



The Economic Value of the University of Louisiana System

EXECUTIVE SUMMARY



THE University of Louisiana System (UL System) creates value in many ways. The universities play a key role in helping students increase their employability and achieve their individual potential. The universities facilitate new research and company developments and also draw visitors and students to the state, generating new dollars and opportunities for Louisiana. The universities provide students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, the universities are places for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

The UL System influences both the lives of students and the state economy. The universities support a variety of industries in Louisiana, serve Louisiana businesses, and benefit society as a whole in Louisiana from an expanded economy and improved quality of life. The benefits created by the UL System even extend to the state government through increased tax revenues and public sector savings.

This study measures the economic impacts created by the UL System on the business community and the benefits the universities generate in return for the investments made by their 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 universities and system office, for fiscal year (FY) 2017-18. Impacts on the Louisiana 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 Louisiana are reported under the investment analysis.

*The value of the UL System influences both the **lives of its students** and the **state economy**.*



Economic impact analysis

IMPACTS CREATED BY THE
UL SYSTEM IN FY 2017-18

The UL System promotes economic growth in Louisiana through its direct expenditures and the resulting expenditures of visitors, students, and Louisiana businesses. The universities serve as employers and buyers of goods and services for their day-to-day and research operations. Numerous start-up and spin-off companies have formed as a result of programs and knowledge at the universities. The universities' reputation and activities attract visitors and students from outside Louisiana, whose expenditures benefit state vendors. In addition, the universities are primary sources of higher education to Louisiana residents and suppliers of trained workers to state industries, enhancing overall productivity in the state workforce.

Operations Spending Impact



The UL System adds economic value to Louisiana as an employer of state residents and a large-scale buyer of goods and services. In FY 2017-18, the universities employed 9,036 full-time and part-time faculty and staff (not including research employees), 96 percent of whom lived in Louisiana. Total payroll at the UL System was \$712.2 million (excluding payroll from research employees), much of which was spent in the state for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the universities spent \$378.5 million on day-to-day expenses related to facilities, supplies, and professional services (excluding research expenditures).

The UL System's day-to-day operations spending added \$786.8 million in income to the state during the analysis year. This figure represents the universities' payroll, the multiplier effects generated by the in-state spending of the universities and their employees, and a downward adjustment to account for funding that the universities received from state sources. The \$786.8 million in added income is equivalent to supporting 11,581 jobs in the state.

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 four years, the UL System received 90 invention disclosures, filed 56 new patent applications, and produced 18 licenses.

In FY 2017-18, the UL System spent \$83.6 million on payroll to support research activities.¹ This, along with \$66.6 million in other research spending, created a net total of \$132.3 million in added income for the state economy. This added income is equivalent to supporting 1,695 jobs.

¹ Note that because FY 2017-18 research expenses data were unavailable at the time of this study, FY 2016-17 data was used as a proxy.



\$786.8 million
Operations Spending Impact



\$132.3 million
Research Spending Impact



\$44.0 million
Construction Spending Impact



\$834.3 million
Start-up and Spin-off Company Impact



\$30.7 million
Visitor Spending Impact



\$185.5 million
Student Spending Impact



\$8.8 billion
Alumni Impact



\$10.9 billion
TOTAL IMPACT

- OR -

149,662
JOBS SUPPORTED

UL SYSTEM RESEARCH DEVELOPMENTS

	Inventions	Patents	Licenses
2014-15	20	15	7
2015-16	31	18	4
2016-17	28	17	5
2017-18	11	6	2
Total	90	56	18

Note that these are conservative as not all universities were able to provide this data.

Source: the UL System.

Construction Spending Impact



The UL System commissioned contractors to build or renovate facilities in FY 2017-18. The quick infusion of income and jobs that occurred in the state economy as a result of this construction spending is considered short-term due to the one-time nature of such projects. Nonetheless, the universities' construction spending had a substantial impact on the state economy in FY 2017-18, equal to \$44.0 million in added income and equivalent to supporting 580 jobs.

Start-up and Spin-off Company Impact



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

In FY 2017-18, UL System start-up and spin-off companies added \$834.3 million in income to the Louisiana economy, which is equivalent to supporting 10,599 jobs. Of this added income, \$537.2 million was due to the start-up companies, with the remainder due to spin-off companies.

Visitor Spending Impact



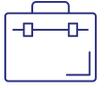
Thousands of visitors from outside the state were attracted to the universities during the analysis year to attend commencement, sporting events, and other activities. While in the state, visitors spent money for lodging, food, transportation, and other personal expenses. The off-campus expenditures of the universities' out-of-state visitors generated a net impact of \$30.7 million in added income for the state economy in FY 2017-18. This \$30.9 million in added income is equivalent to supporting 833 jobs.

Student Spending Impact



Around 12 percent of students attending the UL System originated from outside the state in FY 2017-18, and some of these students relocated to Louisiana to attend the universities. These students may not have come to the state if the universities did not exist. In addition, some in-state students, referred to as retained students, would have left Louisiana if not for the existence of the UL System. While attending the universities, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$185.5 million in added income for the state economy in FY 2017-18, which supported 3,006 jobs in Louisiana.

Alumni Impact



The education and training the universities provide for state residents has the greatest impact. Since the universities were established, students have studied at UL System member institutions and entered the state workforce with greater knowledge and new skills. Today, hundreds of thousands of former UL System students are employed in Louisiana. As a result of their UL System educations, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2017-18, UL System alumni generated \$8.8 billion in added income for the state economy, which is equivalent to supporting 121,367 jobs.

Total Impact

The UL System added \$10.9 billion in income to the Louisiana economy during the analysis year, equal to the sum of the operations, research, and construction spending impacts, the start-up and spin-off company impacts, the visitor and student spending impacts, and the alumni impact. For context, the \$10.9 billion impact was equal to approximately 4.5 percent of the total gross state product (GSP) of Louisiana. This contribution that the universities provided on their own is as large as the entire Finance & Insurance industry in the state.

The UL System's total impact can also be expressed in terms of jobs supported. The \$10.9 billion impact supported 149,662 state jobs, using the jobs-to-sales ratios specific to each Louisiana industry. This means that one out of every 18 jobs in Louisiana is supported by the activities of the universities and their students. In addition, the \$10.9 billion, or 149,662 supported jobs, impacted state industries in different ways. Among non-education industry sectors, the UL System supported the most jobs in the Health Care & Social Assistance industry sector – supporting 25,719 jobs in FY 2017-18. These are impacts that would not have been generated without the universities' presence in Louisiana.

TOP INDUSTRIES IMPACTED BY THE UL SYSTEM (JOBS SUPPORTED)



One out of every 18 jobs in Louisiana is supported by the activities of the universities and their students.



Investment analysis

An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. If the benefits outweigh the costs, then the investment is financially worthwhile. The analysis presented here considers the UL System as an investment from the perspectives of students, taxpayers, and society in Louisiana.

Student perspective



In FY 2017-18, the UL System served 106,177 credit and 17,579 non-credit students. In order to attend the universities, 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 UL System students in FY 2017-18 amounted to a present value of \$1.5 billion, equal to \$622.2 million in out-of-pocket expenses (including future principal and interest on student loans) and \$862.8 million in forgone time and money.

In return for their investment, the UL System's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average UL System bachelor's degree graduate from FY 2017-18 will see an increase in earnings of \$22,300 each year compared to a person with a high school diploma or equivalent working in Louisiana. Over a working lifetime, the benefits of the bachelor's degree over a high school diploma will amount to an undiscounted value of \$981.2 thousand in higher earnings per graduate. Altogether, the UL System's FY 2017-18 students will receive \$5.6 billion in higher future earnings over their working lives, as a result of their education and training at the UL System.

STUDENTS SEE A HIGH RATE OF RETURN FOR THEIR INVESTMENT IN THE UL SYSTEM



14.3%

Average annual return for UL System students



10.1%

Stock market 30-year average annual return

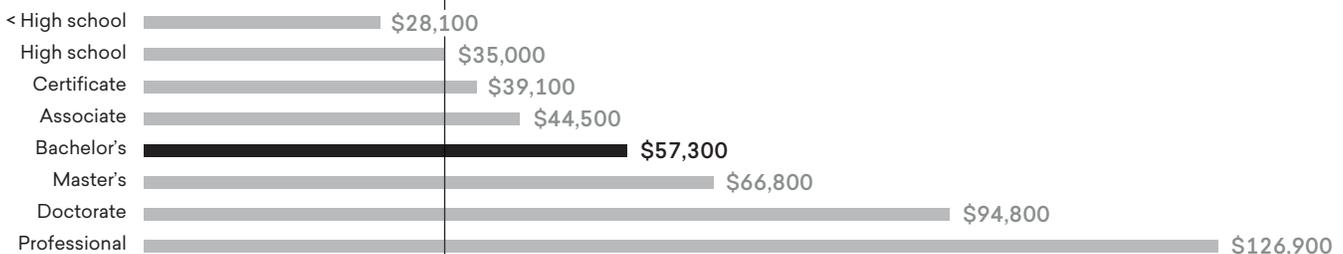


0.8%

Interest earned on savings account (National Rate Cap)

Source: Forbes' S&P 500, 1987-2016. FDIC.gov, 7-2016.

The average bachelor's degree graduate from the UL System will see an increase in earnings of **\$22,300** each year compared to a person with a high school diploma or equivalent working in Louisiana.



Source: Emsi complete employment data.

The students' benefit-cost ratio is 3.8. In other words, for every dollar students invest in an education at the UL System, in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$3.80 in higher future earnings. Annually, the students' investment in the UL System has an average annual internal rate of return of 14.3 percent, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.1 percent.

Taxpayer perspective



The UL System generates more in tax revenue than it takes. These benefits to taxpayers consist primarily of taxes that the state government will collect from the added revenue created in the state.

As UL System 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. The state government will continue to collect added tax revenues from the FY 2017-18 students as long as the students are in the Louisiana workforce. These students will generate a present value of \$1.6 billion in added tax revenues.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of UL System students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. Students' UL System educations will generate savings in three main categories: 1) healthcare, 2) crime, and 3) income assistance. Improved health will lower students' demand for national health care services. In addition, students will be less likely to interact with the criminal justice system, resulting in a reduced demand for law enforcement and victim costs. UL System students will be more employable, so their reduced demand for income assistance such as welfare and unemployment benefits will benefit taxpayers. Altogether, the present value of the benefits associated with a UL System education will generate \$361.2 million in savings to state taxpayers. For a list of study references, contact the UL System for a copy of the main report.

Total taxpayer benefits amount to \$2.0 billion, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$332.4 million, equal to the amount of state government funding the UL System received in FY 2017-18. These benefits and costs yield a benefit-cost ratio of 5.9. This means that for every dollar of public money invested

*For every dollar of public money invested in the UL System, taxpayers will receive a cumulative value of **\$5.90** over the course of the students' working lives.*



STUDENT PERSPECTIVE

\$5.6 billion
Present value benefits

\$1.5 billion
Present value costs

\$4.1 billion
Net present value

Benefit-cost Ratio	Rate of Return
3.8	14.3%



TAXPAYER PERSPECTIVE

\$2.0 billion
Present value benefits

\$332.4 million
Present value costs

\$1.6 billion
Net present value

Benefit-cost Ratio	Rate of Return
5.9	12.9%



SOCIAL PERSPECTIVE

\$24.9 billion
Present value benefits

\$2.5 billion
Present value costs

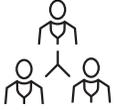
\$22.4 billion
Net present value

Benefit-cost Ratio	Rate of Return
10.0	n/a*

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

in the UL System in FY 2017-18, taxpayers will receive a cumulative value of \$5.90 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 12.9 percent, which compares favorably to other long-term investments in the public and private sectors.

Social perspective



Society as a whole in Louisiana benefits from the presence of the UL System in two major ways. Primarily, society benefits from an increased economic base in the state. This is attributed to higher student earnings and increased business output, which raise economic prosperity in Louisiana.

Benefits to society also consist of the savings generated by the improved lifestyles of UL System 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. Healthcare savings include avoided medical costs associated with smoking, alcohol dependence, obesity, drug abuse, and depression. Savings related to crime include reduced security expenditures and insurance administration, lower victim costs, and reduced expenditures by the criminal justice system. Income assistance savings include reduced welfare and unemployment claims. For a list of study references, contact the UL System for a copy of the main report.

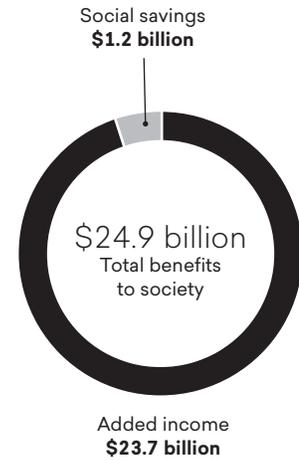
Altogether, the social benefits of the UL System equal a present value of \$24.9 billion. These benefits include \$23.7 billion in added income through students' increased lifetime earnings and increased business output, as well as \$1.2 billion in social savings related to health, crime, and income assistance in Louisiana. People in Louisiana invested a present value total of \$2.5 billion in the UL System in FY 2017-18. The cost includes all the universities' expenditures and student costs.

The benefit-cost ratio for society is 10.0, equal to the \$24.9 billion in benefits divided by the \$2.5 billion in costs. In other words, for every dollar invested in the UL System, people in Louisiana will receive a cumulative value of \$10.00 in benefits. The benefits of this investment will occur for as long as the UL System's FY 2017-18 students remain employed in the state workforce.

Summary of investment analysis results

The results of the analysis demonstrate that the UL System 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 a UL System education. At the same time, taxpayers' investment in the UL System returns more to government budgets than it costs and creates a wide range of social benefits throughout Louisiana.

SOCIAL BENEFITS IN LOUISIANA FROM THE UL SYSTEM



Conclusion

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

*The results of this study demonstrate that the UL System creates value from **multiple perspectives.***

About the Study

Data and assumptions used in the study are based on several sources, including the FY 2017-18 academic and financial reports from the UL System, 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 economic impact and investment effectiveness. For a full description of the data and approach used in the study, please contact the UL System for a copy of the main report.



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