

The Economic Value of Lenoir-Rhyne University





LENOIR-RHYNE UNIVERSITY (LRU) creates value in many ways. The university plays a key role in helping students increase their employability and achieve their individual potential. The university draws visitors and students to the region, generating new dollars and opportunities for the Unifour.* LRU provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, LRU is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

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

This study measures the economic impacts created by LRU on the business community and evaluates the return on investment to LRU primary stakeholders—students and the North Carolina society—as well as the benefits received by state taxpayers from LRU. The following two analyses are presented:



The Unifour, North Carolina

LRU influences both the **lives of its students** and the **regional economy**.



Economic impact analysis



Investment analysis

All results reflect employee, student, and financial data, provided by the university, for fiscal year (FY) 2022-23. Impacts on the Unifour economy are reported under the economic impact analysis and are measured in terms of added income. The returns on investment to students and North Carolina society, along with benefits to taxpayers of North Carolina, are reported under the investment analysis.

* For the purposes of this analysis, the Unifour is comprised of Alexander, Burke, Caldwell, and Catawba Counties.

Economic impact analysis



LRU promotes economic growth in the Unifour through its direct expenditures and the resulting expenditures of visitors, students, and regional businesses. The university serves as an employer and buyer of goods and services for its day-to-day and construction operations. The university's reputation and activities, such as athletics-specific events, attract visitors and students from outside the Unifour, whose expenditures benefit regional vendors. In addition, LRU is one of the primary sources of higher education to Unifour residents and a supplier of trained workers to regional industries, enhancing overall productivity in the regional workforce.

Operations spending impact



LRU adds economic value to the Unifour as an employer of regional residents and a large-scale buyer of goods and services. In FY 2022-23, payroll at LRU was \$29.1 million, much of which was spent in the region on groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the university spent \$26.9 million on expenses related to facilities, supplies, and professional services.

LRU's operations spending added \$35.5 million in income to the region during the analysis year. This figure represents the university's payroll, the multiplier effects generated by the in-region spending of the university and its employees, and a downward adjustment to account for funding that the university received from regional sources. The \$35.5 million in added income is equivalent to supporting 551 jobs in the region.

Visitor spending impact



Thousands of visitors from outside the region were attracted to LRU during the analysis year to attend sports events. While in the region, visitors spent money on lodging, food, transportation, and other personal expenses. The off-campus expenditures of the university's out-of-region visitors generated a net impact of \$1.2 million in added income for the regional economy in FY 2022-23. This \$1.2 million in added income is equivalent to supporting 28 jobs.

Impacts created by
LRU in FY 2022-23



Operations spending impact

\$35.5 million

+



Visitor spending impact

\$1.2 million

+



Student spending impact

\$6.1 million

+



Alumni impact

\$70.8 million



Total economic impact

\$113.6 million

OR



Jobs supported

1,935



Student spending impact



Around 59% of students attending LRU originated from outside the region in FY 2022-23, and most of them relocated to the Unifour to attend LRU. These students may not have come to the region if the university did not exist. In addition, some in-region students, referred to as retained students, would have left the Unifour if not for the existence of LRU. While attending the university, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$6.1 million in added income for the regional economy in FY 2022-23, which supported 122 jobs in the Unifour.

Alumni impact



The education and training LRU provides for regional residents has the greatest impact. Since the establishment of the university, students have studied at LRU and entered the regional workforce with greater knowledge and new skills. Today, thousands of former LRU students are employed in the Unifour. As a result of their education from LRU, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2022-23, LRU alumni generated \$70.8 million in added income for the regional economy, which is equivalent to supporting 1,234 jobs.

Total impact

LRU added \$113.6 million in income to the Unifour economy during the analysis year, equal to the sum of the operations spending impact, the visitor and student spending impacts, and the alumni impact. For context, the \$113.6 million impact was equal to approximately 0.7% of the total gross regional product (GRP) of the Unifour. This contribution that the university provided on its own is one-third the size of the entire Information industry in the region.

LRU's total impact can also be expressed in terms of jobs supported. The \$113.6 million impact supported 1,935 regional jobs, using the jobs-to-sales ratios specific to each industry in the region. In addition, the \$113.6 million, or 1,935 supported jobs, stemmed from different industry sectors. For instance, among non-education industry sectors, the activities of LRU and its alumni in the Health Care & Social Assistance industry sector supported 275 jobs in FY 2022-23. If the university did not exist, these impacts would not have been generated in the Unifour.

LRU impacts by industry (jobs supported)



275

Health Care & Social Assistance



194

Other Services (except
Public Administration)



191

Arts, Entertainment, & Recreation



117

Accommodation & Food Services



93

Government, Non-Education



Investment analysis



An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. The analysis presented here evaluates LRU as an investment from the perspectives of students and society in North Carolina. In addition, the benefits received by state taxpayers are measured. As with the economic impact analysis, this analysis considers only FY 2022-23 activities.

Student perspective



In FY 2022-23, LRU served 2,516 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 LRU students in FY 2022-23 amounted to a present value of \$57.5 million, equal to \$32.0 million in out-of-pocket expenses (including future principal and interest on student loans) and \$25.4 million in forgone time and money.

In return for their investment, LRU students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average LRU bachelor's degree graduate from FY 2022-23 will see annual earnings that are \$27,900 higher than a person with a high school diploma or equivalent working in North Carolina. Over a working lifetime, the benefits of the 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 LRU FY 2022-23 students will receive over their working careers is \$206.8 million.

The students' benefit-cost ratio is 3.6. In other words, for every dollar students invest in LRU in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$3.60 in higher future earnings. Annually, the students'

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



Average annual return for LRU students

15.6%



Stock market 30-year average annual return

10.1%



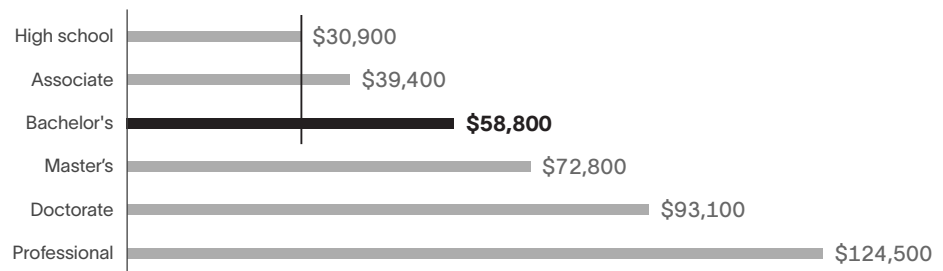
Interest earned on savings account (national deposit rate)

0.5%

Source: Forbes' S&P 500, 1994-2023; FDIC.gov, March 2023

Average earnings by education level at career midpoint

The average bachelor's degree graduate from LRU will see an increase in earnings of **\$27,900** each year compared to a person with a high school diploma or equivalent working in North Carolina.



Source: Lightcast employment data



investment in LRU has an average annual internal rate of return of 15.6%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.1%.

Taxpayer perspective



LRU is a private university and receives no local or state government funding, yet North Carolina taxpayers still receive a substantial amount of benefits from LRU. These benefits to taxpayers consist primarily of taxes that the state government will collect from the added revenue created in the state. As LRU 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 2022-23 students' working lives, the state government will have collected a present value of \$49.1 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of LRU students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The education that LRU 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. LRU 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 LRU will generate \$18.2 million in savings to state taxpayers.

Total taxpayer benefits amount to \$67.3 million, the present value sum of the added tax revenue and public sector savings.

North Carolina taxpayers will receive a cumulative value of **\$67.3 million** in benefits over the course of the students' working lives.

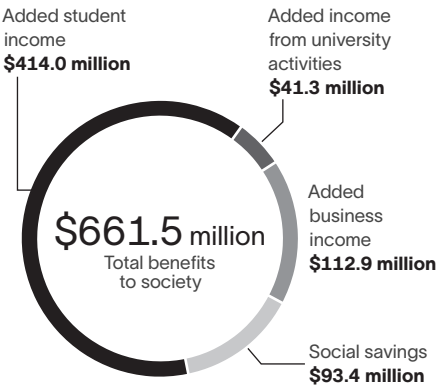
Social perspective



Society as a whole in North Carolina benefits from the presence of LRU 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 North Carolina.

Benefits to society also consist of the savings generated by the improved lifestyles of LRU 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, obesity, substance abuse, and depression. Justice system savings include avoided costs to the government and society due to less judicial activity. Income

Social benefits in North Carolina from LRU



Source: Lightcast impact model

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 LRU equal a present value of \$661.5 million. These benefits include \$414.0 million in added student income, \$112.9 million in added business income, \$41.3 million in added income from university activities, as well as \$93.4 million in social savings related to health, the justice system, and income assistance in North Carolina. People in North Carolina invested a present value total of \$86.8 million in LRU in FY 2022-23. The cost includes all the university and student costs.

The benefit-cost ratio for society is 7.6, equal to the \$661.5 million in benefits divided by the \$86.8 million in costs. In other words, for every dollar invested in LRU, people in North Carolina will receive a cumulative value of \$7.60 in benefits. The benefits of this investment will occur for as long as LRU FY 2022-23 students remain employed in the state workforce.



Summary of investment analysis results

The results of the analysis demonstrate that LRU is a strong investment for students and society and generates substantial benefits to taxpayers. As shown, students receive a great return for their investments in an education from LRU. At the same time, society’s investment in LRU returns more to North Carolina than it costs and creates a wide range of social benefits throughout the state.

Summary of investment analysis results

Student perspective	
Present value benefits	
\$206.8 million	
Present value costs	
\$57.5 million	
Net present value	
\$149.3 million	
Benefit-cost ratio	Rate of return
3.6	15.6%

Taxpayer perspective	
Present value benefits	
\$67.3 million	

Social perspective	
Present value benefits	
\$661.5 million	
Present value costs	
\$86.8 million	
Net present value	
\$574.7 million	
Benefit-cost ratio	Rate of return
7.6	n/a*

* 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 LRU creates value from **multiple perspectives**.*

The university benefits regional businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers to the workforce. LRU enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The university benefits state taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, LRU benefits society as a whole in North Carolina 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 2022-23 academic and financial reports from LRU, 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.



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.