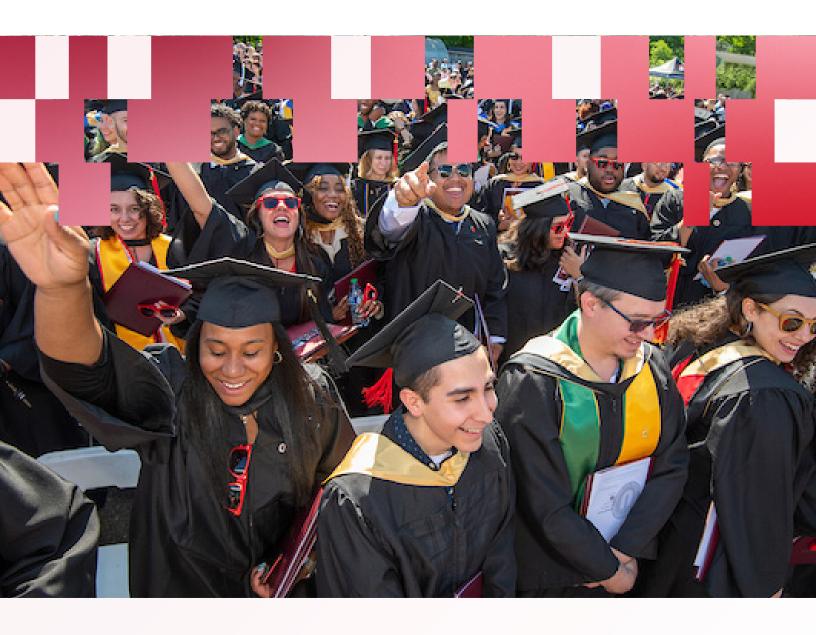




111NE 2023



The Economic Value of Union College of Union County, New Jersey





THE UNION COLLEGE OF UNION COUNTY, NEW JERSEY (Union) creates value in many ways. The college plays a key role in helping students increase their employability and achieve their individual potential. The college retains students in the county, generating new dollars and opportunities for Union County. Union provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, Union is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

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

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



UNION COUNTY, NJ

Union 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 college, for fiscal year (FY) 2021-22. Impacts on the Union County 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 New Jersey are reported under the investment analysis.

Economic impact analysis



Union promotes economic growth in Union County through its direct expenditures and the resulting expenditures of students and county businesses. The college serves as an employer and buyer of goods and services for its day-to-day operations. The college's activities retain students in Union County, whose expenditures benefit county vendors. In addition, Union is a primary source of higher education to Union County residents and a supplier of trained workers to county industries, enhancing overall productivity in the county workforce.

Operations spending impact

Union adds economic value to Union County as an employer of county residents and a large-scale buyer of goods and services. In FY 2021-22, the college employed 968 full-time and part-time faculty and staff, 41% of whom lived in Union County. Total payroll at Union was \$48.2 million, much of which was spent in the county for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the college spent \$35.9 million on day-to-day expenses related to facilities, supplies, and professional services.

Union's day-to-day operations spending added \$54.5 million in income to the county during the analysis year. This figure represents the college's payroll, the multiplier effects generated by the in-county spending of the college and its employees, and a downward adjustment to account for funding that the college received from county sources. The \$54.5 million in added income is equivalent to supporting 997 jobs in the county.

Student spending impact

Some in-county students, referred to as retained students, would have left Union County if not for the existence of Union. While attending the college, these retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$7.2 million in added income for the county economy in FY 2021-22, which supported 98 jobs in Union County.

Alumni impact

The education and training Union provides for county residents has the greatest impact. Since the establishment of the college, students have studied at Union and entered the county workforce with greater knowledge and new skills. Today, thousands of former Union students are employed in Union County. As a result of their education from Union, the students receive higher earnings and increase the

Impacts created by Union in FY 2021-22

Operations spending impact \$54.5 million

+

\$7.2 million



\$346.9 million



OR

Jobs supported 4.713



productivity of the businesses that employ them. In FY 2021-22, Union alumni generated \$346.9 million in added income for the county economy, which is equivalent to supporting 3,618 jobs.

Total impact

Union added \$408.6 million in income to the Union County economy during the analysis year, equal to the sum of the operations spending impact, the student spending impact, and the alumni impact. For context, the \$408.6 million impact was equal to approximately 0.9% of the total gross regional product (GRP) of Union County. This contribution that the college provided on its own is nearly twice as large as the entire Arts, Entertainment, & Recreation industry in the county.

Union's total impact can also be expressed in terms of jobs supported. The \$408.6 million impact supported 4,713 county jobs, using the jobs-to-sales ratios specific to each industry in the county. This means that one out of every 71 jobs in Union County is supported by the activities of Union and its students. In addition, the \$408.6 million, or 4,713 supported jobs, stemmed from different industry sectors. For instance, among non-education industry sectors, the spending of Union and its students and the activities of its alumni in the Health Care & Social Assistance industry sector supported 1,052 jobs in FY 2021-22. If the college did not exist, these impacts would not have been generated in Union County.

One out of every 71 jobs in the Union County is supported by the activities of Union and its students.

Union impacts by industry (jobs supported)



1,052

Health Care & Social Assistance



421

Retail Trade



400

Real Estate & Rental & Leasing



234

Other services (except Public Admin)



216

Professional & Technical Services

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 evaluates Union as an investment from the perspectives of students, taxpayers, and society in New Jersey.

Student perspective

In FY 2021-22, Union served 10,974 credit and 1,060 non-credit students. In order to attend the college, 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 Union's students in FY 2021-22 amounted to a present value of \$80.5 million, equal to \$33.6 million in outof-pocket expenses (including future principal and interest on student loans) and \$46.9 million in forgone time and money.

In return for their investment, Union's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average Union associate degree graduate from FY 2021-22 will see annual earnings that are \$10,900 higher than a person with a high school diploma or equivalent working in New Jersey. Over a working lifetime, the benefits of the associate degree over a high school diploma will amount to an undiscounted value of \$436 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that Union's FY 2021-22 students will receive over their working careers is \$410.3 million.

The students' benefit-cost ratio is 5.1. In other words, for every dollar students invest in Union in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$5.10 in higher future earnings. Annually, the students' investment in Union has an average annual internal rate of return of 19.0%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 9.6%. for their investment in Union Average annual return for

Students see a high rate of return



Union students

19.0%



Stock market 30-year average annual return

9.6%

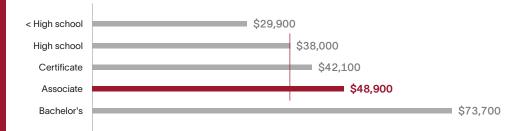


Interest earned on savings account (National Rate Cap)

0.4%

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

The average associate degree graduate from Union will see an increase in earnings of **\$10,900** each year compared to a person with a high school diploma or equivalent working in New Jersey.



Source: Lightcast employment data



Taxpayer perspective

Union 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 Union 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 \$127.3 million in added taxes.

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

For every dollar of public money invested in Union, taxpayers will receive a cumulative value of \$4.40 over the course of the students' working lives.

three main categories: 1) healthcare, 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. Union 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 college for a copy of the main report. Altogether, the present value of the benefits associated with an education from Union will generate \$22.3 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$149.6 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$33.6 million, equal to the amount of state and local government funding Union received in FY 2021-22. These benefits and costs yield a benefit-cost ratio of 4.4. This means that for every dollar of public money invested in Union in FY 2021-22, taxpayers will receive a cumulative present value of \$4.40 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 11.6%, which compares favorably to other longterm investments in the public and private sectors.

Social perspective

Society as a whole in New Jersey benefits from the presence of Union 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 New Jersey.

Benefits to society also consist of the savings generated by the improved lifestyles of Union 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. 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 college for a copy of the main report.

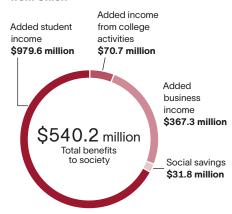
Altogether, the social benefits of Union equal a present value of \$1.4 billion. These benefits include \$979.6 million in added student income, \$367.3 million in added business income, \$70.7 million in added income from college activities, as well as \$31.8 million in social savings related to health, the justice system, and income assistance in New Jersey. People in New Jersey invested a present value total of \$139.7 million in Union in FY 2021-22. The cost includes all the college and student costs.

The benefit-cost ratio for society is 10.4, equal to the \$1.4 billion in benefits divided by the \$139.7 million in costs. In other words, for every dollar invested in Union, people in New Jersey will receive a cumulative value of \$10.40 in benefits. The benefits of this investment will occur for as long as Union's FY 2021-22 students remain employed in the state workforce.

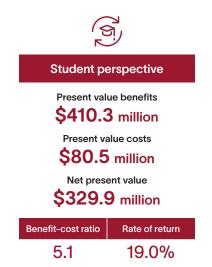
Summary of investment analysis results

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

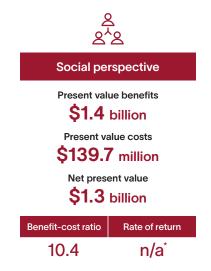




Source: Lightcast impact model







^{*} 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.

Conclusion

The results of this study demonstrate that Union creates value from multiple perspectives. The college benefits county businesses by increasing consumer spending in the county and supplying a steady flow of qualified, trained workers to the workforce. Union enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The college benefits state and local taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, Union benefits society as a whole in New Jersey 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 Union, 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

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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 college 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.