



EXECUTIVE SUMMARY

MAY 2021



The Economic Value of Nash Community College



NASH COMMUNITY COLLEGE (NCC) 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 Nash County. NCC provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, NCC is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

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

This study measures the economic impacts created by NCC 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:



NASH COUNTY, NC

NCC influences both the lives of its students and the county economy.



Economic impact analysis



Investment analysis

All results reflect employee, student, and financial data, provided by the college, for fiscal year (FY) 2019-20. Impacts on the Nash 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 North Carolina are reported under the investment analysis.



NCC promotes economic growth in Nash 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 Nash County, whose expenditures benefit county vendors. In addition, NCC is a primary source of higher education to Nash County residents and a supplier of trained workers to county industries, enhancing overall productivity in the county workforce.

Operations spending impact



NCC adds economic value to Nash County as an employer of county residents and a large-scale buyer of goods and services. In FY 2019-20, the college employed 397 full-time and part-time faculty and staff, 60% of whom lived in Nash County. Total payroll at NCC was \$18.9 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 \$10.3 million on day-to-day expenses related to facilities, supplies, and professional services.

NCC's day-to-day operations spending added \$22.3 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 \$22.3 million in added income is equivalent to supporting 435 jobs in the county.

Student spending impact



Some in-county students, referred to as retained students, would have left Nash County if not for the existence of NCC. While attending the college, these retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$1.7 million in added income for the county economy in FY 2019-20, which supported 50 jobs in Nash County.

Alumni impact



The education and training NCC provides for county residents has the greatest impact. Since its establishment, students have studied at NCC and entered the county workforce with greater knowledge

IMPACTS CREATED BY NCC IN FY 2019-20



Operations spending impact

\$22.3 million



Student spending impact

\$1.7 million



Alumni impact

\$61.9 million



TOTAL ECONOMIC IMPACT

\$86 million

OR

Jobs supported

1,387

and new skills. Today, thousands of former NCC students are employed in Nash County. As a result of their NCC educations, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2019-20, NCC alumni generated \$61.9 million in added income for the county economy, which is equivalent to supporting 902 jobs.

Total impact

NCC added \$86 million in income to the Nash 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 \$86 million impact was equal to approximately 1.6% of the total gross regional product (GRP) of Nash County. This contribution that the college provided on its own is nearly as large as the entire Real Estate & Rental & Leasing industry in the region.

NCC's total impact can also be expressed in terms of jobs supported. The \$86 million impact supported 1,387 county jobs, using the jobs-to-sales ratios specific to each industry in the county. This means that one out of every 38 jobs in Nash County is supported by the activities of NCC and its students. In addition, the \$86 million, or 1,387 supported jobs, stemmed from different industry sectors. Among non-education industry sectors, NCC's spending and alumni in the Health Care & Social Assistance industry sector supported 144 jobs in FY 2019-20. These are impacts that would not have been generated without the college's presence in Nash County.

One out of every 38 jobs in Nash County is supported by the activities of NCC and its students.

NCC IMPACTS BY INDUSTRY (JOBS SUPPORTED)





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 NCC as an investment from the perspectives of students, taxpayers, and society in North Carolina.

Student perspective



In FY 2019-20, NCC served 4,427 credit and 5,493 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 NCC's students in FY 2019-20 amounted to a present value of \$26.6 million, equal to \$5 million in out-of-pocket expenses (including future principal and interest on student loans) and \$21.5 million in forgone time and money.

In return for their investment, NCC's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average NCC associate degree graduate from FY 2019-20 will see annual earnings that are \$7,900 higher than a person with a high school diploma or equivalent working in North Carolina. Over a working lifetime, the benefits of the associate degree over a high school diploma will amount to an undiscounted value of \$268.6 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that NCC's FY 2019-20 students will receive over their working careers is \$94.9 million.

The students' benefit-cost ratio is 3.6. In other words, for every dollar students invest in NCC, 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.

STUDENTS SEE A HIGH RATE OF RETURN FOR THEIR INVESTMENT IN NCC



Average annual return for NCC students

20.9%



Stock market 30-year average annual return

9.9%

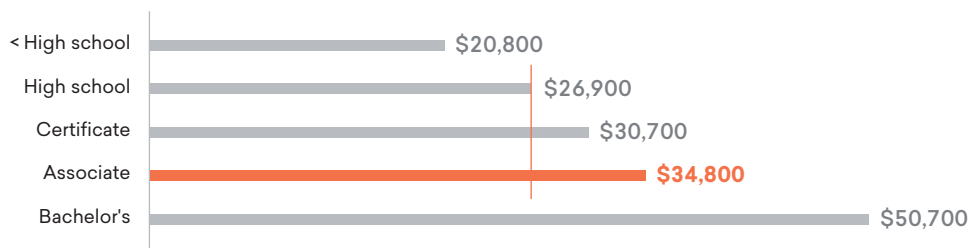


Interest earned on savings account (National Rate Cap)

0.8%

Source: Forbes' S&P 500, 1989-2018. FDIC.gov, 6-2019.

The average associate degree graduate from NCC will see an increase in earnings of **\$7,900** each year compared to a person with a high school diploma or equivalent working in North Carolina.



Source: Emsi employment data.

Annually, the students' investment in NCC has an average annual internal rate of return of 20.9%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 9.9%.

Taxpayer perspective



NCC 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 NCC 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 2019-20 students' working lives, the state and local government will have collected a present value of \$27.4 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of NCC students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. Students' NCC 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. NCC 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 NCC education will generate \$1.9 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$29.3 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$19.8 million, equal to the amount of state and local government funding NCC received in FY 2019-20. These benefits and costs yield a benefit-cost ratio of 1.5. This means that for every dollar of public money invested in NCC in FY 2019-20, taxpayers will receive a cumulative value of \$1.50 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 4.7%, which compares favorably to other long-term investments in the public and private sectors.

For every dollar of public money invested in NCC, taxpayers will receive a cumulative value of **\$1.50** over the course of the students' working lives.

Social perspective



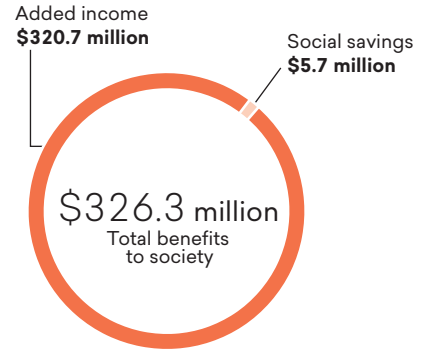
Society as a whole in North Carolina benefits from the presence of NCC in two major ways. Primarily, society benefits from an increased economic base in the state. This is attributed to higher student earnings and increased business output, which raise economic prosperity in North Carolina.

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

Altogether, the social benefits of NCC equal a present value of \$326.3 million. These benefits include \$320.7 million in added income through students' increased lifetime earnings and increased business output, as well as \$5.7 million in social savings related to health, crime, and income assistance in North Carolina. People in North Carolina invested a present value total of \$53.9 million in NCC in FY 2019-20. The cost includes all the college and student costs.

The benefit-cost ratio for society is 6.0, equal to the \$326.3 million in benefits divided by the \$53.9 million in costs. In other words, for every dollar invested in NCC, people in North Carolina will receive a cumulative value of \$6.00 in benefits. The benefits of this investment will occur for as long as NCC's FY 2019-20 students remain employed in the state workforce.

SOCIAL BENEFITS IN NORTH CAROLINA FROM NCC



Source: Emsi impact model.

Summary of investment analysis results

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

STUDENT PERSPECTIVE		TAXPAYER PERSPECTIVE		SOCIAL PERSPECTIVE	
Present value benefits	\$94.9 million	Present value benefits	\$29.3 million	Present value benefits	\$326.3 million
Present value costs	\$26.6 million	Present value costs	\$19.8 million	Present value costs	\$53.9 million
Net present value	\$68.4 million	Net present value	\$9.5 million	Net present value	\$272.4 million
Benefit-cost ratio	3.6	Benefit-cost ratio	1.5	Benefit-cost ratio	6.0
Rate of return	20.9%	Rate of return	4.7%	Rate of return	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.

CONCLUSION

The results of this study demonstrate that NCC 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. NCC 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, NCC 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 2019-20 academic and financial reports from NCC, 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 college for a copy of the main report.

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



Emsi is a labor market analytics firm that integrates data from a wide variety of sources to serve professionals in higher education, economic development, workforce development, talent acquisition, and site selection. Emsi is a leading provider of economic impact studies and labor market data to educational institutions in the U.S. and internationally. Since 2000, Emsi has completed over 2,200 economic impact studies for institutions across three countries. For more information about Emsi's products and services, visit www.economicmodeling.com.