

EXECUTIVE SUMMARY

FEBRUARY 2021



The Economic Value of the Nebraska State College System



THE NEBRASKA STATE COLLEGE SYSTEM (NSCS or System)' continues to have a significant positive economic impact within the rural communities the Colleges serve and Nebraska as a whole. Additionally, the Colleges are key in preparing students to enter high demand, high skilled, and high paying careers necessary to continue to grow the Nebraska economy. Out-of-state students are drawn to the state, generating new dollars and opportunities for Nebraska. The Colleges provide students with the education, training, and skills needed to enjoy fulfilling and prosperous careers.

The NSCS influences both the lives of its students and the Nebraska economy. The System supports a variety of businesses and industries in Nebraska and benefits the state by contributing to an expanded economy and improved quality of life for all Nebraskans. The benefits created by the NSCS extend to the state government through increased tax revenues and public sector savings.

This study measures the economic impacts created by the NSCS on the business community and the benefits the Colleges generate in return for the investments made by students, taxpayers, and society. The following two analyses are presented:



NEBRASKA

The NSCS shapes both the lives of students and the state economy.



Economic impact analysis



Investment analysis

All results reflect employee, student, and financial data, provided by the NSCS for fiscal year (FY) 2018-19. Impacts on the Nebraska 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 Nebraska are reported under the investment analysis.

^{*} The NSCS consists of the three state colleges: Chadron State College, Peru State College, and Wayne State College.

ECONOMIC IMPACT ANALYSIS



The NSCS promotes economic growth in Nebraska through its direct expenditures and the resulting expenditures of students and state businesses. The System serves as an employer and buyer of goods and services for day-to-day operations. The Colleges' reputation and activities attract students from outside Nebraska, whose expenditures benefit state vendors. In addition, the Colleges are primary sources of higher education to Nebraska residents and suppliers of educated workers to Nebraska businesses and industries, enhancing overall productivity in the state workforce.

Operations spending impact



The NSCS adds economic value to Nebraska as an employer and large-scale buyer of goods and services. In FY 2018-19, the System employed 1,983 full-time and part-time faculty and staff, 94% of whom

lived in Nebraska. Total payroll across the NSCS was \$71.1 million, much of which was spent in Nebraska for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the NSCS spent \$43.4 million on day-to-day expenses related to facilities, supplies, and professional services.

The NSCS' day-to-day operations spending added \$67.8 million in income to Nebraska during the analysis year. This figure represents the System's payroll, the multiplier effects generated by the in-state spending of the System and their employees, and a downward adjustment to account for funding received from state sources. The \$67.8 million in added income is equivalent to supporting 1,961 jobs in Nebraska.

Student spending impact



Around 27% of students attending the NSCS originated from outside Nebraska in FY 2018-19, and some of these students relocated to Nebraska to attend a State College. These students may not have

come to Nebraska if the Colleges did not exist. In addition, some in-state students, referred to as retained students, would have left Nebraska if not for the existence of the NSCS. While attending the Colleges, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$15.3 million in added income for the Nebraska economy in FY 2018-19, which supported 376 jobs in the state.

TOTAL IMPACTS CREATED BY THE NSCS IN FY 2018-19



Operations spending impact

\$67.8 million





Student spending impact

\$15.3 million





Alumni impact \$481.7 million



TOTAL ECONOMIC IMPACT

\$564.8 million

Jobs supported

10,593

Alumni impact



The educational opportunities provided to Nebraska residents by the State Colleges have the most significant impact. Since the NSCS was established, students have attended, graduated from the Colleges,

and entered the Nebraska workforce with greater knowledge and new skills. Today, thousands of former State College students are employed in Nebraska. As a result of their State College educations, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2018-19, NSCS alumni generated \$481.7 million in added income for the Nebraska economy, which is equivalent to supporting 8,256 jobs.

Total impact

The NSCS added \$564.8 million in income to the Nebraska economy during the analysis year, equal to the sum of operations spending impact, the student spending impact, and the alumni impact. For context, the \$564.8 million impact was equal to approximately 0.4% of the total gross state product (GSP) of Nebraska.

The NSCS' total impact can also be expressed in terms of jobs supported. The \$564.8 million impact supported 10,593 Nebraska jobs, using the jobs-to-sales ratios specific to each industry in the state. This means that one out of every 127 jobs in Nebraska is supported by the activities of the Colleges and their students. In addition, the \$564.8 million, or 10,593 supported jobs, stemmed from different industry sectors. Among non-education industry sectors, the NSCS' spending and alumni in the Health Care & Social Assistance industry sector supported 895 jobs in FY 2018-19. These are impacts that would not have been generated without the presence of all three of the State Colleges in Nebraska.

THE NSCS IMPACT BY INDUSTRY (JOBS SUPPORTED)



895

Health Care & Social Assistance



804

Government, Non-Education



659

Arts, Entertainment, & Recreation



602

Other Services (except Public Administration)



524

Construction

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 NSCS as an investment from the perspectives of students, taxpayers, and society in Nebraska.

Student perspective



In FY 2018-19, the NSCS served 10,595 students. In order to attend the Colleges, the students paid for tuition, fees, books, and supplies. They also took out loans and will incur interest on those loans. Addi-

tionally, students gave up money they would have otherwise earned had they been working instead of attending college. The total investment made by NSCS students in FY 2018-19 amounted to a present value of \$128 million, equal to \$39.4 million in out-of-pocket expenses (including future principal and interest on student loans) and \$88.7 million in forgone time and money.

In return for their investment, State College students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average State College bachelor's degree graduate from FY 2018-19 will see annual earnings \$22,100 higher than a person with a high school diploma or equivalent working in Nebraska. Over a working lifetime, the benefits of the bachelor's degree over a high school diploma will amount to an undiscounted value of \$928.2 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings NSCS' FY 2018-19 students will receive over their working careers is \$496.7 million.

The students' benefit-cost ratio is 3.9. In other words, for every dollar students invest in an education at a State College, in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$3.90 in higher future earnings. Annually, the students' investment in the NSCS has an

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



Average annual return for NSCS students

16.2%



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 bachelor's degree graduate from the NSCS will see an increase in earnings of \$22,100 each year compared to a person with a high school diploma or equivalent working in Nebraska.



Source: Emsi employment data.

average annual internal rate of return of 16.2%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 9.9%.

Taxpayer perspective



The NSCS generates benefits back to Nebraska taxpayers. These benefits to taxpayers consist primarily of taxes the state government will collect from the added revenue created in Nebraska. As NSCS

students earn more, they will make higher tax payments throughout their work-

ing 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 2018-19 students' working lives, Nebraska will have collected a present value of \$45.4 million in added taxes.

Taxpayers will also benefit from the savings generated by the improved lifestyles of State College students and the corresponding reduced need for government services. Edu-

For every dollar of public money invested in the NSCS, taxpayers will receive a cumulative value of \$1.00 over the course of the students' working lives.

cation is statistically correlated with a variety of lifestyle changes. Students' State College 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 lower victim costs. Because NSCS students will be more employable, their demand for income assistance such as welfare and unemployment benefits will be reduced. For a list of study references, contact the NSCS for a copy of the main report. Altogether, the present value of the benefits associated with a NSCS education will generate \$11.7 million in savings to Nebraska taxpayers.

Total taxpayer benefits amount to \$57.1 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$55.9 million, equal to the amount of Nebraska state funding NSCS received in FY 2018-19. These benefits and costs yield a benefit-cost ratio of 1.0. This means that for every dollar of public money invested in NSCS in FY 2018-19, Nebraska taxpayers will receive a cumulative value of \$1.00 over the course of the students' working lives, indicating that the NSCS pays back the support the Colleges receive. The average annual internal rate of return for taxpayers is 1.6%, which compares favorably to other long-term investments in the public and private sectors. A benefit-cost ratio of 1.0 shows that taxpayers recover their initial investment in the State Colleges and provide large benefits to students and society as a whole.

Social perspective



As a whole, Nebraska benefits from the presence of the NSCS 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 Nebraska.

Benefits to society also consist of the savings generated by the improved lifestyles of NSCS students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes generating social savings. Note 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 NSCS for a copy of the main report.

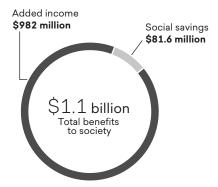
Altogether, the social benefits of the NSCS equal a present value of \$1.1 billion. These benefits include \$982 million in added income through students' increased lifetime earnings and increased business output, as well as \$81.6 million in social savings related to health, crime, and income assistance in Nebraska. People in Nebraska invested a present value total of \$219.5 million in NSCS in FY 2018-19. The cost includes all the Colleges' expenditures and student costs.

The benefit-cost ratio for society is 4.8, equal to the \$1.1 billion in benefits divided by the \$219.5 million in costs. In other words, for every dollar invested in the NSCS, people in Nebraska will receive a cumulative value of \$4.80 in benefits. The benefits of this investment will occur for as long as the NSCS' FY 2018-19 students remain employed in Nebraska.

Summary of investment analysis results

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

SOCIAL BENEFITS IN NEBRASKA FROM THE NSCS



Source: Emsi impact model.

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	STUDENT PERSPECTIVE		TAXPAYER PERSPECTIVE		SOCIAL PERSPECTIVE		
	Present value benefits \$496.7 million Present value costs \$128 million		Present value benefits \$57.1 million Present value costs \$55.9 million		Present value benefits \$1.1 billion Present value costs \$219.5 million		
	Net present value \$368.7 million		Net present value \$1.2 million		Net present value \$844.2 million		
	Benefit-cost ratio 3.9	Rate of return 16.2%	Benefit-cost ratio	Rate of return 1.6%	Benefit-cost ratio	Rate of return	

^{*} 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 the State Colleges continue to have a significant positive economic impact not only on the individual lives of their students, but for Nebraska as whole. NSCS benefits Nebraska businesses by increasing consumer spending in the state and supplying a steady flow of qualified, educated workers to the workforce. The NSCS enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The System benefits Nebraska taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, the NSCS benefits Nebraska by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of its students.

About the study

Data and assumptions used in the study are based on several sources, including the FY 2018-19 academic and financial reports from the NSCS, 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 NSCS for a copy of the main report.

The results of this study demonstrate that the NSCS creates value from multiple perspectives.



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The Economic Value of the Nebraska State College System

The Nebraska State College System (NSCS or System)' creates a significant positive economic impact on both rural and statewide business communities and generates a return on investment to students, taxpayers, and Nebraska as a whole. Using a two-pronged approach involving an economic impact analysis and an investment analysis, this study calculates the benefits received by each of these groups. Results of the analysis reflect fiscal year (FY) 2018-19.



NEBRASKA



ECONOMIC IMPACT ANALYSIS

In FY 2018-19, the NSCS added \$564.8 million in income to the Nebraska economy, a value approximately equal to 0.4% of the state's total gross state product (GSP). Expressed in terms of jobs, the NSCS' impact supported 10,593 jobs across multiple sectors.

OPERATIONS SPENDING IMPACT

- Employing 1,983 full-time and part-time faculty and staff, the NSCS payroll amounted to \$71.1 million, much of which was spent in Nebraska for groceries, mortgage and rent payments, dining out, and other household expenses. NSCS is the 13th largest employer in the state of Nebraska. The System spent another \$43.4 million on day-to-day expenses related to facilities, supplies, and professional services.
- The net impact of the System's operations spending added \$67.8 million in income to the Nebraska economy in FY 2018-19.

STUDENT SPENDING IMPACT

Around 27% of students attending the State Colleges originated from outside Nebraska. Some of these students relocated to Nebraska to attend a State College. In addition, some in-state students, referred to as retained students, would have left Nebraska for other educational opportunities if not for the NSCS. These relocated and retained students spent money on groceries, mortgage and rent payments, and other living expenses at Nebraska businesses.

TOTAL IMPACTS CREATED BY **THE NSCS IN FY 2018-19**



Operations spending impact

\$67.8 million



Student spending impact

\$15.3 million





\$481.7 million



TOTAL ECONOMIC IMPACT S564.8 million

Jobs supported

10,593



The NSCS consists of the three state colleges: Chadron State College, Peru State College, and Wayne State College.

The expenditures of relocated and retained students in FY 2018-19 added \$15.3 million in income to the Nebraska economy.

ALUMNI IMPACT

- Over the years, students have completed courses and graduated from a State College and entered or re-entered the workforce with newly-acquired knowledge and skills. Today, thousands of these former students are employed in Nebraska.
- The net impact of the NSCS' former students currently employed in Nebraska amounted to \$481.7 million in added income in FY 2018-19.



INVESTMENT ANALYSIS

STUDENT PERSPECTIVE

- The State Colleges' FY 2018-19 students paid a present value of \$39.4 million to cover the cost of tuition, fees, supplies, and interest on student loans. They also forwent \$88.7 million in money would have earned had they been working instead of attending college.
- In return for their investment, students will receive \$496.7 million in increased earnings over their working lives. This translates to a return of \$3.90 in higher future earnings for every dollar a student invests in their education. Students' average annual rate of return is 16.2%.

TAXPAYER PERSPECTIVE

- Nebraska taxpayers provided NSCS with \$55.9 million of funding in FY 2018-19. In return, they will benefit from added tax revenue, stemming from students' higher lifetime earnings and increased business output, amounting to \$45.4 million. A reduced demand for government-funded services in Nebraska will add another \$11.7 million in benefits to taxpayers.
- For every dollar of public money invested in the NSCS, taxpayers will receive \$1.00 in return, over the course of students' working lives, indicating that the NSCS pays back the support the Colleges receive. The average annual rate of return for taxpayers is 1.6%.

SOCIAL PERSPECTIVE

- In FY 2018-19, Nebraska invested \$219.5 million in various forms including the Colleges' expenditures and the student opportunity cost of attendance during FY 2018-19. In turn, the Nebraska economy will grow by \$982 million, over the course of students' working lives. Society will also benefit from \$81.6 million of public and private sector savings.
- For every dollar invested in the NSCS in FY 2018-19, people in Nebraska will receive **\$4.80** in return, for as long as the NSCS' FY 2018-19 students remain employed in Nebraska.

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



Average annual return for NSCS students

16.2%



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.

For every \$1...



Students gain in lifetime earnings S3.90



Taxpayers gain in added tax revenue and public sector savings S1.00



Society gains in added income and social savings

S4.80