

DEMONSTRATING THE ECONOMIC VALUE OF
NORTH CAROLINA'S INDEPENDENT COLLEGES AND UNIVERSITIES

FACT SHEET

NORTH CAROLINA
INDEPENDENT
COLLEGES & UNIVERSITIES

FEBRUARY 2015



North Carolina Independent Colleges and Universities (NCICU) supports the individual missions of the state's 36 private non-profit colleges and universities. Each NCICU campus has an important impact on the students it serves, helping them achieve their individual potential and increase their employability. By facilitating new research and business creation, and by drawing students and visitors to the state, the institutions also generate new dollars and opportunities for North Carolina.

**TABLE 1. ADDED INCOME CREATED
BY THE NCICU INSTITUTIONS IN FY
2012-13**

\$14.2 billion Total impact
\$3 billion Operations spending impact
\$1.1 billion Research spending impact
\$4.5 billion Clinical spending impact
\$166.3 million Construction spending impact
\$242.7 million Student spending impact
\$119 million Visitor spending impact
\$78.8 million Business start-up impact
\$4.9 billion Alumni impact

*The purpose of this study is to assess the collective economic value generated by NCICU's institutions, along with their hospitals and medical centers. The **economic impact analysis** measures the impact of the institutions on the state economy in terms of total income, which is analogous to Gross State Product, and the corresponding number of jobs created. The **benefits analysis** examines the return on investment for students and the benefits for North Carolina as a whole and for taxpayers. Results of both analyses are summarized in this fact sheet.*

IMPACT ON STATE ECONOMY

This analysis shows that in FY 2012-13, payroll and operations spending of the NCICU campuses, together with the spending of their students, visitors, start-up companies, and alumni, created **\$14.2 billion** in added state income to the North Carolina economy. The term “added state income” in this context refers to economic impacts and is equivalent to the commonly referred to measure of Gross State Product. The added state income, or additional Gross State Product, of \$14.2 billion created by NCICU's institutions is equal to approximately **3.2%** of the total Gross State Product of North Carolina, and is equivalent to creating **219,590** new jobs.

The components that make up the \$14.2 billion in economic impacts appear in the following sections. To generate these impacts, the NCICU campuses spent **\$4 billion** on payroll and benefits for **66,309** full-time and part-time employees, and spent another **\$6.8 billion** on goods and services to carry out their day-to-day operations, research, and clinical activities. This initial round of spending – along with the institutions' spending on construction and the spending of their students, visitors, start-up companies, and alumni – created more spending across other businesses throughout the state economy, resulting in the commonly referred to multiplier effects. For the sake of simplicity, only the combined initial and multiplier effects of each impact measure are presented in this fact sheet.

NOTE ON THE METHODOLOGY

Economic impact analyses use different types of impacts to estimate the results. Frequently used is the sales impact, which comprises the change in business sales revenue as a result of increased economic activity. However, sales revenue includes the intermediary costs of production and overstates actual impacts. A more accurate measure is the income impact, which assesses the change in Gross State Product, or GSP. Another way to state the income impact is job equivalents, a measure of the number of full- and part-time jobs that would be required to support the change in income. Both of these measures – job equivalents and income – are used to estimate the economic impact results presented in this report.

Also, the economic impact analysis in this report is conservative in that it directly takes into account the fact that in-state monies spent on NCICU's institutions could have been spent elsewhere in North Carolina, and thus would have created some economic impacts regardless. The analysis accounts for such alternative uses of funds by (1) assuming that if in-state funds had not been directed to the NCICU campuses, they would have been returned to their original sources and generated economic impacts through household spending on goods and services, and (2) subtracting the estimated economic impacts generated by such alternative uses of funds from the estimated economic impacts of the NCICU institutions. Thus, the analysis reports only net impacts that are *above and beyond* what would have happened had the institutions' in-state funding been returned to its original sources.

Operations spending impact

- Payroll to support the day-to-day operations of NCICU's campuses (less research and clinical activities) amounted to **\$1.9 billion**.
- The net impact of the institutions' operations spending in North Carolina during the analysis year was approximately **\$3 billion** in added state income, which is equivalent to creating **44,945** jobs.

Research spending impact

- Research activities of the NCICU institutions impact the state economy by employing people and making purchases for equipment, supplies, and services. They also facilitate new knowledge creation in North Carolina through inventions, patent applications, and licenses. In FY 2012-13, NCICU's institutions spent **\$418.8 million** on payroll to support research activities.
- Research spending of NCICU's institutions generated **\$1.1 billion** in added state income for the North Carolina economy, which is equivalent to creating **17,334** new jobs.

Clinical spending impact

- In FY 2012-13, two of NCICU's largest campuses – Wake Forest University and Duke University – spent **\$1.7 billion** on employees working at their hospitals and care centers.
- The total net impact of the operations of these hospitals and care centers in the state was **\$4.5 billion** in added state income, which is equivalent to creating **62,757** new jobs.

Construction spending impact

- NCICU's institutions commissioned in-state and out-of-state contractors to build or renovate their facilities during the analysis year. This spending generated a short-term infusion of income and jobs in the state economy.
- The net impact of the institutions' construction spending in FY 2012-13 was **\$166.3 million** in added state income, equivalent to **5,256** new jobs.

INTELLECTUAL PROPERTY CREATED BY THE NCICU CAMPUSES

	INVEN- TIONS	PATENT APPLICA- TIONS	LICENSES
2009-10	72	40	16
2010-11	70	51	25
2011-12	68	44	23
2012-13	102	36	22
Total	312	171	86

IMPACT OF START-UP COMPANIES

Start-up companies are defined as companies that were created specifically to license and commercialize technology or knowledge of the NCICU campuses. The founding of business start-ups creates new jobs in North Carolina and enhances the competitiveness of the state's business environment. In FY 2012-13, NCICU's campuses had 43 active start-up companies in North Carolina. Collectively these companies employed 242 people.

Also worth mentioning but not explicitly assessed in this study are the institutions' spin-off companies. Spin-off companies are those that were created and fostered through institutional programs that support entrepreneurial business development, as well as companies that were created by faculty, students, or alumni as a result of their experience at the NCICU institutions. The data needed to assess the impacts of business spin-offs was insufficient; however, the fact that such companies exist and contribute to North Carolina's economy enhances the value that NCICU's institutions bring to the state.

Student spending impact

- Around **42%** of graduate and undergraduate students attending NCICU's campuses originated from outside the state. Some of these students relocated to North Carolina and spent money on groceries, transportation, rent, and so on at state businesses.
- The expenditures of students who relocated to the state during the analysis year added approximately **\$242.7 million** in state income to the North Carolina economy, which is equivalent to creating **4,433** new jobs.

Visitor spending impact

- Out-of-state visitors attracted to North Carolina for activities at NCICU's institutions brought new dollars to the economy through their spending at hotels, restaurants, gas stations, and other state businesses.
- Visitor spending added approximately **\$119 million** in state income for the North Carolina economy, which is equivalent to creating **3,041** new jobs.

Business start-up impact

- NCICU's campuses create an exceptional environment that fosters innovation and entrepreneurship, evidenced by the number of start-up companies created by the institutions.
- In FY 2012-13, start-up companies related to NCICU's institutions generated **\$78.8 million** in added state income for the North Carolina economy, which is equivalent to creating **477** jobs.

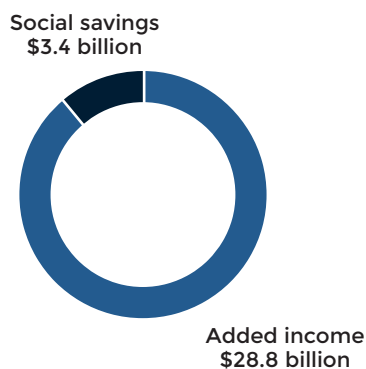
Alumni impact

- Over the years, students have gained new skills, making them more productive workers, by studying at NCICU's institutions. Today, hundreds of thousands of these former students are employed in North Carolina.
- The accumulated contribution of alumni currently employed in the North Carolina workforce amounted to **\$4.9 billion** in income added to the North Carolina economy, which is equivalent to creating **81,348** new jobs.

FOR EVERY \$1 SPENT BY...

Students	\$2.30 Gained in lifetime income for STUDENTS
Society	\$3.60 Gained in added state income and social savings for SOCIETY

PRESENT VALUE OF ADDED INCOME AND SOCIAL SAVINGS IN NORTH CAROLINA



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BENEFITS TO STUDENTS, SOCIETY, AND TAXPAYERS

Student perspective

- Students attending NCICU's institutions during FY 2012-13 paid a total of **\$1.6 billion** to cover the cost of tuition, fees, books, and supplies. They also forwent another **\$1.6 billion** in money that they would have earned had they been working instead of learning.
- In return for the money students invest to earn their degrees, they will receive a present value of **\$7.2 billion** in increased earnings over their working lives.
- This translates to a return of **\$2.30** in higher future income for every \$1 that students invest in their education. The average annual return for students is **10.3%**.

Societal perspective

- North Carolina as a whole will receive a present value of **\$28.8 billion** in added state income over the course of the students' working lives. Communities will also benefit from **\$3.4 billion** in present value social savings related to reduced crime, lower unemployment, and increased health and well-being across the state.
- For every dollar that society spent on education at the NCICU institutions during the analysis year, North Carolina communities will receive a cumulative value of **\$3.60** in benefits, for as long as the 2012-13 students of NCICU's institutions remain active in the state workforce.

Taxpayer perspective

- The net present value of the added tax revenue stemming from higher student incomes and increased business output will amount to **\$2.8 billion** in benefits to taxpayers.
- Savings to the public sector will add another **\$595.7 million** in benefits due to a reduced demand for government-funded services in North Carolina.