The University of North Carolina at Pembroke (UNCP) creates value in a variety of ways. The university improves higher education delivery throughout the state and helps students increase their employability and potential, with a notably high percentage of graduates employed in their field of study. By facilitating new research, placing a priority on community service through academic programming, and drawing students and visitors to North Carolina, the university also generates new dollars and opportunities for the state. The purpose of this analysis is to assess the impact of UNCP on the state economy. The analysis also looks at the benefits generated for students, North Carolina as a whole, and taxpayers.

Our analysis shows that in FY 2012-13, the $116.4 million in payroll and operations spending of UNCP, together with its construction spending and the spending of its students, visitors, and alumni, created $389.9 MILLION in added state income. This is equal to approximately 0.1% of the total Gross State Product of North Carolina, and is equivalent to creating 6,622 new jobs.

IMPACT ON THE STATE BUSINESS COMMUNITY

During the analysis year, FY 2012-13, UNCP spent $64.4 MILLION on payroll and benefits for 1,064 full-time and part-time employees, and spent another $52.1 MILLION on goods and services to carry out its day-to-day operations and research. This initial round of spending creates more spending across other businesses throughout the state economy, resulting in the commonly referred to multiplier effects. We estimate these multiplier effects in this study and report the additional economic activity that is created by the initial spending of UNCP.* Impacts are reported in terms of total income, which is analogous to Gross State Product, and the corresponding number of jobs created.

* Note: Our estimated economic impacts are conservative in that we directly take into account the fact that state and local dollars spent on the university could have been spent elsewhere in North Carolina if not directed toward UNCP, and thus would have created some economic impacts regardless. We account for these alternative uses of funds directly in our analysis by (i) assuming that if funds were not directed to UNCP, they would have been returned to the taxpayer and generate economic impacts through household spending on goods and services, and (ii) subtracting the estimated economic impacts generated by this alternative use of funds from the estimated economic impacts of UNCP. Thus, we report a net impact of UNCP that is above and beyond what would have occurred had the funds been returned to the taxpayer.
These economic impacts break down as follows:

**Operations spending impact**
- Payroll and non-pay expenditures to support day-to-day operations (less research) of UNCP amounted to **$63.8 MILLION** and **$51.8 MILLION**, respectively. The net impact of the university’s operations spending in North Carolina during the analysis year was approximately **$85.9 MILLION** in added state income, which is equivalent to creating **1,275** jobs.

**Research spending impact**
- Research activities of UNCP impact the state economy by employing people and making purchases for equipment, supplies, and services. They also facilitate new knowledge creation throughout North Carolina. In FY 2012-13, UNCP spent **$569.4 THOUSAND** on payroll to support research activities.
- Research spending of UNCP generates **$1.1 MILLION** in added state income for the North Carolina economy, which is equivalent to creating **16** new jobs.

**Construction spending impact**
- UNCP built or renovated a number of its 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 university’s construction spending in FY 2012-13 was **$833.5 THOUSAND** in added state income, equivalent to **35** new jobs.

**Student spending impact**
- Around **3%** of graduate and undergraduate students attending UNCP originated from outside the state. Some of these students relocated to North Carolina and spent money on groceries, transportation, rent, and so on at North Carolina businesses.
- The expenditures of students who relocated to the state during the analysis year added approximately **$1.8 MILLION** in state income for the North Carolina economy, which is equivalent to creating **33** new jobs.
Visitor spending impact
- Out-of-state visitors attracted to North Carolina for activities at UNCP brought new dollars to the economy through their spending at hotels, restaurants, gas stations, and other state businesses.
- Visitor spending added approximately **$1.1 MILLION** in state income for the North Carolina economy, which is equivalent to creating **29** new jobs.

Alumni impact
- Over the years, students gained new skills, making them more productive workers, by studying at UNCP. Today, thousands of these former students are employed in North Carolina.
- The accumulated contribution of former UNCP students currently employed in the North Carolina workforce amounted to **$299.1 MILLION** in added state income to the North Carolina economy, which is equivalent to creating **5,234** new jobs.

### IMPACTS CREATED BY UNCP IN FY 2012-13

<table>
<thead>
<tr>
<th>INCOME</th>
<th>JOBS</th>
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<tbody>
<tr>
<td><strong>$85.9 MILLION</strong></td>
<td>1,275</td>
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</tbody>
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Operations spending impact

| **$1.1 MILLION** | 16 |

Research spending impact

| **$833.5 THOUSAND** | 35 |

Construction spending impact

| **$1.8 MILLION** | 33 |

Student spending impact

| **$1.1 MILLION** | 29 |

Visitor spending impact

| **$299.1 MILLION** | 5,234 |

Alumni impact

| **$389.9 MILLION** | 6,622 |

Total impact
FOR EVERY $1 SPENT BY...

| STUDENTS | $3.10 |
| SOCIETY  | $10.20 |
| TAXPAYERS | $4.20 |

Return on investment to students, society, and taxpayers

Student perspective

- Students attending UNCP during FY 2012-13 paid a total of **$28.1 million** to cover the cost of tuition, fees, books, and supplies. They also forwent **$102 million** 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 **$405.5 million** in estimated increased earnings over their working lives.

- This translates to a return of **$3.10** in higher future income for every $1 that students invest in their UNCP education. The average annual return for students is **13.3%**.

Societal perspective

- North Carolina as a whole will receive a present value of **$2 billion** in added state income over the course of the students’ working lives. Communities will also benefit from **$352.7 million** 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 educations at UNCP during the analysis year, North Carolina communities will receive a cumulative value of **$10.20** in benefits, for as long as the 2012-13 students of UNCP remain active in the state workforce.

Taxpayer perspective

- In FY 2012-13, state and local taxpayers in North Carolina invested **$59.5 million** to support the operations of UNCP. The net present value of the added tax revenue stemming from the students’ higher lifetime incomes and the increased output of businesses amounts to **$189.2 million** in benefits to taxpayers. Savings to the public sector add another **$61.3 million** in benefits due to a reduced demand for government-funded services in North Carolina.

- Dividing benefits to taxpayers by the associated costs yields a **4.2** benefit-cost ratio, i.e., every $1 in costs returns $4.20 in benefits. The average annual return on investment for taxpayers is **11.9%**.

About EMSI

Economic Modeling Specialists International turns labor market data into useful information that helps organizations understand the connection between economies, people, and work. Since 2000, EMSI has completed numerous economic impact studies for educational institutions across the US, Canada, the UK, and Australia. It also provides industry-leading labor market data via software and reports to higher education professionals, workforce planners, and regional developers in the U.S. and internationally. For more information, visit www.economicmodeling.com.