Guilford Technical Community College (Guilford Tech) improves higher education delivery throughout the region and helps students increase their employability and potential. By drawing students to the Guilford Tech Service Area, the college also generates new dollars and opportunities for the region. The purpose of this analysis is to assess the impact of Guilford Tech as a whole on the regional economy and the benefits generated for students, North Carolina as a whole, and taxpayers.

Our analysis shows that in FY 2012-13, payroll and operations spending of Guilford Tech, together with its construction spending and the spending of its students and alumni, created $528.7 million in added regional income to the Guilford Tech Service Area economy. Although we use added regional income to refer to the economic impacts, it is helpful to realize that regional income in this context is equivalent to the commonly referred to measure of gross regional product. This added regional income of $528.7 MILLION created by Guilford Tech is equal to approximately 1.7% of the total gross regional product of the Guilford Tech Service Area, and is equivalent to creating 9,447 new jobs.

**IMPACT ON LOCAL BUSINESS COMMUNITY**

During the analysis year, Guilford Tech spent $63 MILLION on payroll and benefits for 2,301 full-time and part-time employees, and spent another $54.7 MILLION on goods and services to carry out its day-to-day operations. This initial round of spending creates more spending across other businesses throughout the regional 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 Guilford Tech and its students and alumni. Impacts are reported in terms of total income, which is analogous to gross regional product, and the corresponding number of jobs created.

Our estimated economic impacts are conservative in that we directly take into account the fact that state and local dollars spent on the institutions could have been spent elsewhere in North Carolina if not directed toward Guilford Tech, 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 Guilford Tech, 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 Guilford Tech. Thus, we report a net impact of Guilford Tech 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 to support day-to-day operations of Guilford Tech amounted to $63 million. The net impact of the college’s operations spending in the Guilford Tech Service Area during the analysis year was approximately $85.5 million in added regional income, which is equivalent to creating 2,515 jobs.

**Construction spending impact**
- Guilford Tech built or renovated a number of their facilities during the analysis year. This spending generated a short-term infusion of income and jobs in the regional economy.
- The net impact of the Guilford Tech construction spending in FY 2012-13 was $3.7 million in added regional income, equivalent to 88 new jobs.

**Student spending impact**
- Around 34% of students attending Guilford Tech originated from outside the region. Some of these students relocated to the Guilford Tech Service Area and spent money on groceries, transportation, rent, and so on at regional businesses.
- The expenditures of students who relocated to the region during the analysis year added approximately $20.5 million in regional income for the Guilford Tech Service Area economy, which is equivalent to creating 329 new jobs.

**Alumni impact**
- Over the years, students gained new skills, making them more productive workers, by studying at Guilford Tech. Today, hundreds of thousands of these former students are employed in the Guilford Tech Service Area.
- The accumulated contribution of alumni currently employed in the Guilford Tech Service Area workforce amounted to $419 million in regional income added to the Guilford Tech Service Area economy, which is equivalent to creating 6,516 new jobs.
### RETURN ON INVESTMENT TO STUDENTS, SOCIETY, AND TAXPAYERS

#### Student perspective
- Students attending Guilford Tech during FY 2012-13 paid a total of $18.3 million to cover the cost of tuition, fees, books, and supplies. They also forwent $255.9 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 $554.8 million in increased earnings over their working lives.
- This translates to a return of $2.00 in higher future income for every $1 that students invest in their education. The average annual return for students is 10.5%.

#### Societal perspective
- North Carolina as a whole will receive a present value of $3 billion in added state income over the course of the students’ working lives. Communities will also benefit from $60.7 million in present value societal 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 Guilford Tech during the analysis year, North Carolina communities will receive a cumulative value of $7.80 in benefits, for as long as the 2012-13 students of Guilford Tech remain active in the state workforce.

#### Taxpayer perspective
- In FY 2012-13, state and local taxpayers in North Carolina paid $76.1 million to support the operations of Guilford Tech. The net present value of the added tax revenue stemming from the students’ higher lifetime incomes and the increased output of businesses amounts to $282.1 million in benefits to taxpayers. Savings to the public sector add another $19.7 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 4.0 benefit-cost ratio, i.e., every $1 in costs returns $4.00 in benefits. The average annual return on investment for taxpayers is 14.7%.

### Present Value of Added Income and Societal Savings in North Carolina

<table>
<thead>
<tr>
<th></th>
<th>Present Value of Added Income</th>
<th>Societal Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>$2.00</td>
<td>$60.7 million</td>
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<tr>
<td>Society</td>
<td>$7.80</td>
<td></td>
</tr>
<tr>
<td>Taxpayers</td>
<td>$4.00</td>
<td></td>
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</tbody>
</table>

For every $1 spent by...

<table>
<thead>
<tr>
<th>STUDENTS</th>
<th>$2.00</th>
<th>Gained in lifetime income for STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCIETY</td>
<td>$7.80</td>
<td>Gained in added state income and social savings for SOCIETY</td>
</tr>
<tr>
<td>TAXPAYERS</td>
<td>$4.00</td>
<td>Gained in added taxes and public sector savings for TAXPAYERS</td>
</tr>
</tbody>
</table>

![Pie chart showing Added income $3 billion and Societal savings $60.7 million]