LIBERTY UNIVERSITY

ECONOMIC & FISCAL CONTRIBUTION ON THE LYNCHBURG MSA AND THE STATE OF VIRGINIA IN ACADEMIC YEAR 2021-22

Prepared for

LIBERTY UNIVERSITY

MANGUM ECONOMICS

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About Mangum Economics, LLC

Mangum Economics is a Glen Allen, Virginia based firm that was founded in 2003. Since then, we have become known as a leader in industry analysis, economic impact assessment, policy and program evaluation, and economic and workforce strategy development. The Mangum Team specializes in producing objective and actionable quantitative economic research that our clients use for strategic decision making in a variety of industries and environments. We know that our clients are unique, and that one size does not fit all. As a result, we have a well-earned reputation for tailoring our analyses to meet the specific needs of specific clients, with a specific audience.

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- **Energy**: The Mangum Team has produced analyses of the economic and fiscal impact of over 19 GW of proposed solar, wind, battery, and hydro projects spanning nineteen states. Among those projects was Dominion’s 2.6 GW Coastal Virginia Offshore Wind project off of Virginia Beach. In addition, the Mangum Team has also performed economic and fiscal impact analyses for the natural gas, nuclear, oil, and pipeline industries.

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- **Policy Analysis**: The Mangum Team also has extensive experience in identifying and quantifying the intended and unintended economic consequences of proposed legislative and regulatory initiatives.

The Project Team

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Executive Summary

This report assesses the economic and fiscal contribution that Liberty University made to the Lynchburg MSA and the state of Virginia in academic year 2021-22. The principal findings from that assessment are as follows:

1. **Liberty University is Virginia’s largest and most rapidly growing institution of higher education:**
   - In academic year 2021-22, Liberty had an unduplicated headcount of 130,594, making it the largest institution of higher education in Virginia and one of the largest in the country.
   - Between 1997 and 2022, Liberty University’s fall headcount enrollment increased from 6,648 to 96,709, an increase of 90,061 students or 1,355 percent. In contrast, over that same period Virginia’s other four-year private non-profit colleges and universities grew by 24 percent, and Virginia’s four-year public colleges and universities grew by 29 percent.
   - In 2021-22, Liberty University and its auxiliary enterprises were also Lynchburg’s largest employer, providing jobs for 8,413 individuals in the Lynchburg MSA, 9,166 in Virginia, and 12,663 worldwide.

2. **Liberty University makes a major economic and fiscal contribution to the Lynchburg MSA:**
   - In 2021-22, direct spending in the Lynchburg MSA by the university, its associated enterprises, students, and visitors totaled $534.2 million. Our analysis shows that $534.2 million in direct regional spending was responsible for generating $966.9 million in overall economic activity in the Lynchburg MSA, which means that every $1.00 of Liberty University’s net local spending generated $1.81 within the broader regional economy.
   - Liberty University’s 2021-22 regional spending was also responsible for supporting a total of 10,397 jobs within the Lynchburg MSA and generating $439.0 million in labor income. Given that the location of most of this employment was in the City of Lynchburg, and that total employment in the City of Lynchburg was 48,686 in 2021, this means that approximately one out of every five jobs in the City of Lynchburg that year was either directly or indirectly attributable to Liberty University.
   - Local taxes paid by the university itself, associated enterprises, employees, students, and visitors contributed approximately $23.3 million in tax revenue to the Lynchburg MSA in 2021-22. Focusing exclusively on the City of Lynchburg, where most of Liberty University’s campus is physically located, the university directly or indirectly generated approximately $14.4 million in tax revenue for the city.
   - More specifically, Liberty University directly or indirectly accounted for approximately: 9 percent of the city’s total Real Property Tax revenue, 17 percent of its Personal Property Tax revenue, 15 percent of its Motor Vehicle License Fee revenue, 9 percent of its Restaurant
Food Tax revenue, 39 percent of its Hotel and Motel Room Tax revenue, and 2 percent of its local Sales Tax revenue.

3. **Liberty University makes a major economic and fiscal contribution to the state of Virginia as a whole:**
   - In 2021-22 Liberty University, along with its associated enterprises, students, and visitors were responsible for contributing $613.2 million in direct spending to the state. Our analysis indicates that this $613.2 million in statewide spending was responsible for generating almost $1.1 billion in economic activity, which means that every $1.00 of Liberty University’s state spending ultimately generated $1.84 in overall economic activity within the state.
   - In addition, those expenditures were responsible for supporting a total of 11,380 jobs in the state, creating $500.5 million in labor income, and generating $162.5 million in federal, state, and local tax revenue.

4. **Liberty University makes a major contribution to growing Virginia’s human capital:**
   - The primary economic contribution of any educational institution is really the product it is in the business of creating – well educated and highly trained graduates. We estimate that the economic value of the enhanced labor productivity, or increased human capital, that Liberty University’s 2021-22 graduates carried with them into Virginia’s workforce was approximately $74.3 million.
   - Moreover, the discounted present value of the stream of economic benefits that enhanced productivity will generate over the entire time that those graduates are likely to be active in the workforce is approximately $1.3 billion.

5. **Liberty University also makes many other contributions to the Lynchburg MSA and the state of Virginia:**
   - Its students and employees provide more than $5.1 million worth of volunteer service hours within the Lynchburg MSA each year.
   - It has made significant regional investments in economic revitalization.
     - In 2008, the university acquired the Plaza shopping center and invested $500,000 to upgrade and improve the property.
     - In 2010, it acquired Candlers Station shopping center and made similar improvements to that property.
     - In 2017, it acquired River Ridge Mall which had deteriorated to the point that it was on the verge of closing. After investing approximately $78 million to revitalize the facility it now counts among its’ anchor tenants nationally recognized names like Dick’s Sporting Goods, Home Goods, and Ulta Beauty.
In 2018, it acquired a retail center on Wards Road that brought a national footprint with large tenants such as Hobby Lobby, Chick Fil A, and Northern Tool.

Along with commercial properties, Liberty also owns over 60 residential rental homes to provide additional options for residents in the area.

- It has enhanced the quality of life within the Lynchburg MSA by adding to the region’s recreational opportunities through investments in facilities such as the LaHaye Ice Center; the Liberty Mountain Snowflex Center; the Tower Theater, and the Montview Bowling Alley, all of which are open to the public.

- It plays a large role in attracting tourists to the Lynchburg MSA. In fiscal year 2022, out-of-town visitors to Liberty University employees, students, facilities, and events generated approximately 133,339 hotel room nights in the Lynchburg MSA. Those hotel room nights in turn were associated with approximately $14.9 million in hotel revenue within the Lynchburg MSA.

- It makes a significant contribution to ensuring Virginia will have the trained graduates it needs to prosper in the future in support occupational employment growth in critical areas such as business and finance, education, healthcare, and many other in-demand fields.

6. In sum, Liberty University is a rapidly growing institution that has a significant economic and fiscal impact on the Lynchburg MSA and the state of Virginia as a whole and plays a very active and positive leadership role within its community and the state.
Introduction

This report assesses the economic and fiscal contribution that Liberty University, and its associated enterprises, students, and out-of-area visitors made to the Lynchburg MSA and the state of Virginia in academic year 2021-22.

Liberty University Profile

History and General Characteristics

Liberty University was founded in 1971 as a private, non-profit, Evangelical Christian institution of higher education. Liberty is situated on over 7,000 acres in the City of Lynchburg and in the counties of Amherst, Bedford, Campbell, and Prince Edward. Approximately 700 acres are developed and used for campus operations, while 6,300 acres have been preserved in their natural state and are used for various recreational purposes. The campus includes 252 buildings with over 8.9 million square feet of building space, and Liberty currently maintains over 522 classrooms.

Since its first class of 154 students, Liberty has experienced explosive enrollment growth. In academic year 2021-22, Liberty had an unduplicated headcount of 130,594, making it the largest institution of higher education in Virginia and one of the largest in the country. In 2021-22, Liberty University and its auxiliary enterprises were also Lynchburg’s largest employer, providing jobs for 8,413 individuals in the Lynchburg MSA, 9,166 in Virginia, and 12,663 worldwide. Moreover, as will be demonstrated in subsequent sections, Liberty’s rapid employment growth has provided much needed stability to a regional economy that has experienced uneven employment growth in recent years, was particularly hard-hit by lockdowns of economic activity mandated in response to the Covid19 virus, and has yet to fully recover to its pre-pandemic employment level.

Liberty University is accredited by the Southern Association of Colleges and Schools Commissions on Colleges (SACSCOC). Liberty’s 15 schools and colleges currently offer more than 700 unique programs of study from the certificate to the doctoral level. Liberty was a pioneer in distance education and started offering distance education courses in 1985. The University currently serves over 130,000 students through these programs world-wide, including over 30,000 men and women serving in the U.S. military, veterans, spouses, and dependents.

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1 The Lynchburg MSA is comprised of the counties of Amherst, Appomattox, Bedford, and Campbell, and the City of Lynchburg.
2 July 1 of 2021 through June 30 of 2022.
3 Data Source: Liberty University
4 Data Source: Liberty University.
Liberty University also boasts a mature NCAA Division 1 athletic program with 20 teams, as well as over 42 intercollegiate Club Sports teams, and over 20 intramural sports. Campus facilities used to support these programs are also frequently used by the community. These facilities include the recently renovated 25,000 seat Williams Stadium, 9,547 seat Vines Center, 4,000 seat Liberty Arena, 4,000 seat LaHaye Ice Center, 2,500 seat Liberty Baseball Stadium, 1,500 seat Liberty Track Complex, 1,414 seat Natatorium, 1,000 seat Kamphuis Field at Liberty Softball Stadium, 1,200 seat lacrosse facility, 1,000 seat soccer stadium, 100 seat Liberty Indoor Tennis Facility, year-round skiing and snowboarding at the Liberty Mountain Snowflex Centre, and the LaHaye Student Union.

Liberty’s athletic facilities have also hosted two divisions of the Virginia High School League’s Football Championships, Outdoor Track, and Indoor Track Championships. As well as the Commonwealth Games, an annual Olympic style event that attracts thousands of amateur athletes to Lynchburg each year to compete in over 50 individual events.

**Enrollment and Student Characteristics**

Figure 1 provides a breakdown of Liberty’s fall 2022 enrollment by program level. As these data show, 48,906 or 51 percent of Liberty’s student body was comprised of undergraduates that fall, while 44,671 or 46 percent was comprised of graduate students, and 3,132 or 3 percent was comprised of first professional students (e.g., students at the Liberty University School of Law and School of Osteopathic Medicine). These data indicate that Liberty’s program mix tends to be more heavily tilted toward graduate and first professional programs than is typical among Virginia’s other four-year institutions of higher education. For example, where 49 percent of Liberty’s student body was comprised of graduate or first professional students in fall 2022, the comparable average among other non-profit four-year colleges and universities in Virginia was 31 percent that fall, and among the state’s public colleges and universities it was 22 percent.

**Figure 1: Liberty University Fall 2022 Enrollment**

<table>
<thead>
<tr>
<th>Program Level</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>48,906</td>
</tr>
<tr>
<td>Graduate</td>
<td>44,671</td>
</tr>
<tr>
<td>First Professional</td>
<td>3,132</td>
</tr>
</tbody>
</table>

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5 Data Source: State Council of Higher Education for Virginia.
Figure 2 depicts the growth in Liberty University’s total fall headcount enrollment between 1997 and 2022. Overall, headcount enrollment increased from 6,648 in fall 1997 to 96,709 in fall 2022, an increase of 90,061 students or 1,355 percent. Breaking this total down by undergraduate, graduate, and first professional enrollment shows that undergraduate enrollment increased by 43,037 students or 733 percent over this period, graduate enrollment increased by 43,966 students or 6,236 percent, and first professional enrollment (e.g., students at the Liberty University School of Law and School of Osteopathic Medicine) increased by 3,058 students or 4,123 percent.

Figure 3 puts these truly remarkable growth rates in perspective by comparing Liberty University’s growth in total fall headcount enrollment between 1997 and 2022 to that of Virginia’s other private non-profit colleges and universities, as well as the state’s public four-year institutions. As this chart demonstrates, in contrast to Liberty’s 1,355 percent increase in enrollment over this period, Virginia’s other four-year private non-profit colleges and universities grew by 24 percent, and Virginia’s four-year public colleges and universities grew by 29 percent.

Figure 2: Fall Headcount Enrollment – 1997 to 2022

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6 Data Source: State Council of Higher Education for Virginia.
Figures 4 through 6 provide additional information on the characteristics of the students that Liberty University serves. As shown in Figure 4, driven by its large graduate enrollment, Liberty tends to serve a greater proportion of adult or non-traditional students (i.e., students 25 years of age or older) than is typical among Virginia’s other four-year colleges and universities. In fall 2022, non-traditional students comprised 70 percent of Liberty’s headcount enrollment, as compared to 36 percent in Virginia’s other private non-profit colleges and universities, and 23 percent in the state’s public four-year institutions.

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**Figure 3: Total Enrollment Growth – 1997 to 2022**

<table>
<thead>
<tr>
<th>Enrollment Growth</th>
<th>Liberty University</th>
<th>All Other Private, Non-Profit, 4 yrs.</th>
<th>Public, 4yrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>200%</td>
<td>1355%</td>
<td>24%</td>
<td>29%</td>
</tr>
</tbody>
</table>

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**Figure 4: 2022 Fall Headcount Enrollment – Traditional and Non-Traditional Students**

<table>
<thead>
<tr>
<th>Enrollment</th>
<th>Liberty University</th>
<th>All Other Private, Non-Profit, 4 yrs.</th>
<th>Public, 4yrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional</td>
<td>30%</td>
<td>64%</td>
<td>77%</td>
</tr>
<tr>
<td>Non-Traditional</td>
<td>70%</td>
<td>36%</td>
<td>23%</td>
</tr>
</tbody>
</table>

---

7 Data Source: State Council of Higher Education for Virginia.
8 Data Source: State Council of Higher Education for Virginia.
Figure 5 details the race/ethnicity distribution of Liberty University’s student body and compares that distribution to the norm for other four-year colleges and universities in Virginia. As these data show, the distributions are generally comparable. In fall 2022, minority and international students comprised 33 percent of Liberty’s enrollment, 42 percent of enrollment at other Virginia four-year non-profit colleges, and 45 percent of enrollment in the state’s four-year public colleges and universities.

Finally, Figure 6 provides information on the relative proportions of in-state and out-of-state students at Liberty University as compared to the other institutional categories. As this chart demonstrates, Liberty’s enrollment tends to be much more heavily comprised of out-of-state students (81 percent in fall 2022) than is typical for other Virginia non-profit colleges and universities (51 percent in fall 2022), or the state’s public four-year institutions (25 percent in fall 2022). From an economic perspective, this means that Liberty functions much like an export industry, in that it draws out-of-state dollars and resources into the Lynchburg MSA’s and Virginia’s economies, thereby fueling economic expansion.

9 Data are only for those students for whom race/ethnicity was reported.
10 Data Source: State Council of Higher Education for Virginia.
Figure 6: 2022 Fall Headcount Enrollment – In-State and Out-of-State Students\(^{11}\)

![Bar chart showing the percentage of Liberty University, All Other Private, Non-Profit, 4 yrs., and Public, 4yrs. students by in-state and out-of-state status.]

Figure 7 depicts the number of graduates that Liberty University produced in academic year 2021-22 by degree level. As these data indicate, the largest number of completions were at the bachelor’s level (10,025), followed closely by master’s (9,796), then doctorate (1,863), certificates (1,862), two-year associate’s (1,156), and first professional (809). Figure 8 provides additional detail on the top twenty-five programs for overall number of completions.

Figure 7: 2021-22 Completions by Degree Level\(^{12}\)

![Bar chart showing the number of completions by degree level.]

\(^{11}\) Data Source: State Council of Higher Education for Virginia.

\(^{12}\) Data Source: State Council of Higher Education for Virginia.
Figure 8: 2021-22 Completions by Top-25 Programs

- Business: 4,553
- Education: 4,041
- Health: 2,621
- Psychology: 2,614
- Theology: 2,368
- Multi-disciplinary: 1,923
- Homeland Security: 1,262
- Phil. & Religion: 769
- Public Admin.: 603
- Law: 599
- Comms.: 507
- Biology: 505
- Arts: 504
- Transportation: 476
- History: 447
- Parks & Rec.: 386
- Social Sci.: 374
- Computer Science: 259
- English: 227
- Military Tech.: 162
- Engineering: 89
- Family Science: 61
- Math: 50
- Liberal Arts: 41
- Languages: 37

Data Source: State Council of Higher Education for Virginia.
Lynchburg MSA Economic Profile

In this section, we provide context for the economic and fiscal impact assessments that follow by profiling the regional economy of the Lynchburg MSA.

Trend in Total Employment

Figure 9 depicts the trend in total nonfarm employment in the Lynchburg MSA from February 2018 to February 2023. As these data show, total nonfarm employment exhibited a slight upward trend through March of 2020 and then plummeted due to restrictions on economic activity imposed in response to the Covid-19 virus. Between March and April of 2020, total employment in the Lynchburg MSA fell from 112,735 to 101,935, a loss of 10,800 jobs or nearly one out of every ten jobs in the region.

As of February 2023, total nonfarm employment in the Lynchburg MSA had recovered to 112,983 jobs, 248 jobs above where it had been in March of 2020. Over the period as a whole, total nonfarm employment in the Lynchburg MSA increased by 2.0 percent between February of 2018 and February of 2023. To put this number in perspective, over the same period total nonfarm employment increased by 3.7 percent statewide in Virginia.\(^\text{14}\)

\(^{14}\) Data Source: U.S. Bureau of Labor Statistics and Liberty University. As a non-profit institution, Liberty University is not required to report employment data. These numbers have been augmented by data from Liberty University to provide a more accurate total employment estimate.

\(^{15}\) Data Source: U.S. Bureau of Labor Statistics and Liberty University.
To control for seasonality and provide a point of reference, Figure 10 compares the year-over-year change in total employment in the Lynchburg MSA to that of the state of Virginia over the same five-year period. Any point above the zero line in this graph indicates an increase in employment, while any point below the zero line indicates a decrease in employment. As these data show, the Lynchburg MSA generally under-performed the statewide average throughout most of the period. However, that gap has recently narrowed and as of February 2023 the year-over-year change in total employment in the Lynchburg MSA was 2.0 percent as compared to 2.5 percent statewide.

**Figure 10: Year-Over-Year Change in Total Nonfarm Employment – February 2018 to February 2023**

Employment by Major Industry Sector

To provide a better understanding of private sector employment in the Lynchburg MSA, Figure 11 provides an indication of the distribution of private sector employment across major industry sectors in the Lynchburg MSA in 2022. As these data indicate, the region’s largest industry sector that year was Education and Health Services (26,700 jobs), followed by Manufacturing (14,800 jobs), and Retail Trade (12,600 jobs).

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Figure 11: Private Employment by Major Industry Sector in the Lynchburg MSA – 2022"17

- Education & Health Services: 26,700
- Manufacturing: 14,800
- Retail Trade: 12,600
- Professional & Business Services: 11,600
- Leisure & Hospitality: 10,700
- Mining, Looging, & Construction: 6,000
- Financial Activities: 5,000
- Other Services: 4,400
- Wholesale Trade: 3,600
- Transportation & Utilities: 2,600
- Information: 700

Figure 12: Change in Private Employment by Major Industry Sector in the Lynchburg MSA – 2021 to 2022"18

- Leisure & Hospitality: 600
- Education & Health Services: 500
- Manufacturing: 500
- Professional & Business Services: 300
- Other Services: 200
- Wholesale Trade: 200
- Mining, Looging, & Construction: 100
- Information: 0
- Transportation & Utilities: 0
- Financial Activities: -200
- Retail Trade: -200

Figure 12 details the year-over-year change in private sector employment in the Lynchburg MSA between 2021 and 2022 by major industry sector. Over this period, the largest employment gains occurred in the Leisure and Hospitality (up 600 jobs), Education and Health Services (up 500 jobs), and Manufacturing (up 500 jobs) sectors. The largest employment losses occurred in the Retail Trade (down 200 jobs) and Financial Activities (down 200 jobs) sectors.

**Unemployment**

Figure 13 illustrates the trend in the Lynchburg MSA’s unemployment rate over the five-year period from January 2018 through January 2023 and benchmarks those data against the statewide trend for Virginia. As these data show, unemployment rates in the Lynchburg MSA generally tracked about 0.5 percentage points above the statewide rate through March of 2020, dropped below the statewide rate through the remainder of 2020, and have since again risen above the statewide rate. As of January 2023, unemployment stood at 3.8 percent in the Lynchburg MSA and 3.3 percent statewide in Virginia.

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Economic and Fiscal Impact

In this section, we quantify the economic and fiscal contribution that Liberty University made to the Lynchburg MSA and the state of Virginia as a whole during the 2021-22 academic year.

Methods

Assessing Economic Impact

To empirically evaluate the economic impact attributable to Liberty University during the 2021-22 academic year, we employ a regional economic impact model called IMPLAN. The IMPLAN model is one of the most commonly used economic impact simulation models in the U.S., and in Virginia is used by UVA’s Weldon Cooper Center, the Virginia Department of Planning and Budget, the Virginia Employment Commission, and other state agencies and research institutes. Like all economic impact models, the IMPLAN model uses economic multipliers to quantify economic impact.

Economic multipliers measure the ripple effects that an expenditure generates as it makes its way through the economy. For example, as when Liberty University purchases goods and services – or when employees hired by the university use their salaries and wages to make household purchases – thereby generating income for someone else, which is in turn spent, thereby becoming income for yet someone else, and so on, and so on. Through this process, one dollar in expenditures generates multiple dollars of income. The mathematical relationship between the initial expenditure and the total income generated is the economic multiplier.

One of the primary advantages of the IMPLAN model is that it uses regional and national production and trade flow data to construct region-specific and industry-specific economic multipliers, which are then further adjusted to reflect anticipated actual spending patterns within the specific geographic study area that is being evaluated. As a result, the economic impact estimates produced by IMPLAN are not generic. They reflect as precisely as possible the economic realities of the specific industry, and the specific study area, being evaluated.

In the analysis that follows, these impact estimates are divided into three categories. First round direct impact measures the direct economic contribution of the entity being evaluated (e.g., own employment, wages paid, goods and services purchased by Liberty University). Second round indirect and induced impact measures the economic ripple effects of this direct impact in terms of business to business, and household (employee) to business, transactions. Total impact is simply the sum of the preceding two. These categories of impact are then further defined in terms of employment (the jobs that are created), labor income (the wages and benefits associated with those jobs), and economic output (the total amount of economic activity that is created in the economy).

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20 IMPLAN is produced by IMPLAN Group, LLC.
Assessing Fiscal Impact

Our estimates of fiscal impact are based on detailed data obtained from three sources: 1) surveys of Liberty University employees and students, 2) information on out-of-town attendees to Liberty University events, and 3) information on the economic activities of enterprises associated with Liberty University.

That fiscal impact comes from seven primary local revenue streams:

- **Real Property Tax**: The local tax that employees and students who own homes within the region pay on those properties.
- **Personal Property Tax**: The local tax that employees and students who own cars that are registered within the region pay on those vehicles.
- **Motor Vehicle License Fee**: The fee that employees and students who own cars pay to register those vehicles locally.
- **Restaurant Food Tax**: The tax that some localities add to meals purchased in restaurants.
- **Hotel and Motel Room Tax**: The tax that some localities add to hotel and motel room charges.
- **Sales Tax**: The one percent portion of the state sales tax that goes to localities.
- **Other Local Taxes**: Water and sewer, amusement tax, business license, and other fees paid by Liberty University and its associated enterprises to local governments in the Lynchburg MSA.

Impact on the Lynchburg MSA in Academic Year 2021-22

Regional Economic Impact

In academic year 2021-22, Liberty University, and its associated enterprises, students, and out-of-area visitors were directly responsible for contributing $534.2 million in spending to the Lynchburg MSA. As shown in Figure 14:

- Liberty expenditures on goods and services accounted for 16 percent of that total ($87.4 million),\(^{21}\)
- Liberty expenditures on salaries and wages accounted for 53 percent ($284.8 million),\(^ {22}\)
- Liberty expenditures on capital construction projects and equipment accounted for 3 percent ($12.7 million),\(^ {23}\)

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\(^{21}\) Data Source: Liberty University.

\(^{22}\) Data Source: Liberty University.

\(^{23}\) Data Source: Liberty University.
• Expenditures on goods and services by enterprises associated with Liberty accounted for 2 percent ($9.5 million).\(^{24}\)

• Expenditures on salaries and wages by enterprises associated with Liberty accounted for 4 percent ($23.4 million).\(^{25}\)

• Student spending accounted for 15 percent ($81.2 million),\(^{26}\) and

• Visitor spending accounted for 7 percent ($35.3 million).\(^{27}\)

Figure 14: Disposition of Liberty University’s $534.2 Million in Direct Spending in the Lynchburg MSA in Academic Year 2021-22

By feeding these data into the IMPLAN model, we obtain the following estimates of economic impact. As shown in Table 1, in academic year 2021-22 direct spending from Liberty University, and its associated enterprises, students, and out-of-area visitors directly supported approximately: 1) 7,579 jobs, 2) $323.1

\(^{24}\) Data Source: Liberty University. These enterprises include Airport Plaza; Burton Properties; Candler Station; Collaborative Health Partners; Fairfield Inn and Suites; Freedom Aviation; Liberty Christian Academy; Liberty Mountain Medical Group; LU Plaza; LU Wards; Morningstar Broadcasting; Philanthropy; Red Tie Music; River Ridge Mall; and SeaQuest.

\(^{25}\) Data Source: Liberty University.

\(^{26}\) Data Source: Based on the findings from 2022 survey of Liberty University students and data from the Virginia Tourism Corporation’s domestic travel profiles for 2021.

\(^{27}\) Data Source: Based on data on out-of-area visitors to university events provided by Liberty University, findings from 2022 survey of Liberty University students, and data from the Virginia Tourism Corporation’s domestic travel profiles for 2021.
million in labor income, and 3) $527.8 million in economic output in the Lynchburg MSA (in 2023 dollars).

Taking into account the economic ripple effects that direct spending would generate within the region, we estimate that in total Liberty University supported approximately: 1) 10,397 jobs, 2) $439.0 million in labor income, and 3) $966.9 million in economic output in the Lynchburg MSA in academic year 2021-22.

Table 1: Total Economic Impact of Liberty University on the Lynchburg MSA in Academic Year 2021-22 (2023 Dollars)

<table>
<thead>
<tr>
<th>Economic Impact</th>
<th>Employment</th>
<th>Labor Income</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Round Direct Economic Activity</td>
<td>7,579</td>
<td>$323,084,458</td>
<td>$527,811,761</td>
</tr>
<tr>
<td>2nd Round Indirect and Induced Economic Activity</td>
<td>2,818</td>
<td>$115,883,462</td>
<td>$439,105,460</td>
</tr>
<tr>
<td>Total Economic Activity*</td>
<td>10,397</td>
<td>$438,967,920</td>
<td>$966,917,221</td>
</tr>
</tbody>
</table>

*Totals may not sum due to rounding.

Regional Fiscal Impact

As shown in Table 2, in academic year 2021-22 Liberty University, and its associated enterprises, students, and out-of-area visitors were directly responsible for contributing approximately $23.3 million in local tax revenue to the Lynchburg MSA.

If we focus exclusively on the City of Lynchburg, where most of Liberty University’s campus is physically located, what these data show is that in academic year 2021-22 Liberty University directly or indirectly generated approximately $14.4 million in tax revenue for the city. More specifically, Liberty University was responsible for generating approximately:

- 9 percent of the City of Lynchburg’s total Real Property Tax revenue,
- 17 percent of its Personal Property Tax revenue,
- 15 percent of its Motor Vehicle License Fee revenue,
- 9 percent of its Restaurant Food Tax revenue,
- 39 percent of its Hotel and Motel Room Tax revenue, and
- 2 percent of its local Sales Tax revenue.  

Table 2: Total Fiscal Impact of Liberty University on the Lynchburg MSA in Academic Year 2021-22 (2023 Dollars)

<table>
<thead>
<tr>
<th>Fiscal Impact</th>
<th>Amherst</th>
<th>Appomattox</th>
<th>Bedford</th>
<th>Campbell</th>
<th>Lynchburg</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Property(^{29})</td>
<td>$282,708</td>
<td>$157,517</td>
<td>$1,542,607</td>
<td>$1,487,731</td>
<td>$5,837,385</td>
<td>$9,307,947</td>
</tr>
<tr>
<td>Personal Property(^{30})</td>
<td>$444,064</td>
<td>$181,057</td>
<td>$1,489,379</td>
<td>$2,142,286</td>
<td>$3,173,450</td>
<td>$7,430,236</td>
</tr>
<tr>
<td>Motor Vehicle License Fee(^{31})</td>
<td>$35,754</td>
<td>$23,470</td>
<td>$0</td>
<td>$297,540</td>
<td>$273,733</td>
<td>$630,497</td>
</tr>
<tr>
<td>Restaurant Food Tax(^{32})</td>
<td>$39,736</td>
<td>$17,585</td>
<td>$130,799</td>
<td>$147,393</td>
<td>$1,609,189</td>
<td>$1,944,702</td>
</tr>
<tr>
<td>Hotel and Motel Room Tax(^{33})</td>
<td>$8,570</td>
<td>$4,074</td>
<td>$59,262</td>
<td>$25,513</td>
<td>$1,110,074</td>
<td>$1,207,494</td>
</tr>
<tr>
<td>Local Sales Tax(^{34})</td>
<td>$27,664</td>
<td>$14,500</td>
<td>$139,845</td>
<td>$149,505</td>
<td>$457,828</td>
<td>$789,342</td>
</tr>
<tr>
<td>Other Local Taxes(^{35})</td>
<td>$0</td>
<td>$0</td>
<td>$3,437</td>
<td>$19,965</td>
<td>$1,930,552</td>
<td>$1,953,954</td>
</tr>
<tr>
<td>TOTAL*</td>
<td>$838,496</td>
<td>$398,203</td>
<td>$3,365,328</td>
<td>$4,269,933</td>
<td>$14,392,211</td>
<td>$23,264,172</td>
</tr>
</tbody>
</table>

*Totals may not sum due to rounding.

\(^{29}\) 2022 Real Property Tax Rates: Amherst County – $0.61 per $100 of assessed value, Appomattox County – $0.63, Bedford County – $0.53, Campbell County – $0.52, and Lynchburg City – $1.11.

\(^{30}\) 2022 Personal Property Tax Rates: Amherst County – $3.45 per $100 of assessed value, Appomattox County – $3.00, Bedford County – $2.35, Campbell County – $2.16 (effective tax rate), and Lynchburg City – $3.80. Based on informal discussions with the City of Lynchburg’s Commissioner of Revenue Office, we conservatively estimate that only five percent of university students who live on campus and own vehicles actually pay personal property tax on those vehicles in the Lynchburg MSA.

\(^{31}\) 2022 Motor Vehicle License Fees: Amherst County – $25.00, Appomattox County – $35.00, Bedford County – none, Campbell County – $27.00, and Lynchburg City – $29.50. Conservatively assumes that only five percent of Liberty University students who live on campus and own vehicles register those vehicles in the Lynchburg MSA.

\(^{32}\) 2022 Restaurant and Food Tax: Amherst County – 4.0%, Appomattox County – 8.0%, Bedford County – 4.0%, Campbell County – 4.0%, and Lynchburg City – 6.5%.

\(^{33}\) 2022 Hotel and Motel Room Tax: Amherst County – 5.0%, Appomattox County – 5.0%, Bedford County – 7.0%, Campbell County – 2.0%, and Lynchburg City – 6.5%.

\(^{34}\) One percent of retail sales in all localities.

\(^{35}\) Comprised of water and sewer, business license, amusement tax, and other fees paid by Liberty University and its associated enterprises.
Impact on the Commonwealth of Virginia in Academic Year 2021-22

Statewide Economic and Fiscal Impact

In academic year 2021-22, Liberty University was directly responsible for contributing $613.2 million in spending to the Commonwealth of Virginia. As shown in Figure 15:

- Liberty expenditures on goods and services accounted for 17 percent of that total ($106.3 million),\textsuperscript{36}
- Liberty expenditures on salaries and wages accounted for 50 percent ($308.7 million),\textsuperscript{37}
- Liberty expenditures on capital construction projects and equipment accounted for 7 percent ($42.5 million),\textsuperscript{38}
- Expenditures on goods and services by enterprises associated with Liberty accounted for 2 percent ($10.9 million),\textsuperscript{39}
- Expenditures on salaries and wages by enterprises associated with Liberty accounted for 4 percent ($24.3 million),\textsuperscript{40}
- Student spending accounted for 14 percent ($84.5 million),\textsuperscript{41} and
- Visitor spending accounted for 6 percent ($36.0 million).\textsuperscript{42}

\textsuperscript{36} Data Source: Liberty University.
\textsuperscript{37} Data Source: Liberty University.
\textsuperscript{38} Data Source: Liberty University.
\textsuperscript{39} Data Source: Liberty University. These enterprises include Airport Plaza; Burton Properties; Candler Station; Collaborative Health Partners; Fairfield Inn and Suites; Freedom Aviation; Liberty Christian Academy; Liberty Mountain Medical Group; LU Plaza; LU Wards; Morningstar Broadcasting; Philanthropy; Red Tie Music; River Ridge Mall; and SeaQuest.
\textsuperscript{40} Data Source: Liberty University.
\textsuperscript{41} Data Source: Based on the findings from 2022 survey of Liberty University students and data from the Virginia Tourism Corporation’s domestic travel profiles for 2021.
\textsuperscript{42} Data Source: Based on data on out-of-area visitors to university events provided by Liberty University, findings from 2022 survey of Liberty University students, and data from the Virginia Tourism Corporation’s domestic travel profiles for 2021.
By feeding these data into the IMPLAN model, we obtain the following estimates of economic impact. As shown in Table 3, in academic year 2021-22 direct spending from Liberty University, associated enterprises, students, and out-of-area visitors directly supported approximately: 1) 8,171 jobs, 2) $361.3 million in labor income, and 3) $580.4 million in economic output in the Commonwealth of Virginia (in 2020 dollars).

Taking into account the economic ripple effects that direct spending would generate within the state, we estimate that in total Liberty University supported approximately: 1) 11,380 jobs, 2) $500.5 million in labor income, 3) $1.1 billion in economic output, and 4) $162.5 million in total government tax revenue ($55.6 million of which was state and local) in the Commonwealth of Virginia in academic year 2021-22.
Table 3: Estimated Total Economic Impact of Liberty University on the Commonwealth of Virginia in Academic Year 2021-22 (2023 Dollars)

<table>
<thead>
<tr>
<th>Economic Impact</th>
<th>Employment</th>
<th>Labor Income</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Round Direct Economic Activity</td>
<td>8,171</td>
<td>361,308,394</td>
<td>580,425,141</td>
</tr>
<tr>
<td>2nd Round Indirect and Induced Economic Activity</td>
<td>3,209</td>
<td>139,180,920</td>
<td>486,688,060</td>
</tr>
<tr>
<td>Total Economic Activity*</td>
<td>11,380</td>
<td>500,489,314</td>
<td>1,067,113,202</td>
</tr>
<tr>
<td>Fiscal Impact</td>
<td>State and Local</td>
<td>Federal</td>
<td>Total*</td>
</tr>
<tr>
<td>Tax Revenue</td>
<td>55,559,052</td>
<td>106,918,701</td>
<td>162,477,752</td>
</tr>
</tbody>
</table>

*Totals may not sum due to rounding.

Human Capital

In the previous section we quantified the regional and statewide economic and fiscal impact that Liberty University had in academic year 2021-22 in terms of the dollars that it injected into the economy. In this section, we look at the economic contribution that Liberty University made to Virginia in academic year 2021-22 from a different perspective – the value of the human capital it created through its most important product, its graduates.

Value Added

A significant and unique characteristic of higher education is that it generates externalities, or spillover effects, that exceed the private benefits to individuals. As a result, it is generally recognized that it is in the interest of the community at large to encourage higher levels of educational attainment. Some of these spillover effects take the form of greater civic responsibility, improved health, and reduced crime. From a purely economic perspective though, the largest spillover effect has to do with increased economic productivity.

As individuals increase their human capital through higher levels of educational attainment, not only do they become more productive, they also increase the productivity of the resources around them. A good example of this would be the difference between what can be accomplished by placing a computer in the hands of a trained user, and what can be accomplished when the computer is placed in the hands of an untrained user – same resource, very different result. Moreover, this difference in results has significant economic implications in the aggregate. Greater productivity translates into increased economic activity and higher incomes.

However, to measure the effect that Liberty University’s educational services have on economic productivity and, therefore, Virginia’s economy, we must first be able to quantify the relationship between educational attainment and productivity. One of the early leaders in this area of economics was Gary Becker, who was awarded a Nobel Prize in 1992 for his work in the economics of human
capital development. One of Becker’s key insights was that, because education produces work skills that are valuable to all employers, in a competitive market employers will be forced to compensate workers for the full value of their skills, or otherwise risk losing them to other employers. A critical implication of this insight is that differences in wages provide a reasonable estimate of the economic value attributable to differences in educational attainment and skills training.

Table 4 presents data on average annual wages in Virginia by educational attainment level for those occupations that typically require a certain level of education as a prerequisite for employment. In the first row of this table, we provide estimates of average annual wages across all Virginia occupations. In the second row of the table, we further refine our analysis to reflect only those occupations that Liberty University graduates are likely to enter, based on their program of study. To accomplish that task, we employ a crosswalk developed by the National Crosswalk Service Center (NCSC) that “maps” occupations into the prerequisite education and training program(s) necessary for entry into that occupation. Using this tool, we are able to identify those occupations that Liberty University graduates are most likely to enter and restrict the second set of average wage estimates to encompass only those occupations.

### Table 4: Median Annual Wages in Virginia by Degree Level

<table>
<thead>
<tr>
<th></th>
<th>High School</th>
<th>Associates</th>
<th>Bachelors</th>
<th>Masters</th>
<th>Doctoral or Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Annual Virginia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wage: All Occupations</td>
<td>$52,316</td>
<td>$79,329</td>
<td>$93,409</td>
<td>$91,730</td>
<td>$164,507</td>
</tr>
<tr>
<td><strong>Average Annual Virginia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wage: Liberty Univ. Specific</td>
<td>N/A</td>
<td>$90,781</td>
<td>$96,027</td>
<td>$94,550</td>
<td>$129,705</td>
</tr>
</tbody>
</table>

Table 5 provides additional data on the number of students that Liberty University graduated at each degree level in academic year 2021-22, and the number of those graduates who were in-state residents of Virginia.

---

43 Data Source: Derived using 2021 occupational wage data from the Virginia Employment Commission.
44 The National Crosswalk Service Center (NCSC) is funded by the U.S. Department of Labor, Employment and Training Administration. The specific NCSC crosswalk used in this analysis is the 2010 Standard Occupational Classification Crosswalk to 2010 Classification of Instructional Programs. This crosswalk identifies the prerequisite instructional programs (classified according to the National Center for Educational Statistics’ 2010 Classification of Instructional Program, or CIP, code) necessary for employment in specific occupations (classified according to the Bureau of Labor Statistics’ 2010 Standard Occupational Classification, or SOC, code).
45 Data Source: State Council of Higher Education for Virginia.
Table 5: Liberty University 2021-22 Graduates by Degree Level

<table>
<thead>
<tr>
<th></th>
<th>Associates</th>
<th>Bachelors</th>
<th>Masters</th>
<th>Doctoral or Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Graduates</td>
<td>1,156</td>
<td>10,025</td>
<td>9,796</td>
<td>2,672</td>
</tr>
<tr>
<td>In-State Graduates</td>
<td>188</td>
<td>2,429</td>
<td>1,980</td>
<td>425</td>
</tr>
</tbody>
</table>

Based on these data, Table 6 presents our analysis of the economic value that was created through the increased labor productivity embodied in Liberty University’s 2021-22 graduates. The first three rows of Table 6, compare likely average wages for Liberty University graduates against the benchmark wage across all Virginia occupations for that degree level, and compute the difference (i.e., comparing average wages for Liberty University Associate and Bachelor degree graduates to the average wage for high school graduates, and comparing average wages for Liberty University Master’s and Doctoral or Professional degree graduates to the average wage for Bachelors graduates). Based on Becker’s research, this differential represents the “value added,” in terms of increased labor productivity, associated with each Liberty University degree.

This value added differential is then multiplied by the number of in-state graduates from Liberty University in 2021-22 to determine the “Total Annual Value of Increased Labor Productivity.” We then further adjust that figure to account for: 1) average labor force participation rates by degree level, and 2) selectivity bias, or the fact that individuals who pursue education tend to have higher than average innate abilities to start with, to derive an adjusted final estimate. As shown in the “Adjusted Total Annual Value of Increased Labor Productivity” row of Table 6, across all graduate levels that estimate of the economic value of the additional human capital embodied in Liberty University’s 2021-22 graduates is $74.3 million.

46 Data Source: State Council of Higher Education for Virginia. Virginia residents are used instead of all graduates because of the greater probability that these graduates will live and work in Virginia after graduation.
47 Data Source: U.S. Department of Labor. Data are average labor force participation rates by educational attainment level in 2020.
48 There is a substantial body of literature that indicates that not all of the difference in annual income between different educational attainment levels is attributable to educational attainment alone. The reason for this has to do with what is called selectivity bias – the tendency for those with greater innate abilities to go on to pursue higher levels of educational attainment. In other words, what you come out of the educational process with is partly attributable to what you had when you went into it. Although estimates differ, a frequently cited study by Larry L. Leslie and Paul Brinkman found that only about 79 percent of the difference in income between high school graduates and individuals with an undergraduate education is attributable to education alone. See, Larry L. Leslie and Paul Brinkman, The Economic Value of Higher Education (Phoenix: American Council of Education and the Oryx Press), 1993.
Table 6: Median Annual Wages in Virginia by Degree Level

<table>
<thead>
<tr>
<th></th>
<th>Associates</th>
<th>Bachelors</th>
<th>Masters</th>
<th>Doctoral or Professional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Annual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia Wage:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberty U. Specific Occupations</td>
<td>$90,781</td>
<td>$96,027</td>
<td>$94,550</td>
<td>$129,705</td>
<td></td>
</tr>
<tr>
<td>Benchmark Average Virginia Wage – All Occupations</td>
<td>$52,316</td>
<td>$52,316</td>
<td>$93,409</td>
<td>$93,409</td>
<td></td>
</tr>
<tr>
<td>Differential</td>
<td>$38,465</td>
<td>$43,711</td>
<td>$1,141</td>
<td>$36,296</td>
<td></td>
</tr>
<tr>
<td>Estimated Liberty In-State 2021-22 Graduates</td>
<td>188</td>
<td>2,429</td>
<td>1,980</td>
<td>425</td>
<td></td>
</tr>
<tr>
<td>Total Annual Value of Increased Labor Productivity</td>
<td>$7,231,379</td>
<td>$106,173,965</td>
<td>$2,258,477</td>
<td>$15,425,895</td>
<td>$131,089,716</td>
</tr>
<tr>
<td>Labor Force</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation</td>
<td>67.2%</td>
<td>71.8%</td>
<td>73.4%</td>
<td>73.4%</td>
<td></td>
</tr>
<tr>
<td>Selectivity Bias</td>
<td>79.0%</td>
<td>79.0%</td>
<td>79.0%</td>
<td>79.0%</td>
<td></td>
</tr>
<tr>
<td>Adjusted Total</td>
<td>$3,838,994</td>
<td>$60,223,996</td>
<td>$1,309,601</td>
<td>$8,944,860</td>
<td>$74,317,451</td>
</tr>
<tr>
<td>Annual Value of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased Labor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typical Work-life</td>
<td>26</td>
<td>26</td>
<td>21</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Discounted Present Value</td>
<td>$67,775,655</td>
<td>$1,063,226,565</td>
<td>$20,117,375</td>
<td>$137,406,078</td>
<td>$1,288,525,673</td>
</tr>
</tbody>
</table>

Finally, it is important to realize that these estimates of the value of increased labor productivity are not one-time benefits. Rather, they are part of a stream of economic activity that continues over the entire time that the students Liberty University graduated in 2021-22 are active in the workforce. Based on analysis of the typical “work-life” of American men and women,49 and the average age of Liberty University students, we estimate that time horizon to be approximately 26 years for graduates from

Associate and Bachelor programs, and 21 years for graduates from Master’s and Doctoral or Professional programs.

Using these figures, along with the estimates of “Adjusted Total Annual Value of Increased Labor Productivity” discussed above, we can determine the present value, or value in today’s dollars, of the stream of economic activity generated by the increased labor productivity embodied in Liberty University’s 2021-22 graduates. As shown in the bottom row of Table 6, that present value is estimated to be approximately $1.3 billion.50

Statewide Economic Impact

In this portion of the section, we use the IMPLAN model to quantify the economic and fiscal impact attributable to the $74.3 million increase in human capital associated with Liberty University’s 2021-22 graduates. It is important to note that these estimates focus exclusively on the additional economic activity that is generated as Liberty University graduates turn the income they earn as a result of their enhanced skills and increased labor productivity into household consumption expenditures. As a result, they reflect the economic impact that comes from the second-round ripple effects generated by the “Adjusted Total Annual Value of Increased Labor Productivity” presented in Table 6.

As shown in Table 7, second round effects from the income that 2021-22 Liberty University graduates earn as a result of their enhanced skills and increased labor productivity are estimated to support approximately: 1) 283 additional jobs, 2) $16.1 million in additional labor income, and 3) $51.4 million in additional economic output annually in the Commonwealth of Virginia (in 2023 dollars). For a total annual economic and fiscal impact of approximately: 1) 283 jobs, 2) $90.4 million in labor income, 3) $125.7 million in economic output, and 4) $6.7 million in total government tax revenue ($3.7 million of which was state and local).

Table 7: Estimated Annual Economic and Fiscal Impact from the Increased Labor Productivity Associated with Liberty University’s 2021-22 Graduates (2023 Dollars)

<table>
<thead>
<tr>
<th>Economic Impact</th>
<th>Employment</th>
<th>Labor Income</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; Round Direct Economic Activity</td>
<td>0</td>
<td>$74,317,451</td>
<td>$74,317,451</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; Round Indirect and Induced Economic Activity</td>
<td>283</td>
<td>$16,064,857</td>
<td>$51,419,466</td>
</tr>
<tr>
<td>Total Economic Activity*</td>
<td>283</td>
<td>$90,382,308</td>
<td>$125,736,917</td>
</tr>
<tr>
<td>Fiscal Impact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State and Local</td>
<td>$3,698,577</td>
<td>$3,047,654</td>
<td>$6,746,232</td>
</tr>
</tbody>
</table>

*Totals may not sum due to rounding.

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50 Data Source: United States Treasury. The discount rate used for this calculation was 1.5 percent and is a rounded approximation of the United States Treasury’s Real Long-Term Bond Rate.
Other Contributions

In this section we illuminate the many contributions that Liberty University makes to the Lynchburg MSA that go beyond the narrow confines of economic and fiscal impact. Among these contributions are community service, contributing to economic revitalization, enhancing the quality of life, and generating higher levels of tourism, and ensuring that the Lynchburg MSA is developing the qualified workforce that it will need to be economically successful in the future.

Community Involvement

Liberty University, its employees, and students make several positive contributions to the greater Lynchburg community.

Service and Volunteerism

One of the unique characteristics of Liberty University is that its students are obliged to volunteer on campus and within the community as a requirement for graduation. Among the many local community organizations that benefit from this volunteer service are Humankind, Parkview Community Mission, Patrick Henry Family Services, Salvation Army, YMCA, Lynchburg Humane Society, and over 50 churches in the Lynchburg area. In 2021-22 alone, Liberty University students provided 466,303 hours of volunteer service to the Greater Lynchburg community.  

If one were to quantify the value of this volunteer service by Liberty University students at simply the current minimum wage, their total annual contribution to the Lynchburg MSA was approximately $5.1 million in 2021-22.

Center for Engineering Research and Education

The Center for Engineering Research and Education (CERE) is owned by Liberty University and is located in the New London Business and Technology Park in Bedford County. CERE is a 30,000 square foot multi-functional complex that houses numerous laboratories which have been designed based on industry needs and standards. These laboratories provide a space where industry, faculty, and students collaborate on a variety of research projects. CERE attracts industry partners to the Lynchburg MSA by providing needed equipment, facilities, trained operators, and certified training programs that were previously outsourced to outside of the region. Companies that have used CERE include: Belvac, Simplimatic, Framatone, Novatech, CyberKong, Commander’s Concepts, Hendricks Motor Sports, and ICISI.

Economic Revitalization

In an effort to grow its endowment fund, Liberty University has also made significant property investments in the Lynchburg MSA and among these are two shopping centers and one regional mall. In 2008, Liberty acquired the Plaza shopping center and invested $500,000 to upgrade and improve the property. In 2010, Liberty acquired Candlers Station shopping center, and after similar improvements it

51 Data Source: Liberty University.
52 “At Liberty, the future is in land,” Valley Business Front, April 2010.
is anticipated that Candlers Station will provide the university with double digit annual return on its investment, while also providing a continuing stream of tax revenue for the city.\(^5\)

Then, in 2017 Liberty University acquired the River Ridge Mall. The River Ridge Mall is the Lynchburg MSA’s only mall and it had deteriorated to the point that it was on the verge of closing. Over the past several years, Liberty has invested approximately $78 million in the revitalization of River Ridge Mall. These efforts have helped to bring nationally recognized tenants like Dick’s Sporting Goods, Home Goods, and Ulta Beauty to the Lynchburg MSA area. Along with national tenants, the River Ridge Mall has also been able to attract more local tenants such as Papa Gallo Mexican Restaurant, Duck Donuts, and Rookie’s – a local ice cream shop. In addition to River Ridge Mall, Liberty purchased a retail center on Wards Road in 2018 that houses Hobby Lobby, Mardel’s Christian & Education, and Chick Fil A.

These investments will have a long-term impact on the Lynchburg MSA by enabling residents to shop locally for their retail needs, which will generate additional local tax revenue.

**Freedom Aviation**

Similar to the retail investments, Freedom Aviation is a private enterprise that is associated with Liberty University. Freedom Aviation is the Fixed Base Operator (FBO) at the Lynchburg Regional Airport where it provides a broad range of services to the general aviation community that include hangar services, maintenance, flight instruction, charter flights, aircraft rentals, and fuel sales. In addition to generally contributing to the economic stability and growth of Lynchburg’s only commercial airport, Freedom Aviation also enjoys the unique advantage of being associated with Liberty University’s School of Aeronautics.

The Liberty University School of Aeronautics plays a critical role in meeting the Commonwealth’s demand for skilled professionals in Aeronautics and Aerospace including pilots, unmanned vehicle crews, maintenance technicians, and aeronautics administrators. Of the 467 graduates in Aerospace, Aeronautics, and Astronautical Sciences from Virginia colleges and universities in 2021-2022, Liberty University provided 453, or 97 percent.\(^5\) This association also better positions Freedom Aviation to attract aeronautical conferences and events to Lynchburg, such as the 2016 Lynchburg Regional Airshow, which featured the Navy’s Blue Angels and drew a large number of out-of-town spectators.

**Recreational and Cultural Facilities**

Liberty University has also contributed to the Lynchburg MSA’s quality of life by significantly enhancing its recreational and cultural opportunities. The university’s LaHaye Ice Center, Liberty Mountain Snowflex Center, Tower Theater, Montview Bowling Alley, and the Center for Music and Worship Arts’ Concert Hall are all open to the public.

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\(^5\) “At Liberty, the future is in land,” Valley Business Front, April 2010.

\(^5\) Data Source: State Council of Higher Education for Virginia.
The LaHaye Ice Center was newly renovated in 2015. In addition to providing a home for Liberty’s figure skating, synchronized skating, and men’s and women’s hockey teams, the LaHaye Ice Center is also used to host a variety of community events such as youth hockey leagues, figure skating programs, public sessions, and private events.

The Liberty Mountain Snowflex Center opened in August of 2009 and has since added two tubing runs on the main slope. The Snowflex Centre specializes in year-round skiing and snowboarding, but also offers a variety of activities & programs such as tubing, trampolining, sledding, lessons, and day camps. The Snowflex Center has received national attention and continues to be a significant destination for winter sports enthusiasts. As described on Virginia’s official tourism website,

_Ever wondered if there was a way to ski and snowboard year round? Located in Lynchburg Virginia, Liberty Snowflex allows you to ski and snowboard any season of the year! Snowflex is the first of its kind in America. Developed by Briton Engineering, Snowflex is a synthetic multilayered material that simulates the effects of snow. It is lined with a misting system that sprays the surface to help your board/skis slide, as well as a 2 inch padded cushion to help ease any falls._55

The Tower Theater opened in 2010 and is home to Liberty University’s Department of Theatre Arts and the Alluvian Stage Company, a nonprofit professional theater company. The Tower Theater is a 640 seat venue with over 12,000 square feet of backstage and support areas, and it boasts a Broadway-style fly tower and professional rigging system that few other colleges in America feature. The Tower Theater is staged for approximately four productions each semester, including shows like "The Hunchback of Notre Dame," "Parade," "Romeo and Juliet," "42 Street," and original works written by students, such as "Bedford Boys" in 2019. Over the summer break, the theater is also used to host youth and high school drama camps.

Liberty’s eight lane Montview Bowling Alley opened its doors in 2016. The bowling alley runs weekly specials, family nights throughout the year, and reservation opportunities. Memberships are available to students throughout the school year, and to the general public during the summer.

Finally, the Center for Music and Worship Arts’ Concert Hall opened in 2016. The Concert Hall has just under 1,600 seats, and boasts a retractable telescoping choir loft that can also be used to provide an additional 300 seats, while the orchestra pit can be raised to serve as an extension of the stage. The Concert Hall is also equipped with the Meyer Sound Constellation Acoustic System that can be used to stage both acoustic and electronic presentations. This allows the Concert Hall to be used for a wide variety of performances, including classical orchestras, praise and worship, jazz and pop music shows, musical theater, and opera.

55 Data Source: Virginia Tourism Corporation.
Tourism

As demonstrated in the earlier assessment of economic and fiscal impact, the university also contributes significantly to regional tourism. Through out-of-town visitors to Liberty University’s employees and students, facilities such as the LaHaye Ice Center and Liberty Mountain Snowflex Center, and events such as commencement, fall family weekend, and spring family weekend the university plays a large role in attracting tourists to the Lynchburg MSA.

Based on information obtained from our surveys of Liberty University employees and students, along with data provided by Liberty University on out-of-town attendees to university events, we estimate that in academic year 2021-22, Liberty University:

- employees had approximately 37,814 overnight out-of-town visitors,
- resident and commuter students had approximately 70,300 overnight out-of-town visitors,
- intensive online students accounted for approximately 3,489 overnight out-of-town visitors, and
- facilities and events attracted 145,906 overnight out-of-town visitors.

Perhaps the most tangible way to gauge the effect that these visitors had on the regional tourism industry is to focus on the hotel stays that were generated. Using the data above in combination with other information from the surveys on the proportion of out-of-town visitors that stayed in hotels, we estimate that in fiscal year 2022 out-of-town visitors to Liberty University employees, students, facilities, and events generated approximately 133,339 hotel room nights in the Lynchburg MSA. Those hotel room nights in turn were associated with approximately $14.9 million in hotel revenue within the Lynchburg MSA.

Workforce Development

In this section, we shed light on the contribution that Liberty University makes to ensuring that Virginia is developing the qualified workforce it will need to be economically successful in the future. Employing the same National Crosswalk Service Center (NCSC) crosswalk used earlier in the Human Capital section to identify those occupations that Liberty University graduates are likely to enter based on their program of study, and combining that with the Virginia Employment Commission’s most recent occupational employment projections, we find that between 2020 and 2030 the occupations supported by Liberty University’s graduate pipeline are anticipated to grow by 90,031 jobs statewide. Table 8 provides additional detail on the specific occupational categories in which that job growth is anticipated to occur.

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56 Data Source: Based on the findings from recent survey of Liberty University students and employees.
57 Data Source: Liberty University.
58 Data Source: Data on 2022 room rates are taken from “2023 Monthly and Year-to-Date February Lodging Report,” Virginia Tourism Corporation.
**Figure 8: Projected Statewide Employment Growth in Occupations Supported by Liberty University’s Graduate Pipeline – 2020 to 2030**

<table>
<thead>
<tr>
<th>Occupation Category</th>
<th>Projected Employment Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business and Financial Operations Occupations</td>
<td>26,095</td>
</tr>
<tr>
<td>Management Occupations</td>
<td>19,478</td>
</tr>
<tr>
<td>Education, Training, and Library Occupations</td>
<td>12,127</td>
</tr>
<tr>
<td>Healthcare Practitioners and Technical Occupations</td>
<td>9,898</td>
</tr>
<tr>
<td>Personal Care and Service Occupations</td>
<td>4,939</td>
</tr>
<tr>
<td>Arts, Design, Entertainment, Sports, and Media Occupations</td>
<td>4,846</td>
</tr>
<tr>
<td>Community and Social Service Occupations</td>
<td>3,779</td>
</tr>
<tr>
<td>Healthcare Support Occupations</td>
<td>3,006</td>
</tr>
<tr>
<td>Architecture and Engineering Occupations</td>
<td>2,408</td>
</tr>
<tr>
<td>Office and Administrative Support Occupations</td>
<td>1,331</td>
</tr>
<tr>
<td>Life, Physical, and Social Science Occupations</td>
<td>812</td>
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<tr>
<td>Computer and Mathematical Occupations</td>
<td>474</td>
</tr>
<tr>
<td>Installation, Maintenance, and Repair Occupations</td>
<td>457</td>
</tr>
<tr>
<td>Protective Service Occupations</td>
<td>339</td>
</tr>
<tr>
<td>Legal Occupations</td>
<td>42</td>
</tr>
</tbody>
</table>

59 Data Source: Derived from Virginia Employment Commission occupational employment projections for 2020 to 2030.
Conclusion

This report has assessed the economic contribution that Liberty University made to the Lynchburg MSA and the state of Virginia in academic year 2021-22. What that analysis has shown is that Liberty University is one of Virginia’s most successful and fastest growing institutions of higher education. In academic year 2021-22, Liberty had an unduplicated headcount of 130,594, making it the largest institution of higher education in Virginia and one of the largest in the country. Between 1997 and 2022, Liberty University’s fall headcount enrollment increased from 6,648 to 96,709, an increase of 90,061 students or 1,355 percent. In contrast, over that same period Virginia’s other four-year private non-profit colleges and universities grew by 24 percent, and Virginia’s four-year public colleges and universities grew by 29 percent.

In 2021-22, Liberty University and its auxiliary enterprises were also Lynchburg’s largest employer, providing jobs for 8,413 individuals in the Lynchburg MSA, 9,166 in Virginia, and 12,663 worldwide. Moreover, Liberty’s rapid employment growth has provided much needed stability to a regional economy that has experienced uneven employment growth in recent years, was particularly hard-hit by lockdowns of economic activity mandated in response to the Covid19 virus, and has yet to fully recover to its pre-pandemic employment level.

Our analysis has also shown that Liberty University makes a major economic contribution to its community. In 2021-22, direct spending in the Lynchburg MSA by the university, its associated enterprises, students, and visitors totaled $534.2 million. Our analysis shows that $534.2 million in direct regional spending was responsible for generating $966.9 million in overall economic activity in the Lynchburg MSA, which means that every $1.00 of Liberty University’s net local spending generated $1.81 within the broader regional economy.

In addition, Liberty University’s 2021-22 regional spending was also responsible for supporting a total of 10,397 jobs within the Lynchburg MSA and generating $439.0 million in labor income. Given that the location of most of this employment was in the City of Lynchburg, and that total employment in the City of Lynchburg was 48,686 in 2021, this means that approximately one out of every five jobs in the City of Lynchburg that year was either directly or indirectly attributable to Liberty University.

With regard to the fiscal contribution that Liberty University makes to its community, local taxes paid by the university itself, associated enterprises, employees, students, and visitors contributed approximately $23.3 million in tax revenue to the Lynchburg MSA in 2021-22. Focusing exclusively on the City of Lynchburg, where most of Liberty University’s campus is physically located, the university directly or indirectly generated approximately $14.4 million in tax revenue for the city. More specifically, Liberty University directly or indirectly accounted for approximately: 9 percent of the city’s total Real Property Tax revenue, 17 percent of its Personal Property Tax revenue, 15 percent of its Motor Vehicle License

60 Data Source: Liberty University.
Fee revenue, 9 percent of its Restaurant Food Tax revenue, 39 percent of its Hotel and Motel Room Tax revenue, and 2 percent of its local Sales Tax revenue.

From the perspective of Virginia as a whole, in 2021-22 Liberty University, along with its associated enterprises, students, and visitors were responsible for contributing $613.2 million in direct spending to the state. Our analysis indicates that this $613.2 million in statewide spending was responsible for generating almost $1.1 billion in economic activity, which means that every $1.00 of Liberty University’s state spending ultimately generated $1.84 in overall economic activity within the state. In addition, those expenditures were responsible for supporting a total of 11,380 jobs in the state, creating $500.5 million in labor income, and generating $162.5 million in federal, state, and local tax revenue.

Our analysis has also shown that Liberty University makes a major contribution to growing Virginia’s human capital. For Liberty University, as with any education institution, its primary economic contribution is the product it is in the business of creating – well educated and highly trained graduates. We estimate that the economic value of the enhanced labor productivity, or increased human capital, that Liberty University’s 2021-22 graduates carried with them into Virginia’s workforce was approximately $74.3 million. Moreover, the discounted present value of the stream of economic benefits that enhanced productivity will generate over the entire time that those graduates are likely to be active in the workforce is approximately $1.3 billion.

In addition, Liberty University makes many other contributions to the Lynchburg MSA and Virginia that go beyond simple economic impact. For example, one of the unique characteristics of Liberty University is that its students are obliged to volunteer on campus and within the community as a requirement for graduation. In 2021-22 alone, Liberty University students provided 466,303 hours of volunteer service to the Greater Lynchburg community. If one were to quantify the value of this volunteer service by Liberty University students at simply the current minimum wage, their total annual contribution to the Lynchburg MSA was approximately $5.1 million in 2021-22.

Liberty University has also made significant property investments in the Lynchburg MSA that have aided in economic revitalization. In 2008, Liberty acquired the Plaza shopping center and invested $500,000 to upgrade and improve the property. In 2010, Liberty acquired Candlers Station shopping center, made similar improvements and is now providing a continuing stream of tax revenue for the city. In 2017, it acquired River Ridge Mall which had deteriorated to the point that it was on the verge of closing. After investing approximately $78 million to revitalize the facility it now counts among its’ anchor tenants nationally recognized names like Dick’s Sporting Goods, Home Goods, and Ulta Beauty. In 2018, it acquired a retail center on Wards Road that brought a national footprint with large tenants such as Hobby Lobby, Chick Fil A, and Northern Tool. These investments will have a long-term impact on the Lynchburg MSA by enabling residents to shop locally for their retail needs, which will generate additional local tax revenue.
Liberty University has also contributed to the region’s recreational attractions, with investments in facilities such as the LaHaye Ice Center; the Liberty Mountain Snowflex Center; the Tower Theater, and the Montview Bowling Alley, all of which are open to the public. Moreover, through those recreational attractions, nationally recognized collegiate sporting events, and visitors to Liberty University students, employees, and events, the university also plays a major role in attracting tourists to the Lynchburg MSA. For example, fiscal year 2022 out-of-town visitors to Liberty University employees, students, facilities, and events generated approximately 133,339 hotel room nights in the Lynchburg MSA. Those hotel room nights in turn were associated with approximately $14.9 million in hotel revenue within the Lynchburg MSA.

Finally, Liberty University also makes a significant contribution to ensuring Virginia will have the trained graduates it needs to prosper in the future in support occupational employment growth in critical areas such as business and finance, education, healthcare, and many other in-demand fields.

In sum, Liberty University is a rapidly growing institution that has a significant economic and fiscal impact on the Lynchburg MSA and the state of Virginia as a whole, and plays a very active and positive leadership role within its community and Virginia.