

# Dynamic Davidson: Impacting Community, Economy, and Society

Date: January 24, 2024

Submitted to: Davidson College





# Executive Summary

Davidson College is a private, liberal arts college located in Davidson, North Carolina. The college community includes approximately 2,000 residential students who choose among 70 different majors, minors, and interdisciplinary programs, and the institution plays a vital role in the surrounding region's growth and prosperity. The college supports an economic impact of \$490 million annually – creating jobs, stimulating local businesses, and generating tax revenue that benefits the state of North Carolina. Moreover, Davidson College's commitment to civic leadership and community service fosters a culture of responsible citizenship among its students, faculty, and staff. Davidson College's mission is a commitment that is demonstrated by both its investments in its community, and through its many talented alumni whose economic and social impact ensure that Davidson – and its values – remain central to the continued growth of the greater Charlotte metro area and North Carolina.

## Davidson Generates Outsized Impacts in North Carolina

ECONOMIC IMPACT	JOBS SUPPORTED
-----------------	----------------

**\$490  
million**

**2,300  
jobs**

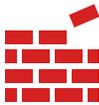
### ECONOMIC IMPACT BY CATEGORY

ANNUAL  
OPERATIONS



**\$333  
million**

CAPITAL  
INVESTMENTS



**\$37  
million**

ANCILLARY  
SPENDING



**\$18  
million**

ALUMNI WAGE  
PREMIUM



**\$102  
million**

### TAX REVENUE GENERATED TO THE STATE OF NORTH CAROLINA



**\$22  
million**

Most of Davidson College's impact is felt close to home in the local Charlotte Metropolitan Statistical Area (MSA), where the college is a key driver of economic activity and job support. The college's economic impact in that region totals more than \$430 million – supporting more than 2,000 jobs. Davidson's day-to-day operations, capital investments, and attraction of visitors to campus and athletic events significantly contribute to the greater Charlotte MSA's economic vitality. This impact underscores Davidson College's integral role as a major economic and community anchor in the Charlotte area.

## Davidson Generates Outsized Impacts in the Charlotte MSA

### ECONOMIC IMPACT

**\$433**  
million

### JOBS SUPPORTED

**2,010**  
jobs

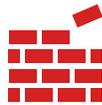
### ECONOMIC IMPACT BY CATEGORY

#### ANNUAL OPERATIONS



**\$333**  
million

#### CAPITAL INVESTMENTS



**\$36**  
million

#### ANCILLARY SPENDING



**\$18**  
million

#### ALUMNI WAGE PREMIUM



**\$46**  
million

### SOCIAL IMPACTS

Over  
73,000  
Service  
Hours

Davidson College is dedicated to making a positive impact on the community, and this commitment has earned national recognition. In 2020, the college received the Community Engagement Classification from the Carnegie Foundation for the Advancement of Teaching, highlighting the college's excellence in community engagement. Davidson has established a number of immersive programs, such as the Bonner Scholars Program, which focuses on issues such as poverty reduction, conflict resolution and education reform. Collectively, Davidson College's student community engagement hours reach over 73,000 annually.

# Table of Contents

- 1. Introduction ..... 7**
  - 1.1. Purpose of Report .....7
  - 1.2. About Davidson College .....7
  - 1.3. Overperforming Economic Engine and Social Force for Good .....7
  - 1.4. Report Scope and Methodology .....8
  - 1.5. Overview of Report .....9
- 2. Impact from Annual Operations ..... 10**
  - 2.1. Direct Economic Footprint from Annual Operations .....10
  - 2.2. Economic Impact from Annual Operations .....11
  - 2.3. Tax Revenue Impact from Annual Operations .....13
  - 2.4. Implications for Local, Regional, and Societal Influence .....13
- 3. Impact from Capital Investments ..... 14**
  - 3.1. Direct Economic Footprint from Capital Investments .....14
  - 3.2. Economic Impact from Capital Investments .....15
  - 3.3. Tax Revenue Impact from Capital Investments .....16
  - 3.4. Implications for Local, Regional, and Societal Influence .....17
- 4. Impact from Ancillary Spending..... 18**
  - 4.1. Estimated Aggregate Ancillary Spending of Students and Visitors .....18
  - 4.2. Economic Impact from Ancillary Spending .....21
  - 4.3. Tax Revenue Impact from Ancillary Spending.....23
  - 4.4. Implications for Local, Regional, and Societal Influence .....23
- 5. Impact from Alumni Wage Premium ..... 24**
  - 5.1. The Concept of the Wage Premium .....24
  - 5.2. Davidson Alumni Living and Working in the Charlotte Area .....24
  - 5.3. Estimated Aggregate Alumni Wage Premium.....25
  - 5.4. Economic Impact from Alumni Wage Premium.....27
  - 5.5. Tax Revenue Impact from Alumni Wage Premium .....28
  - 5.6. Implications for Local, Regional, and Societal Influence .....29
- 6. Broader Local Impacts ..... 31**
  - 6.1. Campus as Community Amenity .....31
  - 6.2. Investment in and Engagement with Community-Serving Organizations .....31
  - 6.3. Synchronizing Institutional Mission with Local Influence .....32
- 7. Broader Regional Impacts..... 33**
  - 7.1. Educating Tomorrow’s Workforce .....33
  - 7.2. Producing Innovations and Strengthening Industries.....33
  - 7.3. Synchronizing Institutional Mission with Regional Influence.....34
- 8. Broader Societal Impacts..... 35**
  - 8.1. An Accessible and Affordable Education.....35
  - 8.2. A Commitment to Diversity, Equity, and Inclusion .....35
  - 8.3. A Commitment to Service and Community-Based Learning .....36

- 8.4. Synchronizing Institutional Mission with Societal Influence ..... 36
- 9. Conclusion ..... 40**
  - 9.1. Aggregate Economic Impact ..... 40
  - 9.2. Return to Student, Community, Region, and Society ..... 41
- 10. Appendix ..... 42**

# 1. Introduction

## 1.1. Purpose of Report

Econsult Solutions, Inc. (ESI) was engaged by Davidson College (Davidson) to analyze and estimate its economic and social impact within the Charlotte metro area and the State of North Carolina. The tenuous market environment currently facing higher education institutions at the time of this report has been well-reported.<sup>1</sup> It is vital for these anchor institutions to provide compelling examples of their impact both in the classroom with students and in their respective communities.

This report intends to speak to the full scope of Davidson’s impact. Davidson’s economic impact comes from its operating and capital spending footprint, as well as from the ancillary spending drawn to local vendors and businesses from students and visitors to on-campus events. Surpassing the economic impact, Davidson has a tremendous social impact and acts as a civic leader in the Charlotte metro area – educating and shaping young scholars who are deeply committed to leadership and service in North Carolina and beyond.

## 1.2. About Davidson College



Davidson College is an institution of higher learning established in 1837 by the Presbyterians of North Carolina. A liberal arts college, Davidson is committed to providing a holistic undergraduate education that focuses on civic leadership, community service, and academic mentorship between faculty and students. As a small, highly selective college, Davidson has approximately 2,000 students and offers 31 undergraduate majors and 40 undergraduate minors. The college – which occupies a 665-acre main campus – is in the Town of Davidson, North Carolina, in the Lake Norman part of greater Charlotte, 19 miles north of Charlotte’s Uptown.

## 1.3. Overperforming Economic Engine and Social Force for Good

Davidson’s action orientation delivers a disproportionate impact on the economy and community as the institution responds to the ever-changing world around it. Davidson is both steeped in respect for tradition and resolute in its mission to cultivate the qualities that enable graduates to enter the world and solve problems bigger than themselves. This report is an important expression of how this core driving force compels Davidson to be both economically and socially impactful.

---

<sup>1</sup> Wooldrodge, Adrian. “America’s Educational Superpower is Fading”. *Bloomberg*. 4/18/23.  
<https://www.bloomberg.com/opinion/articles/2023-04-18/higher-education-in-the-us-faces-a-systemic-crisis>.

In 2022, Dr. Douglas A. Hicks (Davidson College Class of 1990) became the college’s 19<sup>th</sup> president – returning to his alma mater after serving as Dean of Oxford College of Emory University. Since entering the position, President Hicks has engaged staff, faculty, students, alumni, and local community members to advance Davidson’s mission and build on the shared values that have Davidson historically well-positioned to excel academically and civically. His strategic planning initiative has been structured around four primary tenets: Learning for the Future, Discovering Passions – Developing Purpose, Building Public Good, and Engaging Davidson and Greater Charlotte.



President Douglas A. Hicks

## 1.4. Report Scope and Methodology<sup>2</sup>

Within this report, we look at four direct economic impact categories:

- Davidson’s annual operations – The economic benefit of the college carrying out its mission each day, with nearly 2,000 students living on campus, hundreds of employees residing nearby and millions of dollars spent to support them.
- Davidson’s capital investments – How Davidson’s spending on construction, renovation and major equipment expenditures help boost the economy.
- Event and activity spending by students and visitors – The economic lift from audiences at athletics competitions, music and theatre performances, and public speakers, as well as visitors for alumni gatherings and family weekends.
- Wage premium and household income of Davidson alumni – How a Davidson degree leads to better paying jobs and higher tax revenue.

**ANNUAL  
OPERATIONS**



**CAPITAL  
INVESTMENTS**



**ANCILLARY  
SPENDING**



**ALUMNI WAGE  
PREMIUM**



The report estimates the aggregate economic impact of Davidson on an annual basis using industry standard techniques and multipliers. In doing so, it relies on publicly available data about Davidson, as well as proprietary data provided by the college. Where possible, data points were independently verified for accuracy, and any assumptions rely on publicly available industry survey data and conservative estimates.

As this is an economic impact report and not an accounting statement, multiple time frames were utilized to approximate current annualized economic impact levels, rather than being constrained to reporting on

<sup>2</sup> See Appendix for more detail on report scope and methodology.

a single time period. Given the distortive effect of COVID-19 on budgeting for many higher education institutions, this meant reviewing and analyzing multiple years of data in relation to the most recent year of data to best understand the contextual trend of Davidson's budget.

Economic impacts were estimated for three distinct geographies: Mecklenburg County, the Charlotte metropolitan statistical area (MSA) including the South Carolina counties within the MSA, and the State of North Carolina. Using a tax revenue impact model, estimated tax revenues generated by each category were calculated based on the State of North Carolina's tax rates.

## **1.5. Overview of Report**

This report covers the four economic impact categories generally associated with higher education institutions and explores the additional impact of Davidson's efforts to strengthen its local community, the broader Charlotte metro area and North Carolina. The report is organized into the following content sections:

- Section 2 covers Davidson's operating footprint and translates that footprint into its supported economic output and tax revenue impacts.
- Section 3 covers Davidson's capital investments and the economic output and tax revenue impact produced by them.
- Section 4 estimates the ancillary, or event and visitor, spending represented by Davidson students, visitors and Davidson Athletics participants and spectators. This ancillary spending is then modeled and translated into its economic output and tax revenue.
- Section 5 estimates the aggregate wage premium experienced by Davidson alumni living and working in the county, region and state. Using this estimate, the additional household income is modeled to estimate economic output and tax revenue impacts.
- Section 6 explores the local impact of Davidson College in the Town of Davidson.
- Section 7 explores Davidson's impact and growing connection to the Charlotte metro area.
- Section 8 explores Davidson's broader societal impact and mission to produce creative and civically minded young scholars and alumni.
- Section 9 concludes the report, covering Davidson's social impact and aggregated economic impact.

## 2. Impact from Annual Operations

### Section Overview

Davidson College supports significant economic activity within Mecklenburg County, the Charlotte MSA, and North Carolina. As an anchor institution, Davidson directly employs hundreds of faculty and staff members and procures a significant amount of goods and services that in turn support local and regional vendors. **In aggregate, Davidson operating expenditures – inclusive of faculty and staff payroll – support an approximate \$333 million in statewide impact and supports approximately 1,440 direct, indirect, and induced jobs in North Carolina.**

### 2.1. Direct Economic Footprint from Annual Operations

Davidson makes the most direct contribution to the economy through its annual operations, spending on salaries and wages, goods and services, and activities that help Davidson fulfill its primary purpose – to assist students in developing humane instincts and disciplined and creative minds in preparation for lives of leadership and service.

Annual operating activity at Davidson College represents employment opportunities for local Davidson and Mecklenburg County residents and procurement opportunities for nearby businesses. These opportunities circulate dollars through the local economy, as salaries and wages are spent back into the local economy. Further, the goods and services purchased by Davidson College represent economic opportunities for local vendors.

Davidson College's current budget is \$238 million, and it directly employs 923 non-student employees. Approximately \$91 million of that total goes towards compensation and benefits for the employees of the college. The remaining \$147 million is spent on other operating expenses including, but not limited to, items including general operation, utilities, and other administrative costs and fees.

To control budget variance and to be representative of the college's budget in an average year, the analysis is based on an average of budgets from 2020 to 2023. The resulting average budget for this period is \$234 million, of which approximately \$85 million goes toward compensation and benefits. Critically, this analysis exclusively looks at operating expenses, as these dollars are circulated back into the economy. Interest, depreciation costs, and other taxes were excluded from our analysis. Further, payments to student employees were not included in this portion of the analysis as student spending is accounted for later in Section 4 of the report. **Overall, approximately \$115 million in non-personnel operating costs and approximately \$84 million in employee compensation were modeled, for a total of \$198 million in modellable annual costs.**<sup>3</sup>

---

<sup>3</sup> Noted here and throughout this report, standard input/output modelling techniques were employed to translate direct expenditures into overall economic impact. See Appendix for additional detail on input/output economic impact methodology.

Figure 2.1: Annualized Operating Costs for Davidson College (2020 – 2023)<sup>4</sup>

Operating Year	2020	2021	2022	2023	Annualized Expd.	% Modeled	Modeled Expd.
<i>Payroll Expenditures (\$M)</i>							
Employee Benefits & Wages	\$80.7	\$83.6	\$84.0	\$91.5	\$85.0	98%	\$83.6
<i>Non-Payroll Expenditures (\$M)</i>							
Academic & Student Affairs	\$20.0	\$25.3	\$19.9	\$22.0	\$21.8	61%	\$13.4
Athletics	\$10.9	\$10.0	\$12.8	\$13.6	\$11.8	63%	\$7.4
College Communications & Relations	\$2.4	\$1.9	\$2.9	\$4.1	\$2.8	63%	\$1.8
Enrollment & Financial Aid	\$66.5	\$70.4	\$72.5	\$64.1	\$68.4	81%	\$55.1
Facility Maintenance & Operations	\$6.1	\$6.1	\$6.5	\$6.7	\$6.3	100%	\$6.3
Finance & Administrative Offices	\$10.2	\$12.3	\$12.7	\$15.0	\$12.5	100%	\$12.5
Supplies & Equipment	\$31.1	\$28.9	\$21.4	\$21.4	\$25.7	71%	\$18.2
<b>Payroll Expenditures</b>	<b>\$80.7</b>	<b>\$83.6</b>	<b>\$84.0</b>	<b>\$91.5</b>	<b>\$85.0</b>	<b>98%</b>	<b>\$83.6</b>
<b>Non-Payroll Expenditures</b>	<b>\$147.2</b>	<b>\$154.8</b>	<b>\$148.7</b>	<b>\$146.8</b>	<b>\$149.4</b>	<b>77%</b>	<b>\$114.7</b>
<b>Total Expenditures</b>	<b>\$227.9</b>	<b>\$238.4</b>	<b>\$232.7</b>	<b>\$238.3</b>	<b>\$234.4</b>	<b>85%</b>	<b>\$198.3</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

## 2.2. Economic Impact from Annual Operations

Davidson College’s annual operating expenditures generate significant indirect and induced impacts to Mecklenburg County, the Charlotte metro area, and North Carolina.<sup>5</sup> Because goods and services are produced locally or regionally, salaries are similarly spent locally, supporting local and regional businesses in both cases. Based on the model constructed for this analysis, Davidson College’s annualized direct expenditures generated:

- Within Mecklenburg County: Approximately \$309 million in total annual output, supporting 1,320 direct, indirect, and induced jobs and approximately \$91 million in employee compensation;
- Within the Charlotte MSA: Approximately \$333 million in total annual output, supporting 1,450 direct, indirect, and induced jobs and approximately \$96 million in employee compensation;
- Within North Carolina: Approximately \$333 million in total annual output, supporting 1,440 direct, indirect, and induced jobs and approximately \$96 million in employee compensation.

<sup>4</sup> Costs that were categorized as a capital expenditure were excluded from the operating budget and accounted for in a separate capital expense model. ‘Non-modellable’ costs are expenses that do not directly enter the local economy. Examples of such costs include insurance premiums, taxes, depreciation, expenses incurred while traveling, and more.

<sup>5</sup> The Charlotte metropolitan statistical area (MSA), or the Charlotte metro area, includes counties from both North Carolina and South Carolina.

Figure 2.2: Annual Economic Impacts from Davidson College’s Annualized Operations (2020-2023)

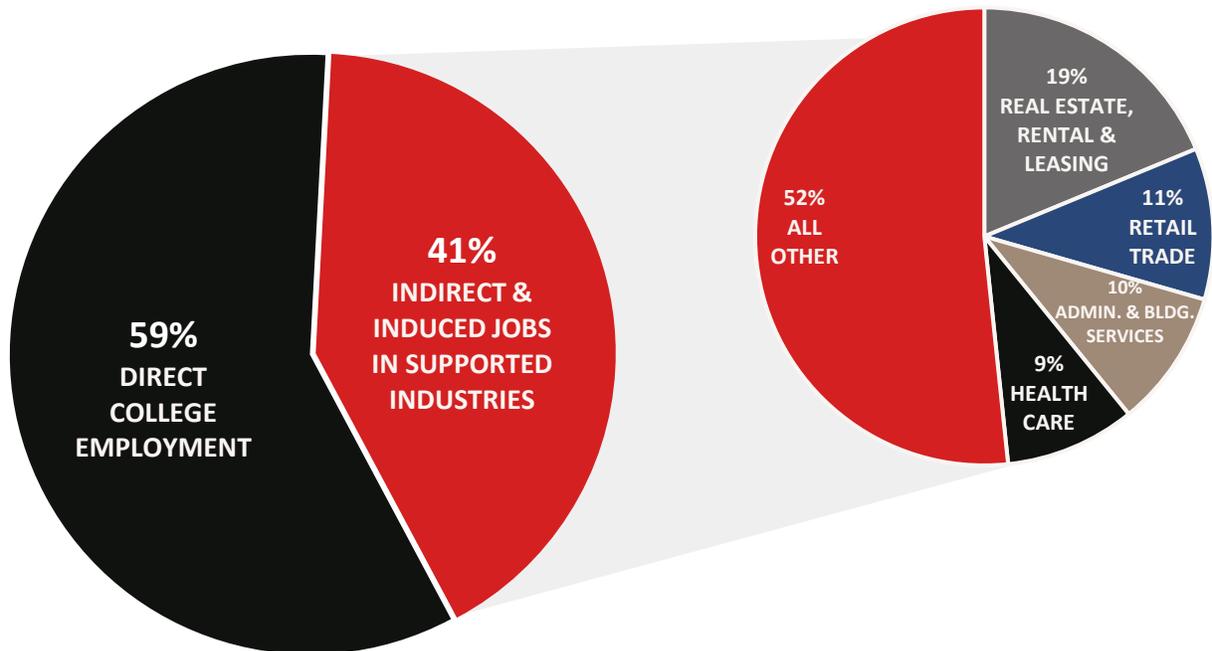
Economic Impact: Operations	Mecklenburg County	Charlotte MSA	North Carolina
Direct Output (\$M)	\$198.3	\$198.3	\$198.3
Indirect & Induced Output (\$M)	\$110.3	\$134.6	\$134.3
<b>Total Output (\$M)</b>	<b>\$308.6</b>	<b>\$332.9</b>	<b>\$332.6</b>
<b>Annual Employment Supported (FTE)</b>	<b>1,320</b>	<b>1,450</b>	<b>1,440</b>
<b>Employee Compensation (\$M)</b>	<b>\$91.1</b>	<b>\$96.0</b>	<b>\$96.0</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

### Industry Distribution of Annual Operation’s Economic Impact

Many of the jobs supported by Davidson College’s annual operations are the college’s direct employment of faculty, administrators, and other support staff. However, Davidson’s operating footprint supports numerous other industries. Labor income is spent in the North Carolina economy in a variety of typical household spending categories, and goods and services necessary for operations are procured from a wide range of industry sectors. Hence, approximately 41 percent of the statewide employment impact supported by Davidson’s annual operations is in industries besides higher education – particularly focused in the health care, retail, and real estate sectors.

Figure 2.3: Industry Distribution of Statewide Employment Impacts from Davidson College’s Annualized Operations (2020 – 2023)



Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

### 2.3. Tax Revenue Impact from Annual Operations

Davidson is a non-profit, but the taxes that result from daily operations spur other economic activities that generate their own tax revenue.

The operating activities increase North Carolina’s tax bases directly by employing faculty and staff members, which generates taxable income, and indirectly via spending by Davidson’s vendors and employees. **It is estimated that Davidson’s College’s operations have a tax revenue impact of approximately \$11 million in an average year.**

Figure 2.4: Estimated Annual Tax Revenue Impacts of Davidson College’s Operations to the State of North Carolina

<b>Tax Type</b>	<b>North Carolina (\$M)</b>
Income	\$5.0
Sales	\$5.3
Business	\$0.8
<b>Total</b>	<b>\$11.1</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

### 2.4. Implications for Local, Regional, and Societal Influence

In purely economic terms, Davidson College is a major employer and purchaser in Mecklenburg County. However, Davidson’s impact is far greater than the sum of economic activity that it supports locally and regionally. There is an economic ripple effect. Over and above this economic impact is the benefit Davidson produces at the local, regional, and state level through its primary purpose of credentialing and educating young, socially conscious scholars. This activity in turn strengthens labor markets, employers, and industries of growing importance to the Charlotte metro area and the state of North Carolina.

### 3. Impact from Capital Investments

#### Section Overview

Like many anchor institutions, Davidson College – in addition to its annual operations – undertakes several large capital investments on an annual basis. These investments support jobs, create demand for goods and services, and generate statewide tax revenues. Notably, these investments also help to ensure that the Davidson campus remains an inviting and vibrant community asset for students, staff, town residents and visitors alike. **On average, the annual statewide impact supported by Davidson College’s capital investments is approximately \$37 million, supporting approximately 200 direct, indirect, and induced jobs in North Carolina.**

#### 3.1. Direct Economic Footprint from Capital Investments

On an annual basis, Davidson College spends approximately \$21 million on capital projects. In recent years, this has included construction of a new athletics facility as well as the renovation of residential Richardson Hall. This investment represents economic opportunities for the local construction industry and adjacent skilled trades sectors. This activity circulates dollars throughout the local economy, as salaries and wages are spent back into the local economy and economic opportunities present themselves for local vendors.

Figure 3.1: Annualized Capital Investments by Davidson College from 2012 to 2023

Capital Project	Cost (\$M)
New Facilities	\$180
Infrastructure Maintenance, Renewals and Upgrades	\$55
Total	\$235
<b>Annualized Capital Costs (2012 – 2023)</b>	<b>\$21</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

### 3.2. Economic Impact from Capital Investments

Davidson College’s annualized capital investments within North Carolina are approximately \$21 million per year. These project costs include hard construction costs, maintenance of capital improvements, equipment purchases, and the procurement of materials and services. These expenditures touch a wide range of manufacturers and professional service providers in addition to construction companies within North Carolina.

In total, Davidson’s annual \$21 million in capital expenditures supports:

- Within Mecklenburg County: Approximately \$33 million in total annual output, supporting 180 direct, indirect, and induced jobs and \$10 million in employee compensation;
- Within the Charlotte MSA: Approximately \$36 million in total annual output, supporting 200 direct, indirect, and induced jobs and approximately \$10 million in employee compensation;
- Within North Carolina: Approximately \$37 million in total annual output, supporting 200 direct, indirect, and induced jobs and approximately \$10 million in employee compensation.

Figure 3.2: Annual Economic Impacts from Davidson College’s Annualized Capital Investments (2012 - 2023)

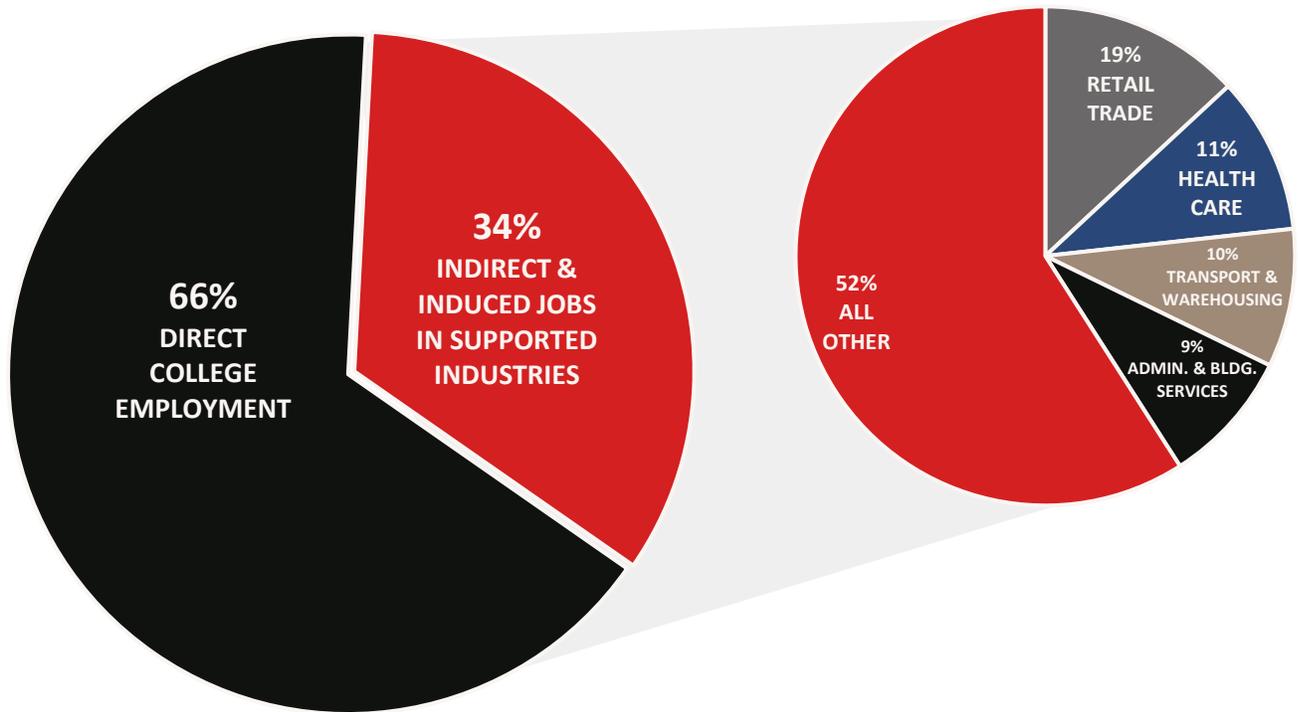
Capital Investments	Mecklenburg County	Charlotte MSA	North Carolina
Direct Output (\$M)	\$21.0	\$21.0	\$21.0
Indirect & Induced Output (\$M)	\$11.6	\$15.4	\$15.7
<b>Total Output (\$M)</b>	<b>\$32.6</b>	<b>\$36.4</b>	<b>\$36.7</b>
<b>Annual Employment Supported (FTE)</b>	<b>180</b>	<b>200</b>	<b>200</b>
<b>Employee Compensation (\$M)</b>	<b>\$9.6</b>	<b>\$10.4</b>	<b>\$10.4</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

#### Industry Distribution of Capital Investment’s Economic Impact

Of the direct, indirect, and induced jobs supported by Davidson College’s capital investments, the majority are contained within the construction sector. However, the multiplier effect of these construction outlays supports numerous other adjacent industries, including retail, health care, and transportation and warehousing. The analysis shows that approximately 34 percent of the statewide employment impact from Davidson College’s capital investments are outside of the construction industry.

Figure 3.3: Industry Distribution of Statewide Employment Impacts from Davidson College’s Annualized Capital Investments (2015 - 2023)



Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

### 3.3. Tax Revenue Impact from Capital Investments

Davidson College’s annual capital investments also contribute directly to North Carolina’s tax revenues. These capital investments help to support construction jobs, local construction businesses and their suppliers – all of which generate income, sales, and business taxes back to the state. **In aggregate, direct capital investments by Davidson College generate approximately \$1.3 million in North Carolina tax revenue in an average year.**

Figure 3.4: Estimated Annual Tax Revenue Impacts from Davidson College’s Annualized Capital Investments to the State of North Carolina

Tax Type	North Carolina
Income	\$545,000
Sales	\$631,000
Business	\$93,000
<b>Total</b>	<b>\$1,269,000</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

### **3.4. Implications for Local, Regional, and Societal Influence**

Compared to other industry sectors, the construction industry is more vulnerable to economic shocks, or the boom and bust of seasonal or business cycles. In this respect, anchor institutions such as Davidson play a critical role in supporting the construction industry through their semi-regular capital investment schedules and maintenance demands.

These investments in turn support the physical space that allows Davidson to inspire its student body and engage with the local community. On-campus improvements enhance the aesthetic of the local area and serve as a public resource to students, staff and town residents. Within the last few years, Davidson has worked with the Town of Davidson to finance public-facing capital improvements near the campus, including downtown revitalization efforts and crosswalk, signage, and intersection improvements.

## 4. Impact from Ancillary Spending

### Section Overview

In addition to its own spending on operating activities and capital investments, Davidson attracts student and visitor spending. Davidson students contribute the most ancillary spending. In addition to their on-campus spending, they spend money off-campus, thereby supporting local retail, restaurants, and entertainment establishments. **It is estimated that the ancillary spending from students and visitors is responsible for approximately \$18 million in statewide economic impact, supporting 140 direct, indirect, and induced jobs in North Carolina.**

Unlike the previous two sections of the report – which cover known spending by Davidson and therefore can be accounted for at a higher level of confidence and precision, these ancillary spending amounts are based on a combination of direct information from Davidson and assumptions anchored by secondary research of industry-relevant data and sources. Where possible, a conservative approach was taken to arrive at these estimates to avoid overstating these amounts.

### 4.1. Estimated Aggregate Ancillary Spending of Students and Visitors

#### New Spending vs. Retained Spending

Davidson is home to approximately 2,000 students and it regularly draws thousands of visitors to a variety of on-campus events. Together, students and visitors end up spending on a variety of different modellable expenses. The off-campus spending that does not accrue directly to Davidson is considered “ancillary” for the purpose of this analysis. Ultimately, this ancillary spending by students and visitors translates into significant revenues for business owners and a large proportion of this spending takes place in and around the Charlotte metro area. This spending is represented by either:

- *New spending* to Mecklenburg County, the Charlotte metro area and/or the State of North Carolina, in the case of students and visitors from outside of these geographies, OR
- *Retained spending*, in that local students and visitors may have attended a college outside of these geographies, consequently taking their spending power with them, in the absence of Davidson.

#### Unique Spending Profiles

To accurately estimate aggregate visitor spending, it was necessary to develop spending profiles of the various types of visitors, recognizing that not all visitors have the same economic footprint. Unique spending behaviors were created based on reason for visit, duration of trip, distance traveled, event type, and visitor age. This visitor spending analysis accounts for the following visitor types: students; local visitors; regional visitors; and overnight, or out-of-region visitors.<sup>6</sup> In the past year, approximately 140,000 visitors (inclusive of students) came to Davidson’s campus, and it is estimated that these visitors spent approximately \$12.9 million.<sup>7</sup>

---

<sup>6</sup> See Spending Profiles in Appendix.

<sup>7</sup> This amount has been calculated by removing any non-modeled amounts of retail spending, to reflect how retail goods and services are often procured and/or produced outside of the direct geography.

Figure 4.1: School Year Ancillary Spending of Davidson College Students by Student Type<sup>8</sup>

Student Type	Ancillary Spending Per Month	# of Students	Aggr. Ancillary Spending (\$M)
On-Campus	\$2,700	1,800	\$4.8
Off-Campus	\$11,900	200	\$2.0
<b>Total Aggregate Student Spending</b>	<b>\$14,600</b>	<b>2,000</b>	<b>\$6.8</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

Davidson College Athletics

Despite its small size, Davidson College has a strong athletic tradition in Division I sports. Nineteen of the college’s 21 athletics teams are members of the Atlantic 10 Conference. Football participates at the NCAA Division I FCS level in the Pioneer Football League, and wrestling participates in the Southern Conference. The best known Wildcat alumnus is four-time NBA champion, two-time Most Valuable Player, nine-time All Star Game and future Hall-of-Famer Stephen Curry of the Golden State Warriors. Curry is Davidson’s highest profile public advocate and remains an active member of the Davidson alumni network.<sup>9</sup>



Visitors to athletic events typically have a higher overall spend – generally attributable to overnight lodging. In the past year, it is estimated that the approximately 109,000 visitors that attended on-campus athletics events spent approximately \$4.3 million.

<sup>8</sup> School year was assumed to be a 10-month period.  
<sup>9</sup> Clemmons, Anna. “Steph Curry Said Davidson Changed His Life. He Changed Davidson”. *The New York Times*. September 2, 2022.

Figure 4.2: Aggregate Annual Spending on Davidson College Sporting Events

Sport	Attendees	Average Spend per Attendee	Total Spend per Sport (\$M)
Baseball	9,890	\$40	\$0.40
Cross Country	-	\$0	\$0.00
Field Hockey	1,800	\$40	\$0.07
Football	22,620	\$40	\$0.91
Lacrosse	2,210	\$40	\$0.09
Men's Basketball	50,340	\$40	\$2.01
Men's Golf	110	\$80	\$0.01
Men's Soccer	3,090	\$30	\$0.09
Men's Tennis	150	\$120	\$0.02
Men's Wrestling	540	\$40	\$0.02
Swimming and Diving	170	\$60	\$0.01
Track and Field	-	\$0	\$0.00
Volleyball	6,120	\$40	\$0.25
Women's Basketball	6,420	\$40	\$0.26
Women's Soccer	5,540	\$30	\$0.17
Women's Tennis	260	\$110	\$0.03
<b>Total</b>	<b>109,260</b>	<b>\$47</b>	<b>\$4.34</b>

Source: Davidson College (2023) & Econsult Solutions, Inc. (2023)

### Other Davidson College On-Campus Event Attendance

Davidson College also attracts a significant number of visitors to the campus each year for a variety of purposes beyond the athletics events held on campus. For instance, some may informally come to Davidson to walk and enjoy the arboretum or may attend one of the several official events that the college hosts on an annual basis. These events include large scale events such as Reunion Weekend, Commencement and Access Davidson, as well as arts, cultural and civic events such as lectures, music and theatre performances, or galas. According to attendance data provided by Davidson, approximately 30,000 visitors attend non-athletic, on-campus events in an average academic year, with an estimated spend of approximately \$3 million.<sup>10</sup>



Rhiannon Giddens at Davidson College in Spring '23

<sup>10</sup> Using a conservative approach, multiple years of event and admissions attendance was analyzed to estimate a number that is representative of visitation to Davidson College.

### Non-Modeled Ancillary Spend

Combined, ancillary spending by students and visitors of Davidson College in the past academic year reached a sum of an approximate \$14 million. However, some of that spending immediately leaves the region and therefore does not have a multiplier effect on the local economy. For example, a large proportion of the retail spending goes to manufacturers and wholesalers, most of which are outside of the region, and so the modeling approach used in this memo conservatively includes only the retail margin (i.e., the difference between the purchase price for the retailer and the sales price for the customer). Based on this adjustment, the amount of spending included in this analysis is a total of an estimated \$10 million.

Figure 4.33: Aggregate Annual Ancillary Spend by Davidson College Students and Visitors in Mecklenburg County, North Carolina

Spend Type	Aggr. Spending in Mecklenburg County (\$M)
Student Expenses	\$6.8
Non-Athletic Events	\$3.0
Athletic Events	\$4.3
<b>Total</b>	<b>\$14.1</b>
<i>Minus Non-Modeled Amount</i>	<i>(\$4.2)</i>
<b>Modeled Amount</b>	<b>\$9.9</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

## 4.2. Economic Impact from Ancillary Spending

The influx of ancillary spending by students and visitors has a multiplier effect throughout the region, supporting the following economic impact:

- In Mecklenburg County: Approximately \$17 million in total annual output, supporting 120 direct, indirect and induced jobs and approximately \$4 million in employee compensation;
- In the Charlotte MSA: Approximately \$18 million in total annual output, supporting 130 direct, indirect and induced jobs and approximately \$4 million in employee compensation;
- In North Carolina: Approximately \$18 million in total annual output, supporting 130 direct, indirect and induced jobs and approximately \$4 million in employee compensation;

Figure 4.4: Estimated Annual Economic Impact from Ancillary Spending Associated with Davidson College

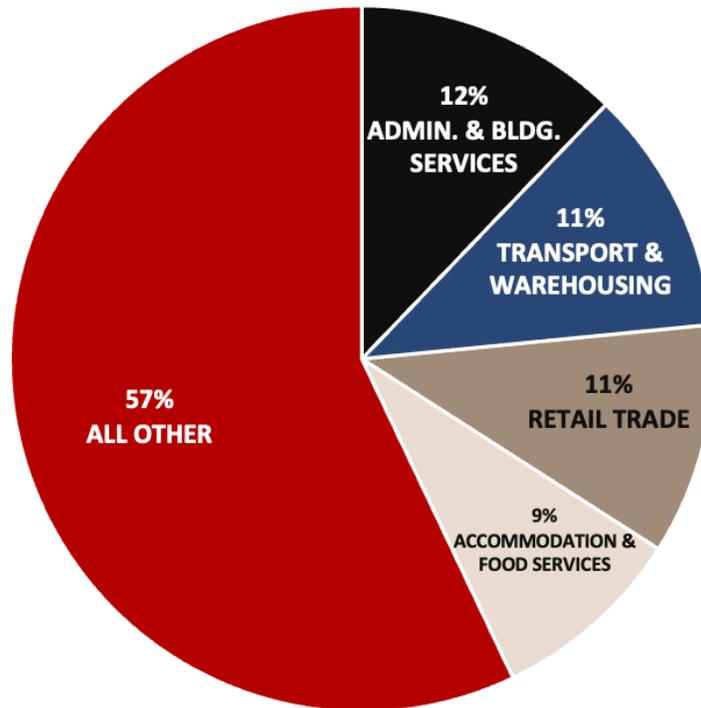
Student and Visitor Spend	Mecklenburg County	Charlotte MSA	North Carolina
Direct Output (\$M)	\$9.9	\$9.9	\$9.9
Indirect & Induced Output (\$M)	\$7.6	\$8.5	\$8.5
<b>Total Output (\$M)</b>	<b>\$17.5</b>	<b>\$18.4</b>	<b>\$18.4</b>
<b>Annual Employment Supported (FTE)</b>	<b>130</b>	<b>140</b>	<b>140</b>
<b>Employee Compensation (\$M)</b>	<b>\$4.0</b>	<b>\$4.2</b>	<b>\$4.2</b>

Source: Davidson College (2023) & Econsult Solutions, Inc. (2023)

### Industry Distribution of Ancillary Spending’s Economic Impact

Economic activity directly and indirectly supported by spending Davidson College students and visitors touches several industries, commensurate with the different kinds of expense categories associated with students’ living costs and visitors’ spending profiles. These industries include health care, retail, the hospitality sector, and transportation and warehousing, among others.

Figure 4.5: Industry Distribution of Statewide Employment Impacts Generated by Ancillary Spending Associated with Davidson College



Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

### 4.3. Tax Revenue Impact from Ancillary Spending

Davidson College’s ancillary spending also boosts North Carolina’s tax bases, generating tax revenues for North Carolina. **It is estimated that the ancillary spending associated with Davidson College produces approximately \$800,000 in North Carolina tax revenue each year.**

Figure 4.6: Estimated Annual Tax Revenue Impact from Ancillary Spending Associated with Davidson College to the State of North Carolina

<b>Tax Type</b>	<b>North Carolina</b>
Income	\$313,000
Sales	\$415,000
Business	\$62,000
<b>Total</b>	<b>\$790,000</b>

Source: Davidson College (2023) & Econsult Solutions, Inc. (2023)

### 4.4. Implications for Local, Regional, and Societal Influence

By investing in its beautiful campus and hosting a variety of on-campus events, Davidson College plays an important role in attracting visitors to the local area from across the country. Students and visitors represent a critical source of demand for retail and hospitality businesses. For an individual establishment, the additional spending associated with students and visitors can therefore make the difference between viability and insolvency. In the aggregate, that can mean the difference between a thriving downtown and a lifeless one, with implication for local quality of life, property values, and overall area perception.

## 5. Impact from Alumni Wage Premium

### Section Overview

The purpose of this section is to analyze and highlight the economic impact supported by the enhanced earning potential of Davidson graduates in the greater Charlotte area and the State of North Carolina. As an elite destination in higher education, Davidson produces many graduates who land high-earning jobs across North Carolina. The increased earnings associated with Davidson alumni in turn has a significant economic impact – supporting jobs and economic activity across North Carolina’s diverse local economies. **It is estimated that the wage premium produced by Davidson graduates supports approximately \$102 million in economic activity throughout North Carolina, supporting approximately 520 induced jobs.**

### 5.1. The Concept of the Wage Premium

The link between educational attainment and earnings is well-established. Conceptually, with each additional level of education, earnings become higher. This excess income – colloquially known as the wage premium – can be calculated at the alumni level by comparing the earnings of Davidson graduates against educational and post-graduate outcomes from similar private, non-profit higher education institutions in North Carolina, and against post-graduate outcomes from across the state. The additional earnings attributable to Davidson graduates has then been modeled through IMPLAN as additional household income, supporting local employment and earnings.

### 5.2. Davidson Alumni Living and Working in the Charlotte Area

Like its peer higher education institutions, Davidson College helps to connect graduating students with employment opportunities across the country and around the world. However, many Davidson graduates accept job opportunities in nearby Charlotte. Located just 19 miles north of Charlotte’s center city and within the vibrant Lake Norman district, Davidson is well located within North Carolina’s largest metro area. A regional hub for finance in the Southeast, Charlotte is home to the headquarters of Bank of America and Truist Financial. In recent years, Charlotte has also grown significantly in the technology services and manufacturing industry sectors. Understanding the benefit of this proximity for its students, Davidson College has invested in connecting students to community-based learning and post-graduate opportunities in Charlotte through the Center for Civic Engagement and the Betty and B. Frank Matthews II ’49 Center for Career Development.

In 2023, Davidson College had approximately 5,000 alumni located in North Carolina, with approximately a third of those alumni living in Mecklenburg County. The additional earnings Davidson alumni enjoy because of the education and credentials they received at the college has a notable impact on the local economy. The wage premium experienced by Davidson College alumni produces a spillover impact on the local economy.

Figure 5.1: Estimated Davidson College Alumni by Location<sup>11</sup>

Davidson College Alumni	Count	% of Alumni Worldwide
Mecklenburg County	1,516	7%
Other Charlotte MSA	1,159	5%
The Rest of North Carolina	2,715	13%
<b>Total Alumni Worldwide</b>	<b>21,082</b>	<b>25%</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

Of the Davidson College alumni living in North Carolina, it is assumed that approximately 70 percent are currently employed (as opposed to retired, unemployed, or otherwise out of the labor force).<sup>12</sup> Applying this proportion evenly across the relevant study geographies, it is estimated that approximately 1,100 Davidson alumni are currently employed in Mecklenburg County, 1,900 within the Charlotte MSA, and 3,900 within North Carolina.

Figure 5.2: Estimated Employed Davidson College Alumni by Location

Est. Employed Alumni	Mecklenburg County	Charlotte MSA	North Carolina
Alumni: Regionally <i>Exclusive</i>	1,090	833	1,952
Alumni: Regionally <i>Inclusive</i>	1,090	1,923	3,875

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

### 5.3. Estimated Aggregate Alumni Wage Premium

Generally, median earnings by educational attainment in North Carolina can be derived from the United States Census Bureau’s American Community Survey (ACS). Analyzing the ACS data for North Carolina, the median annual earnings for bachelor’s degree holders was \$54,286.<sup>13</sup> In order to appropriately consider the potential differences in earnings between Davidson degree holders and the other similar degree holders, longitudinal tax filing data from the United States Department of Education’s College Scorecard was used to compare the median ten-year earnings for Davidson – \$77,397 – against the median ten-year earnings of graduates from private, non-profit institutions offering bachelor’s degrees in North Carolina – \$67,150.<sup>14,15</sup> Therefore within this analysis, median earnings for Davidson graduates are scaled to 115 percent of median NC-wide earnings for bachelor’s degrees, amounting to \$62,570.

<sup>11</sup> Other Charlotte MSA is defined as the Charlotte MSA counties located in North Carolina, excluding Mecklenburg County and the South Carolina counties located in the Charlotte MSA.

<sup>12</sup> This assumption is based on the employment to population ratio reported by the United States Bureau of Labor Statistics for adults aged 25 or older with a college degree, which as of September 2023 was approximately 72 percent. <https://www.bls.gov/news.release/empsit.t04.htm>.

<sup>13</sup> U.S. Census Bureau. American Community Survey 2021 5-Year Sample. Table B2004.

<sup>14</sup> U.S. Department of Education, College ScoreCard.

<sup>15</sup> North Carolina schools used for comparison included: Barton College, Cabarrus College of Health Sciences, Carolina Christian College, Duke University, Elon University, Gardner-Webb University, Guilford College, High Point University, Johnson & Wales University CLT, Lees-McRae College, Lenoir-Rhyne University, Meredith College, North Carolina Wesleyan University, Pfeiffer University, Queens University of Charlotte, Salem College, Wake Forest University, Warren Wilson College, and Wingate University.

Figure 5.3: Estimated Earnings by Educational Attainment for Davidson College Graduates

Highest Education Level	Median Earnings of BA Grads from Peer Institutions	Davidson Est. Premium	Davidson Rescaled Earnings
Bachelor's Degree	\$67,150	115%	\$77,397

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

This analysis assumes that the overall level of employment within each geography of interest is fixed with or without the presence of Davidson. The impact accruing to the economy is therefore not the full salary earned by Davidson alumni, but the incremental portion of that salary attributable to the degree credential and for the “value-add” of that Davidson degree. In effect, the approach assumes that the absence of Davidson College would result in a substantial downturn in the educational attainment level – and accordingly, the productivity level – of the region’s workforce. To absorb this loss, jobs held by Davidson are assumed to filter down to workers with a lower education level, with jobs held by alumni with bachelor’s degrees absorbed by workers with associate degrees.

This framework is implemented by comparing estimated earnings for Davidson graduates by degree level to average earnings for workers of one lower degree level. Estimated earnings for Davidson bachelor's degree holders in North Carolina are therefore compared to associate degree earnings in North Carolina to calculate the wage premium for a Davidson bachelor’s degree.

Figure 5.4: Estimated Wage Premium for Davidson College

Category	Degree Level	Premium by Degree Level
Without Davidson - Earnings	Associate's	\$36,715
With Davidson - Earnings (rescaled)	Bachelor's	\$62,570
<b>Wage Premium – Bachelor's</b>		<b>\$25,855</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

The aggregate alumni earnings impact from the alumni wage premium in each geography can be derived by combining the estimated volume of alumni in the workforce in each geography with the estimated per alumni premiums. Calculations are undertaken first for alumni in Mecklenburg County, and then are applied in sequence for each larger geography. These results are then summed to represent the total impact in the larger geography.

Figure 5.5: Aggregate Wage Premium for Davidson College

Est. Employed Alumni	Mecklenburg County	Charlotte MSA	North Carolina
Alumni	1,090	1,923	3,875
Wage Premium	\$25,855	\$25,855	\$25,855
<b>Total Alumni - Regionally Exclusive (\$M)</b>	<b>\$28.2</b>	<b>\$21.5</b>	<b>\$50.5</b>
<b>Total Alumni - Regionally Inclusive (\$M)</b>	<b>\$28.2</b>	<b>\$49.7</b>	<b>\$100.2</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

The nearly 3,900 Davidson alumni living and working in North Carolina make an additional \$26,000 a year because of the education and degree credential received at Davidson College. This represents the higher contribution they make in their occupations, which strengthens the North Carolina economy in key strategic industries, including finance and information technology. Further, the additional household spending circulates back into the North Carolina economy, supporting local businesses and employment throughout the state.

### 5.4. Economic Impact from Alumni Wage Premium

This additional earning potential has both direct and consequential impacts. The wage premium produced by Davidson alumni produces a spillover impact to local economies because alumni can contribute to these economies at a higher level and partly because alumni have more disposable income to spend within these economies. Accounting for savings rates, tax withholdings, and spending outside the respective geography, there is still a meaningful amount of additional spending by Davidson alumni. Since the spending and saving patterns of a household earning \$40,000 per year is not the same as a household earning \$100,000, it is relevant to know how much in aggregate household income is being added by Davidson and what household income levels are represented. However, it is important to note that while households have different spending patterns based on their level of earnings, all households help to bolster the local economy.

The effects of this additional household spending are estimated to generate on an annual basis:

- Within Mecklenburg County: Approximately \$30 million in total output, supporting an induced 140 jobs and \$8 million in employee compensation;
- Within the Charlotte MSA: Approximately \$46 million in total output, supporting an induced 220 jobs and \$11 million in employee compensation;
- Within North Carolina: Approximately \$102 million in total output, supporting an induced 520 jobs and \$24 million in employee compensation.

Figure 5.6: Estimated Annual Impacts from Davidson College’s Aggregate Wage Premium

Impact Type	Mecklenburg County	Charlotte MSA	North Carolina
Wage Premium	\$28.2	\$49.7	\$100.2
<b>Total Output (\$M)</b>	<b>\$30.2</b>	<b>\$45.6</b>	<b>\$102.4</b>
<b>Annual Employment Supported (FTE)</b>	<b>140</b>	<b>220</b>	<b>520</b>
<b>Employee Compensation (\$M)</b>	<b>\$7.5</b>	<b>\$10.7</b>	<b>\$23.8</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

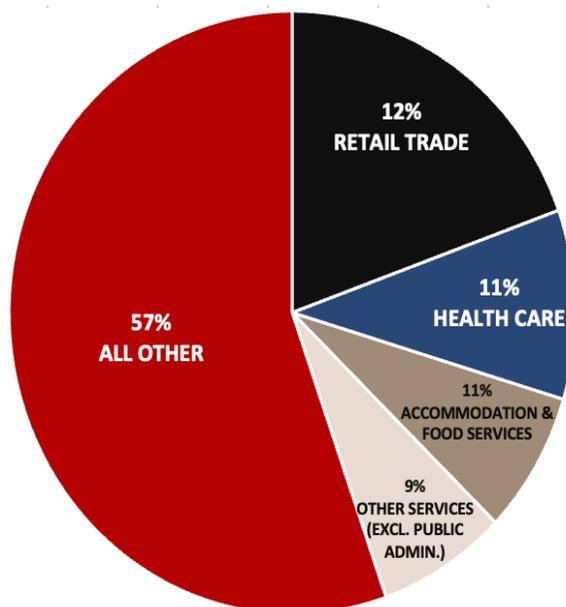
It is important to note that the alumni wage premium is tracking the effect of the portion of that aggregate wage premium that is spent in an area economy. Since people do not spend all their earnings – some may be saved or donated, for instance – only a portion of an alum’s wage premium amount is spent. Furthermore, only a portion of an alum’s spending takes place in a particular geography: some is spent online or out of state, and far less is spent in one specific geography within a state. Hence, in the case of

the figures above, impact from alumni wage premium is less than the aggregate wage premium amount itself, and impact from alumni wage premium is relatively small at smaller geographies as opposed to at the state level.

### Industry Distribution of Alumni Wage Premium’s Economic Impact

The industry distribution of the economic impact of this additional spending by Davidson College alumni corresponds with typical household expenditure categories. As such, the larger industry categories where the alumni wage premium impact is supporting jobs in North Carolina are within the health care, retail, and financial sectors.

Figure 5.7: Industry Distribution of Statewide Employment Impacts Associated with Davidson College’s Alumni Wage Premium in North Carolina



Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

## 5.5. Tax Revenue Impact from Alumni Wage Premium

In addition to economic impacts, North Carolina – as a government authority – will benefit from additional tax revenues generated directly and indirectly from the wage premium associated with Davidson graduates. The higher wage premium paid to Davidson alumni represents sales and business taxes that are indirectly generated by alumni spending. In North Carolina, this is estimated to generate approximately \$8.4 million in income, sales, and business taxes each year.

Figure 5.8: Estimated Annual Tax Revenue Impacts Associated with Davidson College’s Alumni Wage Premium to the State of North Carolina

Tax Type	North Carolina (\$M)
Personal Income Tax	\$1.2
Personal Income Tax (from Davidson Alumni Spending)	\$5.2
Sales	\$1.7
Business	\$0.3
<b>Total</b>	<b>\$8.4</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

This tax revenue impact – in addition to the economic impacts covered above – originates from the enhanced earnings of Davidson graduates. As Davidson continues to invest in its student body and graduates a new cohort each year, a new class of talent enters the North Carolina economy that deepens local labor pools for strategic industries, strengthening North Carolina’s economic competitiveness.

### 5.6. Implications for Local, Regional, and Societal Influence

As stated throughout this report, Davidson’s primary purpose is to prepare students for lives in leadership and service in North Carolina and beyond. Davidson has a notable economic impact in North Carolina, but it reaches other communities in the United States and abroad as well. Inclusive of the alumni analyzed in the wage premium calculations above, Davidson has more than 21,000 alumni located around the world. Just as Davidson alumni positively impact and contribute to the North Carolina economy, this alumni network provides both a tremendous economic impact for their respective local economies and provides an important connection for graduating Davidson students as they enter the labor market. Davidson’s rigorous academics cultivate deep intellectual and social skills. The college’s experiential learning offerings, such as internships and education abroad experiences, help students connect what they learn in the classroom with how they can impact the world.

One of the most visible ways Davidson has done this is in creating the Jay Hurt Hub for Innovation and Entrepreneurship. Currently celebrating its 5-year anniversary, the Hurt Hub is a 23,000-square-foot technology, innovation and entrepreneurship center that hosts two anchor companies, Everblue, and Boomerang Water, in addition to convening other Charlotte metro area business leaders to help provide educational programming, experiential learning and consulting opportunities.<sup>16</sup> By connecting students to these diverse opportunities in North Carolina’s growing strategic industries, Davidson is preparing its graduates for a constantly changing economy, for jobs that didn’t previously exist when they enrolled.

In addition to this, and not considered within the analysis of this section, is the debt load of Davidson’s graduating students. As is well reported, the cost of higher education is at a historical high, and often requires incoming students to take out loans to cover tuition costs. Higher debt loads can impact how much spending may circulate back into the economy, as well as the long-term financial outcome of

<sup>16</sup> The Hurt Hub @ Davidson. <https://hurthub.davidson.edu/about-us/>.

students.<sup>17</sup> Davidson is among a small group of colleges whose policies help limit debt load by three significant commitments: 1.) consideration for admission without regard for ability to pay; 2.) covering all financial need beyond the expected family contribution; and 3.) do not include loans in financial aid packages. Students' need is covered through grants and work-study jobs. Approximately three quarters of Davidson's students graduate without debt – the inverse of graduates nationally. Davidson was the first liberal arts college in the nation to establish this type of funding guarantee.<sup>18</sup>

---

<sup>17</sup> Pinsker, Joe. "How Student-Loan Debt, or Not Having It, Shapes Lives". *The Wall Street Journal*. (2022). [https://www.wsj.com/articles/how-student-loan-debt-or-not-having-it-shapes-lives-11669575228?gclid=EAlalQobChMImpy28NnwgQMVU1VyCh1hjQitEAMYASAAEgISkvD\\_BwE&mod=&psid=WSJ\\_DSA\\_GOO\\_ACQ\\_NA&gclid=aw.ds&gad=1&ef\\_id=ZPCaAAAMvQdQJgAN:20231012142508:s](https://www.wsj.com/articles/how-student-loan-debt-or-not-having-it-shapes-lives-11669575228?gclid=EAlalQobChMImpy28NnwgQMVU1VyCh1hjQitEAMYASAAEgISkvD_BwE&mod=&psid=WSJ_DSA_GOO_ACQ_NA&gclid=aw.ds&gad=1&ef_id=ZPCaAAAMvQdQJgAN:20231012142508:s).

<sup>18</sup> The Davidson Trust. <https://www.davidson.edu/about/distinctly-davidson/davidson-trust>.

## 6. Broader Local Impacts

### Section Overview

Davidson College creates an outsized economic impact within North Carolina. However, dollars do not fully capture Davidson’s impact. A full understanding must consider its mission of cultivating lives of leadership and service. This section explores how Davidson acts as a community leader and provides a variety of community benefits.

### 6.1. Campus as Community Amenity



Davidson College’s Campus – A National Arboretum since 1986

Davidson’s main campus is located adjacent to the Town of Davidson’s charming downtown and has several different entrance points that connect campus to residential neighborhoods. The campus itself is home to a variety of arts and cultural spaces, as well as athletics facilities. The 665-acre campus has several trails and tree-lined walkways between its buildings, and since 1986, has been considered a national arboretum. Although a private institution, the campus welcomes neighbors in the community to visit.

The college has worked with the Town of Davidson to support capital projects and better position certain assets for broader community benefit. This has included financing for town signage, information kiosks, crosswalks, and other large-scale projects. In addition to this, Davidson leases – on a \$1 annual basis – pieces of land located in the local area to the town, which are used for regular community gatherings. Further, the college and its staff – many of whom are Davidson residents – are involved with town planning and historic preservation. This has included the college working directly with the town on recent and proposed infrastructure projects. Working together, the college and town have been able to ensure that the campus and surrounding local area continues to draw visitors and acts as a local amenity for all Davidson residents.

### 6.2. Investment in and Engagement with Community-Serving Organizations

Throughout its history, Davidson College has committed to engagement and connection with the local community. This was most recently affirmed by the awarding of the Carnegie Foundation’s Community Engagement classification to Davidson in 2020.<sup>19</sup> The award and classification highlight the far-reaching scope and impact of Davidson College, which is apparent in how Davidson has dedicated its operations and academic practice to interweaving service and scholarship.

<sup>19</sup> Davidson Recognized for Deep Ties to Community and Commitment to Engagement. <https://www.davidson.edu/news/2020/01/31/recognition-community-commitment-engagement>.

Beyond simply donating funds and resources, Davidson invests a tremendous number of service hours into local community-serving organizations through committed scholarships and fellowships that combine local service hours and education funding. This includes the Service Odyssey internship program and the Bonner Scholars Program – the latter of which requires 280 service hours in an annual year. The college admits 20 Bonner Scholars annually, and has participated in the national program for approximately 30 years. At any time, the college is likely to have 80 undergraduates who consistently complete 280 service hours annually – a sum of 22,400 hours. In addition to these Bonner Scholars' hours, Davidson students completed an additional 50,600 service hours for an aggregate of 73,000 hours. Using an industry-standard service hours-to-dollar estimate, this translates to approximately \$2.2 million on an annual basis.<sup>20</sup> Through its investment in an immersive and service-oriented education, Davidson College ensures that the local community and the organizations they support are central to the student experience.

### 6.3. Synchronizing Institutional Mission with Local Influence

Davidson's deep commitment to the local community permeates its operations, administration, and academic endeavors. This dedication manifests through its extensive range of service-oriented programs. These programs not only foster positive local impact but also embody Davidson's dynamic role within its community.

#### The Farm at Davidson

Situated on 109 acres just off campus, The Farm at Davidson operates as a stand-alone business for the college, producing sustainable agriculture and serving as an educational and collaborative hub for students, faculty, staff, and community members. It supplies fresh produce to Davidson's Dining Services while offering students a hands-on experience through employment, volunteer activities, and agricultural research.

Beyond its practical food delivery and educational role, The Farm at Davidson is a focal point of service and connection to the surrounding Davidson community. During the COVID-19 pandemic, the college forged a partnership with FEEDNC, a local non-profit that offers a food pantry and hot meals for community members in need. A collaborative effort between students, staff, and local resident volunteers, The Farm donated over 22,000 pounds of fresh produce to elderly and homebound community members over the course of 2020.<sup>21</sup>

Connections to physical place and the broader community are also an integral part of The Farm's ethos. The Farm's location within the Town of Davidson is deeply rooted in local history and agrarian traditions. Committed to sustainable agriculture, the farm emphasizes organic practices and integrated pest management, ensuring the use of organic-certified inputs and planting cover crops to bolster soil health and long-term viability of its farmland. Through such initiatives, Davidson showcases its meaningful engagement with the local community.

---

<sup>20</sup> Using the North Carolina Value of a Volunteer Hour - \$29.86. <https://independentsector.org/resource/value-of-volunteer-time/#:~:text=In%20its%20newest%20Value%20of,increase%20from%202021%20to%202022>.

<sup>21</sup> McGivney, Jen Tota, "How One North Carolina Man Saved a Farm and Cultivated Community," *Southern Living*, March 18, 2021. <https://www.southernliving.com/news/joe-rowland-davidson-college-farm-feed-nc>.

## 7. Broader Regional Impacts

### Section Overview

This section explores Davidson’s efforts to prepare its students for successful post-graduate employment in North Carolina’s diverse and growing economy.

### 7.1. Educating Tomorrow’s Workforce

With more than 70 majors, minors and interdisciplinary programs, Davidson’s rigorous course offerings allow students to get academic training in a variety of different topic areas – ranging from chemistry to anthropology, and data science to philosophy. Following in the liberal arts tradition, Davidson students major in at least one program area, but over the course of their full education take courses from across Davidson’s wide set of program offerings. The intentional result is well-rounded and socially conscious graduates with deep skills that every employer seeks, such as: communicating across diverse audiences, finding connections between disparate problems and recovering from failure by reframing for a different approach. Within the current alumni body, the five most represented majors – regardless of occupation – include History, English, Economics, Political Science, and Biology.

In addition to courses and experiential learning opportunities, Davidson offers an extraordinary level of undergraduate research opportunities. Faculty routinely engage students in research projects and as co-authors on peer-reviewed papers. In the past five academic years, faculty have secured more than \$10 million in external funding for research within a variety of disciplines.<sup>22</sup> Ultimately, the presence of multiple research teams across numerous scholarly areas fosters a culture of innovation and intellectualism across the local area, giving the college a competitive advantage in attracting driven, high caliber students from North Carolina and beyond.

### 7.2. Producing Innovations and Strengthening Industries

Acknowledging the changing demands for the skills of graduating students and entry-level positions in many industries, Davidson has made experiential learning, internships, and industry-relevant skilling accessible to students. This is especially important as the North Carolina economy continues to grow in several knowledge- and technology-based industries. In the past five years, this effort has been led by the Jay Hurt Hub for Innovation and Entrepreneurship at Davidson College. As referenced in Section 5, the Hurt Hub provides educational programming, experiential learning opportunities, co-working space, a mentor network including Charlotte-area members, and access to capital and grant start-up funding.

---

<sup>22</sup> Davidson Office of Grants and Contracts. 2022 Annual Report. *Provided by Davidson College.*



*Source: Hurt Hub @ Davidson (2023)*

The Hurt Hub is a manifestation of Davidson’s efforts to provide a dynamic education that speaks to the current labor market for graduating students. This is central to Davidson’s academic and operational strategy. As noted in its current strategic planning, Davidson is actively engaging faculty, staff, alumni, and local industry leaders on learning for the future – laying the foundation for Davidson to become a leader in the space of generative artificial intelligence, applied learning, and their impact on ethical work.<sup>23</sup>

### **7.3. Synchronizing Institutional Mission with Regional Influence**

Davidson is a supplier of undergraduate talent in North Carolina. While the college has a clear economic impact from the credentialing it provides, Davidson’s efforts to graduate well-rounded and technically skilled students strengthens the region and state’s economic resilience. In tying Davidson’s experiential educational opportunities to North Carolina’s thriving research and innovation technology sectors, Davidson is establishing a connection that will place the college’s graduates – and subsequently the college’s values – in the greater Charlotte metro area, the Research Triangle and beyond.

---

<sup>23</sup> President’s Office, Strategic Plan. <https://www.davidson.edu/about/college-leadership/strategic-plan>.

## 8. Broader Societal Impacts

### Section Overview

Driven by its values and mission statement, Davidson College has long provided leadership in the Town of Davidson, the Charlotte metro area, and the State of North Carolina. This section explores the ways Davidson College lives its primary purpose and acts as a civic leader.

### 8.1. An Accessible and Affordable Education

#### The Davidson Trust

Launched in 2007, this pioneering initiative marked Davidson as the first liberal arts institution in the nation to replace loans with grants and work-study jobs in all financial aid packages. By meeting 100 percent of calculated financial need, the program removes financial hurdles and opens the Davidson experience to students of all backgrounds. A diverse student population means those with different perspectives, experiences, and ideas learn alongside – and from – each other. As students from different backgrounds come together, they engage in dialogue and experiences that challenge preconceptions and broaden horizons.

This financial freedom often translates into more diverse career choices, allowing graduates to follow their passions and venture into fields that address societal needs. They are more entrepreneurial, more willing to take risks, which helps strengthen innovation in their communities.

### 8.2. A Commitment to Diversity, Equity, and Inclusion

#### Commission on Race and Slavery

As Davidson prepares its student body for a changing world and economy, the college has also made efforts to confront its own history, which is intertwined with slavery, segregation and Jim Crow laws. In 2017, Davidson created the Commission on Race and Slavery, chaired by alumnus and former United States Secretary of Transportation Anthony Foxx. After three years of engagement with community members, faculty, staff and trustees, the Commission released a report in 2020 that acknowledged the college's role in furthering the institution of slavery, including the use of enslaved labor to construct the college's first buildings.<sup>24</sup> The report offered three preliminary recommendations: apology, recognition, and commemoration. Shortly after the release of the report, then-President Carol Quillen offered a public apology that concluded stating, "As an institution with moral responsibility, Davidson College affirms our commitment to acknowledge fully wrongs of the past and to act now and in the future for a just and humane campus and world."

Since the release of the report and the apology, Davidson has developed several initiatives that focus on equity and racial justice, including: new faculty hires in Africana Studies; mandatory antiracism education for staff and students; plans for using the former Beaver Dam plantation as an educational resource; plans

---

<sup>24</sup> Davidson College Commission Report and Initial Actions. <https://www.davidson.edu/race-slavery-and-reconciliation/commission-race-and-slavery/commission-report-and-initial-actions>.

for a memorial in the historic heart of campus that acknowledges and commemorates the contributions of enslaved persons; and efforts to increase connections with the local Black community.<sup>25</sup>



*Source: Rendering of proposed commemoration and memorial space, Davidson College (2023)*

### **8.3. A Commitment to Service and Community-Based Learning**

Davidson’s primary purpose is to help students develop humane instincts and discipline and creative minds for lives of leadership and service. The college does so by making leadership and service opportunities a key part of the student experience. These opportunities extend from the local Davidson community into the Charlotte metro area. Many of these opportunities are coordinated through the college’s Center for Civic Engagement (CCE), which helps connect students, faculty, and staff with community capacity-building work. Through the CCE, students access fellowships and internships, grant funding, and other civic programming that align with the college’s values.

Davidson’s staff and faculty are also committed to service and civic leadership. Through the Community-Engaged Faculty Fellows program, select faculty deepen their scholarship by helping to build the capacity of the Davidson community and the Charlotte metro area, and provide input into faculty resources for community-based, experiential learning.<sup>26</sup> In addition, staff also volunteer with civic and non-profit organizations in and around the Davidson community.

### **8.4. Synchronizing Institutional Mission with Societal Influence**

Davidson’s missional commitment to leadership and service can be seen in several programs – particularly in its efforts to provide an affordable and accessible education, and through

<sup>25</sup> Post-Commission Initiatives and Progress. <https://www.davidson.edu/race-slavery-and-reconciliation/commission-race-and-slavery/post-commission-initiatives-and-progress>.

<sup>26</sup> Community Engaged Faculty Fellows Program. <https://www.davidson.edu/offices-and-services/civic-engagement/community-based-learning-research/community-engaged-faculty-fellows>.

## Dynamic Davidson: Impacting Community, Economy, and Society

compassionately acknowledging the college’s history with slavery. In addition to these laudable efforts, the college has also synchronized its mission with its academic and scholarly efforts, making community service and experiential learning a core component of the Davidson experience. In the past academic year, more than 1,000 Davidson students participated in more than 400 community-based learning courses. These types of experiences and initiatives ensure that Davidson students remain leaders well beyond their time on-campus, no matter their location, and remain lifelong advocates for Davidson. Notably, Davidson’s alumni network advocate for Davidson’s mission, and act as exemplary civic leaders. In addition to that, alumni remain a vital part of Davidson’s success – donating approximately \$100 million over the past five academic years.

### Notable Davidson Alumni



*John Chidsey '83*

**John Chidsey** is the CEO of sandwich franchise giant Subway, which has roughly 40,000 locations across more than 100 countries, with a network of 20,000+ franchises. In this role, he has overseen the “Eat Fresh Refresh” campaign featuring fellow Davidson alum Stephen Curry '10 and led the company’s expansion into East Asia. He previously served as the CEO of Burger King and two divisions of Cendant Corporation. The Chidsey Scholarship, Chidsey Center for Leadership Development and Chidsey Hall are all named for John, a former Board of Trustees chairman, and his wife and classmate Lisa Robinson Chidsey.

**Liz Clasen-Kelley** is the CEO of Roof Above, a leading Charlotte non-profit addressing homelessness and housing instability. The organization, born in 2019 out of the merger of the Urban Ministry Center and the Men’s Shelter of Charlotte, serves 1,200 people each day with services including street outreach, day services, emergency shelter and permanent support housing. A former religious studies student, Clasen-Kelley was recognized by her class peers in 2020 with the John W. Kuykendall Award for Community Service.



*Liz Clasen-Kelley '00*



*Patricia Cornwell '79*

**Patricia Cornwell** is an internationally renowned author of forensic crime fiction novels. Cornwell graduated from Davidson College in 1979 and started her career with the *Charlotte Observer* before transitioning to a position with the Office of the Chief Medical Examiner in Richmond, Virginia. It was during this time that Cornwell wrote her first novel, *Postmortem*, which won the Edgar, Creasey, Anthony and Macavity awards as well as the French Prix du Roman d’Aventure prize. It was the first book ever to claim all these distinctions in a single year. Cornwell’s books—including 29 *New York Times* Best Sellers—have sold some 100 million copies and been translated into 36 languages in more than 129 countries.

**James E. Crowe, Jr.** is an immunologist and pediatrician at the Vanderbilt University Medical Center. He received the 2020 Golden Goose COVID-19 Recognition for his decades-long pursuit of better understanding of the human immune system, as well as his work identifying the DNA sequences of COVID antibodies. Dr. Crowe and his team also worked on the dengue and Zika viruses. Following Davidson, Dr. Crowe completed his medical training at the University of North Carolina Chapel Hill and went on to work at the National Institutes of Health.



*James E. Crowe, Jr. '83*

## Dynamic Davidson: Impacting Community, Economy, and Society



**Stephen Curry** is widely regarded as one of the greatest basketball players of all time. In his ongoing career, Curry has led the Golden State Warriors to four NBA championships and has received two MVP awards. At Davidson, he led the team to the Elite 8 during the 2008 NCAA Tournament and was the NCAA season scoring leader the following year. Curry has been named both Sports Illustrated Sportsperson of the Year and AP's Athlete of the Year. Off the court, Curry and his wife, Ayesha, lead the Eat.Learn.Play Foundation, which supports the overall well-being of children.

*Stephen Curry '10*

**Anthony Foxx** held the position of United States Secretary of Transportation during the Obama Administration. He served as the first Black student body president at Davidson and went on to hold several jobs in the federal government before winning a seat on Charlotte's City Council. Foxx became Charlotte's youngest mayor and the city's second Black mayor before taking his career to Washington, D.C. Anthony is the current vice chair of Davidson's Board of Trustees.



*Anthony Foxx '93*



**Elizabeth Kiss** was named Warden of Rhodes House by the Rhodes Trust in 2018. She is the first woman to hold this position and was the first woman at Davidson to win a Rhodes Scholarship. Elizabeth was the founding director of Duke University's Kenan Institute for Ethics and served as president of Agnes Scott College for more than a decade. She has held leadership positions in many national organizations, including the Climate Leadership Network and the Women's College Coalition, and she previously served on the college's Board of Trustees.

*Elizabeth Kiss '83*

**Lorie K. Logan** is the 14th President and CEO of the Federal Reserve Bank of Dallas. A former executive vice president of the Federal Reserve Bank of New York, Logan has played a crucial role in the development and implementation of the Federal Reserve's action in response to the COVID-19 pandemic. Additionally, she contributed significantly to the 2008 financial crisis response.



*Lorie K. Logan '95*



**Mary Tabb Mack**, a longtime Most Powerful Women in Banking honoree, led Wells Fargo's consumer and small-business banking division as Head of Community Banking. In this role, Mack helped Wells Fargo with several major initiatives, including the company's efforts at expanding digital banking options and their commitments to diversity, equity and inclusion. After working for the company throughout her entire career and retiring in the summer of 2023, Mack continues to work on special projects there. She currently sits on the Davidson College Board of Trustees.

*Mary Tabb Mack '84*

**Tom Marshburn** is a veteran spacewalker and flight surgeon. He retired from NASA last year after 28 years, including 18 as an astronaut. During this time, he spent 337 days in space, traveling to the International Space Station three times on three different spacecraft—the space shuttle, Soyuz, and SpaceX Crew Dragon—and performed five spacewalks during his three spaceflights. Tom received the NASA Distinguished Service Medal, which is the highest award that can be bestowed by the National Aeronautics and Space Administration of the United States. During his third mission to space, Tom connected to Davidson's campus via Zoom and spoke with hundreds of Wildcat alums, faculty, staff and students.



*Tom Marshburn '82*

## Dynamic Davidson: Impacting Community, Economy, and Society



**Sallie Permar** is the pediatrician-in-chief at New York-Presbyterian/Weill Cornell Medical Center and the chair of Department of Pediatrics at Weill Cornell Medicine in New York. A physician-scientist, Dr. Permar focuses on the treatment and prevention of neonatal viral infections. Author of nearly 150 scientific publications, she worked previously at the Duke University School of Medicine, where her work focused in pediatrics, immunology and molecular genetics. Throughout her distinguished career, Dr. Permar has earned recognition from the National Institute of Health and the White House.

*Sallie Permar '97*

**Clint Smith** is a nationally recognized educator and author whose book *How the Word Is Passed: A Reckoning with the History of Slavery Across America* earned the No. 1 spot on the *New York Times* Best Sellers List. This same book won the National Book Critics Circle Award for Non-Fiction, the Hillman Prize for Book Journalism, the Stowe Prize, the Dayton Literary Peace Prize and was selected by the *New York Times* as one of the best books of 2021.

Smith is also the author of two books of poetry, the *New York Times* bestselling collection *Above Ground* and *Counting Descent*, which won the 2017 Literary Award for Best Poetry Book from the Black Caucus of the American Library Association. Smith is a contributor to several publications including *The New Yorker* magazine, and he serves as a staff writer at *The Atlantic*.



*Clint Smith '10*

## 9. Conclusion

### 9.1. Aggregate Economic Impact

In analyzing this information, much care has been taken in calculating annualized impact estimates for the four relevant impact categories. **Considered together, Davidson College produces an annual impact of approximately \$490 million in North Carolina and supports an estimated 2,300 direct, indirect, and induced jobs throughout the state.**

Figure 9.1: Aggregate Annual Economic Impact from Davidson College (\$M)

	Mecklenburg County	Charlotte MSA	North Carolina
From Operations	\$308.5	\$332.9	\$332.6
From Capital	\$32.6	\$36.4	\$36.7
From Ancillary Spending	\$17.5	\$18.4	\$18.4
From Alumni Wage Premium	\$30.2	\$45.6	\$102.4
<b>Total</b>	<b>\$388.4</b>	<b>\$433.3</b>	<b>\$490.1</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

Figure 9.2: Jobs Supported by Aggregate Annual Economic Impact from Davidson College (\$M)

	Mecklenburg County	Charlotte MSA	North Carolina
From Operations	1,320	1,450	1,440
From Capital	180	200	200
From Ancillary Spending	130	140	140
From Alumni Wage Premium	140	220	520
<b>Total</b>	<b>1,770</b>	<b>2,010</b>	<b>2,300</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

This economic impact grows the North Carolina tax base, with Davidson producing an estimated tax revenue impact of \$22 million per year through economic activity created by the college’s operational footprint, capital investments, associated ancillary spending, and the alumni wage premium enjoyed by Davidson College graduates living and working in North Carolina.

Figure 9.3: Aggregate Tax Revenue Impact from Davidson College (\$M)

Tax Type	Operations	Capital	Ancillary Spend	Wage Premium	Total
Income	\$5.0	\$0.5	\$0.3	\$1.2	<b>\$7.0</b>
Income (from Davidson Alumni)	–	–	–	\$5.2	<b>\$5.2</b>
Sales	\$5.3	\$0.6	\$0.4	\$1.7	<b>\$8.0</b>
Business	\$0.8	\$0.1	\$0.1	\$0.3	<b>\$1.3</b>
<b>Total</b>	<b>\$11.1</b>	<b>\$1.3</b>	<b>\$0.8</b>	<b>\$8.4</b>	<b>\$21.6</b>

Source: Econsult Solutions, Inc. (2024)

## **9.2. Return to Student, Community, Region, and Society**

Davidson College – and the role it plays within its local community and region – must be viewed beyond simple economic terms. As a values-driven institution, Davidson College provides a broad set of positive catalytic social impacts to the region. A leading higher-education institution in providing experiential learning opportunities for its students, Davidson College incorporates service and leadership within its curriculum to boost its impact within its local community. Through its efforts to provide more dynamic, technical experiences to its campus through efforts like the Hurt Hub, the college has become an increasingly important supplier of talent that can excel in North Carolina’s burgeoning and innovative knowledge economy. As it currently works to address, confront, and lead on the most pressing social issues of the day, Davidson College adds to the vibrancy of the greater Charlotte metro area and North Carolina.

## 10. Appendix

### Input-Output Methodology

Figure A.1: Economic Impact Methodology



Source: Econsult Solutions, Inc. (2024)

In an inter-connected economy, every direct dollar spent generates two spillover impacts:

- First, some amount of the proportion of that expenditure that goes to the purchase of goods and services gets circulated back into an economy when those goods and services are purchased from local vendors. This represents what is known as the **indirect effect** and reflects the fact that local purchases of goods and services support local vendors, who in turn require additional purchasing with their own set of vendors.
- Second, some amount of the proportion of that expenditure that goes to labor income gets circulated back into an economy when those employees spend some of their earnings on various goods and services. This represents what is known as the **induced effect** and reflects the fact that some of those goods and services will be purchased from local vendors, further stimulating the economy.

To model the impacts resulting from the direct expenditures of Davidson College, ESI developed a customized economic impact model using IMPLAN's input/output modeling system. Utilizing an industry standard approach, IMPLAN's input/output modeling system allows users to assess the economic and job creation impacts of industry-based events and public policy changes within a county or its surrounding area. IMPLAN has developed a social accounting matrix (SAM) that accounts for the flow of commodities through economics. From this matrix, IMPLAN also determines the regional purchase coefficient (RPC), or the proportion of local supply that satisfies local demand. These values not only establish the types of goods and services supported by an industry or institution, but also the high level at which they are acquired locally. This assessment determines the multiplier basis for the local and regional models created in the IMPLAN modeling system. IMPLAN takes these multipliers and divides them into 546 industry categories in accordance with the North American Industrial Classification System (NAICS) codes.

## Explanation of Multipliers<sup>27</sup>

The use and application of multipliers are intuitive. Multipliers, in their most basic form, are the result of an algebraic analysis expressing how two inputs are interconnected in the production of an output. The result of the equation generates a multiplier that is broken down into direct, indirect, and induced effects. In a generalized example: if the multiplier for good “X” to good “Y” is 3, then the direct effect of good “X” on “Y” is 1, with indirect and induced effects of 2. Essentially, every unit of good “X” supports 2 units of good “Y”.

When implemented on a large complex scale, such as that of the US economy or any subsection of it, multiplier effects across industries can be complicated. However, the same general concept comes into play. Each industry has largely different and varied inputs into other industries. The quantity of the output is largely decided by the scale and efficiency of the industries involved. As a result, the sum of those inputs equates to an output product plus a value added/component. By arranging these inputs and outputs by industry in a matrix and performing some algebra to find the Leontief inverse matrix, each industry’s effect on final demand can be estimated. Additionally, the direct, indirect, and induced effects can also be determined. Direct effects include direct purchases for production, indirect effects include expenses during production, and induced effects concern the expenditures of employees directly involved with production. Using building construction as an example, the direct effects would include materials, brick, steel, and mortar, the indirect effects would involve the steel fabrication and concrete mixing, and the induced effects would consider purchases by construction workers using their wages. While impacts vary in size, each industry has rippling effects throughout the economy. By using an input-output model, these effects can be more accurately quantified and explained.

IMPLAN is one of several popular choices for regional input-output modeling. Each system has its own nuances in establishing proper location coefficients. IMPLAN uses a location quotient to determine its regional purchase coefficient (RPC). This represents the proportion of demand for a good that is filled locally; this assessment helps determine the multiplier for the localized region. Additionally, IMPLAN also accounts for inter-institutional transfers (e.g., firms to households, households to the government, etc.) through its social account matrix (SAM) multipliers. IMPLAN takes the multipliers and divides them into industry categories in accordance with the North American Industrial Classification System (NAICS) codes, allowing a comprehensive breakdown of a region’s multipliers by industry to be shown.

Despite the usefulness of input/output modeling, there are some shortcomings to the system. Notably, input-output models ignore economies of scale. Input-output models assume that costs and inputs remain proportionate through different levels of production. Further, multipliers are not generally updated on a timely basis; most multipliers are prone to be outdated with the current economy. If the multipliers are sourced from a year of a recession economy, the multipliers may not accurately represent the flows from an economic boom period. Additionally, multipliers may not capture sudden legal or technological changes which may improve or decrease efficiency in the production process.

---

<sup>27</sup> Lahr, Michael. “Input-Output Analysis: Technical Description and Application.” Rutgers University Edward J. Bloustein School of Planning and Public Policy.

## Glossary of Terms for Input/Output Models

**Multiplier Effect**– the notion that initial outlays have a ripple effect on a local economy, to the extent that direct output leads to indirect and induced output.

**Economic Impacts**– total expenditures, employment, and labor income generated.

**Tax Revenue Impacts**– local and/or state tax revenues generated.

**Direct Output**– initial outlays usually associated with the project or activity being modeled; examples: one-time upfront construction and related expenditures associated with a new or renovated facility, annual expenditures associated with ongoing facility maintenance and/or operating activity.

**Direct Employment**– the number of annual jobs associated with direct output (including full and part-time employment)

**Direct Labor Income**– the salaries and wages earned by employees, contractors, and proprietors as part of the direct output.

**Indirect Output**– indirect and induced outlays resulting from the direct output; examples: vendors increasing production to meet new demand associated with the direct output, workers spending direct labor income on various purchases within the local economy.

**Indirect/Induced Employment**– the number of annual jobs associated with indirect/induced output (including full and part-time employment)

**Indirect Labor Income**– the salaries and wages earned by employees, contractors, and proprietors as part of the indirect output.

**Total Output**– the sum of direct output and indirect output.

**Total Employment**– the sum of direct employment and indirect employment.

**Total Labor income**– the sum of direct labor income and indirect labor income.

*Source: Econsult Solutions, Inc. (2024)*

## Visitor Spending Profiles

Spending profiles were developed by visit type to reflect that visitor spending patterns vary based on point of origin (local, regional, or overnight), reason for visit, and other factors. Unique spending patterns were estimated for each visitor type using available proxy data on national travel trends and local hotel rates. Where no proxy data is available, conservative assumptions are utilized. We used 12 different spending profiles based on the likely differences of visitors for different types of events. For instance, free events would have one spending profile, while ticketed sporting events would have their own unique spending profile.

Figure A.2: Davidson Student Monthly Spending Profile

	<b>Residential</b>	<b>Off-Campus</b>	<b>Total</b>
Food	\$100	\$200	<b>\$300</b>
Rent	\$0	\$800	<b>\$800</b>
Transport	\$20	\$40	<b>\$60</b>
Retail	\$150	\$150	<b>\$300</b>
<b>Total</b>	<b>\$270</b>	<b>\$1,190</b>	<b>\$1,460</b>

Source: Econsult Solutions, Inc. (2024)

Figure A.3: Davidson Free Ticketed Performances Spending Profile

	<b>Student</b>	<b>Local</b>	<b>Regional (Day Trip)</b>	<b>Overnight Trip</b>	<b>Total</b>
Lodging	\$0	\$0	\$0	\$92	<b>\$92</b>
Food	\$0	\$5	\$37	\$74	<b>\$116</b>
Transport	\$0	\$3	\$10	\$25	<b>\$38</b>
Misc. Retail	\$0	\$0	\$5	\$5	<b>\$10</b>
<b>Total</b>	<b>\$0</b>	<b>\$8</b>	<b>\$52</b>	<b>\$196</b>	<b>\$256</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

Figure A.4: Davidson \$1-\$10 Ticketed Performance Spending Profile

	<b>Student</b>	<b>Local</b>	<b>Regional (Day Trip)</b>	<b>Overnight Trip</b>	<b>Total</b>
Lodging	\$0	\$0	\$0	\$92	<b>\$92</b>
Food	\$5	\$10	\$37	\$74	<b>\$126</b>
Transport	\$0	\$3	\$10	\$25	<b>\$38</b>
Misc. Retail	\$0	\$0	\$5	\$5	<b>\$10</b>
<b>Total</b>	<b>\$5</b>	<b>\$13</b>	<b>\$52</b>	<b>\$196</b>	<b>\$266</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

Figure A.5: Davidson \$11-\$20 Ticketed Performance Spending Profile

	<b>Student</b>	<b>Local</b>	<b>Regional (Day Trip)</b>	<b>Overnight Trip</b>	<b>Total</b>
Lodging	\$0	\$0	\$0	\$92	<b>\$92</b>
Food	\$10	\$15	\$37	\$74	<b>\$136</b>
Transport	\$0	\$3	\$10	\$25	<b>\$38</b>
Misc. Retail	\$0	\$0	\$5	\$5	<b>\$10</b>
<b>Total</b>	<b>\$10</b>	<b>\$18</b>	<b>\$52</b>	<b>\$196</b>	<b>\$276</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

Figure A.6: Davidson >\$21 Ticketed Performance Spending Profile

	<b>Student</b>	<b>Local</b>	<b>Regional (Day Trip)</b>	<b>Overnight Trip</b>	<b>Total</b>
Lodging	\$0	\$0	\$0	\$92	<b>\$92</b>
Food	\$15	\$20	\$37	\$74	<b>\$146</b>
Transport	\$0	\$3	\$10	\$25	<b>\$38</b>
Misc. Retail	\$5	\$10	\$5	\$5	<b>\$25</b>
<b>Total</b>	<b>\$20</b>	<b>\$33</b>	<b>\$52</b>	<b>\$196</b>	<b>\$301</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

Figure A.7: Davidson Family Event Spending Profile

	<b>Local</b>	<b>Regional (Day Trip)</b>	<b>Overnight Trip</b>	<b>Total</b>
Lodging	\$0	\$0	\$92	<b>\$92</b>
Food	\$35	\$50	\$74	<b>\$159</b>
Transport	\$3	\$10	\$25	<b>\$38</b>
Misc. Retail	\$15	\$20	\$20	<b>\$55</b>
<b>Total</b>	<b>\$53</b>	<b>\$80</b>	<b>\$211</b>	<b>\$344</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

Figure A.8: Davidson Alumni Event Spending Profile

	Local	Regional (Day Trip)	Overnight Trip	Total
Lodging	\$3	\$10	\$25	<b>\$38</b>
Food	\$5	\$10	\$10	<b>\$25</b>
Transport	\$28	\$57	\$201	<b>\$286</b>
Misc. Retail	\$0	\$0	\$0	<b>\$0</b>
<b>Total</b>	<b>\$36</b>	<b>\$77</b>	<b>\$236</b>	<b>\$349</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

Figure A.9: Davidson Prospective Student Event Spending Profile

	Local	Regional (Day Trip)	Overnight Trip	Total
Lodging	\$0	\$0	\$92	<b>\$92</b>
Food	\$50	\$75	\$100	<b>\$225</b>
Transport	\$3	\$10	\$25	<b>\$38</b>
Misc. Retail	\$5	\$10	\$10	<b>\$25</b>
<b>Total</b>	<b>\$58</b>	<b>\$95</b>	<b>\$227</b>	<b>\$380</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

Figure A.10: Davidson Miscellaneous Event Spending Profile

	Local	Regional (Day Trip)	Overnight Trip	Total
Lodging	\$0	\$0	\$92	<b>\$92</b>
Food	\$5	\$37	\$74	<b>\$116</b>
Transport	\$3	\$10	\$25	<b>\$38</b>
Misc. Retail	\$0	\$5	\$5	<b>\$10</b>
<b>Total</b>	<b>\$8</b>	<b>\$52</b>	<b>\$196</b>	<b>\$256</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

Figure A.11: Davidson Large Spectator Athletic Event Spending Profile

	Student	Local	Regional (Day Trip)	Overnight Trip	Total
Lodging	\$0	\$0	\$0	\$90	<b>\$90</b>
Food	\$5	\$5	\$35	\$75	<b>\$120</b>
Transport	\$0	\$3	\$10	\$25	<b>\$38</b>
Misc. Retail	\$5	\$5	\$5	\$15	<b>\$30</b>
<b>Total</b>	<b>\$10</b>	<b>\$13</b>	<b>\$50</b>	<b>\$205</b>	<b>\$278</b>

Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)

Figure A.12: Davidson Small Spectator Athletic Event Spending Profile

	<b>Student</b>	<b>Local</b>	<b>Regional (Day Trip)</b>	<b>Overnight Trip</b>	<b>Total</b>
Lodging	\$0	\$0	\$0	\$92	<b>\$92</b>
Food	\$3	\$5	\$35	\$75	<b>\$118</b>
Transport	\$0	\$3	\$10	\$25	<b>\$38</b>
Misc. Retail	\$0	\$0	\$5	\$5	<b>\$10</b>
<b>Total</b>	<b>\$3</b>	<b>\$8</b>	<b>\$50</b>	<b>\$197</b>	<b>\$258</b>

*Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)*

Figure A.13: Davidson Small Non-Spectator Athletic Event Spending Profile

	<b>Student</b>	<b>Local</b>	<b>Regional (Day Trip)</b>	<b>Overnight Trip</b>	<b>Total</b>
Lodging	\$0	\$0	\$0	\$92	<b>\$92</b>
Food	\$0	\$5	\$35	\$75	<b>\$115</b>
Transport	\$0	\$3	\$10	\$25	<b>\$38</b>
Misc. Retail	\$0	\$0	\$5	\$5	<b>\$10</b>
<b>Total</b>	<b>\$0</b>	<b>\$8</b>	<b>\$50</b>	<b>\$197</b>	<b>\$255</b>

*Source: Davidson College (2024) & Econsult Solutions, Inc. (2024)*

### About Econsult Solutions, Inc.

This report was produced by Econsult Solutions, Inc. (“ESI”). ESI is a Philadelphia-based economic consulting firm that provides businesses and public policy makers with economic consulting services in urban economics, real estate economics, transportation, public infrastructure, development, public policy and finance, community and neighborhood development, planning, as well as expert witness services for litigation support. Its principals are nationally recognized experts in urban development, real estate, government and public policy, planning, transportation, non-profit management, business strategy and administration, as well as litigation and commercial damages. Staff members have outstanding professional and academic credentials, including active positions at the university level, wide experience at the highest levels of the public policy process and extensive consulting experience.

**ESI** **ECONCONSULT**  
**SOLUTIONS INC.**

**economics | strategy | insight**

1435 WALNUT STREET, 4<sup>TH</sup> FLOOR, PHILADELPHIA, PA 19102

ECONSULTSOLUTIONS.COM | 215-717-2777