## ADVANCING ACCESSIBILITY, ACADEMIC EXCELLENCE, AND COMMUNITY ENGAGEMENT

MCDANIEL C O L L E G E

Date: August 27, 2024

THE ECONOMIC AND SOCIAL IMPACT OF McDANIEL COLLEGE

Submitted to McDaniel College

## McDANIEL EDUCATES THE REGIONAL WORKFORCE

TOTAL LIVING ALUMNI

18,000 IN MARYLAND

4,400
IN CARROLL COUNTY

ESTIMATED WAGE PREMIUM WITH A McDANIEL DEGREE

\$9,300

\$14,800

McDaniel College is a private liberal arts college founded in 1867 and located in the city of Westminster, Maryland. McDaniel is a community of 1,600 undergraduate and 1,400 graduate students who come from all backgrounds, providing a supportive and inclusive environment for all students.

#### **ECONOMIC IMPACT BY CATEGORY**

ANNUAL OPERATIONS







CAPITAL INVESTMENTS



\$11 M IN MARYLAND

\$9 M IN CARROL COUNTY ANCILLARY SPENDING



M \$25

\$15 M IN CARROLL COUNTY ALUMNI WAGE PREMIUM



\$25 M \$140 M IN MARYLAND

\$23 M IN CARROLL COUNTY

STATE TAX REVENUES GENERATED IN SUPPORT OF PUBLIC SERVICES

**\$8 M TO STATE OF MARYLAND** 

# McDANIEL COLLEGE GENERATES OUTSIZED LOCAL, REGIONAL, AND STATEWIDE IMPACT

**ECONOMIC IMPACT** 

\$271 M IN MARYLAND \$128 M
IN CARROLL COUNTY

**JOBS SUPPORTED** 

2,040
IN MARYLAND

1,290
IN CARROLL COUNTY



THE SUCCESS OF
McDANIEL COLLEGE'S
ATHLETICS TEAMS
BUILDS SCHOOL PRIDE
AND GENERATES AREA
ECONOMIC ACTIVITY

73
CONFERENCE TEAM
CHAMPIONSHIPS

INDIVIDUAL CHAMPIONSHIPS

33,000

GAME ATTENDEES

A TAILGATER'S DREAM

INTRODUCTION

"At McDaniel, we are proud to prepare students for successful lives of leadership, service, and social responsibility. In doing so, we send students out into the world to make a difference not only here in Carroll County during their time on the Hill but also in their future communities—wherever our alumni land as they begin the next and future chapters of their lives."

— PRESIDENT JULIA JASKEN

#### THE ECONOMIC AND SOCIAL IMPACT OF McDANIEL COLLEGE

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#### 1. INTRODUCTION

#### 1.1. Purpose of Report

McDaniel College, located in Westminster, Maryland, is a private liberal arts college known for its diverse academic programs, inclusive community, and emphasis on experiential learning. McDaniel College offers a supportive environment with a wide range of extracurricular activities and opportunities for personal and professional growth.

This report aims to articulate McDaniel College's mission and goals in terms of economic and social impact and to quantify its total economic impact at local, regional, and state levels. These measurements reflect the current annual economic impact of the college and project its future role as a beneficial force locally, regionally, and nationally. The report highlights McDaniel College's significant contributions to its community, region, and society, demonstrating its dedication to excellence in scholarship and service to its community.

By analyzing annual operations, capital investments, student and visitor expenditures, and the enhanced potential earnings of its graduates, the report will estimate the college's total annual economic impact. These accomplishments both underscore McDaniel College's economic importance and show its intentional contribution to community well-being and societal impact.

#### 1.2. About McDaniel College

Founded as the first coeducational higher education institution south of the Mason-Dixon line, McDaniel College was established in 1867 in the immediate aftermath of the Civil War. The college changed its name from Western Maryland College in 2002 to avoid the common misconception that the college was affiliated with the state's University System of Maryland. Located on a hilltop, the campus is referred to as "the Hill" and prides itself on offering a high-value and accessible education, boasting 40% for both first-generation and minority student classifications.

McDaniel offers 108 academic programs including majors, minors, specializations, master's, graduate certificates, and B.A.-to-M.S. pathways. Top majors include Business Administration, Kinesiology, and Psychology, with 32% of the graduates having been enrolled in these three majors. McDaniel offers distinctive academic opportunities such as study abroad programs, an honors program, global fellowship and national security fellowship programs, and undergraduate research opportunities. McDaniel also has a campus in Budapest, Hungary, which has been operational since 1994.

McDaniel's mission is to "challenge students to develop their unique potentials with reason, imagination, and human concern." The college focuses on a commitment to excellence in the liberal arts and sciences and professional studies with a student-centered approach. With a 13:1 student-to-faculty ratio, the college strives to provide mentorship to each individual student. As defined in its First Principles, McDaniel College places students at the center of a supportive environment, encouraging them to achieve personal goals while respecting others and contributing to society. The college aims to foster critical, creative, and humane thinkers who understand their responsibilities within the global community, offering a foundation of knowledge, critical thinking skills, and professional programs integrated with a liberal arts education.

#### 1.3. McDaniel College as a Driver of Local Economic Activity

Colleges and universities are often among a region's most significant economic engines. The activities described below support economic activity both directly and indirectly. This economic activity strengthens the available labor pool and serves the local community. McDaniel College's impact on state and local economic activity is demonstrated in this report via four primary avenues:

- Annual Operations: The college acts as an employer and purchaser of goods and services.
- Capital Investments: The college invests in new buildings, major renovations, and large-scale maintenance projects.
- Student and Visitor Spending: Spending by students and guests supports local merchants.
- **Increased Earnings for Alumni:** Alumni enjoy higher household earnings due to their education and credentials from the college, which translates into additional spending power in the local economy.

Furthermore, this activity contributes to job creation, attracting investment, fostering innovation and entrepreneurship, workforce development, and various cultural and social impacts. Overall, colleges and universities are integral to economic development and enhance the quality of life in their communities.

ANNUAL OPERATIONS

CAPITAL INVESTMENTS

ANCILLARY SPENDING

ALUMNI WAGE PREMIUM









#### 1.4. Scope and Methodology Considerations

This report relies on industry standard university economic impact analysis methods. ESI employed IMPLAN, a widely used input-output modeling software program, to translate direct economic footprints into total economic impact. Through IMPLAN, ESI accounts for spillover effects in the following ways:

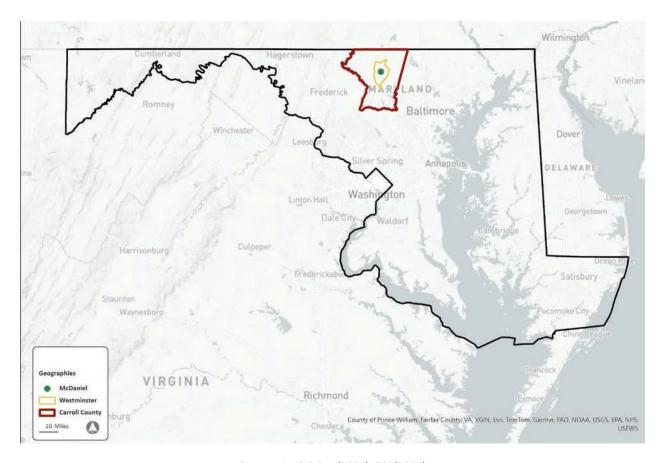
- The indirect effect of the procurement of goods and services creates economic opportunities for the area vendors that supply them.
- The induced effect of salaries and wages being earned and in turn being spent back into an area bolsters the regional economy.

Where possible, direct, indirect, and induced economic impacts were calculated at three levels:

- Local Level City of Westminster, Maryland
- County Level Carroll County, Maryland
- State Level State of Maryland

INTRODUCTION

Figure 1.1: McDaniel College and Relevant Geographies



Source: ArcGIS Pro (2024); ESI (2024)

In this study, the annualized economic impact calculates the total economic contribution of McDaniel College over a year, factoring in direct, indirect, and induced effects, to provide a comprehensive view of its financial influence on the economy. This includes measuring job creation, income generation, and overall economic activity attributed to the college's operations and expenditures.



## OPERATIONS + CAPITAL

Carroll County Annual Economic Impact

**\$90** 

TOTAL ECONOMIC IMPACT

890 FTE

TOTAL JOBS SUPPORTED

\$45

**EMPLOYEE COMPENSATION** 

#### ANNUAL OPERATIONS

#### CAPITAL INVESTMENTS





## 2. LOCAL ECONOMIC IMPACT FROM ANNUAL OPERATIONS AND CAPITAL INVESTMENTS

#### 2.1. Section Overview

Annual operations and capital investments constitute the largest of the four economic impact categories covered in this report. At the state level, it is estimated that McDaniel College's annual operations produce \$106 million in annual economic impact in Maryland, supporting 950 jobs throughout the state and contributing \$1.5 million in state tax revenues each year. In Carroll County, the college's annual operations and capital investments contribute more than \$90 million in total economic impact, supporting 890 direct and indirect full-time jobs, and almost \$45 million in employee compensation.

#### 2.2. Direct Annual Operating Footprint

McDaniel College makes a substantial contribution to the local and regional economy through its significant annual operations. The vast majority of McDaniel's annual operating budget is allocated to faculty and staff compensation, utilities, and food and custodial services, most of which is spent directly within the local community. This direct annual spending — amounting to approximately \$58 million — not only impacts the City of Westminster but also benefits Carroll County and the State of Maryland. Moreover, nearly two-thirds (64%) of annual operating expenditures are paid out to McDaniel employees in the form of wages and benefits. (see Figure 2.1)

#### Figure 2.1: McDaniel College: Annual Operating Costs (FY 2023)<sup>1</sup>

	FY 2023
Payroll Expenditures (\$M)	
Employee Wages	\$29.2
Employee Benefits	\$7.9
Non-Payroll Expenditures (\$M)	
Food and Custodial Services	\$7.4
Utilities	\$2.4
Maintenance	\$2.6
Departmental	\$8.5
Payroll Expenditures	\$37.1
Non-Payroll Expenditures	\$20.8
Total Expenditures	\$58.0

Source: McDaniel College (2024)

Additionally, McDaniel College is committed to sourcing goods and services locally, thereby enhancing regional sustainability efforts. McDaniel is intentional in its procurement of goods and services, prioritizing the patronage of suppliers located within the region and state. Figure 2.2, shown below, captures this procurement strategy and highlights that the institution contracted with nearly 200 Maryland-based vendors, 82 of which are located within the County. This economic impact generates employment opportunities and boosts various tax revenues at both local and state levels.

Figure 2.2: Procurement of Goods and Services, by Geographic Location of Vendors

Vendors	City of Westminster	<b>Carroll County</b>	Maryland
Count of Vendors	61	82	191
Total Spent on Vendors (\$M)	\$1.4	\$1.9	\$7.3

Source: McDaniel College (2024); ESI (2024)

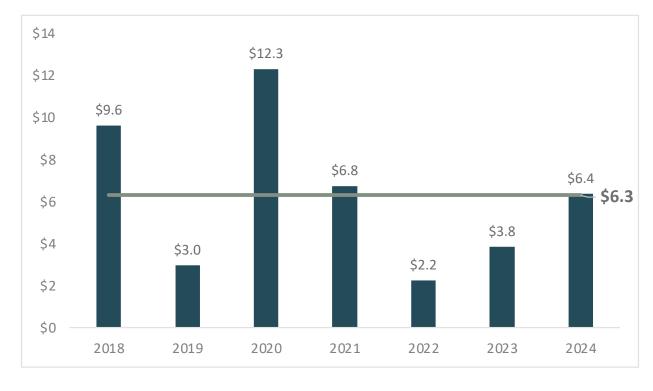
#### **Supplier Diversity**

McDaniel College prioritizes supplier diversity by actively seeking and engaging with a wide range of vendors from diverse backgrounds, ensuring an inclusive and equitable procurement process. The college is committed to partnering with businesses owned by minorities, women, veterans, and other underrepresented groups to foster economic growth and support within the community. By implementing policies that promote fair competition and equal opportunities, McDaniel College not only enhances its supply chain but also contributes to the broader goal of social responsibility and economic inclusiveness. This dedication to supplier diversity reflects the institution's core values of respect, equality, and community engagement, ensuring that all vendors have the chance to contribute to and benefit from the college's economic activities. Examples of Minority Business Enterprises (MBEs) that have contracted services with McDaniel College in the past three years include Chill Craft Company (woman-owned); Advantage Telecom, Inc. (minority- and woman-owned); H&S Bakery (minority-owned); and J&J 2000 Inc. Construction (veteran-owned).

#### **Direct Annual Average Capital Investment Levels**

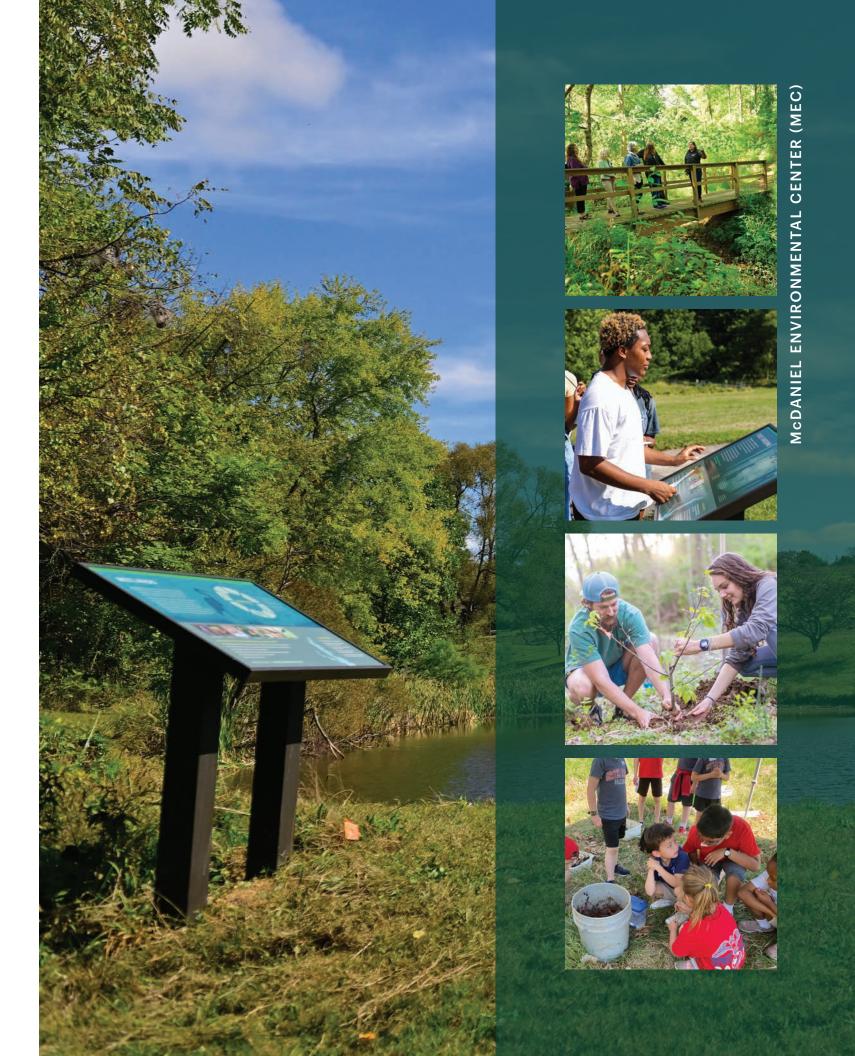
McDaniel College spends millions of dollars annually on capital investments on campus, at an average of \$6.3 million in new buildings and renovations each year. These capital investments directly support the local construction industry and contribute significantly to the local government in the form of taxes. Figure 2.3 demonstrates McDaniel's capital investments from 2018 until 2024.

Figure 2.3: McDaniel College: Annual Expenditures on Capital Projects<sup>2</sup>



Source: McDaniel College (2024)

McDaniel has made significant capital improvements during this time that serve its students and the region. For example, the McDaniel Environmental Center (MEC), is a student-powered hub for collaborative and experiential learning opportunities, particularly in environmental studies, agriculture, and undergraduate research related to the natural world. Completed in the fall of 2022 with state funding, the MEC also benefits the wider community, as the amenity is open to area residents and visitors to the region who share a passion for food science and environmental studies.



<sup>&</sup>lt;sup>2</sup> All capital investment values are adjusted for inflation (2023 dollars) by means of the CPI inflation calculator.

#### 2.3. Economic Impact from Annual Operations and Capital Investments

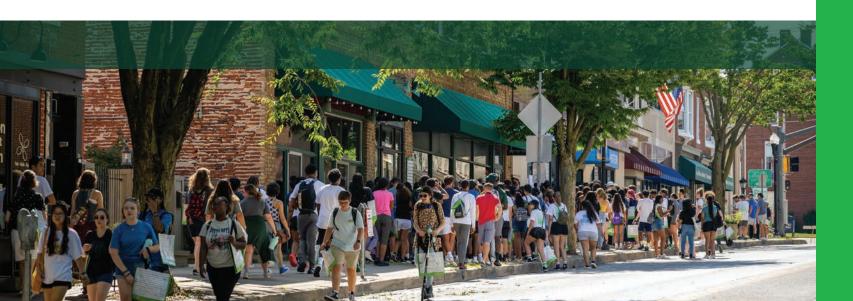
McDaniel College's annual operations and capital investments play a sizable role beyond its campus community, activating ripple effects throughout the city and state economy. The institution's \$64 million in annual direct expenditures, \$58 million from operations, and \$6 million from capital projects, set in motion indirect impacts, such as increased demand for various goods and services, and beneficial business creation. Additionally, induced impacts are realized as employee earnings are spent throughout the regional economy. Based on the input-output model constructed for this analysis, McDaniel's direct operating expenditures annually generate:

- \$70 million in total economic output for the City of Westminster, supporting an estimated 780 jobs with over \$40 million in employee compensation.
- Approximately \$90 million in total economic output within Carroll County, supporting almost 900 jobs and nearly \$45 million in employee compensation.
- \$106 million in total economic output for the State of Maryland, supporting over 950 jobs and \$40 million in employee compensation.

Figure 2.4: Annual Economic Impact from McDaniel College Operations and Capital Projects

<b>Economic Impact: Operations</b>	City of Westminster	<b>Carroll County</b>	Maryland
Direct Output (\$M)	\$64.3	\$64.3	\$64.3
Indirect & Induced Output (\$M)	\$5.7	\$25.9	\$41.7
Total Output (\$M)	\$70.0	\$90.2	\$106.0
Annual Employment Cupperted (FTE)	700	200	050
Annual Employment Supported (FTE)	780	890	950

Source: IMPLAN (2022); ESI (2024)



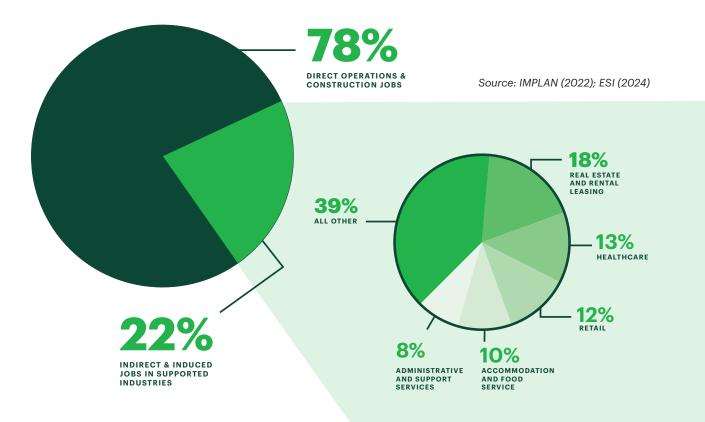
"[One of the key initiatives that makes up the strategic plan,] community partnerships expand our alliances within the City of Westminster and the region through more integrated town-gown relations. We believe that stronger partnerships with the City of Westminster will lead to our students being more engaged with the city and seeing the city as their home, and will also further enhance the employee experience."

— PRESIDENT JULIA JASKEN

#### 2.4. Industry Distribution of Economic Impact from Annual Operations and Capital Investments

Nearly 80% of jobs supported by McDaniel's annual operations and capital investments are employees of the institution, generally categorized as members of the administration, faculty, and support staff. Moreover, McDaniel operations and capital investments supported more than 950 jobs throughout the State of Maryland, as the multiplier effect from its economic footprint flows outward by way of employee household spending and procurement of goods and services from a wide range of industry sectors. Beyond sustaining direct jobs at McDaniel College dedicated to its institutional leadership, academic programming, and campus activities and services, McDaniel's annual operations support statewide employment across many fields, and in particular in the health care, real estate, and retail sectors (see Figure 2.5).

Figure 2.5: Estimated Industry Distribution of Statewide Employment Impact from Operations and Capital Investments



#### 2.5. Local and State Tax Revenues Generated by Economic Impact from Annual Operations and Capital Investments

McDaniel College's annualized operations expenditures and capital investments also contribute significant tax revenues to Carroll County and the State of Maryland. Direct capital investments help create construction jobs and support local construction companies and their suppliers, all of which generate income, sales, and business taxes to Maryland. Operations expenditures generate substantial economic impacts by enhancing local and state tax bases directly through the taxation of faculty and staff incomes and indirectly through the spending of McDaniel's vendors and employees.

In addition to tax revenue generated by operations and capital investments, McDaniel pays additional fees to Carroll County related to its building structures, for items such as property taxes (\$69,000), development fees, and licenses. In fiscal year 2023-24, these additional taxes and fees amounted to more than \$117,000, all of which benefit the local county by funding local services, including libraries, social services, and health departments.

In the aggregate, annual operations and capital investments by McDaniel generate almost \$720,000 in county tax revenues and \$1.5 million in state tax revenues (see Figure 2.6).

Figure 2.6: Estimated Annual Tax Revenue Impact from McDaniel College Operations and Capital Projects

Тах Туре	Carroll County	State of Maryland
Income	\$0.6	\$1.0
Sales	\$0.0	\$0.3
Business	\$0.0	\$0.2
Fees: Building Structures	\$0.1	\$0.0
Total	\$0.7	\$1.5

Source: IMPLAN (2022); ESI (2024)

#### 2.6. Broader Catalytic Effects from Annual Operations and Capital Investments

McDaniel College's operational and capital expenditures have a significant and far-reaching impact on both its local community and the broader state of Maryland. As a major employer and consumer of goods and services, McDaniel's financial activities contribute to the economic vitality of the region, creating jobs, supporting local businesses, and generating tax revenue. In fact, as shown in Figure 2.7, McDaniel is the fourth largest employer in the county. The college's commitment to partnering with local suppliers and service providers strengthens the economic ties between McDaniel and the surrounding community, fostering a mutually beneficial relationship that promotes growth and stability.

Figure 2.7: Top 10 Employers in Carroll County by Employment Base (2022)<sup>3</sup>

Employer	Industry Sector
Board of Education of Carroll County	Education
Carroll Hospital Center	Health Care
Springfield Hospital Center	Health Care
McDaniel College	Education
Penguin Random House, Inc.	Warehousing
Intergrace - Fairhaven	Retirement Living
Carroll County Government	Government
Carroll Community College	Education
EVAPCO	Manufacturing
Carroll Lutheran Village	Retirement Living

Table Source: Jon Stover & Associates; Data Source: Carroll County, Maryland Financial Report (2022)

<sup>&</sup>lt;sup>3</sup> Carroll County, MD Economic Development & Land Use Study. 21 December 2023. www.carrollcountymd.gov/media/paxmiecz/2023-12-21-carroll-county-edlu\_final-study\_single-page-version.pdf

THE IMPACT OF

### ANCILLARY SPENDING

Carroll County Annual Economic Impact

**\$15** 

TOTAL ECONOMIC IMPACT

275
FTE

TOTAL JOBS SUPPORTED

\$59
THOUSAND

TOTAL TAX REVENUE

#### ANCILLARY SPENDING



## 3. LOCAL ECONOMIC IMPACT FROM STUDENT AND VISITOR SPENDING

#### 3.1. Section Overview

McDaniel College not only bolsters the economy through its operational and capital expenditures but also generates substantial economic activity for the city, county, and state by attracting visitors from outside these areas. These visitors, including students and tourists, contribute to various sectors of the economy, particularly in food, lodging, transportation, and retail. While certain expenditures — such as student tuition and on-campus housing — directly benefit McDaniel and are reflected in its annual operations, a portion of spending occurs off campus, benefiting nearby neighborhoods and the broader region. This ancillary spending circulates through the local economy, creating economic opportunities for local businesses.

The economic impact of this ancillary spending in Carroll County leads to more than \$15 million in total output annually, supporting 275 jobs with \$2.6 million in compensation, and generating \$59,000 in county tax revenues. This assessment combines direct data from McDaniel with research-backed assumptions to provide conservative estimates. This section highlights the economic effects of ancillary spending by McDaniel students and their visitors, as well as attendees of athletic events, alumni gatherings, cultural functions, and other special events.

Beyond their economic impact, these expenditures bring substantial non-economic benefits. The influx of diverse populations fosters a variety of retail, dining, and housing opportunities, enhancing the region's appeal as an attractive year-round residence. This variety not only supports employment and enriches tax revenue but also elevates the overall quality of life for residents.

#### 3.2. Aggregate Student Spending

Aside from tuition, students at McDaniel College spend money on expenses such as transportation, housing and meals, supplies and books, and entertainment in the county that the campus is located in and in the surrounding cities within the state of Maryland. McDaniel attracts thousands of students to the City of Westminster, representing a net import in spending to the region. Spending that takes place off campus and does not accrue directly to McDaniel College is considered "ancillary" for the purpose of this analysis. From an impact standpoint, this ancillary spending must be accounted for above and beyond student spending on tuition, lodging, and other categories that accrue directly to McDaniel College, and are therefore reflected in the operational footprint (described in Section 2). This spending is either:

- New to the city, county, and state, in the case of students from outside of Maryland; or
- Retained spending, in that local students may have attended a college outside of Maryland (taking their spending power with them) in the absence of McDaniel College.

Data on the number of students received from McDaniel College was supplemented with cost of attendance data from McDaniel's online resources, which list approximate annual student budgets for housing, meals, expenses, transportation, and miscellaneous costs totaling \$17,100 annually for on-campus students; \$21,600 for off-campus students; and \$8,200 for off-campus students living with parents.<sup>4</sup>

Figure 3.1: McDaniel College Student Enrollment by Student Type

Student Type	# of Students
Undergraduate	1,767
On Campus	1,413
Off Campus	177
Off Campus w/ Parent	177
Graduate	1,235
In Region	926
Outside Region	309
Total	3,002

Source: McDaniel College (2024); College Navigator (2024)

Conservative estimates were then made for the proportion of ancillary spending not directly captured by McDaniel. For example, students who live in "on-campus" residences owned by McDaniel pay rent directly to McDaniel College; and therefore, that economic impact is captured within the operating budget and not included as ancillary spending. In addition, tuition is also paid directly to McDaniel and therefore already captured in the operating budget and operations economic impact outlined in Section 2. The model captures the rent paid by students who live "off campus" within Westminster in non- McDaniel housing but does not include the rent paid by off-campus students living with parents/guardians. Off-campus students living with parents/guardians would likely be paying the same rent or living in the same location regardless of their enrollment at McDaniel College. Therefore, the rent paid by off-campus students living with parents/guardians cannot be attributed to the college and is excluded from the calculation. The model also includes additional food and other retail purchases made by off-campus students living with parents/guardians (see Figure 3.2).

<sup>&</sup>lt;sup>4</sup> See Appendix Figure AB.2 for a breakdown of student expenses by spending category and student type.

Figure 3.2: Estimated Aggregate Annual Ancillary Spending by McDaniel Students, by Student Type

Expense	On Campus	Off Campus	Off Campus (living with parents)	Total
Housing (\$M)	\$0	\$1.5	\$0	\$1.5
Meals (\$M)	\$1.0	\$0.6	\$1.9	\$3.4
Books and Supplies (\$M)	\$2.2	\$0.3	\$2.1	\$4.6
Travel (\$M)	\$2.2	\$0.5	\$4.1	\$6.8
Misc. & Personal Expenses				
(\$M)	\$1.5	\$0.5	\$1.5	\$3.5
Total Spend (\$M)	\$6.8	\$3.4	\$9.6	\$19.8
Total per Student	\$4,787	\$19,079	\$6,823	

Source: McDaniel College (2024), Econsult Solutions, Inc. (2024)

Further, the proportion of spending that takes place in Carroll County and the rest of Maryland was estimated for each student type. The adjustment recognizes that not all spending takes place within the local geography, especially as consumer behavior has shifted, with more people shifting toward online shopping. It is estimated that McDaniel College students generate more than \$15 million in ancillary spending each year, approximately \$11 million of which is captured within the Carroll County economy, and an additional \$4 million which is captured within the State of Maryland.

Figure 3.3: Estimated Aggregate Ancillary Spending by Students, by Geography (\$M)

	CARROLL COUNTY			MARYLAND MINUS CARROLL COUNTY			
	On- Campus	Off- Campus	Off-Campus (living with parents)	On- Campus	Off- Campus	Off-Campus (living with parents)	
Housing	\$0	\$1.5	\$0	\$0	\$0	\$0	\$1.5
Meals	\$0.9	\$0.5	\$1.4	\$0.1	\$0.1	\$0.5	\$3.4
Books & Supplies	\$0.6	\$0.1	\$0.4	\$0.2	\$0	\$0.6	\$2.0
Travel	\$1.9	\$0.4	\$2.4	\$0.2	\$0.1	\$1.6	\$6.7
Misc. & Personal Expenses	\$0.4	\$0.1	\$0.3	\$0.2	\$0.1	\$0.4	\$1.6
Total	\$3.8	\$2.6	\$4.6	\$0.8	\$0.3	\$3.2	\$15.3

Source: McDaniel College (2024), Econsult Solutions, Inc. (2024)

Although McDaniel's student body spends over \$15 million annually within the state, a percentage of these purchases do not further stimulate the state economy, but rather flow out beyond the state border, and, in turn stimulate neighboring economies. Figure 3.4 displays total annual leakages of approximately \$3 million, an accumulation of loss attributed to producer margin across the five student spending categories.

Figure 3.4: Aggregate Ancillary Spending by McDaniel Students by Geography (\$M) 5

Student Type	Ancillary Spend in Carroll County	Ancillary Spend in Maryland
On campus	\$3.8	\$3.9
Off campus	\$2.6	\$2.7
Off Campus (living with parents)	\$4.6	\$5.8
Total	\$11.0	\$12.3

Source: McDaniel College (2024)

#### 3.3. Additional Visitor Categories and Estimating Direct Aggregate Spend

Visitor categories most common at McDaniel College include Commencement guests, prospective students, visitors of students for Move-in Weekend, Parent and Family Weekend, Homecoming, Alumni Weekend, and sports attendees (see Figure 3.5). Overall, McDaniel welcomes an estimated almost 55,000 visitors to campus each year.

Figure 3.5: Estimated Annual Visitors to the McDaniel Campus, by Visitor Type

Events Total	10,680	40,443	3,395	54,518
All Other Sports	2,795	21,064	0	23,859
Football	1,053	7,938	0	8,991
AAU Basketball	100	900	0	1,000
Common Ground Festival	698	78	0	775
Sports Tournaments	2,800	2,800	0	5,600
Sports Camps	1,865	1,583	0	3,448
Athletics Teams Alumni Gatherings	109	335	380	823
Prospective Students	142	1,611	681	2,434
Data Analytics Residency	0	0	130	130
Parent and Family Weekend	26	221	137	384
Homecoming	72	159	111	342
Alumni Weekend	90	177	115	382
Commencement Weekend	557	2,141	1,102	3,800
Move-in Weekend	373	1,437	740	2,550
Events	Local	Day Trip	Overnight	Total Attendees

Source: McDaniel College (2024), Econsult Solutions, Inc. (2024)

<sup>&</sup>lt;sup>5</sup> Totals for student expenses reflect the omission of the vast majority of costs for students residing on campus. McDaniel's aggregated costs for this student type are \$24.1 million annually. However, 100% of housing costs and 90% of food costs for this student type are excluded from the ancillary spending model. See Appendix Figure A.# for the Ancillary Spending framework for Student Type.

ESI classifies visitors into three categories — local, day trip, and overnight — based on data from McDaniel College. This classification helps in understanding the economic impact of different types of visitors. ESI estimates visitor spending patterns by creating detailed visitor spend profiles, which are derived from the U.S. General Services Administration's 2023 per diem rates for Westminster, Maryland. These profiles provide a comprehensive view of how local, day trip, and overnight visitors contribute to the local economy, enabling targeted strategies to maximize economic benefits from each visitor category.

Figure 3.6: Estimated Per Person Ancillary Spend by Visitors to the McDaniel Campus, by Visitor Type

Category	Local	Day Trip	Overnight
Hotel	\$0	\$0	\$98
Food	\$15	\$41	\$72
Retail	\$20	\$20	\$20
Transportation	\$0	\$20	\$30
Total Spend	\$35	\$81	\$220

Source: U.S. General Services Administration (2023), Econsult Solutions, Inc. (2024)

ESI then multiplied the total of each category of visitor (local, day trip, and overnight visitors) by the total spend amount for each type of visitor. In total, visitors to McDaniel College spend an estimated total of \$4.4 million, with \$3.5 million spent directly within Carroll County and nearly \$850,000 throughout the rest of Maryland (Figure 3.7).

Figure 3.7: Estimated Aggregate Ancillary Spend by Visitors to the McDaniel Campus, by Geography (\$M)

Category	<b>Carroll County</b>	MD Minus Carroll County	Maryland
Hotel	\$0.3	\$0	\$0.3
Food	\$1.8	\$0.2	\$2.1
Retail	\$0.8	\$0.3	\$1.0
Transportation	\$0.5	\$0.4	\$0.8
Total Spend	\$3.5	\$0.8	\$4.2

Source: U.S. General Services Administration (2023), McDaniel College (2024), Econsult Solutions, Inc. (2024)

#### Non-Modeled Ancillary Spend

Combined, ancillary spending by students and visitors of McDaniel College in the past academic year reached a sum of approximately \$15 million within the county; and \$17 million statewide. However, some of that spending immediately leaves the region and therefore does not have a multiplier effect on the local and state economies. Based on this adjustment, the amount of spending included in this analysis is a total of an estimated \$10 million in Carroll County and \$14 million in Maryland.

<sup>&</sup>lt;sup>6</sup> 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 model conservatively includes only the retail margin (i.e., the difference between the purchase price for the retailer and the sales price for the customer).

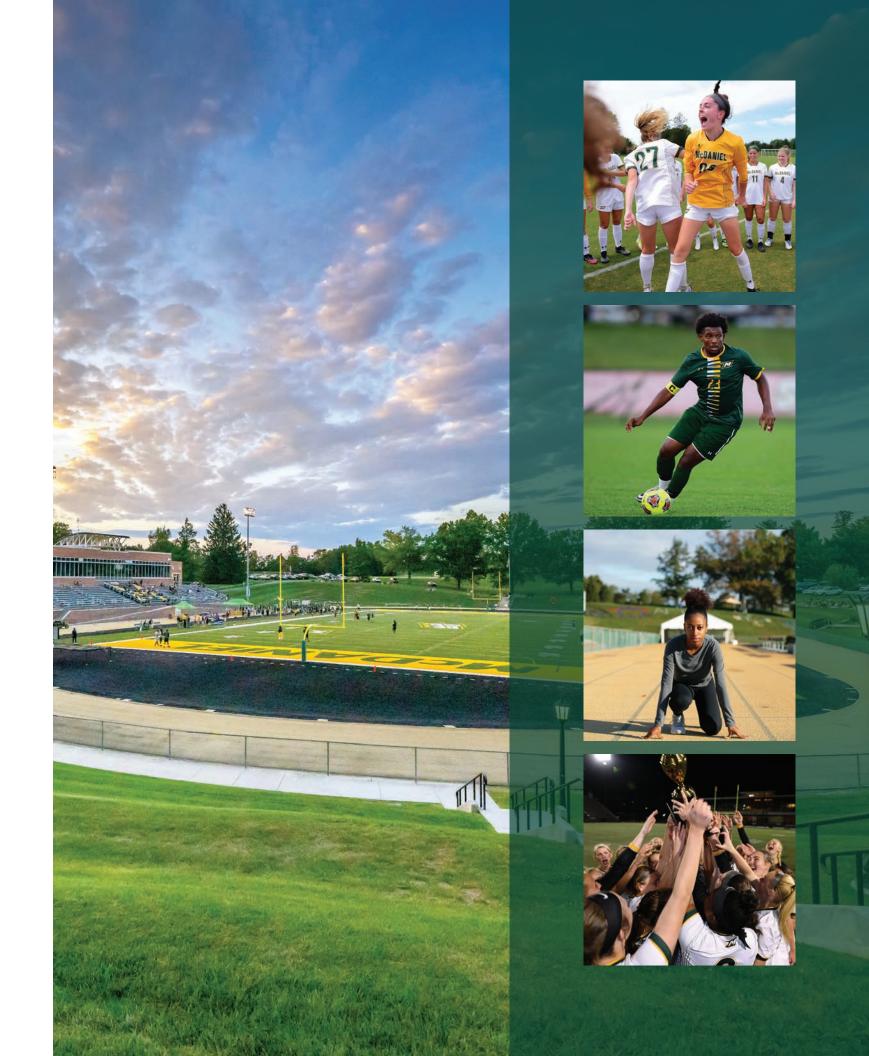


Figure 3.8: Aggregate Annual Ancillary Spend by McDaniel Students and Visitors in Carroll County and Maryland (\$M)

Spend Type	<b>Carroll County</b>	Maryland
Student Expenses	\$11.0	\$12.3
Visitor Expenses	\$3.5	\$4.4
Total	\$14.5	\$16.7
Minus Non-Modeled Amount	(\$4.2)	(\$2.6)
Modeled Amount	\$10.3	\$14.1

#### 3.4. McDaniel College Athletics

McDaniel College boasts a vibrant athletics program that plays a significant role in campus life, with football standing out as a highlight. The Green Terror football team brings excitement and school spirit to the college community, especially during home games. Tailgating events are a cherished tradition, drawing students, alumni, and fans together for a festive game day atmosphere filled with camaraderie, food, and fun. These events not only support the team but also foster a strong sense of community and pride among attendees. McDaniel College's commitment to athletics extends beyond the field, emphasizing the development of student-athletes in both their academic and athletic pursuits.

Figure 3.9: Total Annual Attendance by Athletics Program

Program	<b>Total Attendees</b>
Football	8,991
Women's Soccer	3,558
Men's Soccer	3,436
Men's Basketball	3,022
Volleyball	2,886
Women's Basketball	2,462
Men's Lacrosse	2,274
Field Hockey	1,865
Baseball	1,846
Women's Lacrosse	1,817
Softball	693
Total	32,850



McDaniel College's tailgating tradition, celebrated since the early days of Henry Ford, earned national recognition when The Weather Channel ranked it the No. 6 tailgating school in the nation in 2011. Southern Living magazine further endorsed this distinction in 2012, naming McDaniel one of the top 20 tailgaters in the U.S. On home game days, fans bring cars, trucks, tents, and grills to the hillside at Kenneth R. Gill Stadium, creating a vibrant atmosphere filled with gourmet cuisine and Green Terror gear. Homecoming on the Hill offers an autumn weekend of festivities and reunions for alumni and friends.

#### 3.5. Economic Impact from Student and Visitor Spending

Between students and various visitors to campus, McDaniel College draws thousands of people - along with their discretionary spending — into the region each year. This spending has a multiplier effect throughout the state economy, producing an outsized economic impact and supporting jobs throughout the city, county, and

Combined ancillary spending by students and visitors generates economic impacts at local and state levels:

- Over \$3 million in total economic output for the City of Westminster, supporting 70 jobs and half a million dollars in employee compensation.
- More than \$15 million in total economic impact within Carroll County, supporting more than 270 jobs and \$2.6 million in employee earnings.
- Almost \$25 million in total economic impact within the state of Maryland, supporting 400 jobs and \$4.8 million in employee earnings.

Figure 3.10: Estimated Annual Economic Impact of Spending by McDaniel College Students and Visitors

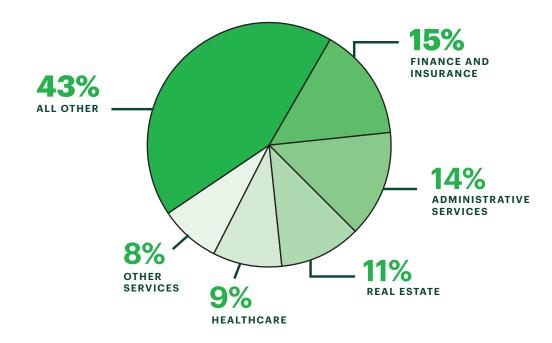
<b>Economic Impact</b>	City of Westminster	Carroll County	Maryland
Direct Output (\$M)	\$2.3	\$10.3	\$14.1
Indirect & Induced Output (\$M)	\$1.1	\$5.0	\$10.6
Total Output (\$M)	\$3.4	\$15.4	\$24.7
Annual Employment Supported (FTE)	70	270	400
Employee Compensation (\$M)	\$0.5	\$2.6	\$4.8

Source: IMPLAN (2022); ESI (2024)

#### 3.6. Industry Distribution of Economic Impact from Student and Visitor Spending

Economic activity directly and indirectly supported by the spending of McDaniel College students and visitors touches many industries, commensurate with the different kinds of expense categories associated with students' living costs and visitors' spending profiles. Health care, real estate, and administrative services are among the industries with the most jobs supported by this spending; however, the employment impact is widely distributed across numerous sectors (Figure 3.11).

Figure 3.11: Estimated Industry Distribution of Statewide Employment Impact from Student and **Visitor Spending** 



Source: IMPLAN (2022); ESI (2024)

#### 3.7. County and State Tax Revenues Generated by Economic Impact from Student and Visitor **Spending**

The economic impact of spending by McDaniel College students and visitors, in turn, grows county and state tax bases. It is estimated that each year, the economic impact of spending from McDaniel students and visitors yields a total of almost \$240,000 in tax revenues to the State of Maryland. Overnight visitors spend money on hotel rooms, which are subject to local hotel taxes and are estimated to draw in approximately \$16,000 to Carroll County in addition to the \$43,000 in income taxes generated at the county level (Figure 3.12).

Figure 3.12: Estimated Annual Tax Revenue Impact from McDaniel College Student and Visitor Spending

Tax Type	Carroll County	Maryland
Lodging Tax	\$16,000	\$0
Income Tax	\$43,000	\$123,000
Sales Tax	\$0	\$75,000
Business Tax	\$0	\$40,000
Total Tax	\$59,000	\$238,000

Source: IMPLAN (2022); ESI (2024)

#### 3.8. Broader Catalytic Effects from Student and Visitor Spending

McDaniel College's presence in the City of Westminster brings a significant amount of ancillary spending to Carroll County, with students as the primary driver. However, prospective students, visitors of students, spectators, and participants associated with McDaniel Athletics — and various other event attendees to campus — represent significant spending power as well. This influx of spending circulates through the local economy, supporting merchants and vendors in a wide range of industries and yielding an estimated \$25 million in statewide economic impact over and above the impact from McDaniel's own spending on annual operations and capital investments.

Beyond the magnitude of its economic footprint, McDaniel also makes intentional efforts to ensure that the economic opportunity represented by this ancillary spending is of direct benefit to local merchants and vendors. Further, McDaniel College facilitates the use of campus dollars at local businesses through the McDaniel Bucks program, which allows students to establish a prepaid spending account on their McDaniel 1Cards, offering a convenient way to make purchases on and around campus. Such initiatives translate into economic opportunities for local businesses and strengthen the connection between the McDaniel community and its surrounding neighborhoods.



#### WAGE PREMIUM

Carroll County Annual Economic Impact

**\$23** 

TOTAL ECONOMIC IMPACT

130

TOTAL JOBS SUPPORTED

**\$5** 

**EMPLOYEE EARNINGS** 

#### ALUMNI WAGE PREMIUM



## 4. LOCAL ECONOMIC IMPACT FROM AGGREGATE ALUMNI WAGE PREMIUM

#### 4.1. Section Overview

The alumni wage premium represents the average difference in wages between college graduates and those with less education. This section examines the value of McDaniel's role in educating and credentialing students. The economic and societal benefits of education are extensive, including increased productivity and earning power of the workforce. By educating, credentialing, and retaining students within the local and statewide economies, McDaniel College contributes to enhanced earning potential and higher household incomes in these areas. This additional household income is often spent locally, stimulating economic activity, supporting local jobs, and boosting tax revenues.

McDaniel boasts approximately 33,800 undergraduate and graduate alumni worldwide — almost 18,000 of whom reside in Maryland. The estimated almost 13,000 McDaniel alumni living and working in Maryland are estimated to yield an aggregate alumni wage premium of approximately \$144 million annually due to their McDaniel education, translating to an aggregate economic impact of nearly \$140 million per year, supporting almost 700 additional jobs. In Carroll County, the aggregate alumni wage premium of approximately \$35 million annually translates to an aggregate economic impact of nearly \$23 million per year, supporting almost 130 additional jobs. These impacts are crucial as they create a virtuous cycle within the local and state economies.

#### 4.2. Estimated Direct Aggregate Alumni Wage Premium

Emboldened by a high-quality educational experience and a valuable credential, the national alumni network of 33,800 McDaniel graduates positively impacts economies and societies within and beyond Maryland's borders. However, with Maryland residents mak-

ing up more than half of this global network and nearly one in seven McDaniel graduates within the county itself, the alumni network is particularly impactful on the state and local economy. As is highlighted in Figure 4.1 below, the McDaniel alumni network is highly present in the state of Maryland and the Westminster community.

Figure 4.1: McDaniel College's Alumni Network by Geography

	Worldwide	Maryland	Carroll County	Westminster
Alumni Count	33,800	17,900	4,400	1,800
Percentage	-	53%	13%	5%

Source: McDaniel College (2024); ESI (2024)

The McDaniel alumni network is a sizable contributor to state, county, and local workforces, with individuals fulfilling high-level positions in key industry sectors. According to the U.S. Bureau of Labor Statistics, 71% of adults holding a college degree are employed. Applying these rates, it can be estimated that over 12,700 McDaniel alumni are currently employed statewide, and that more than 3,100 and nearly 1,300 are working within Carroll County and the City of Westminster, respectively. (see Figure 4.2)

Figure 4.2: McDaniel College Alumni in the Workforce by Geography

	Worldwide	Maryland	Carroll County	Westminster
Alumni Count	33,800	17,900	4,400	1,800
Labor Force Participation Rate	71%	71%	71%	71%
Estimated Total Working Alumni	24,070	12,720	3,110	1,280

Source: McDaniel College (2024); ESI (2024)

McDaniel College offers a wide range of academic programs that equip graduates with the skills and credentials to fill positions and advance in high-demand fields across critical industry sectors. Figure 4.3, featured below, shows the number of currently employed McDaniel alumni by degree type at the city, county, and state geographies.

Figure 4.3: Estimated Geographic Location of McDaniel College Alumni Working within the State of Maryland

Degree Type	City of Westminster	Carroll County	Maryland
Working Alumni with Bachelor's Degrees	830	2,010	8,020
Working Alumni with Master's Degrees	450	1,100	4,700
<b>Estimated Total Working Alumni</b>	1,280	3,110	12,720

Source: McDaniel College (2024); ESI (2024)

The individual wage premium is calculated to be the difference between average household income for McDaniel alumni of each degree attainment level and the average household income for all residents at one degree attainment level below. Specifically, the wage premium for a McDaniel alum with a bachelor's degree living in Maryland equals the average income for McDaniel alumni with a bachelor's degree minus the average household income for all Maryland residents with associate's degrees.

Figure 4.4: Estimated McDaniel Alumni Wage Premium by Degree Type

Group	Bachelor's	Master's
McDaniel Alumni	\$60,700	\$90,700
Next Educational Attainment Below	\$51,400	\$75,900
Wage Premium	\$9,300	\$14,800

Source: College Scorecard (2024); American Community Survey (2022); ESI (2024)

The aggregate wage premium was determined by multiplying the estimated number of working alumni for the appropriate geography by an estimated wage premium amount for each alum. Adding degree types together yields an aggregate McDaniel College alumni wage premium of \$35 million within Carroll County and \$144 million statewide. Figure 4.5, shown below, details aggregate wage premiums by degree type and geography.

Figure 4.5: Estimated Aggregate Alumni Wage Premium by Geography

Degree Level	Westminster	Carroll County	Maryland
Volume of Working Alumni Bachelor's Degree	830	2,011	8,021
Wage Premium	\$9,277	\$9,277	\$9,277
Aggregate Wage Premium for McDaniel College Bachelor Alumni (\$M)	\$7.7	\$18.7	\$74.4
Volume of Working Alumni Advanced Degree	450	1,102	4,701
Wage Premium	\$14,796	\$14,796	\$14,796
Aggregate Wage Premium for McDaniel College Advanced Alumni (\$M)	\$6.7	\$16.3	\$69.5
Aggregate Wage Premium for all McDaniel College Alumni (\$M)	\$14.4	\$35.0	\$144.0

Source: College Scorecard (2024); American Community Survey (2022); ESI (2024)

#### 4.3. Economic Impact from Aggregate Alumni Wage Premium

From those who obtain four-year degrees to those who successfully complete a graduate degree program, McDaniel alumni benefit from their investment in an education on the Hill. Whether establishing themselves in the workforce with a bachelor's degree in hand or advancing their careers with a master's degree or certificate, McDaniel alumni increase their household earnings and bolster their career potential. While a percentage of these earnings are set aside as savings, investment contributions, and/or spent outside of the region, a significant portion recirculates throughout the regional economy as household spending on a wide variety of goods,



services, and experiences. The increased household spending has a multiplier effect on the local regional economy. Estimates of the economic impact from this increased earning power include (Figure 4.6):

- \$5 million in total economic impact for the City of Westminster, supporting 30 jobs and \$1 million in employee earnings.
- \$23 million in total economic impact for Carroll County, supporting 130 jobs and almost \$5 million in annual employee earnings.
- Nearly \$140 million in total economic impact for the state of Maryland, supporting 690 jobs with \$33 million in employee earnings.

Figure 4.6: Estimated Annual Economic Impact from McDaniel College Aggregate Wage Premium

Impact type	City of Westminster	Carroll County	Maryland
Wage Premium	\$7.7	\$35.0	\$144.0
Total Impact (\$M)	\$5.1	\$23.2	\$139.6
Annual Employment Supported (FTE)	30	130	690
Employee Compensation (\$M)	\$1.0	\$4.9	\$33.3

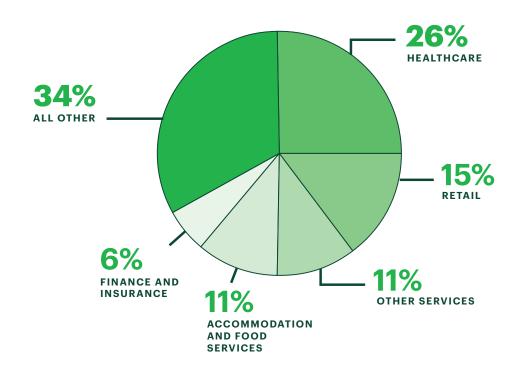
Source: IMPLAN (2022); ESI (2024)

As previously noted, McDaniel alumni living and working in Maryland enjoy an aggregate annual wage premium of \$144 million. In turn, they spend a portion of this premium back into the state economy. Accounting for the multiplier effect of that spending as it supports employment throughout the state and ripples through various supply chains, the statewide economic impact is therefore almost \$140 million per year.

#### 4.4. Industry Distribution of Economic Impact from Aggregate Alumni Wage Premium

The portion of McDaniel College alumni's additional household income that is spent back into the state economy supports several industries, befitting the types of expenditures that are typically made by a household from its earned income. Hence, a high number of jobs in sectors such as retail, accommodation and food services, and health care are supported by the higher aggregate household income enjoyed by McDaniel alumni (Figure 4.7).

Figure 4.7: Estimated Industry Distribution of Statewide Employment Impact from Alumni Wage Premium



Source: IMPLAN (2022); ESI (2024)

#### 4.5. Local Tax Revenues Generated by Economic Impact from Aggregate Alumni Wage Premium

McDaniel's alumni wage premium generates tax revenues for the state through two channels. Besides the state tax revenue impact from the spending of the additional household income represented by the alumni wage premium, the State of Maryland benefits from the personal income taxes paid on that additional household income.

Maryland gains over \$6 million each year in tax revenues from the wage premium associated with McDaniel alumni. Most of this tax revenue comes from direct income taxes paid by McDaniel alumni to the State of Maryland. Additionally, Carroll County receives approximately \$100,000 in income tax generated from McDaniel alumni spending.

## S P O T L I G H T : MAKING McDANIEL AFFORDABLE

More than 90% of McDaniel College students receive some form of financial assistance. Each year, McDaniel invests over \$50 million in need-based grants and merit scholarships to make a McDaniel education accessible to students from diverse financial backgrounds.

In Carroll County, McDaniel ensures that students growing up in the area have the opportunity to attend McDaniel, regardless of financial background.



Figure 4.8: Estimated Annual Tax Revenue Impact from McDaniel College Aggregate Wage Premium (\$M)

Тах Туре	State of Maryland
Personal Income Tax (directly paid by alumni)	\$4.5
Sales	\$1.1
Business	\$0.6
Total	\$6.2

Source: IMPLAN (2022); ESI (2024)

#### 4.6. Broader Catalytic Effects from Aggregate Alumni Wage Premium

Through the students that it graduates each year and its growing alumni network, McDaniel College serves as a major economic driver and societal asset at the local and county level, as well as across the state. McDaniel's earned reputation as a provider of a high-value education accessible to a diverse mix of student populations affirms its role as a key contributor to, and a vital component within, the regional and state economies. As McDaniel grows, it remains committed to this position, and is focused on fostering a thriving, diverse community. Graduates of McDaniel, with higher earning potential, contribute to job creation and entrepreneurial initiatives, benefiting the region beyond measurable economic impacts.

From an individual student's standpoint, the alumni wage premium at McDaniel College represents a substantial return on investment (ROI) for the time and money spent obtaining their degree. This wage premium means that McDaniel graduates typically earn higher salaries compared to peers without a degree or those from institutions with lower wage premiums. Consequently, these higher earnings can offset the costs of tuition and other educational expenses more quickly, leading to improved financial stability and greater long-term earning potential. For students, this enhanced ROI underscores the value of their McDaniel College education, justifying their investment by offering tangible economic benefits that can significantly impact their personal and professional lives.

From an economic standpoint in the Carroll County and Maryland region, the alumni wage premium associated with McDaniel College graduates signifies that these individuals are earning higher wages compared to nongraduates. This increased earning potential translates to greater spending power, higher tax contributions, and enhanced local investment. As McDaniel graduates contribute more financially to the local economy through their elevated incomes, they bolster economic growth and stability in the area. This, in turn, supports local businesses, creates jobs, and fosters a more vibrant and prosperous community, ultimately strengthening the economic foundation of Carroll County and Maryland.

#### 5. CONCLUSION

#### 5.1. Aggregate Local Economic and Tax Revenue Impact

McDaniel College's aggregate economic impact derives from direct, indirect, and induced effects in four categories of economic activity directly attributable to the institution. In total, these impacts represent the local and statewide economic value of the college. Throughout Maryland, that activity generates in aggregate \$271 million in economic impact, supporting over 2,000 jobs with \$78 million in employee earnings (Figure 5.1). Within Westminster, activity generates \$78 million in economic impact, supports almost 900 jobs with \$42 million in employee earnings. (Figure 5.3)

Figure 5.1: Aggregate Economic Impact in the State of Maryland

Economic Impact	Annual Operations	Capital Investments	Ancillary Spending	Alumni Wage Premium	Total
Total Output (\$M)	\$95	\$11	\$25	\$140	\$271
Annual Employment Supported (FTE)	890	60	400	690	2,040
Employee Compensation (\$M)	\$37	\$3	\$5	\$33	\$78

Source: IMPLAN (2022); ESI (2024)

Figure 5.2: Aggregate Economic Impact in Carroll County

Economic Impact	Annual Operations	Capital Investments	Ancillary Spending	Alumni Wage Premium	Total
Total Output (\$M)	\$81	\$9	\$15	\$23	\$128
Annual Employment Supported (FTE)	830	60	270	130	1,290
Employee Compensation (\$M)	\$34	\$3	\$3	\$5	\$45

Source: IMPLAN (2022); ESI (2024)

Figure 5.3: Aggregate Economic Impact in City of Westminster

Economic Impact	Annual Operations	Capital Investments	Ancillary Spending	Alumni Wage Premium	Total
Total Output (\$M)	\$63	\$7	\$3	\$5	\$78
Annual Employment Supported (FTE)	730	50	70	30	880
Employee Compensation (\$M)	\$38	\$2	\$1	\$1	\$42

Source: IMPLAN (2022): ESI (2024)

These economic impacts additionally produce tax revenues for various government jurisdictions, contributing to the funding of essential public services and public education. Therefore, while McDaniel College is tax-exempt, it is still tax-generating. In particular, McDaniel produces a significant amount of tax revenues for the State of Maryland government via economic impact resulting from its annual operations, capital investments, spending of students and visitors to its campus and facilities, and the increased household earnings enjoyed by its alumni. Across the four economic impact categories analyzed in this report, it is estimated that McDaniel generates almost \$8 million in aggregate tax revenue each year for the state (Figure 5.4). Additionally, sales and lodging taxes garner a quarter million in annual tax revenue for the City of Westminster. (Figure 5.5)

Figure 5.4: Aggregate Tax Revenue Impact to the State of Maryland

Тах Туре	Annual Operations	Capital Investments	Ancillary Spending	Alumni Wage Premium	Total
Income	\$0.9	\$0.1	\$0.1	\$4.5	\$5.6
Sales	\$0.3	\$0.0	\$0.1	\$1.1	\$1.5
Business	\$0.14	\$0.02	\$0.04	\$0.60	\$0.8
Total	\$1.3	\$0.1	\$0.2	\$6.2	\$7.9

Source: IMPLAN (2022); ESI (2024)

Figure 5.5: Aggregate Tax Revenue Impact to Carroll County

Тах Туре	Annual Operations	Capital Investments	Ancillary Spending	Alumni Wage Premium	Total
Income	\$0.56	\$0.04	\$0.02	\$0.08	\$0.70
Sales	-	-	\$0.04	-	\$0.04
Business	-	-	-	-	-
Total	\$0.56	\$0.04	\$0.06	\$0.08	\$0.74

I Source: IMPLAN (2022); ESI (2024)

#### 5.2. Framing the College's Impact Contributions in Broader Terms

McDaniel College stands out as a beacon of accessibility and inclusivity, ensuring that higher education is attainable for a diverse range of students. The institution actively works to break down financial and social barriers, providing scholarships, financial aid, and support services that make college accessible to students from various socioeconomic backgrounds. By fostering an environment where every student, regardless of their background, can pursue higher education, McDaniel College demonstrates its commitment to broadening the reach of academic opportunities. McDaniel's dedication to cultivating an inclusive community for all is evident in its robust programming and campus culture, which promote an atmosphere where all students feel valued and respected. Cultural events and student organizations contribute to a campus community that celebrates differences, provides opportunities to share and learn from one another, and advocates for an environment built upon a culture of care. This commitment prepares students to thrive in an increasingly globalized world, equipped with the understanding and skills to navigate diverse professional and personal landscapes.

Community engagement is a cornerstone of the McDaniel College experience. The college encourages students to participate in service-learning projects, internships, and volunteer opportunities that foster a strong connection between the campus and the surrounding community. These experiences not only enhance students' educational journeys but also contribute to the betterment of the City of Westminster, Carroll County, and Maryland. By actively engaging with local organizations and initiatives, McDaniel students develop a sense of civic responsibility and contribute to the social and economic well-being of the region.

Academic excellence is at the heart of McDaniel College's mission. The institution offers a rigorous curriculum designed to challenge students and prepare them for successful careers and meaningful lives. Small class sizes, dedicated faculty, and a strong emphasis on personalized education ensure that students receive the support and attention they need to excel. McDaniel's commitment to academic rigor is reflected in the success of its graduates, who go on to achieve impressive feats in various fields. The supportive environment at McDaniel College is particularly beneficial for first-generation college students. The institution offers tailored resources, mentoring programs, and academic support to help these students navigate the unique challenges they may face. By providing a nurturing and empowering atmosphere, McDaniel ensures that first-generation students can thrive academically and personally, paving the way for future success.

McDaniel College is also deeply committed to providing an affordable education with a significant return on investment (ROI). Through a combination of financial aid, scholarships, and careful management of tuition costs, McDaniel strives to make higher education financially accessible. The alumni wage premium associated with a McDaniel degree highlights the value of this investment, as graduates typically enjoy higher earning potential compared to their peers. This focus on affordability and ROI ensures that students not only receive a quality education but also benefit economically in the long term.

Finally, the economic value of McDaniel College to the region cannot be overstated. The college is a significant contributor to the local economy through job creation, local spending, and the economic activity generated by students, faculty, and staff. Moreover, the enhanced earning potential of McDaniel graduates leads to increased economic contributions over time, further strengthening the region's economic foundation. In essence, McDaniel College not only educates and empowers its students but also plays a crucial role in the economic vitality and prosperity of the City of Westminster, Carroll County, and Maryland.

#### **Appendix A: Input/Output Methodology**

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 McDaniel 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>7</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 U.S. 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.

#### 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. (2023)

#### **Appendix B: Technical Appendix**

Figure AB.1: Minority Business Enterprises (MBEs), 2021-2024:

MBE Designation	Business Name	Category of Services
Woman Owned	Arbee Associates	Home and Garden Supply
Woman Owned, Minority Owned	ATI (Advantage Telecom, Inc.)	Information Technology cabling and wireless access point installation vendor
Woman Owned	AVI Food Systems	Food and Beverage
Woman Co-Owned	CampusWorks	Provides Information Technology staffing and support.
Woman Owned	Chill Craft Company	Campus 1Card, building reader, and camera third-party contractor

CONCLUSION

<sup>&</sup>lt;sup>7</sup>Lahr, Michael. "Input-Output Analysis: Technical Description and Application." Rutgers University Edward J. Bloustein School of Planning and Public Policy.

Minority Owned	DSI Tech	Provides networking and telecommunication products and support
Woman Owned	Fireline	Fire protection systems and maintenance
Minority Owned	H&S Bakery	Food and Beverage
Minority Owned	IFC Sushi	Food and Beverage
Minority Owned	Kaleel Bros, Inc.	Food Distributor
Minority Owned	Maryland Cleaning and Abate- ment Services (MCA)	Facilities
Woman Owned	Old Westminster Winery	Food and Beverage
Woman Owned	Potomac Valley Farms	Food and Beverage
Woman Owned	Rudolph`s Office Supply	Office Supplies
Woman Owned	Stone House Bakery	Food and Beverage
Woman Owned	ACS Services	IT products and solutions.
Woman Owned	Carroll Engineering	Civil Engineering
Woman Owned	Facilities Cleaning company	Facilities
Woman Owned	Hoffman Ice Cream	Food and Beverage
Minority Owned	Masonry Company	Masonry
Veteran Owned	J&J 2000 Inc. Construction	General Contractor
Minority Owned	Fewster Painting	Painting company
Woman Owned, Minority Owned	Data Screening	Criminal background check company
Woman Owned	Julie Hopkins	Patent and Trademarks

Source: McDaniel College (2024)

Figure AB.2: McDaniel Student Budget for Annual Expenses, by Student Type

Expense	On Campus	Off Campus	Off-Campus (living with parents)
Housing	\$6,086	\$9,975	\$0
Meals	\$6,888	\$4,275	\$2,690
Books & Supplies	\$1,522	\$1,522	\$1,522
Travel	\$1,522	\$2,902	\$2,902
Misc. & Personal Expenses	\$1,054	\$2,970	\$1,054
Total per Student	\$17,072	\$21,644	\$8,168
Total Spend (\$M)	\$24.1	\$3.8	\$11.5

Source: McDaniel College (2024); ESI (2024)

Figure AB.3: Ancillary Spending Framework for McDaniel Students, by Student Type

Expense	On Campus	Off Campus	Off-Campus (living with parents)
Housing	0%	85%	0%
Meals	10%	75%	50%
Books & Supplies	100%	100%	100%
Travel	100%	100%	100%
Misc. & Personal Expenses	100%	100%	100%

Source: ESI (2024)

Figure AB.4: Ancillary Spending Profile for McDaniel Students, by Student Type

Expense	On Campus	Off Campus	Off-Campus (living with parents)
Housing	\$0	\$1,497,347	\$0
Meals	\$973,137	\$566,224	\$1,897,257
Books & Supplies	\$2,150,282	\$268,785	\$2,146,933
Travel	\$2,150,282	\$512,493	\$4,093,561
Misc. & Personal Expenses	\$1,489,091	\$524,502	\$1,486,772
Total per Student	\$4,787	\$19,079	\$6,823
Total Spend	\$6.8	\$3.4	\$9.6

Source: McDaniel College (2024); ESI (2024)

#### Appendix C: About Econsult Solutions, Inc.

This report was produced by Econsult Solutions, Inc. (ESI), providing businesses and public policy makers with consulting and thought leadership services in urban economics, real estate, transportation, public infrastructure, economic development, public policy and finance, strategic planning, as well as expert witness services for litigation support.

ESI combines robust quantitative analysis with trusted expert insights to create sustainable solutions. The firm works collaboratively with its clients, and draws in expertise, when necessary, from our network of experts and partners across industries, regions, and management practices. Based in Philadelphia, the firm supports clients nationwide.



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