University of North Carolina System Athletics

Economic Impact Report 2023

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ECONSULT SOLUTIONS INC.
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University of North Carolina System Athletics: Economic Impact Report 2023
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1. Introduction

1.1. Report Purpose

The purpose of this study is to quantify the economic impact the 15 University of North Carolina System Division of Intercollegiate Athletics Programs (collectively, "UNC System Athletics") have on the State of North Carolina. This report will articulate impact in terms of economic output, jobs created, and tax revenues generated from UNC System Athletics' annual operations and large-scale capital projects, as well as from attendees' spending.

Beyond the economic footprint described above, UNC System's Athletics Programs also generate additional economic and social well-being for the state and communities throughout the state. Licensed merchandise, advertisement sales, increased alumni giving, and the growing number of student-athletes receiving "name, image, and likeness" payments all have positive implications for the state economy and local economies in the state. Furthermore, these athletics programs have a significant social influence, through community service, strong social cohesion among alumni, and the enhanced reputation of the state and its educational institutions. This too is part of the impact narrative for UNC System's Athletics Programs.

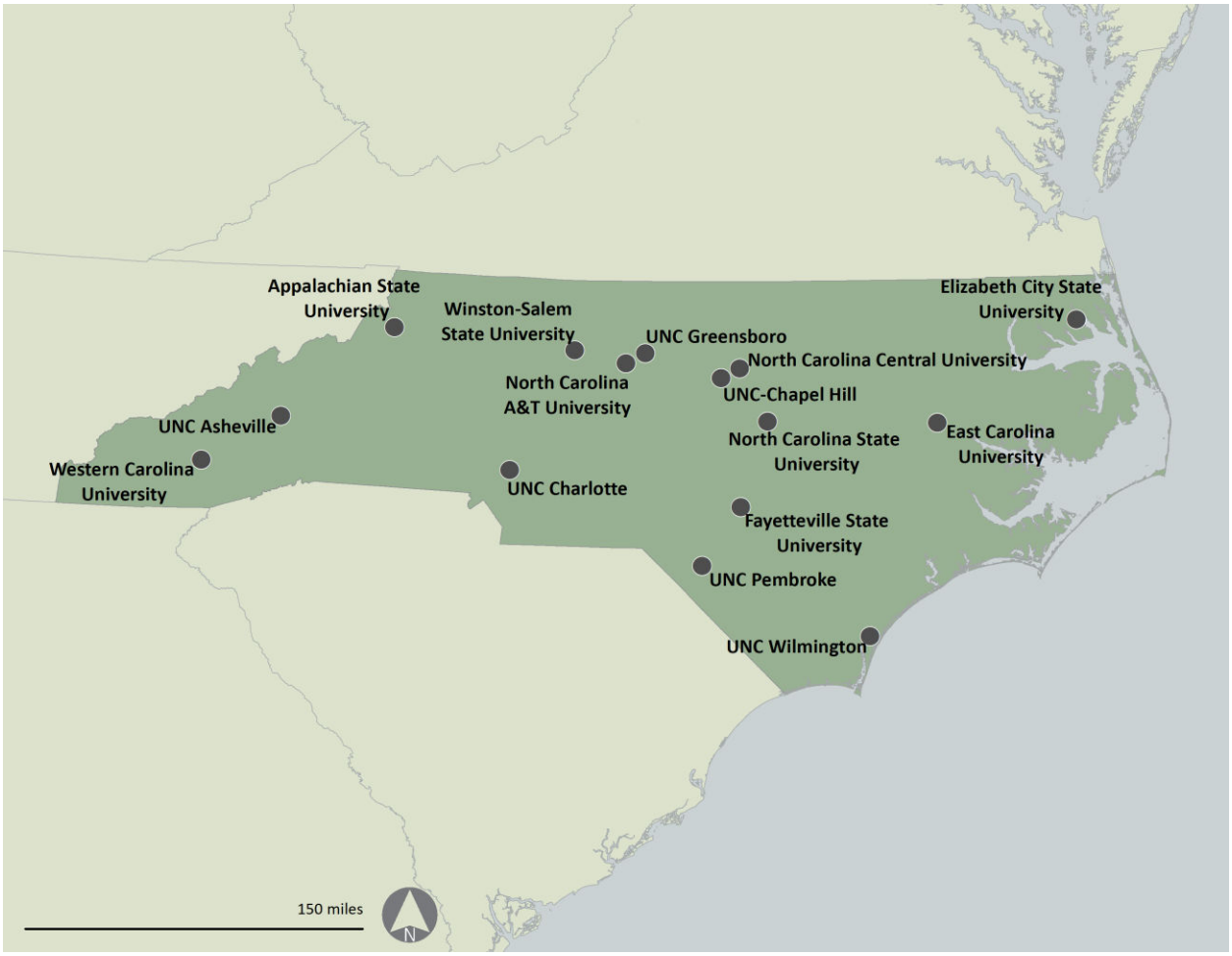
In all these ways, UNC System Athletics delivers a substantial return on investment in the form of economic activity, jobs, and tax revenues generated within the local and state economy. It is also a flagship brand, ambassador, and community service provider within the state it represents, both on and off the field.

1.2. About UNC System Athletics

UNC System Athletics is comprised of 15 intercollegiate athletics programs at UNC's 15 constituent institutions: Appalachian State University, East Carolina University, Elizabeth City State University, Fayetteville State University, North Carolina Agricultural and Technical State University, North Carolina Central University, North Carolina State University, University of North Carolina Asheville, University of North Carolina Chapel Hill, University of North Carolina Charlotte, University of North Carolina Greensboro, University of North Carolina Pembroke, University of North Carolina Wilmington, Western Carolina University, and Winston-Salem State University.[1]

[1] There are two other institutions that are part of the UNC System – UNC School of the Arts and North Carolina School of Science and Mathematics, which do not have intercollegiate athletics programs and hence, are not within the scope of this study.

Figure 1.1: UNC System Athletics Institutions



Source: ArcMap (2022), Econsult Solutions, Inc. (2022)

1.3. Economic Engine and Social Force

Collegiate athletics are an immense source of pride for these institutions and for the state as a whole. The aim of this report is to make sure it is understood that these athletics programs are also major generators of economic activity in communities throughout the state, and that these athletics programs also contribute meaningful social impacts at a community, regional, and statewide level.

Direct spending by these athletics programs, on annual operations and capital investments, supports employment and procurement opportunities at a local and statewide level, as does the significant attendee spending that is drawn into or retained in the area from sporting events and other gatherings. Following these dollars, and the economic activity and tax base they represent, helps establish the contribution these programs make to the state and on communities throughout the state.

But the economic and social contributions of these athletics programs are even larger than the impacts from the dollars directly attributable to them. The presence of these athletics programs in the state creates additional economic gains for the state by supporting media buys, the sale of licensed

merchandise, and alumni giving. And each athletics program's commitment to school spirit and community engagement yields numerous social gains that benefit the state, such as communities served, social cohesion formed, and enhanced statewide reputation.

It is therefore important to consider the 15 athletics programs in the UNC System as not just a matter of rooting interests and school pride, but as an economic and social force for good in the state, with meaningful benefits in the communities in which these programs are located. The presence of these programs in the state has a direct connection to the state's economic vitality, tax base, and social fabric.

1.4. Report Scope and Methodology Overview

Econsult Solutions, Inc. (ESI) employed industry-standard economic modeling techniques to estimate the direct economic activity generated by UNC System Athletics, and to translate that activity into total economic output, employment, and earnings, as well as tax revenue impact. ESI also accounted for the social impact of UNC's 15 athletics programs, and both economic and social impacts were quantified at the individual program level and in the aggregate. Geographically, economic impacts were sized to the state level, and estimated at the single-county level for all counties in the State of North Carolina where one or more of the 15 main campuses are located.

Economic impacts are the sum of direct activity attributable to UNC System Athletics (either direct spending by UNC System Athletics on operations and capital activity or spending drawn into the area by students and attendees, and the spillover impacts of that direct activity). Within an interconnected economy, each dollar of direct expenditures generates multiple waves of spillover impacts through spending on goods and services purchased within a given region ("indirect impacts") as well as spending resulting from the labor income generated by the initial activity that ripples through the region ("induced impacts"). ESI used IMPLAN modeling software to estimate indirect and induced impacts and sum them with the direct activity to produce total economic impact. IMPLAN also estimates the number of jobs that are supported by the spillover impacts (indirect and induced impacts). For ease of comprehension, ESI converted these jobs into Full-Time Equivalent (FTE) jobs, and all jobs expressed in this report are FTE jobs.

ESI also used IMPLAN to translate these economic impacts into their commensurate effect on state tax bases, quantifying the state tax revenues generated by UNC System Athletics.[2] See the Appendix for additional details on ESI's economic and fiscal impact model methodology.

1.5. Report Organization

The subsequent sections of the report are organized as follows:

- **Section 2: Impact from Direct Spending – Annual Operations.** Annual operating expenditures represent direct dollars spent by UNC System Athletics, which in turn have a multiplier effect at all geographic levels. The first content section of this report concerns itself with the economic

[2] UNC Systems Athletics also generates tax revenues for local jurisdictions throughout the state. For the Purpose of this report, only tax revenues to State government were estimated.

and fiscal impacts from UNC System Athletics as a major employer, a significant procurer of a wide range of foods and services, and a major undertaker of large-scale capital projects.

- **Section 3: Impact from Direct Spending – Capital Investments.** The third section estimates the economic impact produced by UNC System Athletics' capital investments.

- **Section 4: Impact from Participant/Attendee Spending**. This section looks at impacts for spending beyond UNC System Athletics' own spending, from spectators and participants of various events. This section separately considers football or basketball games, games for all other sports, and all other events hosted at the respective facilities. ESI combined attendance and participant data with publicly available industry data to develop attendee and participant archetypes as well as spending profiles for each archetype. This yields an estimated ancillary spending amount that can be modeled in IMPLAN to arrive at economic impact estimates.

- **Section 5: Impact from Other Ancillary Spending.** Beyond the ancillary spending drawn to campus by UNC System Athletics events, UNC System Athletics can take credit for two additional forms of spending that also have a multiplier effect throughout the state economy. The first is the purchase of UNC System licensed merchandise in locations besides campus or at times other than when attendees are on campus for an event. The second is media buys associated with UNC System Athletics events. This represents additional spending that enriches the state economy and that therefore must be considered when taking into account the overall impact of UNC System Athletics.

- **Section 6: Social Impacts.** Beyond the above non-overlapping impact categories are a number of broader benefits that warrant exploration in an economic impact study of UNC System Athletics. The first is the reputational enhancement—to the UNC System, the State of North Carolina, and to people affiliated with UNC System or the state—that comes from the success of UNC System teams. Championships drive economic activity (e.g., higher attendance and sale of merchandise), which is accounted for above, but they also increase interest in the institutions and state as a whole (as reflected in more admissions applications and more fundraising for the respective institution and more visitation and business activities for the state, for example). Secondly, UNC System Athletics represents a connecting force for students, staff, and alumni, both in the present and the future (as a common alma mater that can open doors and break the ice). This is important because this is the type of connective tissue – a common alma mater, shared team allegiances, and even shared rituals and vocabulary – that improves one's social experiences, strengthens professional networks, and closes business deals. Third, UNC System Athletics is increasingly seen as a force for good at the local level, as players and staff alike spend time on a number of service initiatives that connect to and provide benefits for the local communities. In all such cases, direct calculations are not possible, but a brief literature review demonstrates these effects, produced by UNC System Athletics, on the strength and size of the state economy.

- **Section 7: Conclusion.** The concluding section of the report summarizes economic impacts. This section summarizes economic impacts across sections and summarizes the significance of the economic impact athletics programs across North Carolina has on the state.

2. Impact from Direct Spending – Annual Operations

2.1. Section Highlights

UNC System Athletics is a major economic engine for North Carolina in its capacity as an employer and purchaser of local goods and services. This section uses annual operating expenditures across the 15 institutions, where operating footprint is expressed in terms of its economic impact at the statewide level using standard input-output modeling techniques.

It is estimated that direct and spillover impacts from UNC System Athletics produce a $807 million in annual economic impact in North Carolina, supporting 6,340 jobs and $298 million in employee earnings.

2.2. Direct Annual Operating Expenditures

At each geographic level, direct operations have a cascading impact that boosts economic activity and supports employment in a range of industries. The total economic impact is the sum of the direct expenditures made by UNC System Athletics, the indirect impacts that result from institutional spending on goods and services with vendors within each region, and the induced expenditures from workers redistributing their income as household spending locally. This section focuses on the 15 institutions' direct operating footprint within UNC System Athletics.

UNC System Athletics comprises of 15 institutions, where these respective Athletics Departments pay for its expenditures from a combination of ticket sales, concessions, conference distribution, multimedia and licensing revenues, student fees, and donor support. Combined, UNC System Athletics' functional operating expenditures for FY 2021 were reported to be $385 million.

UNC Pembroke

UNC Pembroke Athletics has supported local businesses on their operations for many years through ongoing partnerships. The partnership with Pembroke Wing Company is one example. Through their partnership with UNC Pembroke, Pembroke Wing has seen an increased customer retention by having in-game promotions such as "Wing Wednesday" and "90-Point Funnel Fries."

Figure 2.1: UNC System Athletics Annual Operating Expenditures by Institution ($M)

Institution	FY2021 Budget
Appalachian State University	$33
East Carolina University	$43
Elizabeth City State University	$3
Fayetteville State University	$2
North Carolina A&T State University	$14
North Carolina Central University	$12
North Carolina State University	$78
UNC Asheville	$8
UNC-Chapel Hill	$102
UNC Charlotte	$38
UNC Greensboro	$16
UNC Pembroke	$4
UNC Wilmington	$13
Western Carolina University	$15
Winston-Salem State University	$3
Total ($M)	**$385**

Source: UNC System Athletics (2022), Econsult Solutions, Inc. (2022)

To determine the magnitude of the economic impact of UNC System Athletics' operational activity, it is first necessary to understand the composition of annual expenditures within the state economy. Since economic impact relates largely to where expenditures occur, deductions are made for budgetary items that do not represent spending within a given geography. For example, this modeling approach excludes team travel paid by UNC System Athletics' institutions from the analysis because that expenditure is largely spent outside of the local and state economies. After that adjustment, the modeled amount of direct spending within the state economy is $385 million (see Figure 2.2).

Figure 2.2: Summary of UNC System Athletics Annual Operating Expenditures

Category	Included in Model	Operating Expenses ($M)	Modeled Amount ($M)
All Salaries & Fringe Benefits	Yes	$171	$177
Financial Aid	Yes	$82	$83
Operational Expenses	Yes	$125	$125
Team Travel	No	$12	$0
Total Expenses ($M)		**$390**	**$385**

Source: UNC System Athletics (2022), Econsult Solutions, Inc. (2022)

2.3. Economic Impact from Annual Operations

UNC System Athletics Programs' annual operations produce spillover effects at each geographic level, stimulating business activity and supporting employment across a variety of sectors. The total economic impact is the sum of the direct expenditures made by UNC System Athletics, the indirect impacts that result from athletics program spending on goods and services with vendors, and the induced impacts that result when employees of UNC System Athletics spend their salaries and wages within the state (Figure 2.3).

Figure 2.3: Multiplier Effect from Annual Operations



Including these spillover impacts, operational activities have an economic impact of $807 million within the North Carolina economy each year, supporting 6,340 FTE jobs with $298 million in employee compensation (see Figure 2.4).

Figure 2.4: Economic Impact from UNC System Athletics Annual Operations

	North Carolina
Direct Output ($M)	$372
Indirect & Induced Output ($M)	$434
Total Output ($M)	**$807**
Annual Employment Supported (FTE)	**6,340**
Employee Compensation ($M)	**$298**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

2.4. Geographic Distribution of Economic Impact from Annual Operations

The economic impact produced from annual operations varies amongst geographies within the State of North Carolina. The counties with the highest economic impact were Chatham, Durham and Orange counties and Wake County, all located in the northeast central region of North Carolina, generating $186 million and $169 million of impact, respectively. Pitt, Mecklenburg, Guildford, and Watauga were the following counties that produced a high economic impact well above $50 million each year (see Figure 2.5).

Figure 2.5: County-Level Economic Impact by Athletics Program from Annual Operations

Appalachian State University Watauga County **$54.5 million**	East Carolina University Pitt County **$73.5 million**	Elizabeth City State University Pasquotank County **$3.7 million**
Fayetteville State University Cumberland County **$3.2 million**	North Carolina A&T State University and UNC Greensboro Guilford County **$56.2 million**	North Carolina Central University Durham County **$22.3 million**
North Carolina State University Wake County **$169.4 million**	UNC Asheville Buncombe County **$16.9 million**	UNC-Chapel Hill Chatham, Durham & Orange County **$186.1 million**
UNC Charlotte Mecklenburg County **$78.9 million**	UNC Pembroke Robeson County **$5.8 million**	UNC Wilmington New Hanover County **$19.6 million**
Western Carolina University Jackson County **$19.0 million**	Winston Salem State University Forsyth County **$5.7 million**	

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

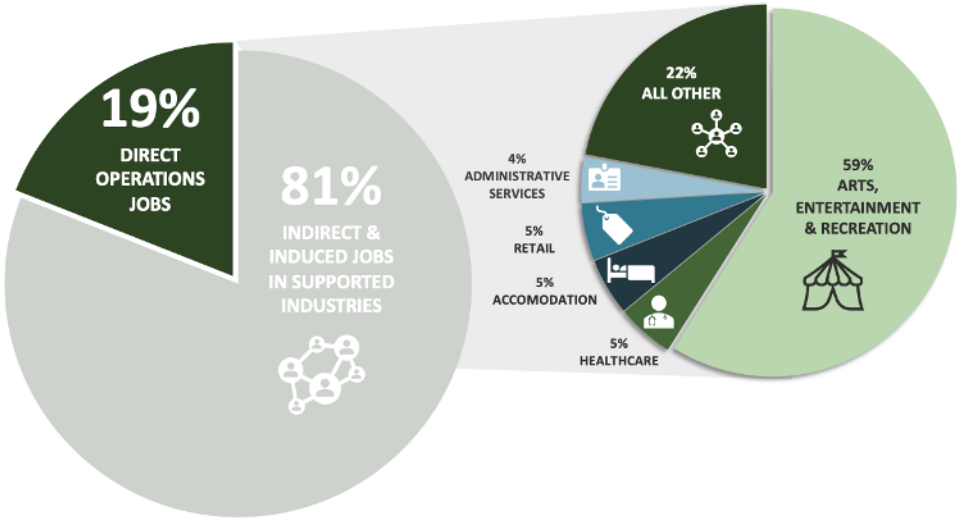
2.5. Industry Distribution of Economic Impact from Annual Operations

While the operating activity of UNC System Athletics exclusively focuses on athletics, the economic impact of that activity supports additional economic activity beyond this sector. Approximately 81 percent of the jobs generated by UNC System Athletics operational impact are in industries supported by procurement of various goods and services or by the income earned by employees who then spend those earnings into the local and state economies. These supported industries include arts, entertainment, and recreation (59 percent of the indirect and induced impact), health care and social assistance (5 percent), and accommodation and food services (5 percent) (see Figure 2.6).

UNC Wilmington

UNC Wilmington Athletics has numerous ongoing partnerships with businesses that create purchasing power for goods and services in the local region. For instance, UNC Wilmington has signed a five-year deal with Under Armour Inc., a leading developer, distributer, and marketer of branded performance apparel, that is expected to add up to the buying power within the local economy.

Figure 2.6: Industry Distribution of Statewide Employment Impact from UNC System Athletics' Operations



Source: UNC System Athletics (2022), IMPLAN (2019), Econsult Solutions, Inc. (2022)

2.6. Tax Revenue Impact from Annual Operations

Although UNC System Athletics Programs are not-for-profit institutions and are exempt from many direct taxes, the economic impacts from their operations still generate tax revenues. UNC System Athletics Programs increase the State of North Carolina's tax bases directly by employing staff which generates taxable income, and indirectly via spending by vendors and employees in the private economy. It is estimated that impacts from UNC System Athletics Programs generate $13.9 million in tax revenue for the State of North Carolina each year (see Figure 2.7).[3]

Figure 2.7: Estimated Annual Tax Revenue Impact from Operations at UNC System Athletics Programs to the State of North Carolina

Tax Type	North Carolina ($M)
Income	$6.0
Sales	$6.2
Business	$1.6
Total	**$13.9**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

[3] Tax revenue impacts are calculated for the State of North Carolina. However, the operating activity also supports other local tax revenues not calculated in this analysis.

3. Impact from Direct Spending – Capital Investments

3.1. Section Highlights

In addition to annual operations, UNC System Athletics contributes to the local and state economy of North Carolina through investments in capital projects. The information provided by UNC's 15 constituent institutions on major capital investments were used for the estimation. The tax revenue impacts generated by capital investments are also described in this section at a statewide level.

UNC System Athletics currently has a number of large construction projects underway and has recently completed a number of other large projects. **Currently, capital investments are estimated to average about $65 million per year, yielding $110 million in annual economic impact in the State of North Carolina, supporting 672 FTE jobs and $27 million in employee compensation.**

3.2. Direct Annualized Capital Investments

Capital investments in UNC System Athletics' facilities represent another impact spending category. ESI analyzed capital spending by averaging recent past spending over the past few years to account for fluctuations of year over year spending.

UNC System Athletics average annualized capital investment of $65.4 million.[4] These project costs include renovations, state-of-good-repair expenses, equipment purchases, and the purchase and procurement of materials and services. These expenditures touch a wide range of manufacturers and professional service providers in addition to construction companies within the state.

North Carolina State University

With the generous $250,000 gift made by alumni Gayle and Dwain Lanier, NC State Athletics approved the new enhancement plan to upgrade locker rooms for women's basketball. The improvements will include an expanded player lounge and new player lockers, expected for completion by season 2023.

[4] The annual average is derived from multiple sources. In many cases, these figures represent multi-year amounts for which annual averages were calculated.

Figure 3.1: UNC System Athletics Annual Capital Investments by Institution ($M)

Institution	Annual Capital Investment
Appalachian State University	$22.4
East Carolina University	$12.5
Elizabeth City State University	$0.2
Fayetteville State	$1.3
North Carolina A&T State University	$0.9
North Carolina Central University	$1.4
North Carolina State University	$2.9
UNC Asheville	$6.4
UNC–Chapel Hill	$11.0
UNC Charlotte	$1.7
UNC Greensboro	$1.1
UNC Pembroke	$2.4
UNC Wilmington	$0.2
Western Carolina University	$1.0
Winston-Salem State University	-[5]
Total	**$65.4**

Source: UNC System Athletics (2022), Econsult Solutions, Inc. (2022)

3.3. Economic Impact from Capital Investments

UNC System Athletics Programs' capital investments were calculated as an annualized average to show the aggregate economic impact (Figure 3.3). In total, capital investments have a $110 million economic impact within the North Carolina economy each year, supporting 672 FTE jobs with $27 million in employee compensation.

Fayetteville State University

Fayetteville State has completed its most recent upgrades to the new university-owned football field in fall 2021. The Luther "Nick" Jeralds Stadium now includes a brand-new, high-tech synthetic turf system, that will benefit student-athletes both in the games and practice.

Figure 3.2: Multiplier Effect from Capital Investments

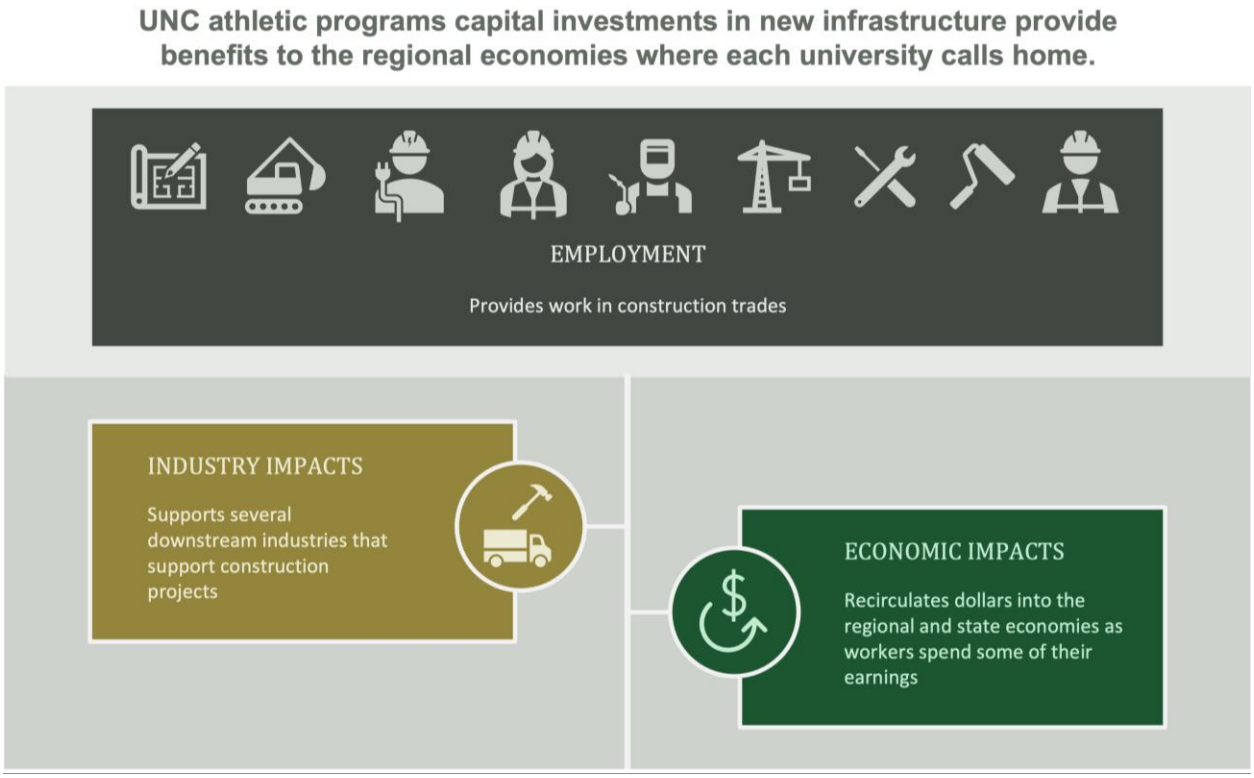


Figure 3.3: Economic Impact from UNC System Athletics Capital Investments

	North Carolina
Direct Output ($M)	$65
Indirect & Induced Output ($M)	$45
Total Output ($M)	**$110**
Annual Employment Supported (FTE)	**672**
Employee Compensation ($M)	**$27**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

[5] Winston-Salem State University's athletics program had no capital investments because all facility-related expenditures are included in its annual operating budget.

3.4. Geographic Distribution of Economic Impact from Capital Investments

The economic impact generated from capital investments is also significant. The economic impact generated in Watauga County is estimated to be $33 million. The impact generated in Pitt County, Chatham, Durham and Orange counties, and Buncombe County are $18 million, $16 million, and $10 million of local economic impacts, respectively.

Figure 3.4: County-Level Economic Impact by Athletics Program from Annual Capital Investments

Appalachian State University	East Carolina University	Elizabeth City State University
Watauga County	Pitt County	Pasquotank County
$33.1 million	**$18.0 million**	**$0.3 million**
Fayetteville State University	North Carolina A&T State University and UNC Greensboro	North Carolina Central University
Cumberland County	Guilford County	Durham County
$1.7 million	**$3.2 million**	**$1.9 million**
North Carolina State University	UNC Asheville	UNC-Chapel Hill
Wake County	Buncombe County	Chatham, Durham & Orange County
$4.9 million	**$10.4 million**	**$15.9 million**
UNC Charlotte	UNC Pembroke	UNC Wilmington
Mecklenburg County	Robeson County	New Hanover County
$2.8 million	**$3.3 million**	**$0.3 million**
Western Carolina University	Winston Salem State University	
Jackson County	Forsyth County	
$1.3 million	**N/A**	

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

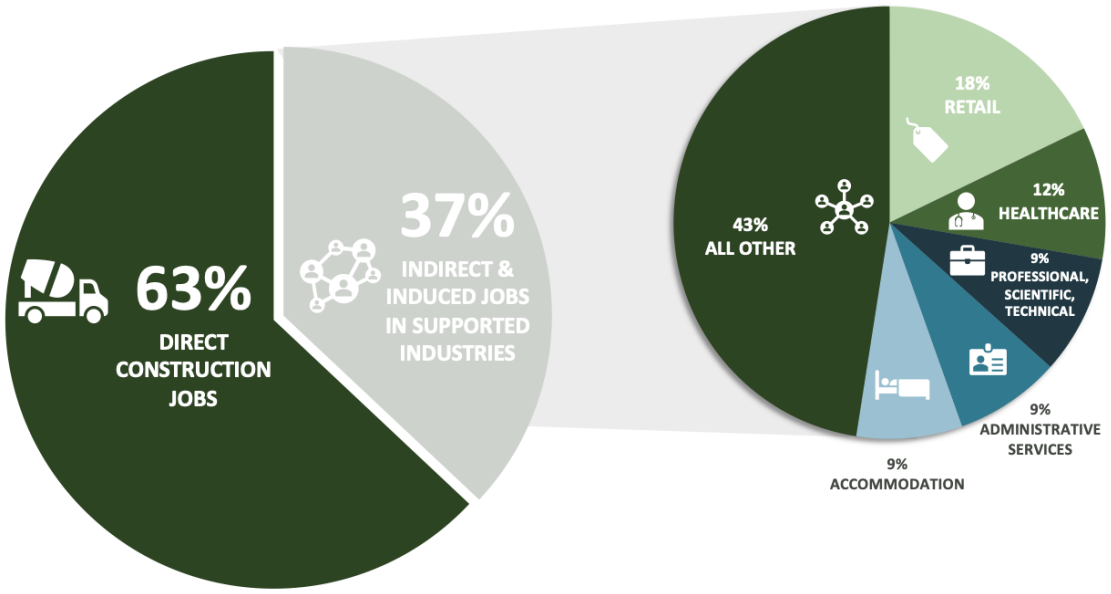
3.5. Industry Distribution of Economic Impact from Capital Investments

The economic impacts associated with UNC System Athletics' annual capital investments result in continued economic activity for the construction sector, but the impacts spread beyond that as spending from construction, goods and services, and workers' salaries recirculate in the local economy. The annualized capital investments into UNC System Athletics' facilities support about 672 jobs each year, inclusive of the indirect and induced impacts. Figure 3.5 shows the proportion of the total employment impact associated with capital investments that has accrued in and beyond the construction industry within North Carolina. Approximately 37 percent of the employment supported by capital investments is in sectors outside of construction. Major industries supported include retail trade (18 percent of the indirect and induced impact), health care and social assistance (12 percent), professional, scientific, and technical services (9 percent), and administrative support services (9 percent).

Elizabeth City State University

Elizabeth City State University raised a $250,000 fund to renovate their football field at Roebuck Stadium. The renovations included improvements to the track, the scoreboard, press box, and seating.

Figure 3.5: Industry Distribution of Statewide Employment Impact from UNC System Athletics' Capital Investments



Source: UNC System Athletics (2022), IMPLAN (2019), Econsult Solutions, Inc. (2022)

3.6. Tax Revenue Impact from Capital Investments

UNC–Chapel Hill

UNC–Chapel Hill plans on a $51 million project for four new facility developments, all approved by the UNC System Board of Governors and Trustees. These investments include the construction of a new outdoor stadium and practice courts for men's and women's tennis programs, amongst others. The projects are expected for completion in spring 2023.

UNC System Athletics' capital investments generate tax revenues for the state government. In addition to operating impacts, these capital outlays increase the State of North Carolina's tax bases in two ways: directly through hiring personnel who produce taxable revenue, and indirectly through vendor and employee spending. It is estimated that these capital investments generate $2.4 million in personal income, sales, and business tax in North Carolina each year (see Figure 3.6).

Figure 3.6: Estimated Annual Tax Revenue Impact from UNC System Athletics Programs Capital Investments to the State of North Carolina

Tax Type	North Carolina
Income	$0.8
Sales	$1.1
Business	$0.5
Total ($M)	**$2.4**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

4. Impact from Participant/Attendee Spending

4.1. Section Highlights

UNC System Athletics host numerous athletic and recreational events each year which attract both local and non-local attendees. These attendees make a significant economic impact on the local community as they dine in local restaurants, shop at local stores, and in some cases stay overnight within the state. Attendee spending represents net new dollars drawn into the state and generates subsequent spillover impacts supporting local businesses and jobs. In a typical year, **there are over 3.2 million attendees at UNC System Athletics events.**

This section reviews the range of sports events taking place in North Carolina, estimates the attendee spending associated with these events annually, and models the total economic impact within the state.

Sports event attendees are estimated to spend $124 million annually throughout the State. This influx of spending generates an annual economic impact of $210 million within North Carolina, supporting more than 2,454 FTE jobs.

4.2. Estimated Participant/Attendee Spending – Football or Basketball

In addition to its own spending on operations and capital investments, an institution contributes to its local and state economy through the ancillary spending of attendees that come to its events. While all sports generate economic activity for the state, for this report each institution's marquee sport is analyzed separately, which for most institutions is football but for some institutions is basketball. This is the subject of this sub-section, and the ensuing sub-section looks at all other sports and other events.

Football and basketball tend to attract more fans and more spending, including in some cases a national following that yields significant spending in the form of out-of-town attendees coming in and staying multiple nights in a hotel as well as spending on food, transportation, and entertainment. Football and basketball attendees include spectators but also opposing teams' players and coaches, media members, and referees.

UNC Charlotte

UNC Charlotte hosted "Niner Nation Week," a tradition that mixes homecoming and other grand events for the larger Charlotte community and visitors. The various events included a scavenger hunt, a homecoming tailgate, and social gathering. To top it off, UNC Charlotte played a homecoming football game against Florida International University.

For each institution, ESI selected one marquee sport, either football or basketball, and developed spending profiles based on the geographical distance of each attendee. Across all 15 institutions, it is estimated that football or basketball collectively represents almost 1.4 million attendees per year and yields about $66 million of spending in the state.

Figure 4.1: Est. UNC System Athletics Football or Basketball Annual Ancillary Spending by Each Institution ($M)[6]

Institution	Annual Ancillary Spending
Appalachian State University	$2.4
East Carolina University	$5.5
Elizabeth City State University	$1.3
Fayetteville State University	$0.4
North Carolina A&T State University	$2.0
North Carolina Central University	$1.0
North Carolina State University	$17.5
UNC Asheville*	$0.2
UNC–Chapel Hill	$30.3
UNC Charlotte	$1.3
UNC Greensboro*	$0.2
UNC Pembroke	$0.4
UNC Wilmington*	$0.4
Western Carolina University	$2.9
Winston-Salem State University	$0.3
Total ($M)	**$65.9**

Source: UNC System Athletics (2022); Econsult Solutions, Inc. (2022)

However, an adjustment is made to account for the fact that some of that spending immediately leaves the region and therefore does not have a multiplier effect within the state economy. Therefore, our modeling approach 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 our analysis is $62.5 million of modeled activity within North Carolina.

[6] An asterisk (*) shows the institutions where basketball is their key program instead of football.

Figure 4.2: Est. UNC System Athletics Football or Basketball Annual Ancillary Spending ($M)

	Day Trip	Overnight Trip	Total
Lodging	$0.0	$19.7	$19.7
Food	$13.4	$17.0	$30.4
Transportation	$4.2	$6.8	$11.0
Misc. Retail	$2.1	$2.7	$4.9
Total	$19.7	$46.2	$65.9
Minus Non-Modeled Amount			*($3.3)*
Modeled Amount			**$62.5**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

4.3. Estimated Participant/Attendee Spending – All Other Sports and Events

UNC Greensboro

In the summer of 2022, Greensboro Coliseum hosted several sporting events, attracting many visitors from out of town. Three of the major summer sporting events --the YMCA Long Course National Swimming Championships, the AAU Junior Olympic Games, and the PGA TOUR's Wyndham Championship, were held in Greensboro, bringing in a total of 18,000 student-athletes and over 40,000 visitors into the region.

UNC System Athletics also fields a number of other teams that draw in attendees to the state. These sports differ by institution but range from baseball, soccer, volleyball, field hockey, lacrosse, tennis, softball, track and field, gymnastics, swimming and diving, wrestling, and other sports. While the impact of the institution's respective football or basketball program is modeled separately from other UNC System Athletics events, there are many other prominent sports programs with highly competitive teams that regularly win championships and have record-setting attendance each season. These athletics events draw over 1,866,800 attendees to North Carolina. Similar to football or basketball, these athletics events attract attendees to the state, drawing in new dollars to the local and state economies and generating additional economic activity.

In addition to spending from statewide conferences and tournaments hosted by UNC System Athletics, the extensive facilities are also used for non-intercollegiate games, such as tournaments, sports camps, and other athletic events. For non-sporting events, these include concerts, special events, banquets, and facility tours.

Figure 4.3: Est. UNC System Athletics Other Sports Annual Ancillary Spending by Each Institution ($M)

Institution	Annual Ancillary Spending
Appalachian State University	$0.7
East Carolina University	$3.2
Elizabeth City State University	$0.1
Fayetteville State University	$0.1
North Carolina A&T State University	$8.8
North Carolina Central University	$0.4
North Carolina State University	$12.8
UNC Asheville	$0.3
UNC-Chapel Hill	$24.8
UNC Charlotte	$1.4
UNC Greensboro	$0.8
UNC Pembroke	$0.5
UNC Wilmington	$2.9
Western Carolina University	$1.0
Winston-Salem State University	$0.4
Total ($M)	**$58.2**

Source: UNC System Athletics (2022); Econsult Solutions, Inc. (2022)

After adjusting for non-modeled amounts due to retail spending, aggregate ancillary spending by all other UNC System Athletics intercollegiate sports besides football or basketball and other events yields $58.2 million of spending that remains within North Carolina, where $55.7 is modeled as spending that remains in the state.

Figure 4.4: Est. UNC System Athletics – All Other Sports and Other Events Annual Ancillary Spending ($M)

	Day Trip	Overnight Trip	Total
Lodging	--	$13.8	$13.8
Food	$15.4	$14.7	$30.1
Transportation	$4.7	$5.9	$10.7
Misc. Retail	$2.4	$1.2	$3.6
Total	$22.6	$35.6	$58.2
Minus Non-Modeled Amount			*($2.5)*
Modeled Amount			**$55.7**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

4.4. Economic Impact from Participant/Attendee Spending

UNC System Athletics Programs attract visitors which have a multiplier effect throughout the region, helping to support the tourism economy in North Carolina. Once an attendee has completed their time on campus, they frequently spend on food, lodging, or retail items in the businesses in the state, thus generating additional economy. Annually, ancillary spending from football or basketball games generates $109 million in economic impact, supporting 1,270 jobs with $35 million in employee compensation.

Figure 4.5: Annual Economic Impact from UNC System Athletics Football or Basketball Participant/Attendee Spending

	North Carolina
Direct Output ($M)	$63
Indirect & Induced Output ($M)	$46
Total Output ($M)	**$109**
Annual Employment Supported (FTE)	**1,270**
Employee Compensation ($M)	**$35**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure 4.6: Multiplier Effect from Visitor Spending



The economic impact from ancillary spending of all other sports and events is $101 million, supporting 1,184 jobs with $33 million in employee compensation (see Figure 4.7)

Figure 4.7: Annual Economic Impact from UNC System Athletics Other Sports and Events Participant/Attendee Spending

	North Carolina
Direct Output ($M)	$57
Indirect & Induced Output ($M)	$43
Total Output ($M)	**$101**
Annual Employment Supported (FTE)	**1,184**
Employee Compensation ($M)	**$33**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

In sum, UNC System Athletics draws in over 3.2 million attendees on an annual basis. Combined, ancillary spending by all UNC System Athletics intercollegiate events and non-athletic events hosted at UNC System Athletics facilities generates a sustained economic impact on the state economy. This yields $210 million in economic impact within North Carolina each year (see Figure 4.8).

Figure 4.8: Aggregate Annual Economic Impact from UNC System Athletics Sports and Events Participant/Attendee Spending

	North Carolina
Direct Output ($M)	$121
Indirect & Induced Output ($M)	$89
Total Output ($M)	**$210**
Annual Employment Supported (FTE)	**2,745**
Employee Compensation ($M)	**$68**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

4.5. Geographic Distribution of Economic Impact from Participant/Attendee Spending

The geographic distribution of economic impacts generated from participant/attendee spending were also quite significant. The economic impact generated in Chatham, Durham and Orange Counties is $74 million for football/basketball and all other sports attendee spending. The impact generated by sports attendees in Guilford County is the second highest, estimated at $20 million, followed by Pitt County at $13 million (see Figures 4.9 to 4.11).

Figure 4.9: County-Level Economic Impact by Athletics Program from Football or Basketball's Participant/Attendee Spending

Appalachian State University Watauga County **$3.8 million**	East Carolina University Pitt County **$8.1 million**	Elizabeth City State University Pasquotank County **$1.8 million**
Fayetteville State University Cumberland County **$0.5 million**	North Carolina A&T State University and UNC Greensboro Guilford County **$3.5 million**	North Carolina Central University Durham County **$1.3 million**
North Carolina State University Wake County **$29.0 million**	UNC Asheville Buncombe County **$0.4 million**	UNC-Chapel Hill Chatham, Durham & Orange County **$40.6 million**
UNC Charlotte Mecklenburg County **$2.2 million**	UNC Pembroke Robeson County **$0.6 million**	UNC Wilmington New Hanover County **$0.6 million**
Western Carolina University Jackson County **$3.9 million**	Winston Salem State University Forsyth County **$0.5 million**	

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure 4.10: County-Level Economic Impact by Athletics Program from all Other Sports Participant/Attendee Spending

Appalachian State University Watauga County **$1.3 million**	East Carolina University Pitt County **$5.0 million**	Elizabeth City State University Pasquotank County **$0.1 million**
Fayetteville State University Cumberland County **$0.1 million**	North Carolina A&T State University and UNC Greensboro Guilford County **$15.9 million**	North Carolina Central University Durham County **$0.5 million**
North Carolina State University Wake County **$21.6 million**	UNC Asheville Buncombe County **$0.7 million**	UNC-Chapel Hill Chatham, Durham & Orange County **$33.9 million**
UNC Charlotte Mecklenburg County **$2.5 million**	UNC Pembroke Robeson County **$0.9 million**	UNC Wilmington New Hanover County **$4.7 million**
Western Carolina University Jackson County **$1.4 million**	Winston Salem State University Forsyth County **$0.7 million**	

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure 4.11: County-Level Economic Impact by Athletics Program from All Sports Participant/Attendee Spending

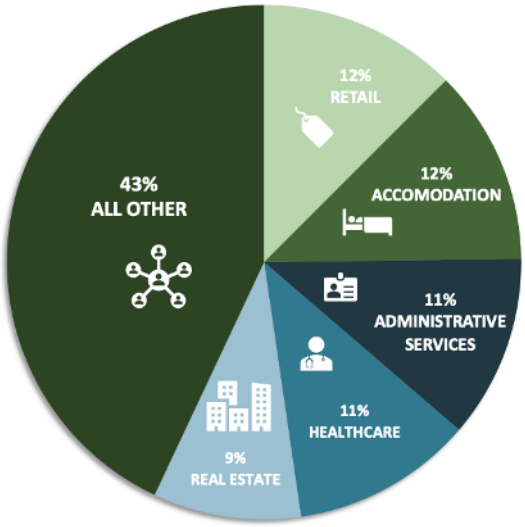
Appalachian State University Watauga County **$5.1 million**	East Carolina University Pitt County **$13.1 million**	Elizabeth City State University Pasquotank County **$1.9 million**
Fayetteville State University Cumberland County **$0.6 million**	North Carolina A&T State University and UNC Greensboro Guilford County **$19.5 million**	North Carolina Central University Durham County **$1.9 million**
North Carolina State University Wake County **$50.6 million**	UNC Asheville Buncombe County **$1.1 million**	UNC-Chapel Hill Chatham, Durham & Orange County **$74.4 million**
UNC Charlotte Mecklenburg County **$4.7 million**	UNC Pembroke Robeson County **$1.5 million**	UNC Wilmington New Hanover County **$5.3 million**
Western Carolina University Jackson County **$5.3 million**	Winston Salem State University Forsyth County **$1.1 million**	

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

4.6. Industry Distribution of Economic Impact from Participant/Attendee Spending

Spending by participants and attendees directly impacts a number of industries, and in turn creates a multiplier effect that reaches additional industries. This influx of spending into North Carolina supports jobs in a wide range of sectors statewide, particularly retail, accommodation, administrative services, and healthcare.

Figure 4.12: Industry Distribution of Statewide Employment Impact from UNC System Participant/Attendee Spending



Source: UNC System Athletics (2022), IMPLAN (2019), Econsult Solutions, Inc. (2022)

4.7. Tax Revenue Impact from Participant/Attendee Spending

Ancillary spending boosts various local and state tax bases, creating tax revenues for various government jurisdictions each year. It is estimated that the economic impact that results from UNC System Athletics attendee spending produces about $6 million in tax revenues for the State of North Carolina each year.

Figure 4.13: Estimated Annual Tax Revenue Impact from UNC System Athletics Programs Participant/Attendee Spending to the State of North Carolina

Tax Type	North Carolina
Income	$1.4
Sales	$3.7
Business	$0.7
Total ($M)	**$5.8**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

5. Other Economic Impacts

5.1. Section Highlights

Beyond the ancillary spending drawn to campus by UNC System Athletics events, UNC System Athletics can take credit for three additional forms of spending that have a multiplier effect throughout the state economy. The first is the purchase of UNC System Athletics-licensed merchandise in locations besides campus or at times other than when attendees are on campus for an event. The second is media buys associated with UNC System Athletics events. The third and last one is the impact from increased alumni engagement. These additional spending categories represent additional spending that enriches the state economy. While it is more difficult to calculate the full scope of their impact because of the proprietary nature of some of the variables, this is important to consider when assessing the overall impact of UNC System Athletics. Therefore, these impacts have not been added to the overall economic impact figures for UNC System Athletics, but they do represent economic activity beyond the categories previously described in this report.

North Carolina Central University



Fans of NCCU wearing NCCU apparel to support the local economy. NCCU benefits through the form of licensing revenue and businesses that sell NCCU merchandise generate additional economic activity in the state.

5.2. Impacts from Licensed Merchandise

While the UNC System Athletics Programs are comprised of non-profit entities, the respective brands of its sports events have significant commercial value. Private businesses license imagery to sell branded merchandise. The licensing fee is a benefit to UNC System Athletics, which it uses to invest in its student-athletes through providing scholarships, enhancing programming, and improving facilities. The revenues accrued to the institutions under UNC System Athletics licensing revenue are thus a component for many institutions' annual operations impact accounted for in Section 2 of the report.

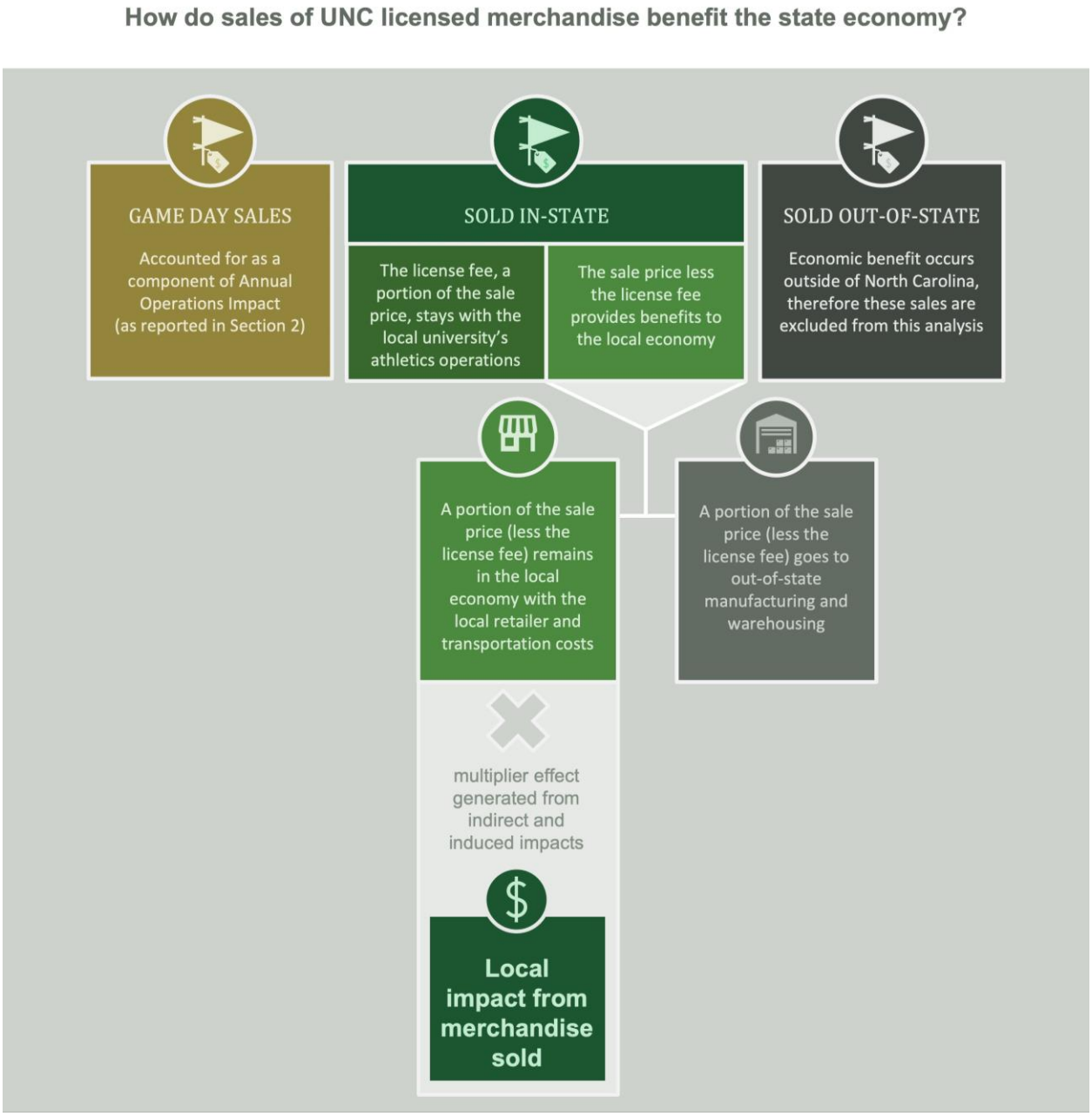
Western Carolina University

Western Carolina University Department of Athletics teamed up with Nike and BSN sports. Since 2021, Nike has been the official provider of athletics apparel, football, and uniform for WCU athletics, while BSN Sports –a leading marketer and manufacturer of sporting goods, has been providing sports equipment for the athletics team.

Licensed merchandise of UNC System Athletics Programs is sold all over the country, including throughout North Carolina. Those sales represent business activity for the retail vendors, which support jobs throughout the respective counties and the state. Wherever merchandise is purchased, the licensing revenues flow back to the respective UNC System institutions. The Athletics

Department is therefore a key mechanism through which the institutions attract spending from around the country, channeling it into the state economy, which supports local jobs and local spending associated with the operations with UNC System Athletics.

Figure 5.1: Economic Impact from Licensed Merchandise



5.3. Impact from Media Buys

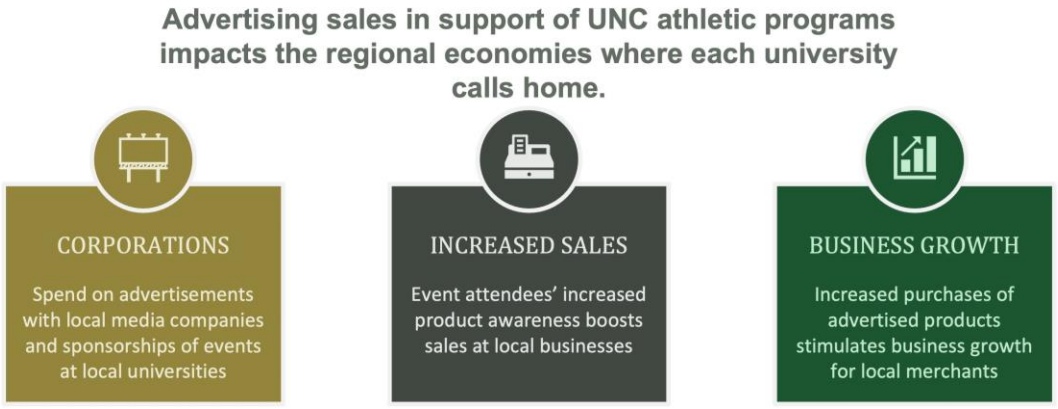
Advertising Sales off of UNC System Athletics' Programs' events impact the area economies that each university calls home. Every year, media companies make a considerable amount of spending to broadcast athletic events and sell advertisement space during that airtime. Both local businesses and out-of-state advertisers make investments to air their commercials during sporting events, which adds up to the economic impact that UNC System Athletics brings to the state economy. Narrowly, local businesses are able to purchase advertising platforms to purchase their services to viewers. This promotion is intended to enhance business sales and expand its customer base. This ultimately draws in additional activity into the local and state economy.

Winston-Salem State University

Winston-Salem State University signed a contract with Pepsi, Pepsi now being the official provider of beverages and snacks for WSSU. Pepsi products are scattered through campus in vending machines. Pepsi can have advertisements and commercials during these events. As visitors attend various events on campus, this adds up to the spending of visitors on goods and services, including Pepsi products.

More broadly, the presence of UNC System Athletics in the national media has significant image-building value. These associations benefit the state as a place for resident and business attraction, drawing in repeat visitation to the state. While this "organic" brand building is difficult to compare to paid advertising channels, the audiences for major sporting events like a nationally televised football or basketball game are very significant relative to the audiences that can be reached through a limited tourism marketing budget. As a result, UNC System Athletics provides one of the major associations that many potential attendees may have with the respective counties and the state as a source of repeat visitation.

Figure 5.2: Economic Impact from Media Buys



5.4. Impact from Increased Alumni Engagement/Giving

UNC System Athletics Programs' engagement with alumni yields economic benefits, for example through fundraising. These donations are another means through which dollars are attracted from around the world into the region and the State of North Carolina, supporting local economic activity as they are spent on UNC System Athletics Programs and capital projects. More broadly, successful athletic programs have been shown to generate positive impact on a university's overall alumni donations. Multiple studies have concluded that the success in either basketball or football at NCAA Division I institutions led to a significant increase in overall private contributions and boosted alumni donations.[7] In particular, the research found that an additional football win increases an institution's athletic donations by $136,400.[8]

North Carolina A&T University

Merl F. Code, an alumnus and former student-athlete at North Carolina A&T State University, donated $500,000 to the university's National Alumni Scholarship Program.

East Carolina University

East Carolina University announced their donor-funded development project for a 101,000 square foot enclosed, climate-controlled multipurpose indoor practice facility. With the support from alumni and fans, the university has fundraised $60 million to make an impact on the athletics team to succeed.

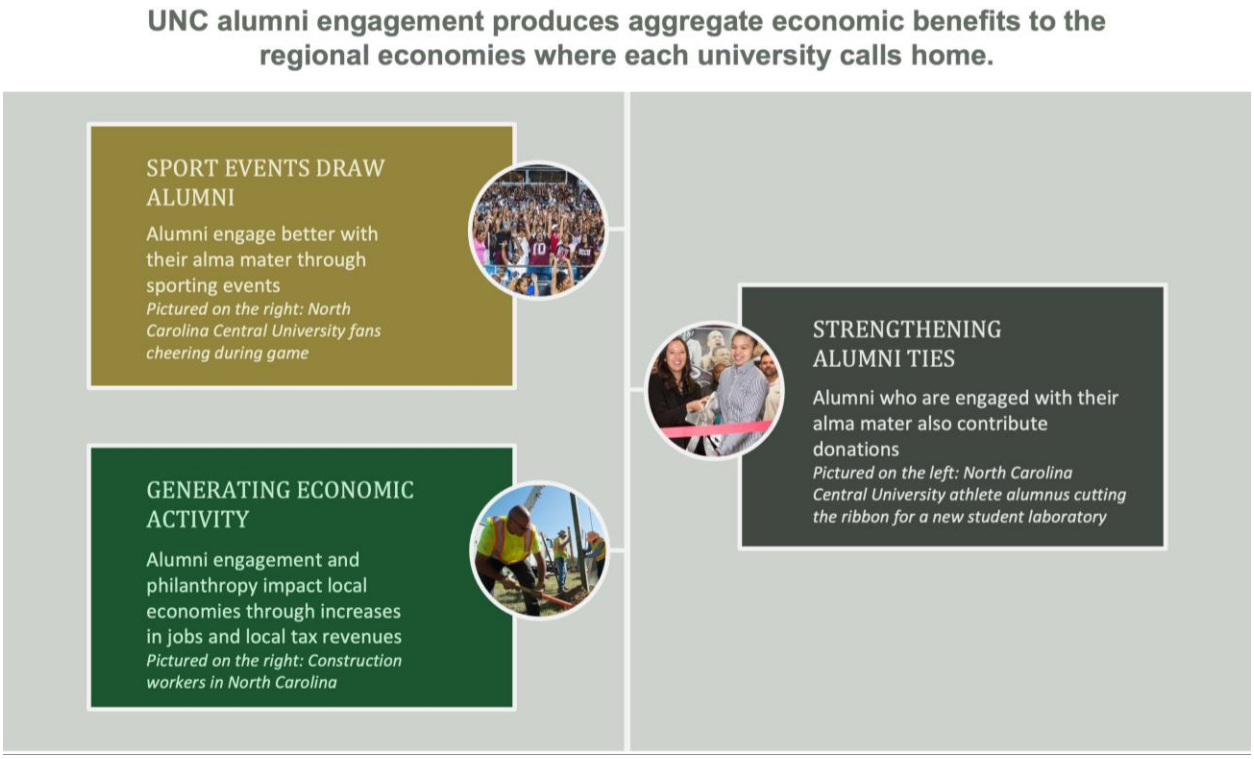
Many notable donations were made to the UNC System Athletics Programs that have generated funding for each institution's athletics team as well as scholarship programs. Recently, Appalachian State University successfully raised $60 million through donations from alumni and fans through the fundraising initiative "A Mountaineer Impact, A Drive for Excellence." This initiative was launched in 2017 with a goal to enhance the experience of student-athletes and furthermore, strengthen campus and community engagement. These donations are planned to construct and enhance athletic facilities, provide scholarship support, and impact the overall athletic experience for student-athletes and attendees. Other examples include donations directly made by former student-athletes. William Murphy, an alumnus and former student-athlete at Fayetteville State University, made a generous $55,000 gift to their Athletics team.

Donors to UNC System Athletics Programs also provide generous support for the institutions' development projects. For instance, North Carolina State University received a $5 million donation from TowneBank to support major upgrades and improvements within the university-owned Carter-Finley Stadium. These donations help to directly fund capital projects, which creates economic activity and employment, and provides a platform for more events going forward.

[7] Walker, "Division I Intercollegiate Athletics Success and the Financial Impact on Universities," University of Memphis, 2015.

[8] Chung, "How much is a win worth? An application to Intercollegiate athletics," Harvard Business School, 2017.

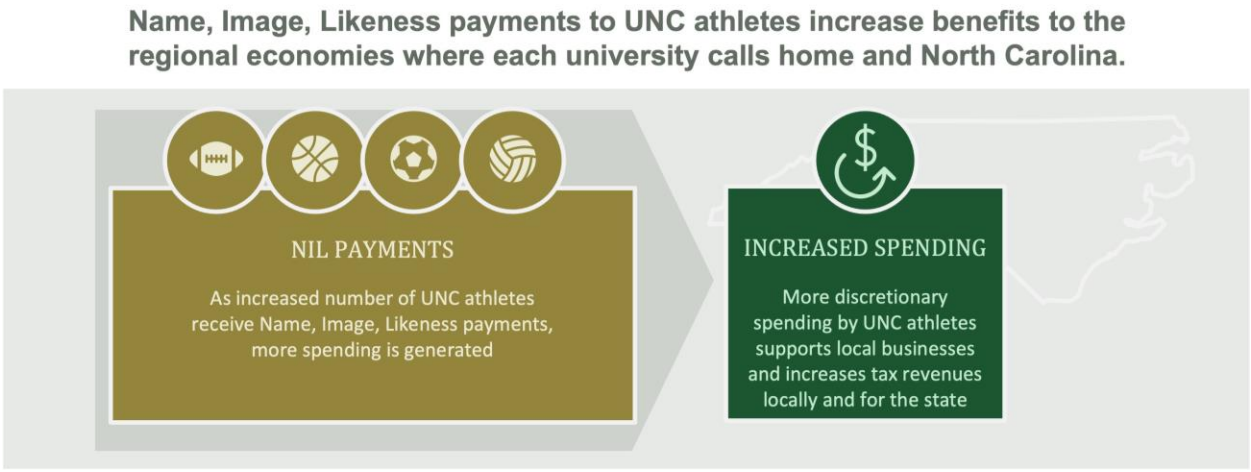
Figure 5.3: Economic Impact from Alumni Engagement



5.5. Name, Image, and Likeness' Payments to UNC System Athletics Programs' Student-Athletes Result in Greater Area Economic Impact

In 2021, the National Collegiate Athletic Association enacted an interim policy enabling student-athletes to receive compensation for the use of their name, image, and likeness (NIL). This represents another potential economic impact for the state and communities throughout the state, as student-athletes within UNC System Athletics now have the ability to receive direct payments from advertisers, which they in turn may spend a portion of back into their local and state economy, supporting additional economic activity (see Figure 5.4). There are no public records of such payments as of yet, and the existence and scale of these payments can vary significantly across student-athletes and athletics programs, and so the magnitude of the impact. So, at this time there is no way to quantify the aggregate effect of NIL payments within the state or from a particular athletics program. Nevertheless, this represents yet another way athletics programs and their student-athletes contribute to the local and state economy.

Figure 5.4: Economic Impact from Name, Image, and Likeness Payments



6. Social Impacts

6.1. Section Highlights

In addition to the quantifiable impacts from attendee spending and ongoing operations, athletic events contribute significantly to the fabric of communities within the State of North Carolina. Athletic programs help generate volunteerism and community service, attract donations into the institution, and enhance social cohesion through establishing a unifying force for the communities they represent. Several of these benefits merit additional discussion and analysis as representations of how sports activity helps to drive additional economic and social benefits for the State of North Carolina.

6.2. Impact from Community Service

UNC's 15 constituent institutions and their intercollegiate Athletics programs regard community service as an integral part of its mission to continue its legacy of community engagement and build upon that legacy.[9]

In 2022, the student-athletes of UNC System Athletics completed a total of 43,281 service hours. Student-athletes of UNC System Athletics provide volunteer services such as youth literacy reading programs, welcoming events at elementary schools, as well as food pantry packaging programs. In 2022, this is estimated to have been over 43,000 service hours provided, or the equivalent of over 20 full-time workers.

UNC System Athletics leverages its recognition on and off the field to develop meaningful ways to engage with the various communities through a number of volunteer initiatives. The student-athletes' persistent effort in community service can be demonstrated by a variety of programs that involve their surrounding communities, contributing to issues that are of both societal and state importance. Student-athletes of UNC System Athletics are much involved in service programs that deal with poverty and food insecurity issues and support underserved youth populations. For instance, North Carolina State University has been in partnership with "Rise Against Hunger," a non-profit organization dedicated to combating hunger, to implement sustainable community development projects to empower local communities and worldwide. UNC Charlotte, UNC Greensboro, and Western Carolina University have also been active with their efforts to reduce food insecurity and launched food pantry packaging programs to serve their surrounding communities.

Moreover, signature community service programs such as the year-around youth literacy reading programs and hosting of welcoming events at elementary schools, facilitate the interaction between the local communities and teams of UNC System Athletics. For instance, Elizabeth City State University (ECSU) student-athletes hosted a welcome back event for elementary and middle school students on their first day of school in person. At UNC Wilmington, student-athletes provided sports lessons for underserved youth populations. UNC Pembroke and UNC Asheville were also part of this youth engagement efforts through opening sports camps and sports lessons for youth. Other community volunteer works included providing support to vaccine awareness day by student-athletes at Fayetteville

[9] Due to unavailability of data, service hours for Winston-Salem were not included in the 43,281 service hours estimated.

State University, and visiting children's hospitals, organized by the athletics team at East Carolina University.

6.3. Impact from Increased Social Cohesion and Community Building

Another role UNC System Athletics plays within the broader University community is enhancing a sense of connection and collegiality among UNC students, staff, faculty, alumni, and other members of the University community within the region and beyond. Athletics serve as a meaningful connector within the campus community, contributing to its shared culture, tradition, and affirms itself through celebrations that esteem the symbols of shared identity.[10]

UNC Asheville

An alumna and former student-athlete, Elizabeth Conte recently completed her NCAA postgraduate internship. As a Division I intern in the NCAA governance department, her works included assisting various advisory committees to provide support for student-athletes. Ms. Conte continues to work for college athletics with the hope to work for a larger population of students at an institution with football and basketball teams.

Many university alumni programs offer opportunities to connect with their broader alumni network through local events and travel. Because of UNC System Athletics' meaningful role in their campus experience, many alumni programs center around participating in an Athletics-related event while reconnecting with fellow former student-athletes and alumni. Moreover, many regional alumni chapters organize watch parties for major sporting events that are televised. These dynamics are important from a collegiality perspective but also because they are meaningful engagements where UNC System Athletics alumni can meet, strengthen their relationships, and potentially find or offer professional, social, or philanthropic opportunities within the community.

Another example of social cohesiveness is the stories of former student-athletes' alumni who gave back to the community and institution itself. George Hoyle, a former alumnus and student-athlete in the men's soccer team at UNC Greensboro, is now a co-chair of the Athletics departments. George Hoyle, with the vision to help support the athletics department at UNC Greensboro and their student-athletes, raised approximately $2.8 million through the "5 for 5" Campaign for champions.

As such, collegiate sports serve as a cohesive force within their host communities in various ways, offering a common denominator for fans. With many of its successful sports programs, the prominence of UNC System Athletics on the national stage can be seen as a point of pride for the people in North Carolina both at home and away.

[10] Clopton, "Predicting a Sense of Community Amongst Students from the Presence of Intercollegiate Athletics," The SMART Journal, 2007.

6.4. Impact from Reputational Enhancement to Institutions and State

Appalachian State University

The university's victory against Texas A&M led to ESPN filming "College Gameday" in Boone, drawing in out-of-state visitors and boosting economic spending in Boone and surrounding areas.

College sports are watched by millions of viewers, either attending in person or watching from home. Every year, a significant number of out-of-state attendees come to North Carolina to enjoy college sports. Victories of athletics teams are shown through media, which increases the exposure and fame of the institution, and positively impacts the institution and the city that it resides in. Research has shown college sports positively influence an institution's reputation and admissions every year. Institutions that accomplished victories in sports experience a 10 to 25 percent increase in the number of applicants to their admissions office.[11] The increase in the number of applicants allows institutions to be more academically selective of their incoming freshmen students, thus improving the overall academic standing and prestige of the institution. Likewise, the institution's sports teams also gain a larger pool of potential student-athletes to recruit from, allowing for more victories and national coverage. This continuous cycle positively contributes to the national ranking of the institution and its athletics program.

Apart from the increased number of applicants, victories in sports lead to an increase of out-of-state attendees, generating more economic impacts that benefit the surrounding areas as well. For instance, Appalachian State University achieved an upset victory over Texas A&M University on September 10, 2022.[12] The victory altered ESPN's plans of filming "College Gameday" at Texas A&M University. Instead, ESPN traveled to Boone to film Appalachian State University's game against Troy University. Many out-of-state attendees converged at Appalachian State University's Kidd Brewer Stadium and surrounding regions just for this game due to ESPN's "College Gameday" coverage and the stunning upset victory Appalachian State University achieved against Texas A&M State University. The fame and victory excited the fans of Appalachian State University, which influenced them to come out in person to support their team at their home stadium. Other attendees could have been football fanatics that wanted to join in on the excitement and football atmosphere caused by ESPN coverage at Boone in person instead of through media coverage. Appalachian State University had reported a 25 percent increase in the number of applicants received after being featured on ESPN's "College GameDay" show.[13] The coverage allowed Boone to gain national reputation and bring more exposure to Appalachian State University and the State of North Carolina.

[11] Brittany Renee Mayes and Emily Giambalvo, "Does Sports Glory Create a Spike in College Applications? It's Not a Slam Dunk.," Washington Post, December 6, 2018, https://www.washingtonpost.com/graphics/2018/sports/ncaa-applicants/.

[12] Bret Strelow, "App State Takes Down No. 6 Texas A&M," App State Athletics news, September 10, 2022, https://appstatesports.com/news/2022/9/10/football-app-state-takes-down-no-6-texas-am.aspx

[13] Kevin Griffin, "App State Chancellor: University Saw 25% Application Spike After 'College GameDay' Appearance," Greensboro News, December 5, 2022, https://greensboro.com/news/state-and-regional/app-state-chancellor-university-saw-25-application-spike-after-college-gameday-appearance/article_409906c7-17cb-529d-800a-74a8a384555a.html?ac_cid=DM734177&ac_bid=1541975224#tracking-source=home-top-story

6.5. Socially Impactful

In addition to being an economic engine for the state, UNC System Athletics and individual athletics programs provide numerous social benefits. The aggregate 37,728 hours of community service provided by student-athletes directly touches local communities throughout the state. Teams and sporting events are among the strongest ties alumni have to their institution and to other alumni, resulting in the personal and professional gains that come from such a spirited network as well as increased engagement with and giving to institutions by alumni. Finally, it has been demonstrated that the visibility, character, and success of an athletics program has a meaningful spillover effect on the reputation of the institution it is a part of and the community and state as a whole.[14] These represent additional contributions UNC System Athletics and individual athletics programs make to the state and to communities throughout the state.

[14] Brittany Renee Mayes and Emily Giambalvo, "Does Sports Glory Create a Spike in College Applications? It's Not a Slam Dunk.," Washington Post, December 6, 2018, https://www.washingtonpost.com/graphics/2018/sports/ncaa-applicants/.

7. Conclusion

7.1. Aggregate Statewide Economic Impact

Athletics' aggregate economic impact derives from direct, indirect, and induced effects in three mutually exclusive categories of economic activity directly attributable to the institution:

1. *Annual operations*, including the broad base of employment, procurement, and administrative activities that comprise the daily activities of UNC System Athletics. These impacts are estimated at $807 million annually within the State of North Carolina.
2. *Capital investments*, which include state-of-good repairs, renovations, and ongoing maintenance of facilities. These impacts are estimated at $110 million annually within the state.
3. *Ancillary event attendee spending*, reflecting participants and attendees drawn to the area by UNC System Athletics that support the local hospitality, food, and retail industries. These impacts are estimated at $210 million within the state.

In the aggregate, UNC System Athletics generates an annual economic impact of approximately $1.13 billion within the state, supporting about 9,460 jobs and $393 million in earnings, and generating $22 million in tax revenues to the State of North Carolina (see Figure 7.1).

Figure 7.1: Annual Economic Impact of UNC System Athletics on the North Carolina Economy

Impact Type	Operations	Capital Investments	Ancillary Event Attendee Spending	Annual Total
Total Economic Impact	$807 M	$110 M	$210 M	**$1.13 B**
Annual Employment Supported	6,340	670	2,450	**9,460**
Employee Compensation	$298 M	$27 M	$68 M	**$393 M**
State Tax Revenues	$14 M	$2 M	$6 M	**$22 M**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

The economic impact that UNC System Athletics brings into the state economy is vast and immensely significant to the local economy by supporting their communities. This is evidenced by the wide distribution of impact at a county level throughout the state. For instance, UNC-Chapel Hill has contributed to Chatham, Durham, and Orange counties an economic impact estimated at $276.5 million in FY2021, and North Carolina State University contributed $224.9 million to Wake County. Other institutions have also made significant contributions to their local economies in each county, with an impact well over $50 million each year.

Figure 7.2: County-Level Annual Economic Impact by Athletics Program[15]

Appalachian State University	East Carolina University	Elizabeth City State University
Watauga County	Pitt County	Pasquotank County
$92.7 million	**$104.6 million**	**$5.9 million**
Fayetteville State University	North Carolina A&T State University and UNC Greensboro	North Carolina Central University
Cumberland County	Guilford County	Durham County
$5.6 million	**$78.8 million**	**$26.0 million**
North Carolina State University	UNC Asheville	UNC-Chapel Hill
Wake County	Buncombe County	Chatham, Durham & Orange County
$224.9 million	**$28.4 million**	**$276.5 million**
UNC Charlotte	UNC Pembroke	UNC Wilmington
Mecklenburg County	Robeson County	New Hanover County
$86.4 million	**$10.6 million**	**$25.3 million**
Western Carolina University	Winston Salem State University	
Jackson County	Forsyth County	
$25.6 million	**$6.8 million**	

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

7.2. Benefit of Athletics to the State and its Taxpayers

This report has made clear that UNC System Athletics produces a significant impact for the state economy, including supporting about 11,000 jobs and generating $22 million in state tax revenues per year. Taxpayers throughout the state benefit immensely from these economic impacts, as well as from the community service, social cohesion, and reputational enhancement provided by UNC System Athletics and individual athletics programs.

Beyond the numbers, the recent COVID pandemic provided a vivid illustration of the visceral impact of UNC System Athletics on individual communities throughout the state. Restrictions on human contact led to cancellations of games, hollowing out what would normally have been festive gatherings with downstream effects on restaurants, retailers, and hotels. Experiencing such a stark contrast in economic activity levels between empty arenas and packed ones so recently has given people a deeper understanding of the magnitude, reach, and emotional weight of the presence of UNC System Athletics

[15] See Appendix X for a more detailed version of this figure showing how each county impact estimate consists of the sum of the impact from annual operations, capital investments, and ancillary spending

and individual athletics programs on communities throughout the state, and thus the gain that UNC System Athletics produces for the state as a whole. This report has endeavored to provide the specific arguments and substantiated quantification to support that understanding.

8. Appendix

Appendix A: Report Methodology

The purpose of this appendix is to highlight the scope and methodology of this report and of the quantitative analysis tools used in it, so that its findings can be properly understood and interpreted. Economic impacts are the sum of direct activity attributable to UNC System Athletics (either direct spending by UNC System Athletics on operations and capital activity or spending drawn into the area by students and attendees, and the spillover impacts of that direct activity). Within an interconnected economy, each dollar of direct expenditures generates multiple waves of spillover impacts through spending on goods and services purchased within a given region ("indirect impacts") as well as spending resulting from the labor income generated by the initial activity that ripples through the region ("induced impacts"). ESI used IMPLAN modeling software to estimate indirect and induced impacts, and sums them with the direct activity to produce total economic impact. IMPLAN also estimates the number of jobs that are supported by the spillover impacts (indirect and induced impacts). For ease of comprehension, ESI converts these jobs into Full-Time Equivalent (FTE) jobs, and all jobs expressed in this report are FTE jobs.

ESI also used IMPLAN modeling to derive estimates of local and state tax revenues generated by UNC System Athletics to the State of North Carolina. For the purposes of this report, ESI takes into consideration personal income tax, sales tax and business tax; business tax includes the following taxes: motor vehicle license, severance, corporate profits, and other taxes that fall under the personal tax and taxes on production & imports net of subsidies (TOPI).

IMPLAN bases its Tax Impact results on the collected and reported taxes within the region for the given data year. The categories within the Tax Impact Report correspond to the categories in the Social Accounting Matrix (SAM). The Tax Impact Report information simply provides more detail to IMPLAN's economic impact estimates which are referenced above. Taxes are levied at different levels of government. IMPLAN provides the results at the following levels: State + Local, Federal, County, Sub County General, Sub County Special Districts, and State. For the purposes of this report, ESI has used the State fiscal impacts.

Figure A.1: County-Level Annual Economic Impact by Impact Category ($M)

County	Annual Operations	Capital Investments	Ancillary Spending	Total
Buncombe	$16.9	$10.4	$1.1	**$28.4**
Chatham, Durham & Orange	$186.1	$15.9	$74.4	**$276.5**
Cumberland	$3.2	$1.7	$0.6	**$5.6**
Durham	$22.3	$1.9	$1.9	**$26.0**
Forsyth	$5.7	$0.0	$1.1	**$6.8**
Guilford	$56.2	$3.2	$19.5	**$78.8**
Jackson	$19.0	$1.3	$5.3	**$25.6**
Mecklenburg	$78.9	$2.8	$4.7	**$86.4**
New Hanover	$19.6	$0.3	$5.3	**$25.3**
Pasquotank	$3.7	$0.3	$1.9	**$5.9**
Pitt	$73.5	$18.0	$13.1	**$104.6**
Robeson	$5.8	$3.3	$1.5	**$10.6**
Wake	$169.4	$4.9	$50.6	**$224.9**
Watauga	$54.5	$33.1	$5.1	**$92.7**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

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 employee compensation generated.

Fiscal Impacts – tax revenues generated to the State of North Carolina.

Direct Output– initial outlays usually associated with the project or activity being modeled; examples: one-time upfront capital investments, annual expenditures associated with ongoing operations of the athletics departments, spending from attendees of athletic events.

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

Direct Employee Compensation– 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 employee compensation 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 Employee Compensation– the salaries and wages earned by employees, contractors, and proprietors as part of the indirect output.

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

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

Total Employee Compensation– the sum total of direct and indirect employee compensation.

Business Tax: motor vehicle license, severance, corporate profits, and other taxes that fall under the personal tax and taxes on production & imports net of subsidies (TOPI).

Source: Econsult Solutions, Inc. (2022)

Appendix B: Detailed Economic Impact Results for Appalachian State University

Figure B.1: Total Annual Economic Impact Generated by Appalachian State University Athletics within the Local (Watauga County) Economy, from Annual Operations + Capital Investments + Attendee Spending

Watauga County	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$32.4	$22.4	$2.4	$0.8
Indirect & Induced Output ($M)	$22.1	$10.7	$1.5	$0.5
Total Output ($M)	**$54.5**	**$33.1**	**$3.8**	**$1.3**
Annual Employment Supported (FTE)	**340**	**230**	**70**	**20**
Employee Compensation ($M)	**$15.7**	**$6.6**	**$0.9**	**$0.3**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure B.2: Total Annual Economic Impact Generated by Appalachian State University Athletics within the State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

North Carolina	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$32.4	$22.4	$2.4	$0.8
Indirect & Induced Output ($M)	$36.2	$15.0	$1.8	$0.6
Total Output ($M)	**$68.6**	**$37.4**	**$4.2**	**$1.4**
Annual Employment Supported (FTE)	**430**	**250**	**70**	**20**
Employee Compensation ($M)	**$19.8**	**$7.8**	**$1.0**	**$0.3**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure B.3: Total Annual Tax Revenue Impact Generated by Appalachian State University Athletics to State of North Carolina Government, from Annual Operations + Capital Investments + Attendee Spending

Tax Type	Operations	Capital	Ancillary Football	Ancillary Other Events	Total
Income	$466,000	$258,000	$26,000	$8,000	$758,000
Sales	$677,000	$410,000	$102,000	$34,000	$1,223,000
Business	$111,000	$291,000	$12,000	$4,000	$418,000
Total	**$1,254,000**	**$959,000**	**$140,000**	**$46,000**	**$2,399,000**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

Calculating ancillary attendee spending requires an estimation of the volume and type of attendees that come to Appalachian State University athletic events for various reasons, and the application of spending profiles to each of those attendee types. As detailed in Section 4, data provided by UNC System Athletics provided the volume of attendees, which we then sorted by attendee category using ticket sales data and industry estimates: 1) students/local, 2) regional (day trip), and 3) overnight (see Figure B.4).

Figure B.4: Estimated Annual Attendance at Appalachian State University Athletics Events, by Attendee Type

	Students/Local	Regional (day trip)	Overnight
Football	141,069	26,450	9,487
Other Sports/Events	66,090	5,093	4,633
Total	**207,159**	**31,544**	**14,120**

Source: Appalachian State (2022)

Spending profiles were developed by visit type to reflect that attendee spending patterns vary based on point of origin (local vs. out of town), reason for visit, and other factors. Unique spending patterns were estimated for each attendee category using available proxy data on regional travel trends and local hotel rates.

Figure B.5 shows the spending profiles of each attendee type by expenditure category. The ancillary impacts for all event categories are not captured for students/local attendees, as student spending for these events are likely captured in direct operating activities, while the spending of local attendees is already captured in the local economy.

All ancillary spending within is estimated to take place within North Carolina.

Figure B.5: Appalachian State University Athletics Spending Profiles by Attendee Type

	Lodging	Food	Transportation	Retail	Spend per Attendee
Football					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$27	$10	$5	$42
Out of Town (Overnight)	$60	$54	$25	$10	$149
Out of Region Team (Overnight)	$45	$54	$25	$10	$134
Other Sports/Events					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$27	$10	$5	$42
Out of Town (Overnight)	$49	$54	$25	$5	$133
Out of Region Team (Overnight)	$37	$54	$25	$5	$121

Source: US General Services Administration (2022)

After developing the spending profile for each attendee category and event category, Figure B.6 then shows the total spending estimates by spending.

Figure B.6: Estimated Annual Ancillary Spending Generated by Appalachian State University Athletics Events, by Expenditure Category

	Total Ancillary Spending ($M)
Lodging	
Football Attendees	$0.6
Other Sports/Events Attendees	$0.2
Total	**$0.8**
Food & Beverage	
Football Attendees	$1.2
Other Sports/Events Attendees	$0.4
Total	**$1.6**
Local Transportation	
Football Attendees	$0.5
Other Sports/Events Attendees	$0.2
Total	**$0.7**
Retail	
Football Attendees	$0.2
Other Sports/Events Attendees	$0.0
Total	**$0.3**

Source: ESI (2022), US General Services Administration (2022)

Appendix C: Detailed Economic Impact Results for East Carolina University

Figure C.1: Total Annual Economic Impact Generated by East Carolina University Athletics within the Local (Pitt County) Economy, from Annual Operations + Capital Investments + Attendee Spending

Pitt County	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$41.7	$12.5	$5.3	$3.2
Indirect & Induced Output ($M)	$31.8	$5.5	$2.9	$1.8
Total Output ($M)	**$73.5**	**$18.0**	**$8.1**	**$5.0**
Annual Employment Supported (FTE)	**960**	**120**	**140**	**90**
Employee Compensation ($M)	**$24.5**	**$4.9**	**$2.1**	**$1.3**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure C.2: Total Annual Economic Impact Generated by East Carolina University Athletics within the State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

North Carolina	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$41.7	$12.5	$5.3	$3.2
Indirect & Induced Output ($M)	$39.8	$7.7	$3.6	$2.2
Total Output ($M)	**$81.5**	**$20.2**	**$8.8**	**$5.4**
Annual Employment Supported (FTE)	**850**	**120**	**130**	**80**
Employee Compensation ($M)	**$26.8**	**$5.5**	**$2.2**	**$1.4**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure C.3: Total Annual Tax Revenue Impact Generated by East Carolina University Athletics to State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

Tax Type	Operations	Capital	Ancillary Football	Ancillary Other Events	Total
Income	$646,000	$177,000	$67,000	$41,000	$931,000
Sales	$696,000	$223,000	$200,000	$121,000	$1,240,000
Business	$141,000	$45,000	$34,000	$21,000	$241,000
Total	**$1,483,000**	**$445,000**	**$301,000**	**$183,000**	**$2,412,000**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

Calculating ancillary attendee spending requires an estimation of the volume and type of attendees that come to East Carolina University athletic events for various reasons, and the application of spending profiles to each of those attendee types. As detailed in Section 4, data provided by UNC System Athletics provided the volume of attendees, which we then sorted by attendee category using ticket sales data and industry estimates: 1) students/local, 2) regional (day trip), and 3) overnight (see Figure C.4).

Figure C.4: Estimated Annual Attendance at East Carolina University Athletics Events, by Attendee Type

	Students/Local	Regional (day trip)	Overnight
Football	58,975	25,193	30,206
Other Sports/Events	51,165	13,184	21,009
Total	**110,141**	**38,377**	**51,215**

Source: East Carolina (2022)

Spending profiles were developed by visit type to reflect that attendee spending patterns vary based on point of origin (local vs. out of town), reason for visit, and other factors. Unique spending patterns were estimated for each attendee category using available proxy data on regional travel trends and local hotel rates.

Figure C.5 shows the spending profiles of each attendee type by expenditure category. The ancillary impacts for all event categories are not captured for students/local attendees, as student spending for these events are likely captured in direct operating activities, while the spending of local attendees is already captured in the local economy.

All ancillary spending within is estimated to take place within North Carolina.

Figure C.5: East Carolina University Athletics Spending Profiles by Attendee Type

	Lodging	Food	Transportation	Retail	Spend per Attendee
Football					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$27	$10	$5	$42
Out of Town (Overnight)	$60	$54	$25	$10	$149
Out of Region Team (Overnight)	$45	$54	$25	$10	$134
Other Sports/Events					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$27	$10	$5	$42
Out of Town (Overnight)	$49	$54	$25	$5	$133
Out of Region Team (Overnight)	$37	$54	$25	$5	$121

Source: US General Services Administration (2022)

After developing the spending profile for each attendee category and event category, Figure C.6 then shows the total spending estimates by spending.

Figure C.6: Estimated Annual Ancillary Spending Generated by East Carolina University Athletics Events, by Expenditure Category

	Total Ancillary Spending ($M)
Lodging	
Football Attendees	$1.8
Other Sports/Events Attendees	$1.0
Total	**$2.8**
Food & Beverage	
Football Attendees	$2.3
Other Sports/Events Attendees	$1.5
Total	**$3.8**
Local Transportation	
Football Attendees	$1.0
Other Sports/Events Attendees	$0.7
Total	**$1.7**
Retail	
Football Attendees	$0.4
Other Sports/Events Attendees	$0.2
Total	**$0.6**

Source: ESI (2022), US General Services Administration (2022)

Appendix D: Detailed Economic Impact Results for Elizabeth City State University

Figure D.1: Total Annual Economic Impact Generated by Elizabeth City State University Athletics within the Local (Pasquotank County) Economy, from Annual Operations + Capital Investments + Attendee Spending

Pasquotank County	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$2.8	$0.2	$1.2	$0.1
Indirect & Induced Output ($M)	$0.9	$0.1	$0.6	$0.0
Total Output ($M)	**$3.7**	**$0.3**	**$1.8**	**$0.1**
Annual Employment Supported (FTE)	**20**	**2**	**30**	**2**
Employee Compensation ($M)	**$1.1**	**$0.1**	**$0.5**	**$0.03**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure D.2: Total Annual Economic Impact Generated by Elizabeth City State University Athletics within the State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

North Carolina	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$2.8	$0.2	$1.2	$0.1
Indirect & Induced Output ($M)	$1.7	$0.1	$0.8	$0.1
Total Output ($M)	**$4.4**	**$0.3**	**$2.0**	**$0.1**
Annual Employment Supported (FTE)	**30**	**2**	**30**	**2**
Employee Compensation ($M)	**$1.3**	**$0.1**	**$0.5**	**$0.03**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure D.3: Total Annual Tax Revenue Impact Generated by Elizabeth City State University Athletics to State of North Carolina Government, from Annual Operations + Capital Investments + Attendee Spending

Tax Type	Operations	Capital	Ancillary Football	Ancillary Other Events	Total
Income	$26,000	$2,000	$12,000	$1,000	$41,000
Sales	$31,000	$4,000	$49,000	$3,000	$87,000
Business	$6,000	$1,000	$7,000	$400	$14,400
Total	**$63,000**	**$7,000**	**$68,000**	**$4,400**	**$142,400**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

Calculating ancillary attendee spending requires an estimation of the volume and type of attendees that come to Elizabeth City State University athletic events for various reasons, and the application of spending profiles to each of those attendee types. As detailed in Section 4, data provided by UNC System Athletics provided the volume of attendees, which we then sorted by attendee category using ticket sales data and industry estimates: 1) students/local, 2) regional (day trip), and 3) overnight (see Figure D.4).

Figure D.4: Estimated Annual Attendance at Elizabeth City State University Athletics Event, by Attendee Type

	Students/Local	Regional (day trip)	Overnight
Football	2,710	8,131	6,311
Other Sports/Events	9,872	304	582
Total	**12,582**	**8,436**	**6,893**

Source: Elizabeth City (2022)

Spending profiles were developed by visit type to reflect that attendee spending patterns vary based on point of origin (local vs. out of town), reason for visit, and other factors. Unique spending patterns were estimated for each attendee category using available proxy data on regional travel trends and local hotel rates.

Figure D.5 shows the spending profiles of each attendee type by expenditure category. The ancillary impacts for all event categories are not captured for students/local attendees, as student spending for these events are likely captured in direct operating activities, while the spending of local attendees is already captured in the local economy.

All ancillary spending within is estimated to take place within North Carolina.

Figure D.5: Elizabeth City State University Athletics Spending Profiles by Attendee Type

	Lodging	Food	Transportation	Retail	Spend per Attendee
Football					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$27	$10	$5	$42
Out of Town (Overnight)	$60	$54	$25	$10	$149
Out of Region Team (Overnight)	$45	$54	$25	$10	$134
Other Sports/Events					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$27	$10	$5	$42
Out of Town (Overnight)	$49	$54	$25	$5	$133
Out of Region Team (Overnight)	$37	$54	$25	$5	$121

Source: US General Services Administration (2022)

After developing the spending profile for each attendee category and event category, Figure D.6 then shows the total spending estimates by spending.

Figure D.6: Estimated Annual Ancillary Spending Generated by Elizabeth City State University Athletics Events, by Expenditure Category

	Total Ancillary Spending ($M)
Lodging	
Football Attendees	$0.4
Other Sports/Events Attendees	$0.0
Total	**$0.4**
Food & Beverage	
Football Attendees	$0.6
Other Sports/Events Attendees	$0.0
Total	**$0.6**
Local Transportation	
Football Attendees	$0.2
Other Sports/Events Attendees	$0.0
Total	**$0.3**
Retail	
Football Attendees	$0.1
Other Sports/Events Attendees	$0.0
Total	**$0.1**

Source: ESI (2022), US General Services Administration (2022)

Appendix E: Detailed Economic Impact Results for Fayetteville State University

Figure E.1: Total Annual Economic Impact Generated by Fayetteville State University Athletics within the Local (Cumberland County) Economy, from Annual Operations + Capital Investments + Attendee Spending

Cumberland County	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$2.3	$1.3	$0.4	$0.1
Indirect & Induced Output ($M)	$1.0	$0.4	$0.1	$0.1
Total Output ($M)	**$3.2**	**$1.7**	**$0.5**	**$0.2**
Annual Employment Supported (FTE)	**40**	**10**	**10**	**2**
Employee Compensation ($M)	**$1.0**	**$0.4**	**$0.1**	**$0.04**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure E.2: Total Annual Economic Impact Generated by Fayetteville State University Athletics within the State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

North Carolina	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$2.3	$1.3	$0.4	$0.1
Indirect & Induced Output ($M)	$2.0	$0.8	$0.2	$0.1
Total Output ($M)	**$4.3**	**$2.0**	**$0.6**	**$0.2**
Annual Employment Supported (FTE)	**50**	**10**	**10**	**2**
Employee Compensation ($M)	**$1.3**	**$0.5**	**$0.2**	**$0.05**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure E.3: Total Annual Tax Revenue Impact Generated by Fayetteville State University Athletics to State of North Carolina Government, from Annual Operations + Capital Investments + Attendee Spending

Tax Type	Operations	Capital	Ancillary Football	Ancillary Other Events	Total
Income	$26,000	$12,000	$3,000	$1,000	$42,000
Sales	$34,000	$19,000	$13,000	$4,000	$70,000
Business	$7,000	$4,000	$2,000	$1,000	$14,000
Total	**$67,000**	**$35,000**	**$18,000**	**$6,000**	**$126,000**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

Calculating ancillary attendee spending requires an estimation of the volume and type of attendees that come to Fayetteville State University athletic events for various reasons, and the application of spending profiles to each of those attendee types. As detailed in Section 4, data provided by UNC System Athletics provided the volume of attendees, which we then sorted by attendee category using ticket sales data and industry estimates: 1) students/local, 2) regional (day trip), and 3) overnight (see Figure E.4).

Figure E.4: Estimated Annual Attendance at Fayetteville State University Athletics Events, by Attendee Type

	Students/Local	Regional (day trip)	Overnight
Football	14,130	1,768	1,843
Other Sports/Events	13,218	393	627
Total	**27,348**	**2,160**	**2,470**

Source: Fayetteville (2022)

Spending profiles were developed by visit type to reflect that attendee spending patterns vary based on point of origin (local vs. out of town), reason for visit, and other factors. Unique spending patterns were estimated for each attendee category using available proxy data on regional travel trends and local hotel rates.

Figure E.5 shows the spending profiles of each attendee type by expenditure category. The ancillary impacts for all event categories are not captured for students/local attendees, as student spending for these events are likely captured in direct operating activities, while the spending of local attendees is already captured in the local economy.

All ancillary spending within is estimated to take place within North Carolina.

Figure E.5: Fayetteville State University Athletics Spending Profiles by Attendee Type

	Lodging	Food	Transportation	Retail	Spend per Attendee
Football					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$30	$10	$5	$44
Out of Town (Overnight)	$73	$59	$25	$10	$167
Out of Region Team (Overnight)	$55	$59	$25	$10	$149
Other Sports/Events					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$30	$10	$5	$44
Out of Town (Overnight)	$59	$59	$25	$5	$148
Out of Region Team (Overnight)	$44	$59	$25	$5	$133

Source: US General Services Administration (2022)

After developing the spending profile for each attendee category and event category, Figure E.6 then shows the total spending estimates by spending.

Figure E.6: Estimated Annual Ancillary Spending Generated by Fayetteville State University Athletics Events, by Expenditure Category

	Total Ancillary Spending ($M)
Lodging	
Football Attendees	$0.13
Other Sports/Events Attendees	$0.03
Total	**$0.17**
Food & Beverage	
Football Attendees	$0.16
Other Sports/Events Attendees	$0.05
Total	**$0.21**
Local Transportation	
Football Attendees	$0.06
Other Sports/Events Attendees	$0.02
Total	**$0.08**
Retail	
Football Attendees	$0.03
Other Sports/Events Attendees	$0.01
Total	**$0.03**

Source: ESI (2022), US General Services Administration (2022)

Appendix F: Detailed Economic Impact Results for North Carolina A&T State University

Figure F.1: Total Annual Economic Impact Generated by North Carolina A&T State University Athletics within the Local (Guilford County) Economy, from Annual Operations + Capital Investments + Attendee Spending

Guilford County	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$13.3	$0.9	$1.9	$8.7
Indirect & Induced Output ($M)	$11.7	$0.5	$1.3	$5.8
Total Output ($M)	**$25.0**	**$1.4**	**$3.2**	**$14.4**
Annual Employment Supported (FTE)	**180**	**10**	**40**	**170**
Employee Compensation ($M)	**$9.2**	**$0.4**	**$1.0**	**$4.6**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure F.2: Total Annual Economic Impact Generated by North Carolina A&T State University Athletics within the State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

North Carolina	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$13.3	$0.9	$1.9	$8.7
Indirect & Induced Output ($M)	$16.8	$0.7	$1.6	$7.4
Total Output ($M)	**$30.1**	**$1.6**	**$3.5**	**$16.1**
Annual Employment Supported (FTE)	**220**	**10**	**40**	**180**
Employee Compensation ($M)	**$10.7**	**$0.4**	**$1.1**	**$5.0**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure F.3: Total Annual Tax Revenue Impact Generated by North Carolina A&T State University Athletics to State of North Carolina Government, from Annual Operations + Capital Investments + Attendee Spending

Tax Type	Operations	Capital	Ancillary Football	Ancillary Other Events	Total
Income	$231,000	$12,000	$24,000	$109,000	$376,000
Sales	$259,000	$16,000	$68,000	$314,000	$657,000
Business	$55,000	$3,000	$12,000	$53,000	$123,000
Total	**$545,000**	**$31,000**	**$104,000**	**$476,000**	**$1,156,000**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

Calculating ancillary attendee spending requires an estimation of the volume and type of attendees that come to North Carolina A&T State University athletic events for various reasons, and the application of spending profiles to each of those attendee types. As detailed in Section 4, data provided by UNC System Athletics provided the volume of attendees, which we then sorted by attendee category using ticket sales data and industry estimates: 1) students/local, 2) regional (day trip), and 3) overnight (see Figure F.4).

Figure F.4: Estimated Annual Attendance at North Carolina A&T State University Athletics Events, by Attendee Type

	Students/Local	Regional (day trip)	Overnight
Football	37,959	13,656	8,664
Other Sports/Events	33,033	18,487	55,994
Total	**70,991**	**32,144**	**64,657**

Source: North Carolina A&T (2022)

Spending profiles were developed by visit type to reflect that attendee spending patterns vary based on point of origin (local vs. out of town), reason for visit, and other factors. Unique spending patterns were estimated for each attendee category using available proxy data on regional travel trends and local hotel rates.

Figure F.5 shows the spending profiles of each attendee type by expenditure category. The ancillary impacts for all event categories are not captured for students/local attendees, as student spending for these events are likely captured in direct operating activities, while the spending of local attendees is already captured in the local economy.

All ancillary spending within is estimated to take place within North Carolina.

Figure F.5: North Carolina A&T State University Athletics Spending Profiles by Attendee Type

	Lodging	Food	Transportation	Retail	Spend per Attendee
Football					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$30	$10	$5	$44
Out of Town (Overnight)	$69	$59	$25	$10	$163
Out of Region Team (Overnight)	$52	$59	$25	$10	$146
Other Sports/Events					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$30	$10	$5	$44
Out of Town (Overnight)	$56	$59	$25	$5	$145
Out of Region Team (Overnight)	$42	$59	$25	$5	$131

Source: US General Services Administration (2022)

After developing the spending profile for each attendee category and event category, Figure F.6 then shows the total spending estimates by spending.

Figure F.6: Estimated Annual Ancillary Spending Generated by North Carolina A&T State University Athletics, by Expenditure Category

	Total Ancillary Spending ($M)
Lodging	
Football Attendees	$0.6
Other Sports/Events Attendees	$3.1
Total	**$3.7**
Food & Beverage	
Football Attendees	$0.9
Other Sports/Events Attendees	$3.8
Total	**$4.8**
Local Transportation	
Football Attendees	$0.3
Other Sports/Events Attendees	$1.6
Total	**$1.9**
Retail	
Football Attendees	$0.2
Other Sports/Events Attendees	$0.4
Total	**$0.5**

Source: ESI (2022), US General Services Administration (2022)

Appendix G: Detailed Economic Impact Results for North Carolina Central University

Figure G.1: Total Annual Economic Impact Generated by North Carolina Central University Athletics within the Local (Durham County) Economy, from Annual Operations + Capital Investments + Attendee Spending

Durham County	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$11.9	$1.4	$1.0	$0.4
Indirect & Induced Output ($M)	$10.4	$0.5	$0.3	$0.1
Total Output ($M)	**$22.3**	**$1.9**	**$1.3**	**$0.5**
Annual Employment Supported (FTE)	**180**	**10**	**20**	**10**
Employee Compensation ($M)	**$8.7**	**$0.5**	**$0.5**	**$0.2**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure G.2: Total Annual Economic Impact Generated by North Carolina Central University Athletics within the State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

North Carolina	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$11.9	$1.4	$1.0	$0.4
Indirect & Induced Output ($M)	$14.7	$1.0	$0.7	$0.3
Total Output ($M)	**$26.6**	**$2.4**	**$1.7**	**$0.7**
Annual Employment Supported (FTE)	**210**	**10**	**20**	**10**
Employee Compensation ($M)	**$9.9**	**$0.7**	**$0.6**	**$0.2**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure G.3: Total Annual Tax Revenue Impact Generated by North Carolina Central University Athletics to State of North Carolina Government, from Annual Operations + Capital Investments + Attendee Spending

Tax Type	Operations	Capital	Ancillary Football	Ancillary Other Events	Total
Income	$155,000	$14,000	$9,000	$3,000	$181,000
Sales	$181,000	$19,000	$24,000	$9,000	$233,000
Business	$42,000	$4,000	$5,000	$2,000	$53,000
Total	**$378,000**	**$37,000**	**$38,000**	**$14,000**	**$467,000**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

Calculating ancillary attendee spending requires an estimation of the volume and type of attendees that come to North Carolina Central University athletic events for various reasons, and the application of spending profiles to each of those attendee types. As detailed in Section 4, data provided by UNC System Athletics provided the volume of attendees, which we then sorted by attendee category using ticket sales data and industry estimates: 1) students/local, 2) regional (day trip), and 3) overnight (see Figure G.4).

Figure G.4: Estimated Annual Attendance at North Carolina Central University Athletics Events, by Attendee Type

	Students/Local	Regional (day trip)	Overnight
Football	17,607	8,366	4,229
Other Sports/Events	14,099	5,704	1,184
Total	**31,706**	**14,070**	**5,413**

Source: North Carolina Central (2022)

Spending profiles were developed by visit type to reflect that attendee spending patterns vary based on point of origin (local vs. out of town), reason for visit, and other factors. Unique spending patterns were estimated for each attendee category using available proxy data on regional travel trends and local hotel rates.

Figure G.5 shows the spending profiles of each attendee type by expenditure category. The ancillary impacts for all event categories are not captured for students/local attendees, as student spending for these events are likely captured in direct operating activities, while the spending of local attendees is already captured in the local economy.

All ancillary spending within is estimated to take place within North Carolina.

Figure G.5: North Carolina Central University Athletics Spending Profiles by Attendee Type

	Lodging	Food	Transportation	Retail	Spend per Attendee
Football					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$30	$10	$5	$44
Out of Town (Overnight)	$71	$59	$25	$10	$165
Out of Region Team (Overnight)	$53	$59	$25	$10	$147
Other Sports/Events					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$30	$10	$5	$44
Out of Town (Overnight)	$58	$59	$25	$5	$146
Out of Region Team (Overnight)	$43	$59	$25	$5	$132

Source: US General Services Administration (2022)

After developing the spending profile for each attendee category and event category, Figure G.6 then shows the total spending estimates by spending.

Figure G.6: Estimated Annual Ancillary Spending Generated by North Carolina Central University Athletics Events, by Expenditure Category

	Total Ancillary Spending ($M)
Lodging	
Football Attendees	$0.3
Other Sports/Events Attendees	$0.1
Total	**$0.4**
Food & Beverage	
Football Attendees	$0.5
Other Sports/Events Attendees	$0.2
Total	**$0.7**
Local Transportation	
Football Attendees	$0.2
Other Sports/Events Attendees	$0.1
Total	**$0.3**
Retail	
Football Attendees	$0.1
Other Sports/Events Attendees	$0.0
Total	**$0.1**

Source: ESI (2022), US General Services Administration (2022)

Appendix H: Detailed Economic Impact Results for North Carolina State University

Figure H.1: Total Annual Economic Impact Generated by North Carolina State University Athletics within the Local (Wake County) Economy, from Annual Operations + Capital Investments + Attendee Spending

Wake County	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$75.4	$2.9	$16.7	$12.3
Indirect & Induced Output ($M)	$93.9	$2.0	$12.3	$9.3
Total Output ($M)	**$169.4**	**$4.9**	**$29.0**	**$21.6**
Annual Employment Supported (FTE)	**1350**	**30**	**330**	**260**
Employee Compensation ($M)	**$71.8**	**$1.6**	**$9.7**	**$7.3**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure H.2: Total Annual Economic Impact Generated by North Carolina State University Athletics within the State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

North Carolina	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$75.4	$2.9	$16.7	$12.3
Indirect & Induced Output ($M)	$95.7	$2.4	$14.2	$10.6
Total Output ($M)	**$171.2**	**$5.3**	**$30.9**	**$22.9**
Annual Employment Supported (FTE)	**1420**	**30**	**340**	**270**
Employee Compensation ($M)	**$74.8**	**$1.7**	**$10.2**	**$7.6**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure H.3: Total Annual Tax Revenue Impact Generated by North Carolina State University Athletics to State of North Carolina Government, from Annual Operations + Capital Investments + Attendee Spending

Tax Type	Operations	Capital	Ancillary Football	Ancillary Other Events	Total
Income	$1,587,000	$43,000	$221,000	$165,000	$2,016,000
Sales	$1,540,000	$51,000	$576,000	$404,000	$2,571,000
Business	$356,000	$12,000	$114,000	$81,000	$563,000
Total	**$3,483,000**	**$106,000**	**$911,000**	**$650,000**	**$5,150,000**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

Calculating ancillary attendee spending requires an estimation of the volume and type of attendees that come to North Carolina State University athletic events for various reasons, and the application of spending profiles to each of those attendee types. As detailed in Section 4, data provided by UNC System Athletics provided the volume of attendees, which we then sorted by attendee category using ticket sales data and industry estimates: 1) students/local, 2) regional (day trip), and 3) overnight (see Figure H.4).

Figure H.4: Estimated Annual Attendance at North Carolina State University Athletics Events, by Attendee Type

	Students/Local	Regional (day trip)	Overnight
Football	**206,096**	**104,019**	**72,630**
Other Sports/Events	**241,065**	**141,046**	**43,640**
Total	**447,161**	**245,065**	**116,270**

Source: North Carolina State (2022)

Spending profiles were developed by visit type to reflect that attendee spending patterns vary based on point of origin (local vs. out of town), reason for visit, and other factors. Unique spending patterns were estimated for each attendee category using available proxy data on regional travel trends and local hotel rates.

Figure H.5 shows the spending profiles of each attendee type by expenditure category. The ancillary impacts for all event categories are not captured for students/local attendees, as student spending for these events are likely captured in direct operating activities, while the spending of local attendees is already captured in the local economy.

All ancillary spending within is estimated to take place within North Carolina.

Figure H.5: North Carolina State University Athletics Spending Profiles by Attendee Type

	Lodging	Food	Transportation	Retail	Spend per Attendee
Football					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$30	$10	$5	$44
Out of Town (Overnight)	$85	$59	$25	$10	$178
Out of Region Team (Overnight)	$63	$59	$25	$10	$157
Other Sports/Events					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$30	$10	$5	$44
Out of Town (Overnight)	$65	$59	$25	$5	$153
Out of Region Team (Overnight)	$48	$59	$25	$5	$137

Source: US General Services Administration (2022)

After developing the spending profile for each attendee category and event category, Figure H.6 then shows the total spending estimates by spending.

Figure H.6: Estimated Annual Ancillary Spending Generated by North Carolina State University Athletics Events, by Expenditure Category

	Total Ancillary Spending ($M)
Lodging	
Football Attendees	$6.1
Other Sports/Events Attendees	$2.8
Total	**$8.9**
Food & Beverage	
Football Attendees	$7.4
Other Sports/Events Attendees	$6.7
Total	**$14.1**
Local Transportation	
Football Attendees	$2.8
Other Sports/Events Attendees	$2.5
Total	**$5.3**
Retail	
Football Attendees	$1.2
Other Sports/Events Attendees	$0.9
Total	**$2.2**

Source: ESI (2022), US General Services Administration (2022)

Appendix I: Detailed Economic Impact Results for UNC Asheville

Figure I.1: Total Annual Economic Impact Generated by UNC Asheville Athletics within the Local (Buncombe County) Economy, from Annual Operations + Capital Investments + Attendee Spending

Buncombe County	Operations	Capital	Ancillary Basketball	Ancillary Other Events
Direct Output ($M)	$7.7	$6.4	$0.2	$0.4
Indirect & Induced Output ($M)	$9.2	$4.1	$0.1	$0.3
Total Output ($M)	**$16.9**	**$10.4**	**$0.4**	**$0.7**
Annual Employment Supported (FTE)	**160**	**70**	**5**	**10**
Employee Compensation ($M)	**$4.5**	**$2.7**	**$0.1**	**$0.2**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure I.2: Total Annual Economic Impact Generated by UNC Asheville Athletics within the State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

North Carolina	Operations	Capital	Ancillary Basketball	Ancillary Other Events
Direct Output ($M)	$7.7	$6.4	$0.2	$0.4
Indirect & Induced Output ($M)	$11.4	$5.1	$0.2	$0.3
Total Output ($M)	**$19.1**	**$11.4**	**$0.4**	**$0.8**
Annual Employment Supported (FTE)	**180**	**70**	**5**	**10**
Employee Compensation ($M)	**$5.1**	**$2.9**	**$0.1**	**$0.2**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure I.3: Total Annual Tax Revenue Impact Generated by UNC Asheville to State of North Carolina Government, from Annual Operations + Capital Investments + Attendee Spending

Tax Type	Operations	Capital	Ancillary Basketball	Ancillary Other Events	Total
Income	$123,000	$89,000	$3,000	$6,000	$221,000
Sales	$187,000	$126,000	$8,000	$15,000	$336,000
Business	$33,000	$23,000	$1,300	$2,400	$59,700
Total	**$343,000**	**$238,000**	**$12,300**	**$23,400**	**$616,700**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

Calculating ancillary attendee spending requires an estimation of the volume and type of attendees that come to UNC Asheville athletic events for various reasons, and the application of spending profiles to each of those attendee types. As detailed in Section 4, data provided by UNC System Athletics provided the volume of attendees, which we then sorted by attendee category using ticket sales data and industry estimates: 1) students/local, 2) regional (day trip), and 3) overnight (see Figure I.4).

Figure I.4: Estimated Annual Attendance at UNC Asheville Athletics Events, by Attendee Type

	Students/Local	Regional (day trip)	Overnight
Basketball	8,539	1,068	1,096
Other Sports/Events	26,979	1,561	2,519
Total	**35,518**	**2,630**	**3,615**

Source: UNC Asheville (2022)

Spending profiles were developed by visit type to reflect that attendee spending patterns vary based on point of origin (local vs. out of town), reason for visit, and other factors. Unique spending patterns were estimated for each attendee category using available proxy data on regional travel trends and local hotel rates.

Figure I.5 shows the spending profiles of each attendee type by expenditure category. The ancillary impacts for all event categories are not captured for students/local attendees, as student spending for these events are likely captured in direct operating activities, while the spending of local attendees is already captured in the local economy.

All ancillary spending within is estimated to take place within North Carolina.

Figure I.5: UNC Asheville Athletics Spending Profiles by Attendee Type

	Lodging	Food	Transportation	Retail	Spend per Attendee
Basketball					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$30	$10	$5	$44
Out of Town (Overnight)	$80	$59	$25	$10	$174
Out of Region Team (Overnight)	$60	$59	$25	$10	$154
Other Sports/Events					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$30	$10	$5	$44
Out of Town (Overnight)	$65	$59	$25	$5	$154
Out of Region Team (Overnight)	$49	$59	$25	$5	$138

Source: US General Services Administration (2022)

After developing the spending profile for each attendee category and event category, Figure I.6 then shows the total spending estimates by spending.

Figure I.6: Estimated Annual Ancillary Spending Generated by UNC Asheville Athletics Events, by Expenditure Category

	Total Ancillary Spending ($M)
Lodging	
Basketball Attendees	$0.09
Other Sports/Events Attendees	$0.15
Total	**$0.24**
Food & Beverage	
Basketball Attendees	$0.10
Other Sports/Events Attendees	$0.19
Total	**$0.29**
Local Transportation	
Basketball Attendees	$0.04
Other Sports/Events Attendees	$0.08
Total	**$0.12**
Retail	
Basketball Attendees	$0.02
Other Sports/Events Attendees	$0.02
Total	**$0.04**

Source: ESI (2022), US General Services Administration (2022)

Appendix J: Detailed Economic Impact Results for UNC-Chapel Hill

Figure J.1: Total Annual Economic Impact Generated by UNC-Chapel Hill Athletics within the Local (Chatham, Durham & Orange Counties) Economy, from Annua Operations + Capital Investments + Attendee Spending

Chatham, Durham & Orange Counties	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$98.6	$11.0	$28.9	$24.0
Indirect & Induced Output ($M)	$87.5	$4.9	$11.7	$9.8
Total Output ($M)	**$186.1**	**$15.9**	**$40.6**	**$33.9**
Annual Employment Supported (FTE)	**1540**	**90**	**480**	**410**
Employee Compensation ($M)	**$72.3**	**$4.3**	**$15.0**	**$12.6**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure J.2: Total Annual Economic Impact Generated by UNC-Chapel Hill Athletics within the State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

North Carolina	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$98.6	$11.0	$28.9	$24.0
Indirect & Induced Output ($M)	$113.4	$8.0	$19.2	$16.2
Total Output ($M)	**$212.0**	**$19.0**	**$48.1**	**$40.2**
Annual Employment Supported (FTE)	**1690**	**110**	**520**	**450**
Employee Compensation ($M)	**$79.2**	**$5.2**	**$17.0**	**$14.2**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure J.3: Total Annual Tax Revenue Impact Generated by UNC-Chapel Hill Athletics to State of North Carolina Government, from Annual Operations + Capital Investments + Attendee Spending

Tax Type	Operations	Capital	Ancillary Football	Ancillary Other Events	Total
Income	$1,548,000	$129,000	$299,000	$251,000	$2,227,000
Sales	$1,428,000	$152,000	$717,000	$584,000	$2,881,000
Business	$362,000	$38,000	$167,000	$136,000	$703,000
Total	**$3,338,000**	**$319,000**	**$1,183,000**	**$971,000**	**$5,811,000**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

Calculating ancillary attendee spending requires an estimation of the volume and type of attendees that come to UNC-Chapel Hill athletic events for various reasons, and the application of spending profiles to each of those attendee types. As detailed in Section 4, data provided by UNC System Athletics provided the volume of attendees, which we then sorted by attendee category using ticket sales data and industry estimates: 1) students/local, 2) regional (day trip), and 3) overnight (see Figure J.4).

Figure J.4: Estimated Annual Attendance at UNC-Chapel Hill Athletics Events, by Attendee Type

	Students/Local	Regional (day trip)	Overnight
Football	56,658	201,377	117,843
Other Sports/Events	375,658	241,618	85,508
Total	**432,316**	**442,995**	**203,351**

Source: UNC Chapel Hill (2022)

Spending profiles were developed by visit type to reflect that attendee spending patterns vary based on point of origin (local vs. out of town), reason for visit, and other factors. Unique spending patterns were estimated for each attendee category using available proxy data on regional travel trends and local hotel rates.

Figure J.5 shows the spending profiles of each attendee type by expenditure category. The ancillary impacts for all event categories are not captured for students/local attendees, as student spending for these events are likely captured in direct operating activities, while the spending of local attendees is already captured in the local economy.

All ancillary spending within is estimated to take place within North Carolina.

Figure J.5: UNC-Chapel Hill Athletics Spending Profiles by Attendee Type

	Lodging	Food	Transportation	Retail	Spend per Attendee
Football					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$35	$10	$5	$49
Out of Town (Overnight)	$70	$69	$25	$10	$174
Out of Region Team (Overnight)	$52	$69	$25	$10	$156
Other Sports/Events					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$35	$10	$5	$49
Out of Town (Overnight)	$57	$69	$25	$5	$155
Out of Region Team (Overnight)	$42	$69	$25	$5	$141

Source; US General Services Administration (2022)

After developing the spending profile for each attendee category and event category, Figure J.6 then shows the total spending estimates by spending.

Figure J.6: Estimated Annual Ancillary Spending Generated by UNC-Chapel Hill Athletics Events, by Expenditure Category

	Total Ancillary Spending ($M)
Lodging	
Football Attendees	$8.2
Other Sports/Events Attendees	$4.8
Total	**$13.0**
Food & Beverage	
Football Attendees	$15.0
Other Sports/Events Attendees	$14.0
Total	**$29.3**
Local Transportation	
Football Attendees	$5.0
Other Sports/Events Attendees	$4.0
Total	**$9.4**
Retail	
Football Attendees	$2.0
Other Sports/Events Attendees	$2.0
Total	**$3.8**

Source: ESI (2022), US General Services Administration (2022)

Appendix K: Detailed Economic Impact Results for UNC Charlotte

Figure K.1: Total Annual Economic Impact Generated by UNC Charlotte Athletics within the Local (Mecklenburg County) Economy, from Annual Operations + Capital Investments + Attendee Spending

Mecklenburg County	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$36.7	$1.7	$1.3	$1.5
Indirect & Induced Output ($M)	$42.2	$1.0	$0.9	$1.0
Total Output ($M)	**$78.9**	**$2.8**	**$2.2**	**$2.5**
Annual Employment Supported (FTE)	**360**	**10**	**20**	**30**
Employee Compensation ($M)	**$30.9**	**$0.9**	**$0.7**	**$0.8**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure K.2: Total Annual Economic Impact Generated by UNC Charlotte Athletics within the State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

North Carolina	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$36.7	$1.7	$1.3	$1.5
Indirect & Induced Output ($M)	$50.1	$1.3	$1.0	$1.2
Total Output ($M)	**$86.8**	**$3.0**	**$2.3**	**$2.7**
Annual Employment Supported (FTE)	**410**	**20**	**20**	**30**
Employee Compensation ($M)	**$32.9**	**$0.9**	**$0.7**	**$0.8**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure K.3: Total Annual Tax Revenue Impact Generated by UNC Charlotte Athletics to State of North Carolina Government, from Annual Operations + Capital Investments + Attendee Spending

Tax Type	Operations	Capital	Ancillary Football	Ancillary Other Events	Total
Income	$744,000	$25,000	$18,000	$22,000	$809,000
Sales	$587,000	$27,000	$36,000	$42,000	$692,000
Business	$144,000	$6,000	$7,000	$9,000	$166,000
Total	**$1,475,000**	**$58,000**	**$61,000**	**$73,000**	**$1,667,000**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

Calculating ancillary attendee spending requires an estimation of the volume and type of attendees that come to UNC Charlotte athletic events for various reasons, and the application of spending profiles to each of those attendee types. As detailed in Section 4, data provided by UNC System Athletics provided the volume of attendees, which we then sorted by attendee category using ticket sales data and industry estimates: 1) students/local, 2) regional (day trip), and 3) overnight (see Figure K.4).

Figure K.4: Estimated Annual Attendance at UNC Charlotte Athletics Events, by Attendee Type

	Students/Local	Regional (day trip)	Overnight
Football	80,495	11,963	4,502
Other Sports/Events	97,945	7,606	7,665
Total	**178,440**	**19,569**	**12,167**

Source: UNC Charlotte (2022)

Spending profiles were developed by visit type to reflect that attendee spending patterns vary based on point of origin (local vs. out of town), reason for visit, and other factors. Unique spending patterns were estimated for each attendee category using available proxy data on regional travel trends and local hotel rates.

Figure K.5 shows the spending profiles of each attendee type by expenditure category. The ancillary impacts for all event categories are not captured for students/local attendees, as student spending for these events are likely captured in direct operating activities, while the spending of local attendees is already captured in the local economy.

All ancillary spending within is estimated to take place within North Carolina.

Figure K.5: UNC Charlotte Athletics Spending Profiles by Attendee Type

	Lodging	Food	Transportation	Retail	Spend per Attendee
Football					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$32	$10	$5	$47
Out of Town (Overnight)	$80	$64	$25	$10	$178
Out of Region Team (Overnight)	$60	$64	$25	$10	$159
Other Sports/Events					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$32	$10	$5	$47
Out of Town (Overnight)	$65	$64	$25	$5	$158
Out of Region Team (Overnight)	$48	$64	$25	$5	$142

Source: US General Services Administration (2022)

After developing the spending profile for each attendee category and event category, Figure K.6 then shows the total spending estimates by spending.

Figure K.6: Estimated Annual Ancillary Spending Generated by UNC Charlotte Athletics Events, by Expenditure Category

	Total Ancillary Spending ($M)
Lodging	
Football Attendees	$0.3
Other Sports/Events Attendees	$0.5
Total	**$0.8**
Food & Beverage	
Football Attendees	$0.7
Other Sports/Events Attendees	$0.7
Total	**$1.4**
Local Transportation	
Football Attendees	$0.2
Other Sports/Events Attendees	$0.3
Total	**$0.5**
Retail	
Football Attendees	$0.1
Other Sports/Events Attendees	$0.1
Total	**$0.2**

Source: ESI (2022), US General Services Administration (2022)

Appendix L: Detailed Economic Impact Results for UNC Greensboro

Figure L.1: Total Annual Economic Impact Generated by UNC Greensboro Athletics within the Local (Guilford County) Economy, from Annual Operations + Capital Investments + Attendee Spending

Guilford County	Operations	Capital	Ancillary Basketball	Ancillary Other Events
Direct Output ($M)	$16.0	$1.1	$0.2	$0.9
Indirect & Induced Output ($M)	$15.2	$0.7	$0.1	$0.6
Total Output ($M)	**$31.2**	**$1.8**	**$0.3**	**$1.5**
Annual Employment Supported (FTE)	**240**	**10**	**5**	**20**
Employee Compensation ($M)	**$9.5**	**$0.5**	**$0.1**	**$0.5**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure L.2: Total Annual Economic Impact Generated by UNC Greensboro Athletics within the State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

North Carolina	Operations	Capital	Ancillary Basketball	Ancillary Other Events
Direct Output ($M)	$16.0	$1.1	$0.2	$0.9
Indirect & Induced Output ($M)	$21.5	$0.9	$0.2	$0.8
Total Output ($M)	**$37.5**	**$2.0**	**$0.4**	**$1.7**
Annual Employment Supported (FTE)	**280**	**10**	**5**	**20**
Employee Compensation ($M)	**$11.3**	**$0.5**	**$0.1**	**$0.5**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure L.3: Total Annual Tax Revenue Impact Generated by UNC Greensboro Athletics to State of North Carolina Government, from Annual Operations + Capital Investments + Attendee Spending

Tax Type	Operations	Capital	Ancillary Basketball	Ancillary Other Events	Total
Income	$255,000	$16,000	$2,000	$11,000	$284,000
Sales	$324,000	$21,000	$7,000	$32,000	$384,000
Business	$67,000	$4,000	$1,100	$5,000	$77,100
Total	**$646,000**	**$41,000**	**$10,100**	**$48,000**	**$745,100**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

Calculating ancillary attendee spending requires an estimation of the volume and type of attendees that come to UNC Greensboro athletic events for various reasons, and the application of spending profiles to each of those attendee types. As detailed in Section 4, data provided by UNC System Athletics provided the volume of attendees, which we then sorted by attendee category using ticket sales data and industry estimates: 1) students/local, 2) regional (day trip), and 3) overnight (see Figure L.4).

Figure L.4: Estimated Annual Attendance at UNC Greensboro Athletics Events, by Attendee Type

	Students/Local	Regional (day trip)	Overnight
Basketball	32,519	2,034	707
Other Sports/Events	64,116	5,246	4,939
Total	**96,636**	**7,280**	**5,646**

Source: UNC Greensboro (2022)

Spending profiles were developed by visit type to reflect that attendee spending patterns vary based on point of origin (local vs. out of town), reason for visit, and other factors. Unique spending patterns were estimated for each attendee category using available proxy data on regional travel trends and local hotel rates.

Figure L.5 shows the spending profiles of each attendee type by expenditure category. The ancillary impacts for all event categories are not captured for students/local attendees, as student spending for these events are likely captured in direct operating activities, while the spending of local attendees is already captured in the local economy.

All ancillary spending within is estimated to take place within North Carolina.

Figure L.5: UNC Greensboro Athletics Spending Profiles by Attendee Type

	Lodging	Food	Transportation	Retail	Spend per Attendee
Basketball					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$30	$10	$5	$44
Out of Town (Overnight)	$69	$59	$25	$10	$163
Out of Region Team (Overnight)	$52	$59	$25	$10	$146
Other Sports/Events					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$30	$10	$5	$44
Out of Town (Overnight)	$56	$59	$25	$5	$145
Out of Region Team (Overnight)	$42	$59	$25	$5	$131

Source: US General Services Administration (2022)

After developing the spending profile for each attendee category and event category, Figure L.6 then shows the total spending estimates by spending.

Figure L.6: Estimated Annual Ancillary Spending Generated by UNC Greensboro Athletics Events, by Expenditure Category

	Total Ancillary Spending ($M)
Lodging	
Basketball Attendees	$0.0
Other Sports/Events Attendees	$0.3
Total	**$0.3**
Food & Beverage	
Basketball Attendees	$0.1
Other Sports/Events Attendees	$0.4
Total	**$0.5**
Local Transportation	
Basketball Attendees	$0.0
Other Sports/Events Attendees	$0.2
Total	**$0.2**
Retail	
Basketball Attendees	$0.0
Other Sports/Events Attendees	$0.1
Total	**$0.1**

Source: ESI (2022), US General Services Administration (2022)

Appendix M: Detailed Economic Impact Results for UNC Pembroke

Figure M.1: Total Annual Economic Impact Generated by UNC Pembroke Athletics within the Local (Robeson County) Economy, from Annual Operations + Capital Investments + Attendee Spending

Robeson County	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$3.6	$2.4	$0.4	$0.6
Indirect & Induced Output ($M)	$2.2	$0.9	$0.2	$0.3
Total Output ($M)	**$5.8**	**$3.3**	**$0.6**	**$0.9**
Annual Employment Supported (FTE)	**120**	**20**	**10**	**20**
Employee Compensation ($M)	**$1.0**	**$0.6**	**$0.2**	**$0.2**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure M.2: Total Annual Economic Impact Generated by UNC Pembroke Athletics within the State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

North Carolina	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$3.6	$2.4	$0.4	$0.6
Indirect & Induced Output ($M)	$3.5	$1.3	$0.3	$0.4
Total Output ($M)	**$7.0**	**$3.7**	**$0.7**	**$1.0**
Annual Employment Supported (FTE)	**120**	**20**	**10**	**20**
Employee Compensation ($M)	**$1.3**	**$0.7**	**$0.2**	**$0.2**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure M.3: Total Annual Tax Revenue Impact Generated by UNC Pembroke Athletics to State of North Carolina Government, from Annual Operations + Capital Investments + Attendee Spending

Tax Type	Operations	Capital	Ancillary Football	Ancillary Other Events	Total
Income	$36,000	$34,000	$4,000	$6,000	$80,000
Sales	$73,000	$56,000	$24,000	$34,000	$187,000
Business	$13,000	$10,000	$4,000	$6,000	$33,000
Total	**$122,000**	**$100,000**	**$32,000**	**$46,000**	**$300,000**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

Calculating ancillary attendee spending requires an estimation of the volume and type of attendees that come to UNC Pembroke athletic events for various reasons, and the application of spending profiles to each of those attendee types. As detailed in Section 4, data provided by UNC System Athletics provided the volume of attendees, which we then sorted by attendee category using ticket sales data and industry estimates: 1) students/local, 2) regional (day trip), and 3) overnight (see Figure M.4).

Figure M.4: Estimated Annual Attendance at UNC Pembroke Athletics Events, by Attendee Type

	Students/Local	Regional (day trip)	Overnight
Football	12,371	3,199	1,671
Other Sports/Events	19,545	5,373	2,503
Total	**31,916**	**8,572**	**4,174**

Source: UNC Pembroke (2022)

Spending profiles were developed by visit type to reflect that attendee spending patterns vary based on point of origin (local vs. out of town), reason for visit, and other factors. Unique spending patterns were estimated for each attendee category using available proxy data on regional travel trends and local hotel rates.

Figure M.5 shows the spending profiles of each attendee type by expenditure category. The ancillary impacts for all event categories are not captured for students/local attendees, as student spending for these events are likely captured in direct operating activities, while the spending of local attendees is already captured in the local economy.

All ancillary spending within is estimated to take place within North Carolina.

Figure M.5: UNC Pembroke Athletics Spending Profiles by Attendee Type

	Lodging	Food	Transportation	Retail	Spend per Attendee
Football					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$27	$10	$5	$42
Out of Town (Overnight)	$121	$54	$25	$10	$210
Out of Region Team (Overnight)	$91	$54	$25	$10	$180
Other Sports/Events					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$27	$10	$5	$42
Out of Town (Overnight)	$98	$54	$25	$5	$182
Out of Region Team (Overnight)	$74	$54	$25	$5	$157

Source: US General Services Administration (2022)

After developing the spending profile for each attendee category and event category, Figure M.6 then shows the total spending estimates by spending.

Figure M.6: Estimated Annual Ancillary Spending Generated by UNC Pembroke Athletics Events, by Expenditure Category

	Total Ancillary Spending ($M)
Lodging	
Football Attendees	$0.2
Other Sports/Events Attendees	$0.2
Total	**$0.4**
Food & Beverage	
Football Attendees	$0.2
Other Sports/Events Attendees	$0.3
Total	**$0.5**
Local Transportation	
Football Attendees	$0.1
Other Sports/Events Attendees	$0.1
Total	**$0.2**
Retail	
Football Attendees	$0.0
Other Sports/Events Attendees	$0.0
Total	**$0.1**

Source: ESI (2022), US General Services Administration (2022)

Appendix N: Detailed Economic Impact Results for UNC Wilmington

Figure N.1: Total Annual Economic Impact Generated by UNC Wilmington Athletics within the Local (New Hanover County) Economy, from Annual Operations + Capital Investments + Attendee Spending

New Hanover County	Operations	Capital	Ancillary Basketball	Ancillary Other Events
Direct Output ($M)	$12.5	$0.2	$0.4	$2.9
Indirect & Induced Output ($M)	$7.2	$0.1	$0.2	$1.8
Total Output ($M)	**$19.6**	**$0.3**	**$0.6**	**$4.7**
Annual Employment Supported (FTE)	**140**	**2**	**10**	**60**
Employee Compensation ($M)	**$9.2**	**$0.1**	**$0.2**	**$1.4**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure N.2: Total Annual Economic Impact Generated by UNC Wilmington Athletics within the State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

North Carolina	Operations	Capital	Ancillary Basketball	Ancillary Other Events
Direct Output ($M)	$12.5	$0.2	$0.4	$2.9
Indirect & Induced Output ($M)	$10.2	$0.2	$0.3	$2.2
Total Output ($M)	**$22.6**	**$0.4**	**$0.6**	**$5.1**
Annual Employment Supported (FTE)	**160**	**0**	**10**	**60**
Employee Compensation ($M)	**$10.1**	**$0.1**	**$0.2**	**$1.5**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure N.3: Total Annual Tax Revenue Impact Generated by UNC Wilmington Athletics to State of North Carolina Government, from Annual Operations + Capital Investments + Attendee Spending

Tax Type	Operations	Capital	Ancillary Basketball	Ancillary Other Events	Total
Income	$209,000	$3,000	$4,000	$35,000	$251,000
Sales	$192,000	$4,000	$13,000	$110,000	$319,000
Business	$39,000	$700	$1,900	$16,000	$57,600
Total	**$440,000**	**$7,700**	**$18,900**	**$161,000**	**$627,600**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

Calculating ancillary attendee spending requires an estimation of the volume and type of attendees that come to UNC Wilmington athletic events for various reasons, and the application of spending profiles to each of those attendee types. As detailed in Section 4, data provided by UNC System Athletics provided the volume of attendees, which we then sorted by attendee category using ticket sales data and industry estimates: 1) students/local, 2) regional (day trip), and 3) overnight (see Figure N.4).

Figure N.4: Estimated Annual Attendance at UNC Wilmington Athletics Events, by Attendee Type

	Students/Local	Regional (day trip)	Overnight
Basketball	47,867	4,258	1,161
Other Sports/Events	60,908	27,102	13,239
Total	**108,775**	**31,360**	**14,400**

Source: UNC Wilmington (2022)

Spending profiles were developed by visit type to reflect that attendee spending patterns vary based on point of origin (local vs. out of town), reason for visit, and other factors. Unique spending patterns were estimated for each attendee category using available proxy data on regional travel trends and local hotel rates.

Figure N.5 shows the spending profiles of each attendee type by expenditure category. The ancillary impacts for all event categories are not captured for students/local attendees, as student spending for these events are likely captured in direct operating activities, while the spending of local attendees is already captured in the local economy.

All ancillary spending within is estimated to take place within North Carolina.

Figure N.5: UNC Wilmington Athletics Spending Profiles by Attendee Type

	Lodging	Food	Transportation	Retail	Spend per Attendee
Basketball					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$27	$10	$5	$42
Out of Town (Overnight)	$76	$59	$25	$10	$170
Out of Region Team (Overnight)	$57	$59	$25	$10	$151
Other Sports/Events					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$27	$10	$5	$42
Out of Town (Overnight)	$62	$54	$25	$5	$146
Out of Region Team (Overnight)	$47	$54	$25	$5	$130

Source: US General Services Administration (2022)

After developing the spending profile for each attendee category and event category, Figure N.6 then shows the total spending estimates by spending.

Figure N.6: Estimated Annual Ancillary Spending Generated by UNC Wilmington Athletics Events, by Expenditure Category

	Total Ancillary Spending ($M)
Lodging	
Basketball Attendees	$0.1
Other Sports/Events Attendees	$0.8
Total	**$0.9**
Food & Beverage	
Basketball Attendees	$0.2
Other Sports/Events Attendees	$1.4
Total	**$1.6**
Local Transportation	
Basketball Attendees	$0.1
Other Sports/Events Attendees	$0.6
Total	**$0.7**
Retail	
Basketball Attendees	$0.0
Other Sports/Events Attendees	$0.2
Total	**$0.2**

Source: ESI (2022), US General Services Administration (2022)

Appendix O: Detailed Economic Impact Results for Western Carolina University

Figure O.1: Total Annual Economic Impact Generated by Western Carolina University Athletics within the Local (Jackson County) Economy, from Annual Operations + Capital Investments + Attendee Spending

Jackson County	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$14.3	$1.0	$2.8	$1.0
Indirect & Induced Output ($M)	$4.6	$0.3	$1.1	$0.4
Total Output ($M)	**$19.0**	**$1.3**	**$3.9**	**$1.4**
Annual Employment Supported (FTE)	**180**	**10**	**50**	**20**
Employee Compensation ($M)	**$7.7**	**$0.3**	**$1.2**	**$0.4**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure O.2: Total Annual Economic Impact Generated by Western Carolina University Athletics within the State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

North Carolina	Operations	Capital	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$14.3	$1.0	$2.8	$1.0
Indirect & Induced Output ($M)	$13.6	$0.5	$1.6	$0.6
Total Output ($M)	**$27.9**	**$1.5**	**$4.4**	**$1.6**
Annual Employment Supported (FTE)	**230**	**10**	**50**	**20**
Employee Compensation ($M)	**$10.2**	**$0.3**	**$1.3**	**$0.5**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)

Figure O.3: Total Annual Tax Revenue Impact Generated by Western Carolina University Athletics to State of North Carolina Government, from Annual Operations + Capital Investments + Attendee Spending

Tax Type	Operations	Capital	Ancillary Football	Ancillary Other Events	Total
Income	$197,000	$8,000	$26,000	$10,000	$241,000
Sales	$249,000	$13,000	$90,000	$31,000	$383,000
Business	$51,000	$2,300	$14,000	$5,000	$72,300
Total	**$497,000**	**$23,300**	**$130,000**	**$46,000**	**$696,300**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)

Calculating ancillary attendee spending requires an estimation of the volume and type of attendees that come to Western Carolina University athletic events for various reasons, and the application of spending profiles to each of those attendee types. As detailed in Section 4, data provided by UNC System Athletics provided the volume of attendees, which we then sorted by attendee category using ticket sales data and industry estimates: 1) students/local, 2) regional (day trip), and 3) overnight (see Figure O.4).

Figure O.4: Estimated Annual Attendance at Western Carolina Athletics Events, by Attendee Type

	Students/Local	Regional (day trip)	Overnight
Football	30,911	12,771	16,057
Other Sports/Events	37,041	10,988	4,738
Total	**67,953**	**23,759**	**20,796**

Source: Western Carolina (2022)

Spending profiles were developed by visit type to reflect that attendee spending patterns vary based on point of origin (local vs. out of town), reason for visit, and other factors. Unique spending patterns were estimated for each attendee category using available proxy data on regional travel trends and local hotel rates.

Figure O.5 shows the spending profiles of each attendee type by expenditure category. The ancillary impacts for all event categories are not captured for students/local attendees, as student spending for these events are likely captured in direct operating activities, while the spending of local attendees is already captured in the local economy.

All ancillary spending within is estimated to take place within North Carolina.

Figure O.5: Western Carolina University Athletics Spending Profiles by Attendee Type

	Lodging	Food	Transportation	Retail	Spend per Attendee
Football					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$27	$10	$5	$42
Out of Town (Overnight)	$60	$54	$25	$10	$149
Out of Region Team (Overnight)	$45	$54	$25	$10	$134
Other Sports/Events					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$27	$10	$5	$42
Out of Town (Overnight)	$49	$54	$25	$5	$133
Out of Region Team (Overnight)	$37	$54	$25	$5	$121

Source: US General Services Administration (2022)

After developing the spending profile for each attendee category and event category, Figure O.6 then shows the total spending estimates by spending.

Figure O.6: Estimated Annual Ancillary Spending Generated by Western Carolina University Athletics Events, by Expenditure Category

	Total Ancillary Spending ($M)
Lodging	
Football Attendees	$1.0
Other Sports/Events Attendees	$0.2
Total	**$1.2**
Food & Beverage	
Football Attendees	$1.2
Other Sports/Events Attendees	$0.6
Total	**$1.8**
Local Transportation	
Football Attendees	$0.5
Other Sports/Events Attendees	$0.2
Total	**$0.8**
Retail	
Football Attendees	$0.2
Other Sports/Events Attendees	$0.1
Total	**$0.3**

Source: ESI (2022), US General Services Administration (2022)

Appendix P: Detailed Economic Impact Results for Winston-Salem State University

Figure P.1: Total Annual Economic Impact Generated by Winston-Salem State University Athletics within the Local (Forsyth County) Economy, from Annual Operations + Capital Investments + Attendee Spending

Forsyth County	Operations	Capital*	Ancillary Football/Basketball	Ancillary Other Events
Direct Output ($M)	$3.2	-	$0.3	$0.4
Indirect & Induced Output ($M)	$2.5	-	$0.2	$0.3
Total Output ($M)	**$5.7**	**-**	**$0.5**	**$0.7**
Annual Employment Supported (FTE)	**50**	**-**	**10**	**10**
Employee Compensation ($M)	**$2.6**	**-**	**$0.2**	**$0.2**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)
**WSSU leases its capital facilities so there are not capital expenditures associated with this impact category.*

Figure P.2: Total Annual Economic Impact Generated by Winston-Salem State University Athletics within the State of North Carolina Economy, from Annual Operations + Capital Investments + Attendee Spending

North Carolina	Operations	Capital*	Ancillary Football	Ancillary Other Events
Direct Output ($M)	$3.2	-	$0.3	$0.4
Indirect & Induced Output ($M)	$3.8	-	$0.2	$0.3
Total Output ($M)	**$7.1**	**-**	**$0.5**	**$0.7**
Annual Employment Supported (FTE)	**60**	**-**	**10**	**10**
Employee Compensation ($M)	**$3.0**	**-**	**$0.2**	**$0.2**

Source: UNC System Athletics (2022); IMPLAN (2019); Econsult Solutions, Inc. (2022)
**WSSU leases its capital facilities so there are not capital expenditures associated with this impact category.*

Figure P.3: Total Annual Tax Revenue Impact Generated by Winston-Salem State University Athletics to State of North Carolina Government, from Annual Operations + Capital Investments + Attendee Spending

Tax Type	Operations	Capital*	Ancillary Football	Ancillary Other Events	Total
Income	$63,000	-	$3,000	$5,000	$71,000
Sales	$63,000	-	$10,000	$14,000	$87,000
Business	$13,000	-	$2,000	$2,000	$17,000
Total	**$139,000**	**-**	**$15,000**	**$21,000**	**$175,000**

Source: North Carolina CAFR (2019), IMPLAN (2019), Econsult Solutions, Inc. (2022)
**WSSU leases its capital facilities so there are not capital expenditures associated with this impact category.*

Calculating ancillary attendee spending requires an estimation of the volume and type of attendees that come to Winston-Salem State University athletic events for various reasons, and the application of spending profiles to each of those attendee types. As detailed in Section 4, data provided by UNC System Athletics provided the volume of attendees, which we then sorted by attendee category using ticket sales data and industry estimates: 1) students/local, 2) regional (day trip), and 3) overnight (see Figure P.4).

Figure P.4: Estimated Annual Attendance at Winston-Salem State University Athletics Events, by Attendee Type

	Students/Local	Regional (day trip)	Overnight
Football	7,895	2,337	128
Other Sports/Events	11,352	3,686	90
Total	**19,247**	**6,023**	**218**

Source: Winston-Salem (2022)

Spending profiles were developed by visit type to reflect that attendee spending patterns vary based on point of origin (local vs. out of town), reason for visit, and other factors. Unique spending patterns were estimated for each attendee category using available proxy data on regional travel trends and local hotel rates.

Figure P.5 shows the spending profiles of each attendee type by expenditure category. The ancillary impacts for all event categories are not captured for students/local attendees, as student spending for these events are likely captured in direct operating activities, while the spending of local attendees is already captured in the local economy.

All ancillary spending within is estimated to take place within North Carolina.

Figure P.5: Winston-Salem State University Athletics Spending Profiles by Attendee Type

	Lodging	Food	Transportation	Retail	Spend per Attendee
Football					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$27	$10	$5	$42
Out of Town (Overnight)	$121	$54	$25	$10	$210
Out of Region Team (Overnight)	$91	$54	$25	$10	$180
Other Sports/Events					
Students/Local	$0	$0	$0	$0	$0
Regional (Day Trip)	$0	$27	$10	$5	$42
Out of Town (Overnight)	$98	$54	$25	$5	$182
Out of Region Team (Overnight)	$74	$54	$25	$5	$157

Source: US General Services Administration (2022)

After developing the spending profile for each attendee category and event category, Figure P.6 then shows the total spending estimates by spending.

Figure P.6: Estimated Annual Ancillary Spending Generated by Winston-Salem State University Athletics Events, by Expenditure Category

	Total Ancillary Spending ($M)
Lodging	
Football Attendees	$0.12
Other Sports/Events Attendees	$0.15
Total	**$0.27**
Food & Beverage	
Football Attendees	$0.12
Other Sports/Events Attendees	$0.18
Total	**$0.30**
Local Transportation	
Football Attendees	$0.05
Other Sports/Events Attendees	$0.07
Total	**$0.12**
Retail	
Football Attendees	$0.02
Other Sports/Events Attendees	$0.03
Total	**$0.05**

Source: ESI (2022), US General Services Administration (2022)

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.

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