

An Economic Impact and  
Market Research Study of the  
University of North Carolina  
vs. Notre Dame  
Football Game

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Report Prepared by:

Nathan Tomasini, Ph.D.  
Virginia Commonwealth University  
Director, Center for Sport Leadership  
1300 W. Broad Street  
Richmond, VA 23284  
(804) 828-0481  
[nttomasini@vcu.edu](mailto:nttomasini@vcu.edu)

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## Executive Summary

The purpose of this research is twofold. The first section of this report provides a summary of the economic impact to the city of Chapel Hill and Orange County as a result of hosting the UNC vs. Notre Dame Football game. The second purpose is to provide a market research analysis of game attendees, including demographics, residency and lodging status, and attendees' satisfaction levels with various components of the event.

This study was conducted on-site at Kenan Stadium on October 11, 2008, and by utilizing an on-line survey sent on October 13 & 14, 2008. For Notre Dame respondents, a research team of  $\approx 20$  students collected email addresses of attendees that agreed to participate in the study. In addition, UNC season-ticket holders were surveyed utilizing an athletics departmental listserv. The survey tool used to gather the data was a 21-question survey sent via email to 8,163 total attendees. A total of 1,687 completed surveys were returned for a response rate of 21.0%. Children under the age of 18 were not allowed to complete the survey due to their spending is usually the result of parent spending. The results were extrapolated to the total attendance at the UNC vs. Notre Dame Football game. The results of this study provide (1) information defining the value associated with hosting the UNC vs. Notre Dame Football game, (2) information applicable for business plans and initiatives, and (3) information allowing decision makers a more informed position regarding the bid solicitation process of similar events.

The total economic impact on the Chapel Hill and Orange County economy is conservatively estimated at **\$6,270,715**. The UNC vs. Notre Dame Football game attracted 60,500 attendees, with approximately 45,849 out-of-town visitors [60,500 attendees – (7,000 students + 7,651 Orange County residents)]. The financial estimates only include non-Chapel Hill and Orange County residents, due to the belief that residents of Chapel Hill and Orange County will spend their discretionary income within the city and county limits, and to calculate their spending within the total would misrepresent the findings. On average, each out-of-town spectator contributed \$136.77 to the Chapel Hill and Orange County economy. The average group size was 3.1 people. Total tax revenue generated for the city of Chapel Hill and Orange County was \$112,722 with the state of North Carolina receiving an estimated \$175,878 in tax revenue.

Spending by out-of-town visitors has a secondary ripple effect on the Chapel Hill and Orange County economy. Those who receive this spending in turn spend a portion of their revenues locally. The process of re-spending continues, with diminishing impact on each subsequent round. This study will use a conservative sales multiplier of 1.3, meaning that for every dollar generated from game spending, an additional 30 cents is potentially generated indirectly in the local economy. The sales multiplier of 1.3 equates to **\$1,447,088** additional dollars spent in the city of Chapel Hill and Orange County due to the football game. Multiplier ranges from 1.1 to 2.5 are commonly used in economic models. The more conservative multiplier was used because Chapel Hill is a semi-rural community<sup>1</sup>.

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<sup>1</sup> Coughlin, C. C. & Mandelbaum, T. B. (1991). *A Consumer's Guide to Regional Economic Multipliers*. Federal Reserve Bank of St. Louis (73).

## Itemization of Economic Impact

Listed below are total expenditures by out-of-town spectators by category, application of the sales multiplier, and application of the sales and lodging taxes. Estimates provided were utilized by extrapolation of data provided by respondents and through various departments at UNC, Chapel Hill. The Itemization is divided into Chapel Hill and Orange County, and Durham County. Because the Durham County line is close to Orange County there was a leakage of expenditures to the Durham economy. This figure represents data obtained for spending only on lodging in Durham and retail and food expenses at Southpoint Mall in Durham. Total Expenditures for Durham were not calculated\*.

Please Note: All total expenditures were calculated less Orange County residents.

<b>ITEM</b>	<b>EXPENDITURES</b>	<b>DURHAM</b>
Lodging (Hotels)	\$ 713,306	\$273,286
Retail (Stadium & Tourism)	\$ 930,845	\$120,596
Food/Dining (Stadium & Tourism)	\$1,463,597	\$118,976
Parking	\$ 15,879	
Team Expenditures		\$103,018
<u>Tickets</u>	<u>\$1,700,000</u>	
Total Expenditures	\$4,823,627	\$615,876
<u>Sales Multiplier</u>	<u>1.3%</u>	<u>1.3%</u>
Total Estimated Economic Impact	\$6,270,715	\$800,639*
 <b>ESTIMATED TAX REVENUES</b>		
State Sales            4.5%	\$ 139,849	\$ 36,029
County Sales        2.25%	\$ 69,924	\$ 20,016
<u>Lodging Tax        6.0%</u>	<u>\$ 42,798</u>	<u>\$ 16,397</u>
Total Tax Revenues	\$ 252,571	\$ 72,442*

## Demographic Analysis

GENDER:

Gender Table:

*Table 1* %

Male	80.0
Female	20.0

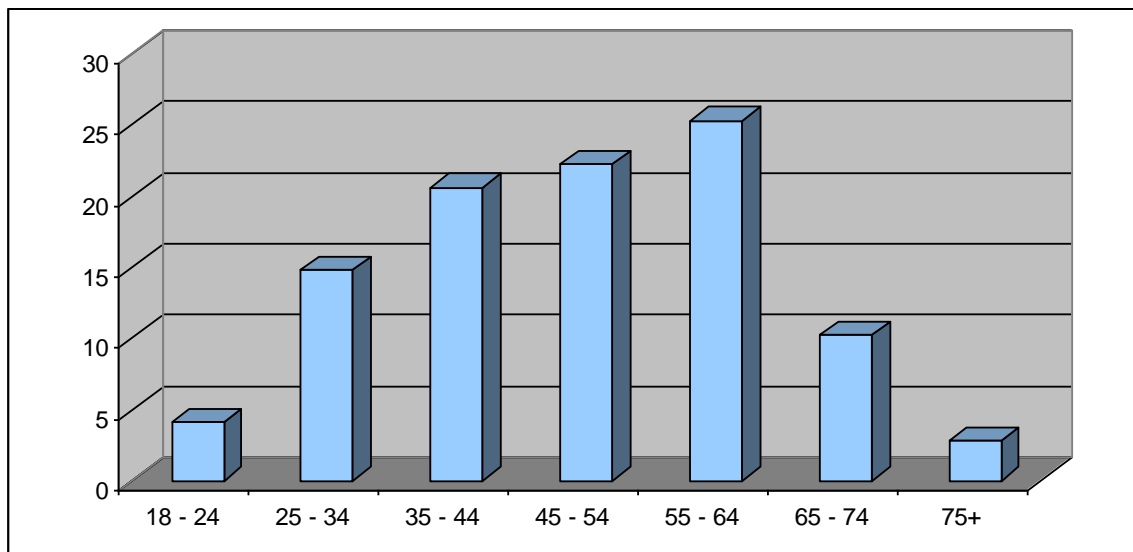
AGE:

Age Table:

*Table 2* %

18 - 24	4.1
25 - 34	14.8
35 - 44	20.6
45 - 54	22.2
55 - 64	25.3
65 - 74	10.2
75+	2.8
Total	100.0

Age of Attendees Bar Graph:



**INCOME:**

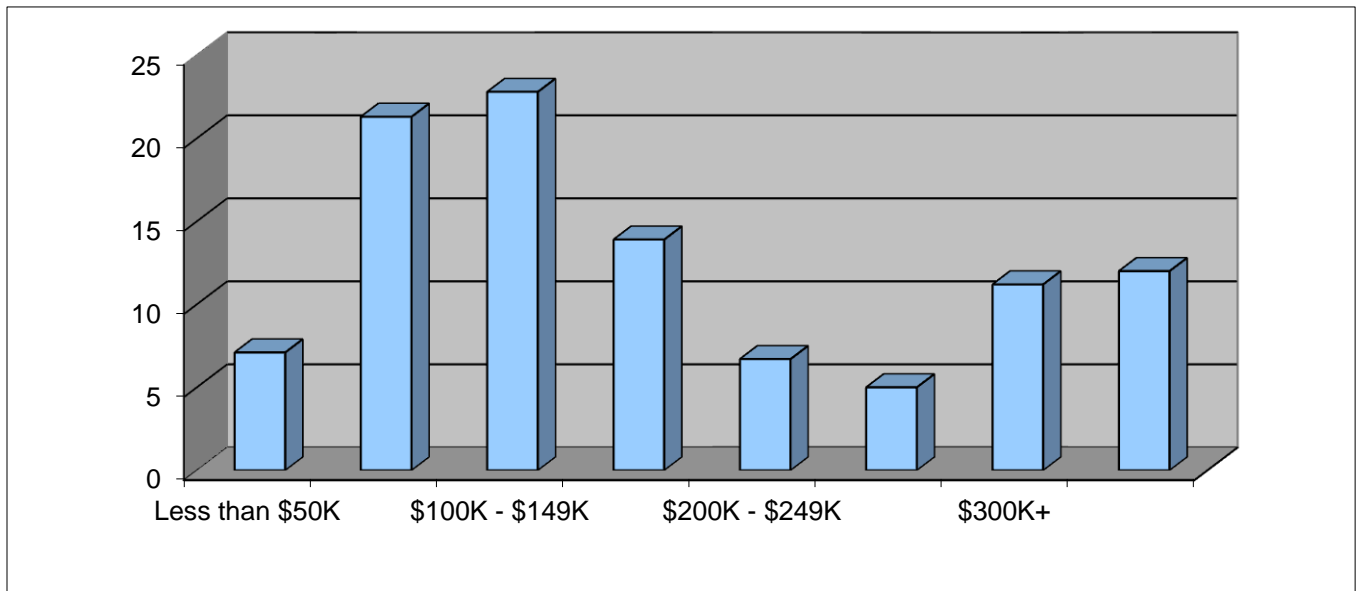
The analysis revealed an evenly distributed income, with a skew to mid-to-high income levels. Approximately 60.0% - 70.0% of attendees had household earnings of over \$100,000 annually. Due to the sensitive nature of Income, attendees were able to select “No Response” if they chose not to answer the question.

Income Table:

*Table 3* %

Less than \$50K	7.1
\$50K - \$99K	21.3
\$100K - \$149K	22.8
\$150K - \$199K	13.9
\$200K - \$249K	6.7
\$250K - \$299K	5.0
\$300K+	11.2
No Response	12.0

Income Bar Graph:



## Market Research Analysis

This section will further segment the various populations in attendance at the game. This section examines:

- Residency Status (where attendees live)
- Relationship and Affiliation to the University of North Carolina, Chapel Hill
- Number of Games Attended this Year
- Lodging Status (did they stay in a hotel?)
- Satisfaction Levels
  - Concessions
  - Parking
  - Promotions
  - Stadium Staff
  - Videoboard
  - Game Atmosphere

RESIDENCY STATUS:

A total of 14.3% of attendees were from Chapel Hill and Orange County. Students were not included in the sample, due to they are current Chapel Hill residents. In addition, in survey research, information gleaned from students is not consistent because students often answer the question of residence where their parents reside.

<u>State</u>	<u>Percentage (%)</u>
North Carolina	83.9
Virginia	2.3
Indiana	2.3
South Carolina	1.3
Georgia	2.1
Tennessee	0.3
Other	7.8

Of All Attendees at the Game, the total percentage from the following NC areas:

<u>Area</u>	<u>Percentage (%)</u>
Triangle	38.6
Triad Area	13.2
Charlotte Area	9.2
Wilmington Area	6.5
Fayetteville Area	4.6
Western Mountains	3.2
Eastern NC/Outer Banks	1.8
Other	6.8
Total	83.9



AFFILIATION to UNC:

Listed below are the Attendees' Affiliations to UNC. Listed in Table 7 is the total percentage of each affiliation at the game. The total does not equal 100% because there is an overlap of each category. For example, Alumni may also be a Ram's Club Member. Table 7 demonstrates there were a total of 56.3% Season-Ticket Holders at the game, regardless of other affiliations.

Affiliation to UNC                      Percentage (%)

*Table 6*

Season-Ticket Holders	56.3
Ram's Club Member	46.5
Alumni	38.0
Fan/No Affiliation	27.8
Faculty/Staff	3.5
Corporate Sponsor	0.8

Number of Games Attended                      Percentage (%)

*Table 7*

1	19.0
2	1.7
3	2.7
4	6.3
5	10.5
6	15.1
7	45.0

LODGING:

The average group in attendance at the event was 3.1 people. A total of 16.0% of all attendees stayed in a hotel, averaging 2.6 nights, and spending an average of \$100.70 per person total on lodging.

*Table 8*

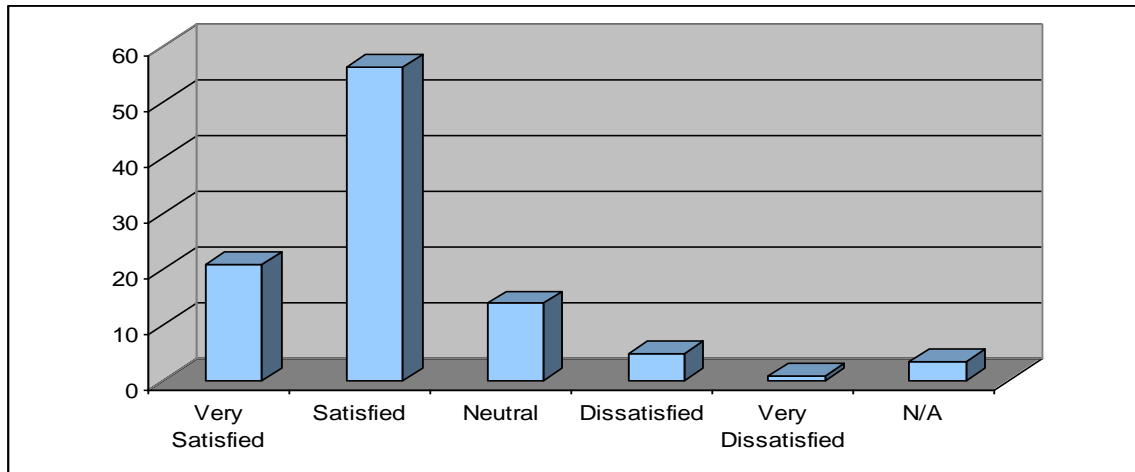
<u>Hotel</u>	<u>Percentage (%)</u>
Carolina Inn	15.6
Courtyard by Marriott	12.3
Hampton Inn (off highway 15-501 in Chapel Hill)	9.3
Homewood Suites	8.9
Red Roof Inn	7.7
The Siena	6.4
Sheraton	5.3
Hilton - Raleigh Durham Airport at RTP	4.1
Marriott - RTP	4.1
Franklin Hotel	3.7
Comfort Inn - Durham	3.2
Days Inn	2.3
Holiday Inn Express - Chapel Hill (near I-40)	2.1
Hampton Inn - Durham	1.1
La Quinta Inn - Durham	1.1
Other	12.8
Total	100

SATISFACTION LEVELS:

Concessions:

*Table 9* %

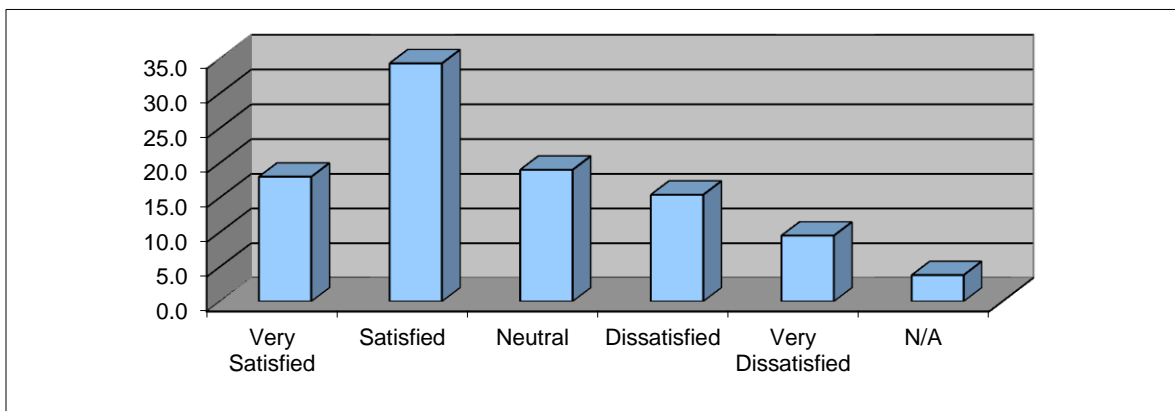
Very Satisfied	20.8
Satisfied	56.4
Neutral	13.8
Dissatisfied	4.8
Very Dissatisfied	0.8
N/A	3.4



Parking:

*Table 10* %

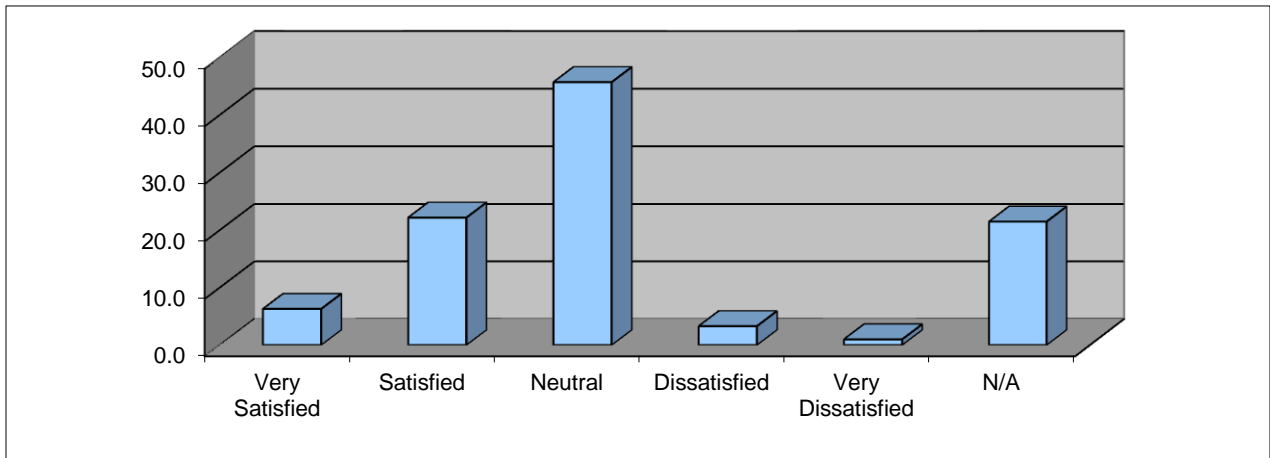
Very Satisfied	18.0
Satisfied	34.3
Neutral	19.0
Dissatisfied	15.4
Very Dissatisfied	9.5
N/A	3.8



Promotions:

*Table 11* %

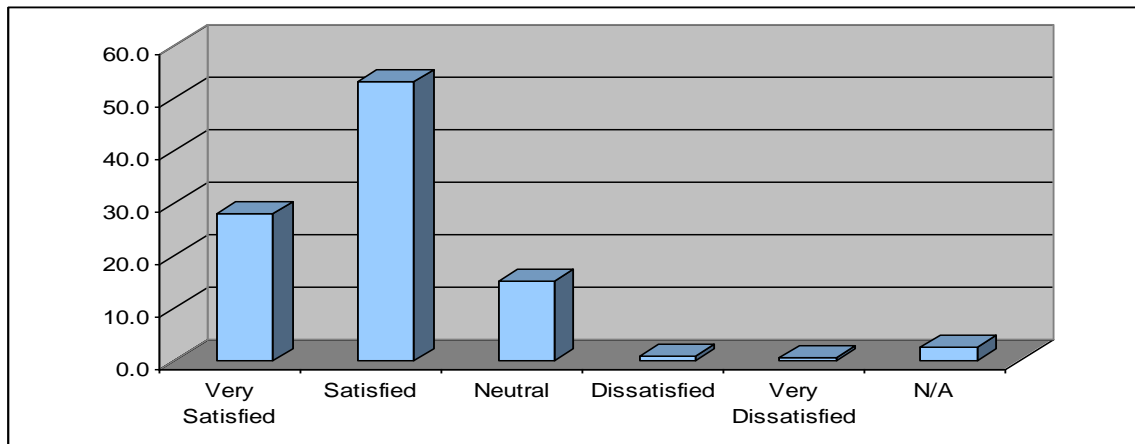
Very Satisfied	6.3
Satisfied	22.2
Neutral	45.7
Dissatisfied	3.3
Very Dissatisfied	1.0
N/A	21.5



Stadium Staff:

*Table 12* %

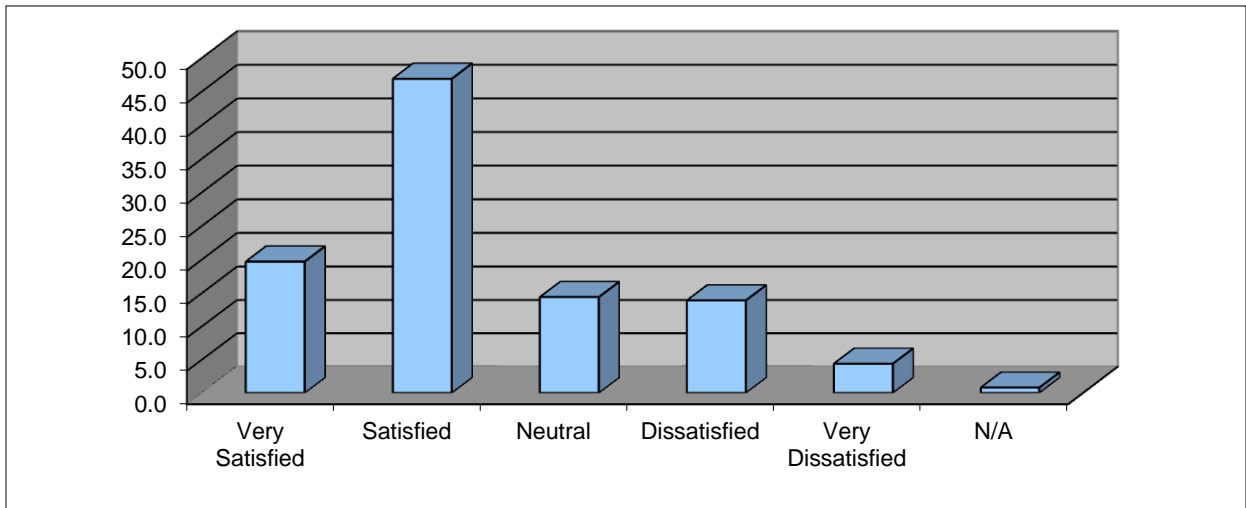
Very Satisfied	28.0
Satisfied	53.2
Neutral	15.2
Dissatisfied	0.8
Very Dissatisfied	0.4
N/A	2.4



Video Board:

*Table 13* %

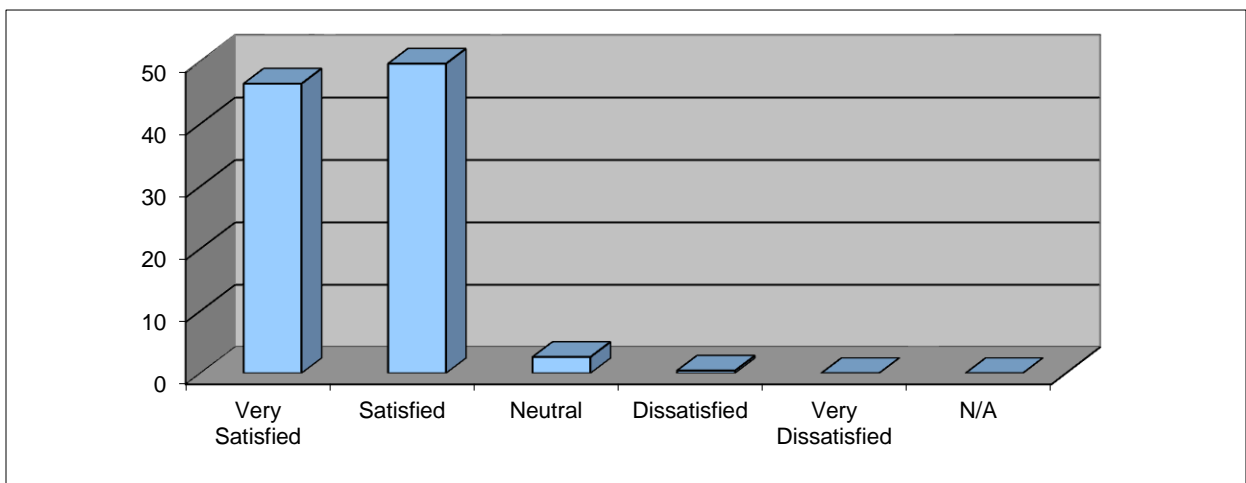
Very Satisfied	19.7
Satisfied	46.9
Neutral	14.4
Dissatisfied	13.9
Very Dissatisfied	4.4
N/A	0.8



Overall Game Atmosphere:

*Table 14* %

Very Satisfied	46.4
Satisfied	49.6
Neutral	2.6
Dissatisfied	0.4
Very Dissatisfied	0.0
N/A	0.0



Number of Times Attended Tar Heel Town:

*Table 15* %

0	34.8
1	16.4
2	17.0
3	12.2
4	6.1
5	4.1
6	2.3
7	7.1

Tar Heel Town Satisfaction:

*Table 16* %

Very Satisfied	16.2
Satisfied	33.9
Neutral	16.7
Dissatisfied	1.1
Very Dissatisfied	0.4
N/A	31.7

Reason Attended Tar Heel Town:

*Table 17*

Early to Park/Traffic	10.7
Atmosphere	31.4
Food & Drink	5.8
Kid's Activities	16.2
Old Well Walk	29.4
Other	6.5

## Respondents Comments:

Respondents were asked to provide any additional comments concerning Carolina Athletics, positive or negative. Below is a summary of the comments that were a concern for many respondents.

- Many groups parking in Rams Club parking take more than one space in the parking lots, with the majority of the violations occurring in the Smith Center and Business School lots.
- As has been the case in the past, parking is viewed as something that greatly needs to be improved. One new complaint this year was that city lots raised parking fees from \$10 to \$20 on game days.
- While many respondents enjoy Park and Ride, there were complaints of delays of over 30 minutes.
- Many respondents would like to see Recycle containers in the stadium.
- Overwhelming reaction to the video board is positive, but the audio system was often viewed negatively and in need of an update.
- Many respondents did not like the seatback rentals and complained that they did not work properly.
- Access to more ATM's or have concessions accept credit.
- Many respondents asked if additional toilets could be placed at or near the parking garages.
- Many respondents would like to see the Smith Center open to walk through on game days.
- Respondents would like healthier food options at Kenan.
- Respondents stated they like the stadium redecoration and all of the improvements over the years.
- Respondents would like monitors to be placed in areas where the Jumbotron cannot be viewed.
- From Notre Dame fans: Many could not find their way around Chapel Hill. The city could do a better job of putting up signs directing traffic to Franklin Street, Kenan Stadium, Park & Rides, etc.
- Overall, Notre Dame fans had a nice time and enjoyed their stay in Chapel Hill. Complaints included parking, PA system, and losing the game.

## Conclusion:

The UNC vs. Notre Dame Football game economic impact equaled approximately \$6.4 million for the local Chapel Hill and Orange County economies, and approximately \$325,000 in tax revenue for Chapel Hill, Orange County, and the state of North Carolina. Important findings are listed below.

- Similar to the last study completed in 2005, the average age of attendees was slightly higher (45 – 54) than the average collegiate football attendee across the country (mid 30's), although the average age of a Carolina attendee has slightly decreased.
- A total of 83.9% of attendees came from North Carolina. Indiana, home to Notre Dame, represented 2.3% of the attendance population, totaling approximately 1,400 people. In addition, 41.2% of Notre Dame fans came from North Carolina, with many of the fans coming from Virginia, South Carolina, and Georgia.
- Of the 83.9% of attendees that came from North Carolina, 38.6% came from the Triangle area.
- A total of 45.0% of all attendees planned to attend all Carolina home games.
- Similar to the study in 2005, the Courtyard by Marriott and Carolina Inn had the highest number of attendees stay overnight, totaling 27.9% (26.4% in 2005).
- An overwhelming majority of attendees were delighted with Concessions, Promotions, Stadium Staff, the Videoboard, and the Overall Game Atmosphere.

Nathan Tomasini, Ph.D., is the Director of the Center for Sport Leadership, a graduate program in the School of Education at Virginia Commonwealth University. In addition to his work with the University of North Carolina Athletics, Nathan's various client list includes the Atlantic Coast Conference, the Big Sky Conference, Gonzaga Basketball, Ironman, the National Hockey League, and the North Carolina High School Athletic Association.