June 2019

# Downtown Raleigh Entertainment District Economic Impact Study



# **Executive Summary**

The proposed Downtown Raleigh Entertainment District will be located at South Saunders Street and Interstate 40, in the southern corridor of downtown Raleigh. The development includes a multipurpose, 20,000 seat open-air stadium surrounded by more than \$1.9 billion in privately financed development of street-level retail, office space, and housing. It is expected to draw additional visitors to Raleigh and Wake

County boosting hotel and restaurant tax revenue, expanding the property tax base, enhancing employment, and creating an anchor catalyst for additional development and growth near the initial investment.



#### North Carolina

\$4.1 Billion NPV in economic activity during operations \$473 Million in average annual economic activity 3,610 average annual number of jobs created \$3.3 Billion in economic activity during construction 10,610 jobs supported during construction \$5.4 million average annual state income tax revenue \$1.6 million average annual state sales tax revenue.

The development, by the North Carolina Football Club and Kane Realty Corporation, would include:

- 1.6 million square feet of office space
- 125,000 square foot of retail and service space
- 1,200 hotel rooms, and
- 1,750 multi-family housing units

The project would address the demand for a large downtown sports and entertainment venue. The Downtown Sports and Entertainment Stadium is designed to host major events throughout the year including the North Carolina FC (NCFC) and North Carolina Courage professional soccer games along with many other sporting and entertainment events.



\$3.8 Billion NPV in economic activity during operations \$438 Million in average annual economic activity 2,730 average annual number of jobs created \$2.4 Billion in economic activity during construction 5,900 jobs supported during construction \$20.3 million average annual property tax revenue \$3.7 million average annual interlocal tax revenue \$0.6 million average annual sales tax revenue

#### Downtown Raleigh

\$3.2 Billion NPV In economic activity during operations \$361 Million in average annual economic activity 1,350 average annual number of jobs created \$1.4 Billion in economic activity during construction 1,990 jobs supported during construction \$8.3 million average annual city property tax revenue



The entertainment

district plan is currently in the last phase of design and the investor's goal is to break ground in 2020 for a start of operations in 2023.



# **Economic Impacts of Proposed Downtown Raleigh Entertainment District**

**Impact Report Prepared June 2019** 

# **Project Overview**

The proposed Downtown Raleigh Entertainment District will be located at South Saunders Street and Interstate 40, in the southern corridor of downtown Raleigh. The development includes a multipurpose, 20,000 seat open-air stadium surrounded by more than \$1.9 billion in privately financed development of street-level retail, office space, and housing.

The 20,000-seat multi-purpose Downtown Sports and Entertainment Stadium would anchor the development that would also include:

- 1.6 million square feet of office space
- 125,000 square foot of retail and service space
- 1,200 hotel rooms, and
- 1,750 multi-family housing units

The project, which is being proposed by the North Carolina Football Club and Kane Realty Corporation, would address the demand for a large downtown sports and entertainment venue. Currently, Raleigh is the only major city in the state without such a venue. It is expected to draw additional visitors to Raleigh and Wake County boosting hotel and restaurant tax revenue, expanding the property tax base, enhancing employment, and creating an anchor catalyst for additional development and growth in close proximity to the initial investment.

The Downtown Sports and Entertainment Stadium, hereby referred to as 'the stadium,' is designed to host major events throughout the year including the North Carolina FC (NCFC) and North Carolina Courage professional soccer games, youth sports tournaments, concerts, theatre performances, graduations, international soccer exhibitions, festivals, watch parties, and local university sporting events. The stadium is also anticipated to be the location for many smaller events throughout the year such as conferences, catered events, trade shows, job fairs, consumer shows, and faith-based events.

The entertainment district plan is currently in the last phase of design and the investor's goal is to break ground in 2020 for a start of operations in 2023.

# Project Impact

In the spring of 2019, NCFC and their real estate partners hired Economic Leadership LLC to determine the economic impacts of the Downtown Raleigh Entertainment District proposal. This study estimates the economic impact of the proposed stadium as well as the impacts of new real estate development within the entertainment district, team operations, and special events promotion staff. The economic impacts are estimated over a 15-year timespan. Construction impacts are calculated separately as a one-time economic impact.

## **Economic Impact Overview**



#### **North Carolina**

\$4.1 Billion NPV in economic activity during operations \$473 Million in average annual economic activity 3,610 average annual number of jobs created \$3.3 Billion in economic activity during construction 10,610 jobs supported during construction \$5.4 million average annual state income tax revenue \$1.6 million average annual state sales tax revenue



# **Wake County**

\$3.8 Billion NPV in economic activity during operations
\$438 Million in average annual economic activity
2,710 average annual number of jobs created
\$2.4 Billion in economic activity during construction
5,900 jobs supported during construction
\$20.3 million average annual property tax revenue
\$3.7 million average annual interlocal tax revenue
\$0.6 million average annual sales tax revenue



# **Downtown Raleigh**

\$3.2 Billion NPV in economic activity during operations \$361 Million in average annual economic activity 1,350 average annual number of jobs created \$1.4 Billion in economic activity during construction 1,990 jobs supported during construction \$8.1 million average annual city property tax revenue

Note: Job figures are jobs for residents in each region. Wake County's property tax estimate includes the \$8.1 million that the City of Raleigh will receive through property taxes.

For each category of economic stimulus, this analysis calculated the total impact on jobs, wages, sales revenue, and tax revenue. To determine the initial spending impacts, Economic Leadership LLC used data provided by NCFC and their real estate partners. Other figures were determined through market research and are outlined in the assumptions section of this report. Economic impacts were assessed for three geographic regions: North Carolina, Wake County, and Downtown Raleigh.

The chart on the previous page displays the total economic impacts, initial impacts plus the multiplying effect, on each regional economy that were modeled. State and local tax revenues were calculated based on property, sales, interlocal, and income taxes that we calculated at the end of this report based on the findings of our model. There may be other tax revenue not included in the model. All figures are presented in current dollars.

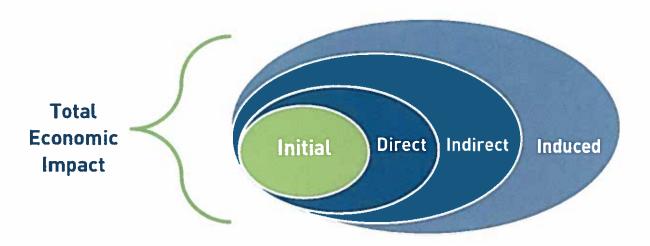
Job impacts represent new jobs that are predicted to be created as well as some existing jobs that will be supported through new spending. Jobs predicted in Wake County and Downtown Raleigh models, indicate only the jobs that will be sourced within the region. For example, in Wake County in the first year of hotel operations, 510 jobs are estimated to be created, but the model assumed 20 percent of workers would live outside the county and were less likely to spend their earnings within Wake County. Therefore, 408 is the number of hotel jobs created for Wake County residents for Year One.

# Methodology

Private investments and consumer spending choices have impacts well beyond the initial transaction. A consistent model with transparent assumptions is the best method for estimating secondary impacts. For this study, we acknowledge that the entertainment district will bring new jobs to the area from the companies leasing office space, or from hotel operations. We also factor that companies that operate in the retail space of the entertainment district will need to buy supplies to stock their store. If the company buys from a local supplier, this will stimulate new economic growth in the region. This phenomena in regional economies is referred to as the multiplier effect.

Multipliers are specific values that measure the ripple or secondary effect of how changes in one industry can influence the broader economy. Economic Leadership LLC utilized multipliers for this study from Economic Modeling Specialist International's (EMSI) licensed software. EMSI produces a social accounting matrix that determines the linkages in purchasing patterns between different sectors of the economy. From this matrix, EMSI creates a proprietary input/output model that can calculate the final equilibrium impacts of a change in a regional economy. The EMSI input/output model has four types of multiplying effects:

- 1. *Initial* this represents the jobs, revenues, and earnings directly related to the project's construction or operations.
- 2. **Direct** these impacts are the first round of impacts to the industry's supply chain due to new input purchases required by the project.
- 3. *Indirect* these impacts reflect the second round of activity when the supply chains stimulate sales within their supply chains.
- 4. **Induced** these impacts are the result of increased earnings and therefore further spending throughout the economy.



For the Downtown Raleigh Entertainment District, there will be a new special events promotion group created; the *initial* impacts are the sales, earnings, and jobs specific to the special events operations. Hiring an outside public relations firm would be a *direct* impact. If the public relations firm is now able to hire an accounting firm from the increased revenue from the special events team, the revenue received by the accounting firm would be an *indirect* impact. The increase in local spending by these employees from their new or increased earnings are the *induced* impacts. EMSI's input/output model estimates multipliers for revenues, earnings, and jobs for each 6-digit NAICS industry code. The chart below displays the job multipliers for a few of the industry categories used in this study.

**Wake County Job Multipliers for Select Industries** 

Industry	Initial	Direct	Indirect	Induced	Total
Sports Teams	1.00	0.31	0.09	0.46	1.86
Hotels	1.00	0.18	0.06	0.29	1.52
Clothing Stores	1.00	0.31	0.18	0.37	1.86

Source: EMSI 2019.2

The differing multipliers demonstrate how a change in one industry can be more or less impactful than a change in another industry. In Wake County for sports teams, the total job multiplier is 1.86, meaning that adding one job can create or support 0.86 jobs elsewhere in Wake County. Hotels have a lower multiplying effect on the economy with a jobs multiplier of 1.52. Higher wages are often an indicator of which industries provide the highest multiplying effect. Greater earnings received translates into more regional spending and thus a higher induced impact.

The critical input of an economic impact assessment is determining accurate data on the initial impacts of a project. To assess the initial impacts accurately, Economic Leadership LLC relied heavily on existing financial models provided by NCFC as well as real estate development plans provided by local developers that have partnered with NCFC for this project. Reasonable market averages were also used to supplement the data provided by the client. These assumptions are discussed in the next

section of the report. EMSI data was also used to provide estimates of average sales per worker and earnings per worker estimates for each industry. These figures contributed to the analysis that determined earnings and initial job impacts in situations where only the expected initial revenue was provided.

Measuring economic impact using multipliers are estimations of potential economic results. The multipliers used in this study come from EMSI estimates based on 2018 economic conditions. These are predictions based on certain economic conditions that are always subject to change. It is impossible to predict how the economy may change 15 years into the future. Therefore, the results represented in this study are forecasts based on many underlying assumptions. While this report does provide specific figures on revenue and employment, these figures are best taken as context on the magnitude of the entertainment district's impact rather than exact predictions. Economic Leadership believes that the resulting analysis represents a fair expectation, based on the information currently available.

# Downtown Raleigh Entertainment District Impact Methodology

# **Construction Phase**

(Years -2 and -1)

#### Construction

- Hard costs
- Soft costs

# **Operations Phase**

(Years 1-15)

#### **Team Operations**

- Additional Team Operations
- Special Event Promotions Team

#### **Real Estate Impact**

- Leasing & Rental Income
- Retail Sales
- Property Taxes
- Hotel Revenue

The economics of sports stadiums can be complicated and contentious, especially if public funding is involved. Most of the debates over economic impacts studies pertaining to sport stadiums concern what constitutes new spending to the region. Most economists agree that stadiums or sporting events generally do not spur new spending from local residents. This is due to the substitution effect. In the United States, people generally save only 5 percent of their income, the rest is spent. Most people have a limited discretionary entertainment budget. When a new sports team comes to town, local residents are likely to have spent the money they paid for a game elsewhere in the local economy in the absence of the sports team. However, when visitors come from outside the region and spend money, that results in new and often significant economic stimulus.

The entertainment district is not a standalone stadium proposal. The stadium is the anchor and catalyst for a broader project that includes new hotels, residences, and offices. The inclusion of new

real estate development in conjunction with the stadium creates higher initial impacts. A stadium can host a defined maximum of annual events, but apartment buildings and hotels consistently collect revenue throughout the year.

The entertainment district is designed to and expected to host a significant number of events annually, attracting many out-of-region visitors. The real estate development surrounding the stadium will provide hotels and restaurants for these visitors during their stay. In this study, we measure the economic impact by calculating the revenue from the retail operations and hotels that will be built as part of the entertainment district. We assume that the out-of-region visitors to stadium events will be the ones sustaining these operations. While it is reasonable to assume there will be some visitor spending outside of the entertainment district area, creating additional impact, we do not include any of that spending in this analysis.

NCFC is anticipating that the new downtown stadium would triple their operations based on attendance increases for its two pro soccer teams. This change in revenue and staffing that NCFC expects from moving to the entertainment district compared to their baseline levels at their current stadium were also included in the economic impacts. A separate special events promotion group is anticipated to be created to handle booking and hosting of all the other events to be hosted at the stadium. The sales, salaries, and staffing of that special events team were also included as new economic stimulus to the local economy.

For this analysis, construction investment is modeled as a one-time impact that takes place during a two-year construction phase. Only a portion of the construction investment was determined to be spent on labor and materials supplied within each region that was modeled. As construction impacts are short-term, they are best viewed as economic activity that is supported throughout the region rather than sustained job creation.

Rather than assume consistent annual operations figures year after year for the operations phase, a scale-up approach was modeled to be more realistic. In the first few years of the model, operations and capacity is still being scaled. Despite this report's estimates stopping at Year 15, the impacts will continue on and the annual economic benefits will resume beyond the measures of this study. Unless the stadium or real estate is expanded, the expected annual impacts beyond this study are best estimated to be similar to the impacts measured in Year 15.

# Assumptions

Forecasts for expected spending provided by NCFC and their real estate partners were relied on as much as possible to determine the initial impacts of the stadium area. These forecasts included detailed pro forma calculations on team expenses and revenues. These estimates also contained salaries and benefits data. Real estate partners released details of the anticipated usage and square footage of the towers to be built near the stadium, along with their anticipated construction costs. Beyond this supplied data, other model predictions were calculated based on regionally available averages.

This analysis reflects the anticipated development as of the time of this report. The Downtown Raleigh Entertainment District is expected to spark significant other development in the surrounding

area. Much of the South Saunders and South Wilmington Street corridors are underdeveloped. In anticipation of greater demand for proximity to the Downtown Raleigh Entertainment District, the project team have also obtained control over an additional 75 acres within sight of the project. This additional land could provide opportunities for more diverse housing options, amenities availability, educational and medical facilities, and varying types of retail and services for the surrounding community. As the plans for this land are still in development, they are not included in this report. However, if these additional 75 acres are developed in the future, there could be even higher levels of economic impacts.

#### **Construction Costs**

Real estate developers for this project estimate that the Downtown Raleigh Entertainment District will cost just over \$2 billion dollars to build. This includes \$150 million for the cost of the stadium, plus the additional development that will take place throughout the 46 acres surrounding the stadium.

#### **Downtown Raleigh Entertainment District Development Plans**



The construction costs provided to Economic Leadership by developers include estimates for each block of the entertainment district. Costs were broken down into estimated costs for land, hard costs, soft costs, and premiums. Hard costs refer to the expenses that relate to the construction of the physical space. Hard costs include site work, building structure, and building finishes. Soft costs are an assortment of costs that include architectural and engineering design, environmental consultant,

project management, insurance, and other fees. Premiums represent the expected escalation in cost from today to the time of building.

#### **Estimated Construction Costs**

Cost Type	Cost Estimate (million\$)
Land	\$159.0
Hard Costs	\$1,249.3
Soft Costs	\$409.5
Premiums	\$188.0
Total Construction Costs	\$2,005.8

Land costs and operating deficits (a portion of soft costs) were removed from the model. This is consistent with other real estate construction impact analyses. Land payments are considered a transfer payment that does not stimulate new economic activity. 70 percent of premium costs were assumed to be used for hard costs, and 30 percent of the premium estimates were added to soft costs. The hard costs of construction were applied to construction industries in the model. Soft costs were applied to several service industries such as engineering firms, legal offices, management consultants, and others based on percentages provided by the developers of this project. A deeper breakdown of these costs is provided in the appendix.

The percentage of capital and labor that was spent within the region was determined by the EMSI model's calculations of demand met within each region for hard and soft costs. For North Carolina all of the hard construction costs were estimated to be sourced from within the state with 65 percent of these costs sourced from within downtown Raleigh. Soft costs were more likely to be sourced outside of the region. This is based on knowledge that the developers are more likely to use additional firms that are based outside of the region. Using these in-region spending adjustments, for example, meant the total construction initial economic impact in Wake County was \$1.4 billion.

**In-Region Construction Spending** 

Region	Hard Costs	Soft Costs
North Carolina	100%	60%
Wake County	85%	30%
Downtown Raleigh	65%	10%

All construction was expected to be completed in two years, with each property operating by Year 1. In reality, there may be some phasing in the timeline for the real estate development. However, for the purpose of this study we modeled all the construction impacts at the same time.

# **Ongoing Impacts**

#### **Team Operations**

NCFC provided revenue figures and projections based on their expected increased revenue from moving to the Downtown Sports and Entertainment Stadium. Since NCFC currently operates in Cary, NC, only additional revenue from the stadium change was included in the Wake County and North Carolina models. In the downtown Raleigh model, it was assumed that all NCFC operations would be new stimulus to the region. NCFC anticipates that their revenue could triple with a downtown stadium and that they would increase their staff by 35 percent, or an additional 12 employees.

NCFC provided precise revenue and expenditure data for the next few years. Revenue for the years in which data was not provided was estimated to grow by 3 percent. Wages were estimated to grow annually by 5 percent, based on NCFC data. Once employment was scaled to accommodate the new venue, employment was estimated to remain stable. In addition to salaried staff, NCFC will also employ staff to operate concessions and parking during stadium events. Event staff earnings data was calculated from NCFC expenditures and scaled to grow at 3 percent each subsequent year. Earnings figures in this report include salaries and benefits.

#### **Special Events Operations**

A promotions and events group will be established once the stadium opens. Economic Leadership examined other stadium project staffing numbers and determined that 10 employees would be a reasonable staffing projection for hosting 75 or more major events per year. The events and staffing were assumed to scale up from Year 1 to Year 7. Revenue increased each year by three percent, but employment stabilized after Year 7. Concessions impacts were modeled based on the revenue anticipated by the special events team.

#### **Real Estate Ongoing Impacts**

The real estate development planned within the stadium area will create new revenue sources for lessors, hotel operators, and retail shops. Much of the information on estimated real estate revenue was provided by industry contacts in the region. The rest was estimated using public and private industry data. For office and retail leasing income, a rate of \$30 per square foot triple-net was gathered from Downtown Raleigh Alliance data. This data showed that downtown Raleigh rates had increased by 6.6 percent from 2017 to 2018. Economic Leadership chose a more conservative three percent annual growth model.

For retail space, Xceligent reports the average rent for retail space in downtown Raleigh is \$24.16 per square foot. However, research shows that newer mixed-use developments in downtown Raleigh and downtown Durham have been able to command substantially higher rents. The \$30 per square foot triple-net rate was used for retail space as well.

The stadium retail space is expected to bring new spending to the downtown Raleigh area. An average of \$300 in sales revenue per square foot annually was used. This figure was based off a national figure of \$325 per square foot provided by Retail Dive. This metric was rounded down due to some research indicating that retail sales per square foot in downtown shopping areas are not as high as in shopping centers and malls, except for a few of the largest U.S. cities. Retail income was

assumed to be split between food & beverage (40 percent) and clothing stores (60 percent) for the purposes of this study.

#### **Key Real Estate Assumptions**

Retail and Office	Value
Retail square footage	125,000
Office square footage	1,625,000
Lease rate per sq. ft triple-net	\$30
Annual increase in income	3%
Occupancy in Year 1	60%
Occupancy in Year 2	80%
Occupancy in Year 3+	90%
Retail spending per sq. foot	\$300
Hotels	Value
Total Hotel Rooms	1,200
Average Daily Rate	\$150
Annual rate increases	3%
Average occupancy rate	72%
Housing	Value
Multifamily units	1,750
Percentage rental units	100%
Rental units	1,750
Average unit size	800
Rent price per sq. foot	\$2
Average rent per month	\$1,600
Annual increase in rent	3%
Occupancy in Year 1	60%
Occupancy in Year 2	80%
Occupancy in Year 3+	90%

Occupancy rates for office, retail, and rental apartments were assumed to be 60 percent in Year 1, 80 percent in Year 2, and 90 percent in Year 3 and subsequent years. Hotel occupancy was assumed to be 72 percent on average, this results in an estimate of 315,360 hotel nights annually. These figures are conservative estimates based on data released by Downtown Raleigh Alliance. Currently, downtown Raleigh experiences vacancy rates of 8.4 percent in the office market, 3.3 percent in the retail market, and 7 percent for multi-family residences.

Of the 1,750 multi-family units built, all are expected to be rented. Annual rent for these apartments was estimated to start at \$1,600 a month in Year 1. This metric is based on data provided by the

developers, based on an average unit size of 800 square feet and a \$2 rent price per square foot. This is consistent with data released by Downtown Raleigh Alliance that listed current Class A rents in downtown at \$1,519 per month. Rents and hotel rates were increased at a rate of 3 percent each year.

Ongoing Real Estate Impacts for First Three Years of Operation

Year	Office Lease Income	Retail Lease Income	Retail Spending	Apartment Rental Income	Hotel Room Income	Property Tax Revenue to Raleigh and Wake County
Year 1	\$29,250,000	\$2,250,000	\$22,500,000	\$20,160,000	\$47,304,000	\$20,276,834
Year 2	\$40,170,000	\$3,090,000	\$30,000,000	\$27,686,400	\$48,723,120	\$20,276,834
Year 3	\$46,546,988	\$3,580,538	\$33,750,000	\$32,081,616	\$50,184,814	\$20,276,834

Wake County and City of Raleigh are estimated to receive \$20.3 million in property taxes annually from Year 1 to Year 15. This revenue was included in the revenue model as a continued impact to the local government sector. This value was calculated from the projected initial investment cost, \$1.86 billion (the value of the stadium was excluded), of the real estate properties multiplied by the combined property tax rate for Wake County and City of Raleigh, \$0.010926 per dollar of property value.

# **North Carolina Economic Impacts**

The main difference included in modeling the state economy is that the multiplying effect is larger when the geographical region is larger. This is because the larger the region, the more likely that supply-chain impacts will be sourced within the model region. There is also less leakage of employment and induced spending with a larger region. In the state impact model, 100 percent of employees are predicted to live in the region and most of the construction costs were assumed to be spent within the state.

# **Construction Impacts**

The \$2 billion anticipated investment to build the entertainment district will create substantial impacts on the economy. It was estimated that \$1.7 billion of construction spending would be spent in North Carolina and support over 4,640 employees. This economic activity will support another 5,960 jobs throughout the economy for a total of 10,610 jobs supported in the state.

One-Time Construction Impacts (million\$)

Impact Type	Initial	Direct, Indirect, & Induced	Total
Sales	\$1,692	\$1,646	\$3,337
Earnings	\$674	\$552	\$1,226
Jobs	4,640	5,960	10,610

# **Ongoing Impacts**

The initial economic impacts of the stadium area will generate \$3.3 billion in economic activity across 15 years. This equates to a net present value of \$1.9 billion. During the 15 years of operations modeled, an annual average of \$221 million in initial economic activity is expected, as well as \$57 million in earnings and 1,710 jobs created and supported.

**Initial Economic Impacts in North Carolina** 

Scenario Year	Revenues	Earnings	Jobs
Year 1	\$152,846,000	\$40,173,000	1,210
Year 2	\$181,287,000	\$47,396,000	1,430
Year 3	\$198,654,000	\$51,689,000	1,560
Year 4	\$203,526,000	\$52,828,000	1,590
Year 5	\$208,524,000	\$54,000,000	1,620
Year 6	\$213,652,000	\$55,208,000	1,660
Year 7	\$218,915,000	\$56,452,000	1,690
Year 8	\$223,857,000	\$57,703,000	1,730
Year 9	\$228,947,000	\$58,993,000	1,760
Year 10	\$234,190,000	\$60,325,000	1,800
Year 11	\$239,591,000	\$61,698,000	1,840
Year 12	\$245,153,000	\$63,114,000	1,880
Year 13	\$250,882,000	\$64,576,000	1,920
Year 14	\$256,783,000	\$66,084,000	1,960
Year 15	\$262,861,000	\$67,639,000	2,000
Raw Sum	\$3,319,669,000	\$857,878,000	
Annual Average	\$221,311,000	\$57,192,000	1,710
NPV	\$1,941,502,000	\$502,497,000	

To determine the direct, indirect, and induced impacts this spending will have on the regional economy, the spending was broken out by industry. Multiplying the initial impact in each industry by the multipliers in the EMSI input/output model provided the estimation of the ripple effect throughout the economy. The appendix provides the multipliers and industries used in detail.

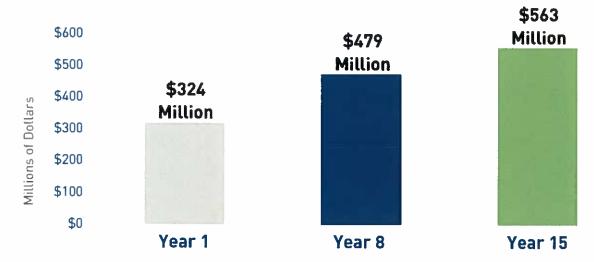
Once the multiplier effect to North Carolina's economy was accounted for, the total economic impact was estimated at a net present value of \$4.1 billion in economic activity across the state. Through 15 years of operation, the entertainment district is predicted to create or support on average 3,610 FTE jobs annually and generate an average of \$473 million in economic activity.

**Total Economic Impacts in North Carolina** 

Scenario Year	Revenues	Earnings	Jobs
Year 1	\$324,323,000	\$99,121,000	2,510
Year 2	\$386,831,000	\$117,818,000	3,000
Year 3	\$424,889,000	\$128,887,000	3,280
Year 4	\$435,368,000	\$131,710,000	3,350
Year 5	\$446,119,000	\$134,616,000	3,420
Year 6	\$457,151,000	\$137,608,000	3,500
Year 7	\$468,472,000	\$140,690,000	3,570
Year 8	\$479,103,000	\$143,792,000	3,650
Year 9	\$490,053,000	\$146,991,000	3,720
Year 10	\$501,332,000	\$150,290,000	3,800
Year 11	\$512,949,000	\$153,691,000	3,890
Year 12	\$524,915,000	\$157,199,000	3,970
Year 13	\$537,239,000	\$160,817,000	4,060
Year 14	\$536,491,000	\$162,513,000	4,120
Year 15	\$563,009,000	\$168,394,000	4,240
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Raw Sum	\$7,088,244,000	\$2,134,138,000	
Annual Average	\$472,550,000	\$142,276,000	3,610
NPV (7%)	\$4,146,465,000	\$1,250,173,000	

By Year 15, over 92 percent of the projected economic impact (\$520 million) would be attributable to the activity generated from the real estate developments in the stadium area. However, these hotels and retail shops are anticipated to be heavily supported by the games and special events held at the stadium. By Year 15 the operations of the NCFC and special events promotion group are estimated to contribute to over \$6.5 million in earnings across North Carolina. After 15 years of operations, the entertainment district is forecasted to create and support almost 4,240 jobs in the state.

# Annual Total Economic Impact of Stadium Area to North Carolina



## Breakdown of Total Economic Impact in Year 15 to North Carolina

Impact Type	Sales	Earnings	Jobs
Team Operations	\$25,731,000	\$4,826,000	43
Special Events Operations	\$17,610,000	\$1,629,000	28
Real Estate	\$519,668,000	\$161,939,000	4,167
Total Impacts	\$563,009,000	\$168,394,000	4,238

# **Wake County Economic Impacts**

In the county impact model, 80 percent of employees are predicted to live in the region and 85 percent of construction hard costs were assumed to be sourced from Wake County. In a county analysis compared to a state region analysis there is more opportunity for leakage and thus slightly less total economic impact.

# **Construction Impacts**

It was estimated that \$1.4 billion of construction spending would be spent inside Wake County and support over 2,960 resident workers. This economic activity will support another 2,940 jobs throughout the economy for a total of 5,900 jobs supported in the county.

#### One-Time Construction Impacts (million\$)

Impact Type	Initial	Direct, Indirect, & Induced	Total
Sales	\$1,368	\$988	\$2,356
Earnings	\$433	\$265	\$698
Jobs	2,960	2,940	5,900

## **Ongoing Impacts**

The initial economic impacts of the stadium area will generate \$3.3 billion in economic activity across 15 years. This equates to a net present value of \$1.9 billion. During the operations phase, an annual average of \$221 million in economic activity is expected as well as \$46 million in earnings and 1,370 resident jobs created and supported.

**Initial Economic Impacts in Wake County** 

Scenario Year	Revenues	Earnings	Jobs
Year 1	\$152,846,000	\$32,139,000	970
Year 2	\$181,287,000	\$37,916,000	1,140
Year 3	\$198,654,000	\$41,351,000	1,250
Year 4	\$203,526,000	\$42,262,000	1,270
Year 5	\$208,524,000	\$43,200,000	1,300
Year 6	\$213,652,000	\$44,166,000	1,330
Year 7	\$218,915,000	\$45,161,000	1,360
Year 8	\$223,857,000	\$46,162,000	1,380
Year 9	\$228,947,000	\$47,195,000	1,410
Year 10	\$234,190,000	\$48,260,000	1,440
Year 11	\$239,591,000	\$49,358,000	1,470
Year 12	\$245,153,000	\$50,492,000	1,500
Year 13	\$250,882,000	\$51,661,000	1,530
Year 14	\$256,783,000	\$52,867,000	1,570
Year 15	\$262,861,000	\$54,112,000	1,600
Raw Sum	\$3,319,669,000	\$686,303,000	
Annual Average	\$221,311,000	\$45,754,000	1,370
NPV	\$1,941,502,000	\$401,998,000	

To determine the direct, indirect, and induced impacts this spending will have on the regional economy, the spending was broken out by industry. Multiplying the initial impact in each industry by the multipliers in the EMSI input/output model provided the estimation of the ripple effect throughout the economy. The Wake County multipliers are smaller than the state model because with a smaller geographical area there is more leakage. For example, a hotel may hire a consultant from Charlotte that would generate impacts in the state model but not the Wake County model. The appendix shows the multipliers and industries used in detail.

After the multiplier effect to Wake County's economy was accounted for, the total economic impact was estimate at a net present value of \$3.8 billion in economic activity. Through 15 years of 16 | P a g e

operations, the entertainment district is predicted to create or support on average 2,710 full-time resident workers in the county annually and generate an average of \$438 million in economic activity.

**Total Economic Impacts in Wake County** 

Scenario Year	Revenues	Earnings	Jobs
Year 1	\$299,294,000	\$73,201,000	1,880
Year 2	\$357,754,000	\$86,990,000	2,250
Year 3	\$393,338,000	\$95,153,000	2,470
Year 4	\$403,087,000	\$97,227,000	2,520
Year 5	\$413,089,000	\$99,363,000	2,570
Year 6	\$423,352,000	\$101,562,000	2,630
Year 7	\$433,884,000	\$103,826,000	2,690
Year 8	\$443,772,000	\$106,107,000	2,740
Year 9	\$453,957,000	\$108,458,000	2,800
Year 10	\$464,448,000	\$110,882,000	2,860
Year 11	\$475,253,000	\$113,382,000	2,920
Year 12	\$486,382,000	\$115,959,000	2,980
Year 13	\$497,845,000	\$118,617,000	3,050
Year 14	\$500,060,000	\$120,194,000	3,110
Year 15	\$521,814,000	\$124,185,000	3,190
30 MW			24.50
Raw Sum	\$6,567,328,000	\$1,575,106,000	
Annual Average	\$437,822,000	\$105,007,000	2,710
NPV (7%)	\$3,840,311,000	\$922,733,000	

By Year 15, over 93 percent of the projected economic impact (\$484 million) would be attributable to the activity generated from the real estate developments in the stadium area. However, these hotels and retail shops are anticipated to be heavily supported by the games and special events held at the stadium. By Year 15 the operations of the NCFC and special events promotion group are estimated to contribute to over \$4.6 million in earnings across Wake County. After 15 years of operations, the entertainment district is forecasted to create and support almost 3,190 jobs in the county.

# **Annual Total Economic Impact of Stadium Area to Wake County**



## Breakdown of Total Economic Impact for Year 15 to Wake County

Impact Type	Sales	Earnings	Jobs
Team Operations	\$21,765,000	\$3,376,000	23
Special Events Operations	\$16,445,000	\$1,188,000	18
Real Estate	\$483,603,000	\$119,621,000	3,146
Total Impacts	\$521,814,000	\$124,185,000	3,187

# **Downtown Raleigh Economic Impacts**

Modeling the downtown area economic impacts demonstrate the level of economic activity that will be concentrated in the central business district near the stadium. As Raleigh continues to recruit top millennial talent, research strongly suggests that a thriving downtown economy will be an important factor. 18 ZIP codes that include the downtown business district were modeled as the Downtown Raleigh region. See the appendix for a more detailed map of the downtown Raleigh region used for this study.

In the downtown Raleigh impact model, 50 percent of employees are predicted to live in the region and 65 percent of construction hard costs were assumed to be sourced from downtown Raleigh. Since NCFC currently operates in Cary, we estimated that moving to the downtown stadium would bring all of NCFC operations to downtown Raleigh as new economic impact for downtown, instead of just the additional benefits from a bigger stadium. Therefore, some of the initial sales are higher for the downtown model than the county and state model.

# **Construction Impacts**

It was estimated that \$1 billion of construction spending would be spent inside Downtown Raleigh and support over 1,340 resident workers. This economic activity will support another 650 jobs throughout the economy for a total of 1,990 jobs supported in downtown.

One-Time Construction Impacts (million\$)

Impact Type	Initial	Direct, Indirect, & Induced	Total
Sales	\$1,007	\$366	\$1,373
Earnings	\$198	\$59	\$256
Jobs	1,340	650	1,990

# **Ongoing Impacts**

The **initial economic impacts** of the stadium area will generate \$3.4 billion in economic activity downtown across 15 years. This equates to **a net present value of \$2.0 billion**. During the operations phase, an annual average of \$228 million in economic activity is expected as well as \$31 million in earnings and **870 jobs for downtown residents**.

Initial Economic Impacts in Downtown Raleigh

Scenario Year	Revenues	Earnings	Jobs	
Year 1	\$158,254,000	\$21,983,000	620	
Year 2	\$186,857,000	\$25,688,000	730	
Year 3	\$204,391,000	\$27,933,000	800	
Year 4	\$209,434,000	\$28,606,000	810	
Year 5	\$214,610,000	\$29,301,000	830	
Year 6	\$219,921,000	\$30,019,000	850	
Year 7	\$225,372,000	\$30,761,000	870	
Year 8	\$230,508,000	\$31,512,000	880	
Year 9	\$235,797,000	\$32,290,000	900	
Year 10	\$241,246,000	\$33,094,000	920	
Year 11	\$246,858,000	\$33,926,000	940	
Year 12	\$252,638,000	\$34,787,000	960	
Year 13	\$258,592,000	\$35,678,000	980	
Year 14	\$264,724,000	\$36,601,000	1,000	
Year 15	\$271,041,000			
		* · · · · · · · · · · · · · · · · · · ·		
Raw Sum	\$3,420,242,000	\$469,735,000		
Annual Average	\$228,016,000	\$31,316,000	870	
NPV	\$2,000,352,000	\$274,560,000		

To determine the direct, indirect, and induced impacts this spending will have on the regional economy, the spending was broken out by industry. Multiplying the initial impact in each industry by the multipliers in the EMSI input/output model provided the estimation of the ripple effect

throughout the economy. Downtown Raleigh's multipliers are smaller than the other regional models because with a smaller geographical area there is more leakage. The appendix shows the multipliers and industries used in detail.

After the multiplier effect to downtown's economy was accounted for, the total economic impact was estimate at a net present value of \$3.2 billion in economic activity. Through 15 years of operation, the entertainment district is predicted to create or support on average 1,350 full-time resident workers in downtown annually and generate an average of \$361 million in economic activity.

Total Economic Impacts in Downtown Raleigh

Scenario Year	Revenues	Earnings	Jobs	
Year 1	\$245,876,000	\$35,898,000	940	
Year 2	\$293,661,000	\$42,680,000	1,120	
Year 3	\$322,866,000	\$46,755,000	1,230	
Year 4	\$331,077,000	\$47,902,000	1,260	
Year 5	\$339,503,000	\$49,086,000	1,280	
Year 6	\$348,150,000	\$50,307,000	1,310	
Year 7	\$357,024,000	\$51,569,000	1,340	
Year 8	\$365,380,000	\$52,845,000	1,370	
Year 9	\$373,987,000	\$54,165,000	1,400	
Year 10	\$382,852,000	\$55,529,000	1,430	
Year 11	\$391,983,000	\$56,939,000	1,460	
Year 12	\$401,387,000	\$58,396,000	1,490	
Year 13	\$411,074,000	\$59,903,000	1,520	
Year 14	\$411,425,000	\$59,807,000	1,540	
Year 15	\$431,329,000	\$63,073,000	1,590	
Raw Sum	\$5,407,576,000	\$784,853,000		
Annual Average	\$360,505,000	\$52,324,000	1,350	
NPV (7%)	\$3,160,426,000	\$458,510,000		

By Year 15, over 90 percent of the projected economic impact in Downtown Raleigh (\$388 million) would be attributable to the activity generated from the real estate developments in the stadium

area. However, these hotels and retail shops are anticipated to be heavily supported by the games and special events held at the stadium. By Year 15 the operations of NCFC and special events promotion group are estimated to contribute to almost \$7.4 million in earnings to city workers. After 15 years of operations, the entertainment district is forecasted to create and support just over 1,590 resident workers in the city.

# Annual Total Economic Impact of Stadium Area to Downtown Raleigh



#### Breakdown of Total Economic Impact in Year 15 to Downtown Raleigh

Impact Type	Sales	Earnings	Jobs
Team Operations	\$29,980,000	\$6,819,000	40
Special Events Operations	\$13,447,000	\$588,000	10
Real Estate	\$387,902,000	\$55,666,000	1,542
Total Impacts	\$431,329,000	\$63,073,000	1,592

# **Tax Impacts**

We estimated tax impacts based on the numbers produced through our analysis. This included property tax, sales tax, interlocal funds, and income tax revenue. Not every geographic unit in our study collects all of these taxes; the chart below shows which jurisdiction collects each type of revenue. There will be other tax revenues generated from this project, but these are the revenues that can be estimated based on investment, sales, and earnings data generated from our model. Construction tax impacts were not calculated as they are one-time impacts to the economy, instead the report focused on the sustained operational tax benefits.

#### **Tax Income Sources Estimated**

Тах Туре	North Carolina	Wake County	Downtown Raleigh
Property Tax		X	X
Sales Tax	X	X	
Interlocal Funds		X	
Income Tax	X		

#### **Property Tax Income**

Local developers plan to invest just over \$2 billion in the entertainment district. We removed the stadium cost from the total property value to arrive at a property value of \$1.86 billion. This value acknowledges that the county and city may value the property at a slightly lower value than the developers report. When you apply this value to the city and county property tax rates, Wake County is expected to receive \$12.1 million annually in property taxes while the City of Raleigh is expected to receive \$8.1 million. This combines to property taxes of \$20.3 million each year.

#### **Property Tax Rates**

Property Taxes to Raleigh/Wake County	\$0.010926
County rate	\$0.006544
Raleigh rate	\$0.004382

#### Sales Tax Income

Both the county and North Carolina have a tax on sold goods in the region. North Carolina has a 4.75 percent sales tax that applies to food and beverage and other tangible personal property that is purchased. To estimate the North Carolina sales tax impact, we counted all retail sales from the entertainment district and the sales from sports games and concerts. Retail sales came from the estimation of the ongoing impacts of retail space in the district that was estimated earlier in the report. In our model this is predicted as new spending to the economy as a result of all the out of region visitors to the economy.

Based on data provided by NCFC, we know that 59 percent of sales revenue at NCFC comes from ticket sales which are subject to a sales tax. The predicted increased revenue expected from NCFC and the special events group was multiplied by 59 percent to determine the revenue from ticket sales. To account for the fact that some of this revenue would be coming from local residents who would be spending this money in the economy elsewhere due to the substitution effect, we only took a portion of these sales as new tax revenue. It was estimated that 10 percent of ticket sales would come from outside the region for North Carolina. This resulted in an estimate \$24.0 million in sales tax for the state over 15 years of operation, or an average annual average of \$1.6 million.

#### Sales Tax Revenue for North Carolina

Scenario Year	Retail Sales	Games and Concert Ticket Sales	Sales Tax		
Year 1	\$22,500,000	\$638,000	\$1,099,000		
Year 2	\$30,000,000	\$652,000	\$1,456,000		
Year 3	\$33,750,000	\$703,000	\$1,637,000		
Year 4	\$33,750,000	\$755,000	\$1,639,000		
Year 5	\$33,750,000	\$808,000	\$1,641,000		
Year 6	\$33,750,000	\$860,000	\$1,644,000		
Year 7	\$33,750,000	\$914,000	\$1,647,000		
Year 8	\$33,750,000	\$941,000	\$1,648,000		
Year 9	\$33,750,000	\$969,000	\$1,649,000		
Year 10	\$33,750,000	\$998,000	\$1,651,000		
Year 11	\$33,750,000	\$1,028,000	\$1,652,000		
Year 12	\$33,750,000	\$1,059,000	\$1,653,000		
Year 13	\$33,750,000	\$1,091,000	\$1,655,000		
Year 14	\$33,750,000	\$1,124,000	\$1,656,000		
Year 15	\$33,750,000	\$1,157,000	\$1,658,000		
Raw Sum	\$491,250,000	\$13,697,000	\$23,985,000		
Annual Average	\$32,750,000	\$913,000	\$1,599,000		
NPV (7%)	\$293,603,000	\$7,883,000	\$14,321,000		

Local sales tax revenue at the county level is taxed at a 2.5 percent rate in Wake County. This applies to tangible personal property that is not food and beverage. Food and beverage sold in the county is subject to a different tax that is included under the interlocal funds section. Therefore, the county tax revenue only includes non-restaurant sales which is 60 percent of retail sales. The games and concert ticket sales from events at the stadium were also included, assuming that only 33 percent came from outside Wake County. Through fifteen years of operation of the entertainment district, Wake County is expected to collect about \$8.5 million in sales tax revenue from new sales within the district. The annual average is about \$567,000 in sales tax.

Sales Tax Revenue for Wake County

Scenario Year	Retail Sales	Games and Concert Ticket Sales	Sales Tax
Year 1	\$13,500,000	\$2,107,000	\$390,000
Year 2	\$18,000,000	\$2,151,000	\$504,000
Year 3	\$20,250,000	\$2,321,000	\$564,000
Year 4	\$20,250,000	\$2,492,000	\$569,000
Year 5	\$20,250,000	\$2,665,000	\$573,000
Year 6	\$20,250,000	\$2,839,000	\$577,000

Year 7	\$20,250,000	\$3,015,000	\$582,000
Year 8	\$20,250,000	\$3,105,000	\$584,000
Year 9	\$20,250,000	\$3,198,000	\$586,000
Year 10	\$20,250,000	\$3,294,000	\$589,000
Year 11	\$20,250,000	\$3,393,000	\$591,000
Year 12	\$20,250,000	\$3,495,000	\$594,000
Year 13	\$20,250,000	\$3,600,000	\$596,000
Year 14	\$20,250,000	\$3,708,000	\$599,000
Year 15	\$20,250,000	\$3,819,000	\$602,000
Raw Sum	\$294,750,000	\$45,201,000	\$8,499,000
Annual Average	\$19,650,000	\$3,013,000	\$567,000
NPV (7%)	\$176,162,000	\$26,014,000	\$5,054,000

#### **Interlocal Funds**

Wake County generates tax revenue from hotels and prepared food sales called interlocal funds. These funds are then used on tourism projects that promote further visitation to the county. The interlocal funds come from a six percent occupancy tax that is levied on hotel sales and a one percent tax on prepared food sales. To estimate these tax impacts, we took the hotel sales that were estimated in the entertainment district, described earlier in the report, and applied the occupancy tax rate. The revenue from restaurants in the district was calculated by taking the retail sales value and multiplying by 40 percent, the assumption of retail space that would be restaurants used in the impact model. This value was then applied with a one percent prepared food tax. This resulted in an estimate of \$54.8 million in interlocal funds generated within the district over 15 years. The average annual interlocal tax revenue is \$3.7 million.

Wake County Interlocal Funds

wake county intel	TOCOT T UTTUS				
Scenario Year	Hotel Income	Occupancy Tax	Restaurant Sales	Prepared Food Tax	Interlocal Fund Revenue
Year 1	\$47,304,000	\$2,838,000	\$9,000,000	\$90,000	\$2,928,000
Year 2	\$48,723,000	\$2,923,000	\$12,000,000	\$120,000	\$3,043,000
Year 3	\$50,185,000	\$3,011,000	\$13,500,000	\$135,000	\$3,146,000
Year 4	\$51,690,000	\$3,101,000	\$13,500,000	\$135,000	\$3,236,000
Year 5	\$53,241,000	\$3,194,000	\$13,500,000	\$135,000	\$3,329,000
Year 6	\$54,838,000	\$3,290,000	\$13,500,000	\$135,000	\$3,425,000
Year 7	\$56,483,000	\$3,389,000	\$13,500,000	\$135,000	\$3,524,000
Year 8	\$58,178,000	\$3,491,000	\$13,500,000	\$135,000	\$3,626,000
Year 9	\$59,923,000	\$3,595,000	\$13,500,000	\$135,000	\$3,730,000
Year 10	\$61,721,000	\$3,703,000	\$13,500,000	\$135,000	\$3,838,000
Year 11	\$63,573,000	\$3,814,000	\$13,500,000	\$135,000	\$3,949,000
Year 12	\$65,480,000	\$3,929,000	\$13,500,000	\$135,000	\$4,064,000

Year 13	\$67,444,000	\$4,047,000	\$13,500,000	\$135,000	\$4,182,000
Year 14	\$69,468,000	\$4,168,000	\$13,500,000	\$135,000	\$4,303,000
Year 15	\$71,552,000	\$4,293,000	\$13,500,000	\$135,000	\$4,428,000
Raw Sum	\$879,803,000	\$52,788,000	\$196,500,000	\$1,965,000	\$54,753,000
Annual Average	\$58,654,000	\$3,519,000	\$13,100,000	\$131,000	\$3,650,000
NPV (7%)	\$514,811,000	\$30,889,000	\$117,441,000	\$1,174,000	\$32,063,000

#### **Income Taxes**

The state of North Carolina taxes personal income at a rate of 5.25 percent. Based on our impact model, we know the anticipated earnings from economic activity within the entertainment district and from the multiplier effect on the economy. These are the total earnings impacts from the North Carolina section of our impact model. Not all earnings count as taxable income, so to reduce earnings to taxable income we used a ratio of average household taxable income from the IRS and the average household income from the US Census. This amounted to a ratio of 83 percent of earnings counting as taxable income. This taxable income was applied to a 4.57 percent effective tax rate in North Carolina estimated by SmartAsset. The state is predicted to receive over \$81.2 million during 15 years of operation of the entertainment district. This averages to \$5.4 million in income tax per year for the state.

#### North Carolina Income Tax Revenue

Scenario Year	Total Earnings	Taxable Income	State Income Tax Revenue			
Year 1	\$99,121,000	\$82,538,000	\$3,772,000			
Year 2	\$117,818,000	\$98,107,000	\$4,483,000			
Year 3	\$128,887,000	\$107,324,000	\$4,905,000			
Year 4	\$131,710,000	\$109,675,000	\$5,012,000			
Year 5	\$134,616,000	\$112,094,000	\$5,123,000			
Year 6	\$137,608,000	\$114,586,000	\$5,237,000			
Year 7	\$140,690,000	\$117,152,000	\$5,354,000			
Year 8	\$143,792,000	\$119,735,000	\$5,472,000			
Year 9	\$146,991,000	\$122,399,000	\$5,594,000			
Year 10	\$150,290,000	\$125,146,000	\$5,719,000			
Year 11	\$153,691,000	\$127,979,000	\$5,849,000			
Year 12	\$157,199,000	\$130,900,000	\$5,982,000			
Year 13	\$160,817,000	\$133,912,000	\$6,120,000			
Year 14	\$162,513,000	\$135,325,000	\$6,184,000			
Year 15	\$168,394,000	\$140,222,000	\$6,408,000			
Raw Sum	\$2,134,138,000	\$1,777,094,000	\$81,213,000			
Annual Average	\$142,276,000	\$118,473,000	\$5,414,000			
NPV (7%)	\$1,250,173,000	\$1,041,017,000	\$47,574,000			

Based on the taxes we have estimated in this analysis, the state of North Carolina would benefit from about \$7 million new taxes annually through sales and income taxes. Wake County would have at least three sources of tax revenue from the entertainment district project for an annual total average of \$16.4 million. The City of Raleigh would also benefit from \$8.8 million in new property tax annually. The majority of tax revenue would come from the property taxes of the entertainment district, with such a large investment the return in property taxes to the county and city is also substantial.

Average Annual Tax Revenue by Geography

Тах Туре	North Carolina	Wake County	Downtown Raleigh	Total
Property Tax		\$12,145,000	\$8,132,000	\$20,277,000
Sales Tax	\$1,599,000	\$567,000		\$2,166,000
Interlocal Funds		\$3,650,000		\$3,650,000
Income Tax	\$5,414,000			\$5,414,000
Total	\$7,013,000	\$16,362,000	\$8,132,000	\$31,507,000

# **Conclusions**

The Downtown Raleigh Entertainment District plan has many elements and significant private investment that would contribute to economic growth. The economic activity would be concentrated in downtown Raleigh which could bring a new entertainment energy to the central business district, bringing with it new spending and new residents. This analysis found that the entertainment district will generate consistent revenue for state and local coffers. Moving to a stadium in downtown Raleigh will increase the operations for NCFC and create a new venue to host special events that will support the hotels and retail operations of the entertainment district. Impacts vary based on the region evaluated, but overall the impacts to the regional economies are expected to be in the billions.

The report was written by Sara Casey, Greg Payne, and Ted Abernathy of Economic Leadership LLC of Raleigh, NC.

# Appendix

**Breakdown of Construction Spending Assumptions** 

Hard Costs	Percentage of Total	Industry for Model
	67%	Commercial and Institutional Building Construction
	33%	New Multifamily Housing Construction
Soft Costs	Percentage of Total	Industry for Model
Architects	10.0%	Architectural Services
Engineering	1.6%	Engineering Services
Consultants	2.0%	Other Scientific and Technical Consulting Services
	2.0%	Environmental Consulting Services
Finance	4.3%	Commercial Banking
	4.3%	Portfolio Management
Legal	2.5%	Offices of Lawyers
Taxes and Permits	6.3%	Local Government
Insurance	2.0%	Insurance Agencies and Brokerages
Operating Deficit*	3.0%	Other Activities Related to Real Estate
Marketing	1.0%	Marketing Consulting Services
Management Fees	25.0%	Other Management Consulting Services
Furniture	1.6%	Furniture Merchant Wholesalers
	1.6%	Office Equipment Merchant Wholesalers
Leasing Costs	18.0%	Offices of Real Estate Agents and Brokers
Tenant Improvements	10.1%	Commercial and Institutional Building Construction
	5.0%	New Multifamily Housing Construction
Premium Costs	Percentage of Total	
	70%	Hard Costs
	30%	Soft Costs

<sup>\*</sup> Not included in the model along with land costs.

**North Carolina Industry Multipliers** 

Industry	Sales	Earnings	Jobs
Commercial and Institutional Building Construction	1.94	1.78	2.28
New Multifamily Housing Construction	1.96	1.80	2.23
Architectural Services	2.15	1.86	2.45
Engineering Services	2.14	1.85	2.65
Other Scientific and Technical Consulting Services	2.10	1.64	1.90
Environmental Consulting Services	2.12	1.65	2.02

Commercial Banking	2.01	2.15	3.87
Portfolio Management	1.90	1.47	1.96
Offices of Lawyers	2.04	1.82	2.42
Local Government, Excluding Education and Hospitals	2.10	2.97	3.44
Insurance Agencies and Brokerages	2.61	2.75	3.18
Marketing Consulting Services	2.14	1.73	2.04
Other Management Consulting Services	2.13	1.72	2.36
Furniture Merchant Wholesalers	2.11	2.27	2.58
Office Equipment Merchant Wholesalers	2.11	2.06	2.72
Offices of Real Estate Agents and Brokers	2.25	2.86	2.06
Lessors of Nonresidential Buildings	2.25	2.86	2.76
Lessors of Residential Buildings and Dwellings	2.24	2.83	2.56
Hotels (except Casino Hotels) and Motels	1.99	2.15	1.70
Men's Clothing Stores	2.17	2.38	1.96
Full-Service Restaurants	2.00	1.86	1.39
Limited-Service Restaurants	2.04	2.34	1.49
Sports Teams and Clubs	2.17	1.80	2.98
Food Service Contractors	2.05	1.69	1.44
Promoters of Performing Arts, Sports, and Similar Events with Facilities	2.15	2.47	2.36

Source: EMSI 2019.2

**Wake County Industry Multipliers** 

Industry	Sales	Earnings	Jobs
Commercial and Institutional Building Construction	1.70	1.58	1.97
New Multifamily Housing Construction	1.70	1.58	1.98
Architectural Services	1.91	1.69	1.99
Engineering Services	1.90	1.68	2.25
Other Scientific and Technical Consulting Services	1.84	1.49	1.63
Environmental Consulting Services	1.84	1.49	1.84
Commercial Banking	1.93	2.02	2.92
Portfolio Management	1.62	1.33	1.42
Offices of Lawyers	1.89	1.68	2.20
Local Government, Excluding Education and Hospitals	1.99	2.96	3.35
Insurance Agencies and Brokerages	2.38	2.46	3.16
Marketing Consulting Services	1.86	1.55	1.77

Other Management Consulting Services	1.86	1.55	1.92
Furniture Merchant Wholesalers	1.92	2.03	2.41
Office Equipment Merchant Wholesalers	1.87	1.81	2.35
Offices of Real Estate Agents and Brokers	2.14	2.68	1.93
Lessors of Nonresidential Buildings	2.14	2.68	2.68
Lessors of Residential Buildings and Dwellings	2.14	2.68	2.51
Hotels (except Casino Hotels) and Motels	1.79	1.91	1.52
Men's Clothing Stores	1.94	2.09	1.86
Full-Service Restaurants	1.76	1.64	1.29
Limited-Service Restaurants	1.89	2.12	1.39
Sports Teams and Clubs	1.84	1.57	1.86
Food Service Contractors	1.71	1.46	1.30
Promoters of Performing Arts, Sports, and Similar Events with Facilities	2.01	2.27	1.87

Source: EMSI 2019.2

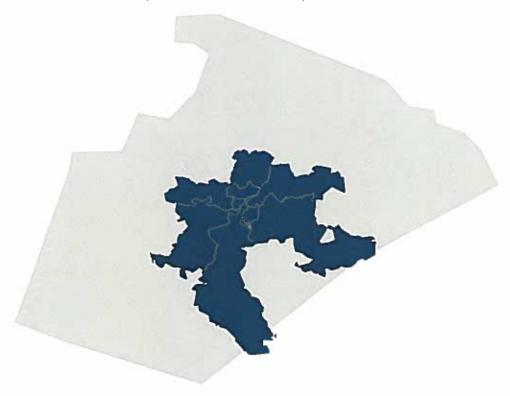
**Downtown Raleigh Industry Multipliers** 

Industry	Sales	Earnings	Jobs
Commercial and Institutional Building Construction	1.36	1.29	1.48
New Multifamily Housing Construction	1.36	1.29	1.48
Architectural Services	1.53	1.40	1.60
Engineering Services	1.52	1.40	1.76
Other Scientific and Technical Consulting Services	1.46	1.28	1.37
Environmental Consulting Services	1.46	1.28	1.49
Commercial Banking	1.59	1.60	2.16
Portfolio Management	1.30	1.16	1.21
Offices of Lawyers	1.54	1.39	1.71
Local Government, Excluding Education and Hospitals	1.32	1.49	1.62
Insurance Agencies and Brokerages	1.86	1.88	2.25
Marketing Consulting Services	1.49	1.32	1.46
Other Management Consulting Services	1.49	1.32	1.55
Furniture Merchant Wholesalers	1.56	1.60	1.85
Office Equipment Merchant Wholesalers	1.51	1.46	1.78
Offices of Real Estate Agents and Brokers	1.74	2.05	1.59
Lessors of Nonresidential Buildings	1.75	2.05	2.06
Lessors of Residential Buildings and Dwellings	1.75	2.05	1.95

Hotels (except Casino Hotels) and Motels	1.47	1.50	1.30
Men's Clothing Stores	1.57	1.62	1.50
Full-Service Restaurants	1.43	1.33	1.15
Limited-Service Restaurants	1.53	1.62	1.22
Sports Teams and Clubs	1.50	1.35	1.50
Food Service Contractors	1.37	1.23	1.15
Promoters of Performing Arts, Sports, and Similar Events with Facilities	1.65	1.78	1.59

Source: EMSI 2019.2

# Map of Downtown Raleigh Region Within Wake County



**Zip Codes of Downtown Raleigh Region** 

27601	27606	27611	27636	27610
27602	27607	27620	27650	27635
27603	27608	27626	27695	
27604	27609	27628	27605	

#### Sources

Economic Modeling Specialists International (EMSI). 2019. "Class of Worker 2019.2: Analyst Tool." <a href="https://e.economicmodeling.com/analyst">https://e.economicmodeling.com/analyst</a>

Downtown Raleigh Alliance. 2018. "State of Downtown Raleigh." http://godowntownraleigh.com/\_files/sodlosres.pdf

SmartAsset. 2019. "North Carolina Income Tax Calculator." https://smartasset.com/taxes/north-carolina-tax-calculator

The Motley Fool. 2017. 'Revealed: The Average American's Taxable Income, and Why It Could Fall in 2017." <a href="https://www.fool.com/retirement/2017/02/06/revealed-the-average-americans-taxable-income-and.aspx">https://www.fool.com/retirement/2017/02/06/revealed-the-average-americans-taxable-income-and.aspx</a>

US Census Bureau. 2019. "2014 American Community Survey 5-Year Estimates: Average Household Income." Accessed from American Factfinder.

Xceligent. 2017. "1st Quarter 2017 Triangle Region Market Report." Purchased from https://www.xceligent.com