

# **Economic Contribution of North Carolina Airports**

## **FINAL REPORT**

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Without the help of all the above individuals, this project could not have been completed.

## EXECUTIVE SUMMARY

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This study of the economic contribution of airports to their communities includes the 72 publicly-owned airports in North Carolina, including ten which offer scheduled, commercial air service. Airports provide a vital link to regional, national, and international markets to many businesses in North Carolina. A portion of the revenues generated by these local businesses can be attributed to the provision of access to the markets they serve.

The economic contribution results are presented in three categories: direct, indirect, and induced impacts. The indirect and induced impacts capture multiplier impacts. Direct impacts result from firms that are directly engaged in the movement of people or goods through an airport. Indirect impacts represent the impacts of spending by airport-related firms on products and services provided by support businesses (such as office supply companies, property maintenance, etc.). Induced impacts result from payroll expenditures of employees of directly- and indirectly-related firms that produce successive spending (which is money that is re-circulated in an economy resulting in additional economic activity). The direct contributions for general aviation airports came from surveys of airport management, tenants, and major users; while the direct contributions for commercial airports were derived from operations at the airports. IMPLAN® (IMPact Analysis for PLANning) multipliers (from the Minnesota IMPLAN® Group) were used to generate the indirect and induced contributions of the airport activity, which was also utilized for the tax analysis.

The total economic output contribution of North Carolina's publicly-owned airports is approximately \$31 billion while supporting over 123,400 jobs. As evident by these numbers, aviation is clearly a significant contributor to the economic viability of the state. As a frame of reference for the magnitude of the airports' and aviation manufacturing's contribution to the state's economy, the contribution represents 8.5 percent of the state's GDP. North Carolina airports supported \$4.2 billion in labor income for North Carolina workers. State and local governments in North Carolina received \$913 million in sales, property, corporate, and personal tax collections in 2014 due to activity supported by North Carolina's publicly-owned airports.

# TABLE OF CONTENTS

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<b>DISCLAIMER.....</b>	<b>III</b>
<b>ACKNOWLEDGEMENTS.....</b>	<b>IV</b>
<b>EXECUTIVE SUMMARY .....</b>	<b>V</b>
<b>TABLE OF CONTENTS .....</b>	<b>VI</b>
<b>LIST OF EXHIBITS.....</b>	<b>VII</b>
<b>INTRODUCTION .....</b>	<b>1</b>
<b>PROBLEM STATEMENT.....</b>	<b>1</b>
<b>ECONOMIC CONTRIBUTION DEFINITIONS .....</b>	<b>1</b>
<b>METHODOLOGY .....</b>	<b>4</b>
<b>INTRODUCTION.....</b>	<b>4</b>
<b>DIRECT CONTRIBUTIONS FOR GENERAL AVIATION AIRPORTS.....</b>	<b>4</b>
<b>DIRECT CONTRIBUTIONS FOR COMMERCIAL AIRPORTS .....</b>	<b>4</b>
<b>VISITOR CONTRIBUTIONS.....</b>	<b>5</b>
<b>MULTIPLIER EFFECTS.....</b>	<b>5</b>
<b>TAX CONTRIBUTIONS .....</b>	<b>6</b>
<b>SUMMARY .....</b>	<b>6</b>
<b>RESULTS.....</b>	<b>7</b>
<b>INTRODUCTION.....</b>	<b>7</b>
<b>OUTPUT CONTRIBUTION.....</b>	<b>7</b>
<b>EMPLOYMENT CONTRIBUTION .....</b>	<b>7</b>
<b>INCOME CONTRIBUTION.....</b>	<b>7</b>
<b>STATE AND LOCAL TAX CONTRIBUTION .....</b>	<b>7</b>
<b>AEROSPACE MANUFACTURING .....</b>	<b>7</b>
<b>REFERENCES .....</b>	<b>13</b>
<b>APPENDIX A: AIRPORT INFLUENCE AREAS BY COUNTY.....</b>	<b>14</b>

# LIST OF EXHIBITS

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EXHIBIT 1 – NORTH CAROLINA AIRPORTS .....3  
EXHIBIT 2 –OUTPUT CONTRIBUTION FOR AIR CARRIER AIRPORTS .....8  
EXHIBIT 3 –EMPLOYMENT, PAYROLL, AND TAX CONTRIBUTIONS FOR AIR CARRIER AIRPORTS .....8  
EXHIBIT 4 –OUTPUT CONTRIBUTION FOR GENERAL AVIATION AIRPORTS .....9  
EXHIBIT 5 –OUTPUT CONTRIBUTION FOR GENERAL AVIATION AIRPORTS (CONTINUED).....10  
EXHIBIT 6 – EMPLOYMENT, PAYROLL, AND TAX CONTRIBUTIONS FOR GENERAL AVIATION AIRPORTS .....11  
EXHIBIT 7 – EMPLOYMENT, PAYROLL, AND TAX CONTRIBUTIONS FOR GENERAL AVIATION AIRPORTS (CONTINUED)12

# INTRODUCTION

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The North Carolina Department of Transportation's Division of Aviation has responsibility across the state for aviation functions including system planning, airport and aviation system development, and funding. This study of the economic contribution of airports to their communities includes the 72 publicly-owned airports in North Carolina which are part of the National Plan of Integrated Airport Systems (NPIAS), including ten which offer scheduled, commercial air service. Previous, similar statewide studies were conducted in 1996, 2006, and 2012. The purpose of this project is to examine and report the current economic contributions of aviation services for the publicly-owned airports in North Carolina, both on the statewide and the local, county levels. Economic indicator studies are referred to by several names ranging from economic impact, benefit, cost-benefit, and contribution studies. For the purposes of this study, the project team will refer to the overall study of the existing airports as an economic contribution study, which will measure the economic activity associated with the airports in the current regional economy. A thorough understanding of the contribution of aviation activities is important when considering funding decisions at local and statewide levels.

## **PROBLEM STATEMENT**

The North Carolina Department of Transportation (NCDOT) Division of Aviation wanted to understand the economic contribution of aviation services for the 72 publicly-owned airports in North Carolina (Exhibit 1). The purpose of this project was to examine and report the economic contribution of airport services for the publicly-owned airports in North Carolina, at both a local and statewide level. The results of the study are documented in this technical report for use by the Division of Aviation and airport managers and operators. The Division of Aviation and local airports could use these results to show the existing as well as the future potential contribution of airport activities to various audiences such as the North Carolina General Assembly, the North Carolina Department of Transportation Board of Transportation, other municipal and elected officials, and businesses and industries located in North Carolina, as well as businesses and industries that could potentially locate in North Carolina. This study has a couple of notable differences from the previous study in the calculation of visitor impacts and commercial airport contribution calculations, as documented in this report. Both of these changes were modified as a result of guidance from the FAA including updated default values for visitor expenditures and a commercial airport methodology based on contributions from commercial airline, air cargo, and airport operations, instead of the previously applied survey-based method. The 2006 study found an estimated 88,420 jobs and \$11.81 billion in economic contribution per year were supported North Carolina airports – 14,970 jobs and \$1.88 billion at general aviation airports and 73,450 jobs and \$9.93 billion at commercial airports. The 2012 study found an estimated 108,850 jobs and \$25.88 billion in economic contribution per year were supported North Carolina airports – 15,460 jobs and \$2.01 billion at general aviation airports and 93,390 jobs and \$23.87 billion at commercial airports.

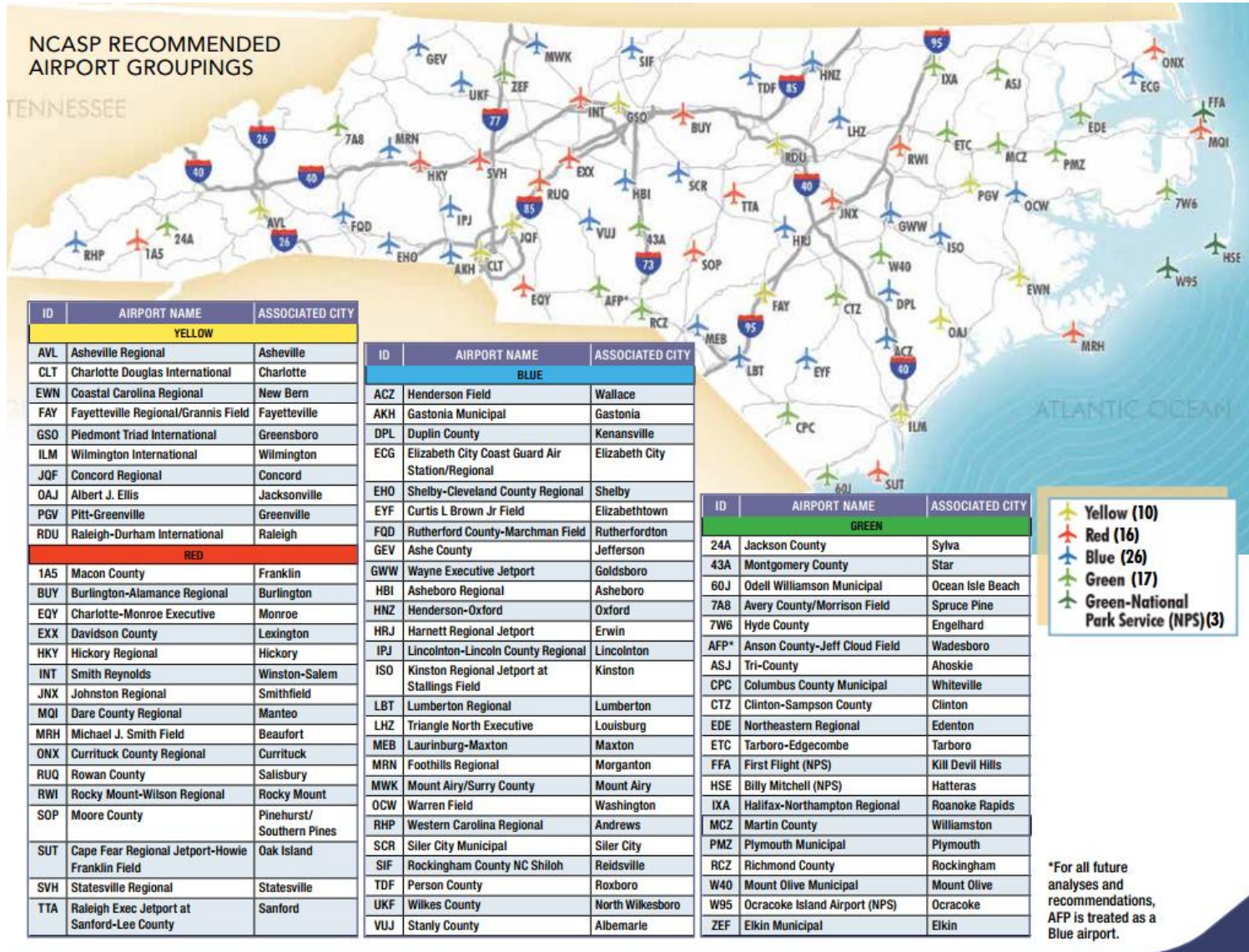
## **ECONOMIC CONTRIBUTION DEFINITIONS**

Numerous terms and concepts will appear throughout this report, specific to economic contribution studies and airport activity. The following information will provide readers with a foundation for understanding the results presented in this report. To measure the contribution of the airports to North Carolina's economy, four metrics were used: output (gross revenue), the

number of payroll employees and self-employed workers, employee compensation (payrolls and self-employment income), and tax receipts of state and local governments. The economic contribution results are presented in three categories: direct, indirect, and induced contributions.

- Direct contributions result from airport staff and on-site companies that are directly engaged in airport operations or aviation services, which can include manufacturing, shipping, receiving, exporting, distributing, transporting, handling, or processing people and goods which move through an airport, including employees engaged in these activities and personnel employed by an airport.
- Indirect contributions represent the impacts of spending by airport-related firms on products and services provided by support businesses (such as office supply companies, property maintenance, etc.). Indirect firms supply inputs (tools, products, know-how) to direct firms, so that direct firms can operate.
- Induced contributions result from payroll expenditures of employees of directly- and indirectly-related firms that produce successive spending (which is money that is re-circulated in an economy resulting in additional economic activity).

# Exhibit 1 – North Carolina Airports



Source: North Carolina Airports System Plan. 2015 Executive Summary.

# METHODOLOGY

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## INTRODUCTION

Airports provide a vital link to regional, national, and international markets for many businesses in North Carolina. A portion of the revenues generated by these local businesses can be attributed to the provision of access to the markets they serve. These revenues support employees as they provide goods or services to clients. Subsequently, the employees spend their salaries in the local economy on housing, food, household items, entertainment, services, etc. Airports enable companies reach well beyond their immediate geographic area to obtain work that would not be as easy to secure without the use of a flight. Consequently, airports are a contributor to North Carolina's economic vitality. The following methodology is an attempt to quantify the amount and type of these economic contributions at North Carolina airports. The broad study approach was to measure the outputs of business activities supported by the movement of goods and people via North Carolina's publicly-owned airports.

## DIRECT CONTRIBUTIONS FOR GENERAL AVIATION AIRPORTS

The primary source of data for general aviation airports came from surveys completed by airport management, tenants at the airport, and major users. The initial set of surveys was sent to airport management and asked about the number of based-aircraft, aircraft operations, jobs, airport tenants, and major airport users. The next step in the data collection was to contact each of the tenants at the airport and major users of the airport through contact information acquired through the airport manager's survey. The tenant and major user survey asked questions on topics including: use of the airport, type of business, and number of employees. Through repeated phone calls and emails, the team desired to achieve a 100 percent response rate from airport management, tenants, and major users. However, as with most surveys, complete participation was not achieved. The team decided that only collected or documented information would be input into the model. Any business users not reporting survey information would be excluded from the study. If a tenant did not respond to the survey, information from airport management about airport tenant employment was used when available. Thus, no extrapolation techniques were used to expand data for missing information. This is a conservative approach, but one that is highly repeatable over time. The individual contribution of any airport can be updated in a short period of time if additional data becomes available from existing or new tenants or business users. Employment data at each business was the measure of economic activity. The direct contribution employment value was calculated by multiplying the employment of each business by the proportion of their business that they would attribute to the existence of this airport. This proportion was used by the project team to separate the economic contribution due to aviation from the contribution due to other sources.

## DIRECT CONTRIBUTIONS FOR COMMERCIAL AIRPORTS

Similar to the survey method for general aviation airports, airport management, tenants, and major users at commercial (scheduled air carrier) airports were surveyed. However, due to the far-reaching impacts of commercial airports into surrounding communities and the difficulty of obtaining a complete listing of major users, an alternative analysis procedure developed by the FAA (2011) was applied to the commercial airports. Commercial airports were also given the opportunity to assist the project team with the survey distribution to businesses to apply the more detailed survey methodology used by the general aviation airports – ILM and AVL took this

approach. Therefore, the following methodology was applied to CLT, RDU, GSO, FAY, OAJ, EWN, PGV, and JQF. This methodology includes three operations which generate economic activity: commercial airline, air cargo, and airport operations. Commercial airline operations were measured by expenditures on airline and air commuter services, including passenger airline ticket revenues (BTS Form 41 Schedule P 1.2 and Schedule P 1.1). Airport operations were measured by expenses incurred by each airport authority on operation and project expenditures (FAA AAS-400, CATS, Report 127). Air cargo operations were measured by air cargo shipments (FAA ACAIS).

## **VISITOR CONTRIBUTIONS**

Airports serve the transportation needs of many visitors to an area. Visitors spend money for taxis, hotels, meals, entertainment, etc. These expenditures in turn support local jobs and are an important component as input into the economic contribution calculations. The visitors to the airport were calculated using FAA methodology (FAA 2011) based on the number of operations included in the FAA 5010 data. The 5010 data were reviewed and in some cases, revised by the airport management at the individual airports. The types of operations include: air carrier, regional carrier, air taxi, general aviation local, general aviation itinerant, and military. For general aviation operations, only air taxi and general aviation itinerant trips are assumed to generate visitors. Half of the operations were assumed to arrive at each airport (with the other half departing the airport), while 40% of the aircraft were expected to carry overnight passengers with an average of 2.84 passengers staying two nights with an average expenditure of \$98 per day. Airports that offer commercial service also have significant visitor impacts. The number of visitors for commercial airports was calculated based on the percentage of visitors and the number of deplanements, excluding internal transfers, at the airport. This takes into account the users of an airport who are local residents returning from trips to other locations. The \$1,024 value used for expenditures per visitor was based on FAA defaults (FAA 2011).

## **MULTIPLIER EFFECTS**

IMPLAN® (Impact Analysis for PLANning) multipliers (from the IMPLAN® Group) were used to generate the indirect and induced contributions of the airport activity, which was also utilized for the tax analysis. IMPLAN® uses data compiled from a wide variety of sources, including unique local data and census information, not estimated from national averages (IMPLAN 2014). IMPLAN® is widely used by analysts in helping to calculate the economic contribution of airports and other transportation facilities. The indirect contributions represent spending by airport-related firms on goods and services provided by support businesses (such as office supply companies, property maintenance, etc.). The induced contributions result from payroll expenditures by employees of directly- and indirectly-related firms that produce successive spending. Total contributions were generated by modeling each airport's contributions.

The project team developed a separate model within IMPLAN® for each airport to take into consideration the surrounding local economy. Each airport was analyzed on a county-level basis, which includes the county in which it is located and other adjacent influenced counties if applicable, as shown in Appendix A. The county influence areas were selected based on geographic location, metropolitan and micropolitan statistical areas, and knowledge by NCDOT Division of Aviation staff about employment and travel patterns.

## **TAX CONTRIBUTIONS**

Along with economic contributions, the project team considered the tax revenues that are generated by the airports through IMPLAN analysis and an evaluation of the impact of based aircraft. Based aircraft result in property taxes being paid into the local county revenue departments. Local tax offices were contacted for specific tax information on based aircraft. Tax collections in 2014 were obtained for 42 airports. For airports that did not have specific tax information, the types of based aircraft based at each airport were classified in the following groups with estimated values: single engine (\$80,000), multi-engine (\$200,000), jet (\$3,000,000), helicopters (\$750,000), gliders (\$35,000), and ultra-light (\$15,000). The estimated value of each type of aircraft was based on assessment data from the Division of Aviation. Property tax rates appropriate for each individual airport were applied to the estimated value of the aircraft.

## **SUMMARY**

The findings from studying the economic contributions of North Carolina's publicly-owned airports include total (in subcategories of direct, indirect, and induced) contributions to economic output, jobs, and labor income. The direct employment contributions for general aviation airports came from surveys of airport management, tenants, and major users, while the direct employment contributions for commercial airports were derived from operations at the airports. Subsequently, IMPLAN® (IMpact Analysis for PLANning) multipliers (from the IMPLAN® Group) were used to generate the direct output and direct labor income values for all airports. The indirect and induced contributions of the airport activity for each component were also derived from IMPLAN®. The IMPLAN® multipliers were also used for the tax analysis. The total contribution of an airport is the sum of its direct, indirect, and induced contributions for each category.

# RESULTS

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## **Introduction**

The final result of the project includes values for output, employment, labor income, and taxes, presented in the following tables. Aviation is clearly a significant contributor to the economic viability of the state. This study documents the significant economic contribution aviation has in supporting and encouraging local economies across the state. Commercial airports are defined as those airports with scheduled air carrier service. General aviation airports support commercial activity, such as chartered and on-demand flights, but do not have scheduled air carrier service. North Carolina's airports are located throughout the state, with most counties having either a commercial or general aviation airport. These transportation services support a diverse set of industries across the state.

## **OUTPUT CONTRIBUTION**

The 72 publicly-owned airports in North Carolina supported \$31 billion in output, in the form of gross revenues, of North Carolina businesses in 2014. As a frame of reference for the magnitude of the airports' contribution to the state's economy, the contribution was compared to the North Carolina gross domestic product (GDP). North Carolina's GDP in 2014 was \$481.9 billion (BEA 2015). Therefore, the airports' contribution to the state's GDP was approximately 6.4%.

## **EMPLOYMENT CONTRIBUTION**

North Carolina airports supported 123,400 full-time and part-time jobs at North Carolina businesses in 2014.

## **INCOME CONTRIBUTION**

North Carolina airports supported \$4.1 billion in labor income for North Carolina workers in 2014. Labor income is comprised of compensation for employees and self-employment income.

## **STATE AND LOCAL TAX CONTRIBUTION**

State and local governments in North Carolina received \$913 million in sales, property, corporate, and personal tax collections in 2014 due to activity supported by North Carolina's publicly-owned airports. The local property taxes do not include revenues earmarked for the support of public schools, which are not calculated in IMPLAN®.

## **AEROSPACE MANUFACTURING**

North Carolina is home to a robust aerospace manufacturing sector with 42,600 jobs and \$10.5 billion in economic output. Aerospace manufacturing contributes to approximately 2.1% of the state's GDP. When considered in tandem, aviation manufacturing and North Carolina's airports contribute to approximately 8.5% of the state's GDP.

**Exhibit 2 –Output Contribution for Air Carrier (Commercial) Airports**

Airport ID and Name		Output (dollars)			
		Direct	Indirect	Induced	Total
OAJ	Albert J. Ellis	\$45,560,000	\$114,420,000	\$77,140,000	\$237,120,000
AVL	Asheville Regional	\$116,170,000	\$245,220,000	\$194,270,000	\$555,660,000
CLT	Charlotte Douglas International	\$4,740,250,000	\$3,914,610,000	\$4,936,940,000	\$13,591,800,000
EWN	Coastal Carolina Regional	\$28,230,000	\$83,810,000	\$67,070,000	\$179,110,000
JQF	Concord Regional	\$97,670,000	\$42,950,000	\$20,320,000	\$160,940,000
FAY	Fayetteville Regional/Grannis Field	\$57,320,000	\$151,480,000	\$103,720,000	\$312,520,000
GSO	Piedmont Triad International	\$477,030,000	\$653,200,000	\$823,060,000	\$1,953,290,000
PGV	Pitt-Greenville	\$22,230,000	\$46,560,000	\$34,610,000	\$103,400,000
RDU	Raleigh-Durham International	\$1,236,790,000	\$3,199,980,000	\$4,141,410,000	\$8,578,180,000
ILM	Wilmington International	\$760,980,000	\$637,480,000	\$232,310,000	\$1,630,770,000
<b>Air Carrier Subtotal</b>		<b>\$7,484,560,000</b>	<b>\$9,046,760,000</b>	<b>\$10,610,530,000</b>	<b>\$27,141,850,000</b>

**Exhibit 3 –Employment, Payroll, and Tax Contributions for Air Carrier (Commercial) Airports**

Airport ID and Name		Employment (jobs)		Estimated Payroll Income (dollars)		Total State and Local Taxes (dollars)
		Direct	Total	Direct	Total	
OAJ	Albert J. Ellis	150	370	\$7,770,000	\$ 12,240,000	\$ 4,908,000
AVL	Asheville Regional	750	1,680	\$22,160,000	\$39,110,000	\$ 9,609,000
CLT	Charlotte Douglas International	18,240	61,590	\$1,321,630,000	\$2,212,690,000	\$551,973,000
JQF	Concord Regional	1,140	1,940	\$16,980,000	\$42,960,000	\$3,162,000
EWN	Coastal Carolina Regional	180	560	\$7,550,000	\$13,310,000	\$ 3,376,000
FAY	Fayetteville Regional/Grannis Field	320	610	\$13,080,000	\$18,680,000	\$ 6,636,000
GSO	Piedmont Triad International	2,200	8,410	\$116,520,000	\$229,710,000	\$55,596,000
PGV	Pitt-Greenville	160	340	\$4,980,000	\$ 8,040,000	\$ 2,127,000
RDU	Raleigh-Durham International	6,330	21,340	\$319,080,000	\$593,930,000	\$143,570,000
ILM	Wilmington International	1,730	4,910	\$44,700,000	\$83,440,000	\$12,319,000
<b>Air Carrier Subtotal</b>		<b>30,060</b>	<b>99,810</b>	<b>\$1,857,470,000</b>	<b>\$3,211,150,000</b>	<b>\$790,114,000</b>

#### Exhibit 4 –Output Contribution for General Aviation Airports

Airport ID and Name		Output (dollars)			
		Direct	Indirect	Induced	Total
AFP	Anson County - Jeff Cloud Field	\$15,410,000	\$1,750,000	\$800,000	\$17,960,000
GEV	Ashe County	\$28,440,000	\$4,030,000	\$2,210,000	\$34,680,000
HBI	Asheboro Regional	\$6,060,000	\$3,280,000	\$3,670,000	\$13,010,000
7A8	Avery County/Morrison Field	\$9,070,000	\$3,850,000	\$1,310,000	\$14,230,000
HSE	Billy Mitchell	\$430,000	\$890,000	\$320,000	\$1,640,000
BUY	Burlington-Alamance Regional	\$64,640,000	\$29,010,000	\$20,710,000	\$114,360,000
SUT	Cape Fear Rgnl Jetport/Howie Franklin Fld	\$129,140,000	\$46,230,000	\$39,760,000	\$215,130,000
EQY	Charlotte-Monroe Executive	\$8,340,000	\$6,820,000	\$7,700,000	\$22,860,000
CPC	Columbus County Municipal	\$94,360,000	\$20,710,000	\$6,910,000	\$121,980,000
ONX	Currituck County Regional	\$2,400,000	\$2,950,000	\$2,120,000	\$7,470,000
EYF	Curtis L Brown, Jr. Field	\$2,780,000	\$730,000	\$670,000	\$4,180,000
MQI	Dare County Regional	\$7,630,000	\$2,640,000	\$1,600,000	\$11,870,000
EXX	Davidson County	\$21,140,000	\$5,080,000	\$3,420,000	\$29,640,000
DPL	Duplin County	\$18,200,000	\$6,800,000	\$2,330,000	\$27,330,000
ECG	Elizabeth City CG Air Station/Regional	\$205,550,000	\$145,000,000	\$33,260,000	\$383,810,000
ZEF	Elkin Municipal	\$2,070,000	\$2,090,000	\$1,500,000	\$5,660,000
FFA	First Flight	\$400,000	\$4,040,000	\$1,820,000	\$6,260,000
MRN	Foothills Regional	\$1,220,000	\$1,930,000	\$970,000	\$4,120,000
AKH	Gastonia Municipal	\$1,580,000	\$2,310,000	\$2,010,000	\$5,900,000
IXA	Halifax - Northampton Regional	\$6,870,000	\$2,170,000	\$1,080,000	\$10,120,000
HRJ	Harnett Regional Jetport	\$107,050,000	\$18,470,000	\$12,440,000	\$137,960,000
ACZ	Henderson Field	\$1,180,000	\$1,140,000	\$400,000	\$2,720,000
HNZ	Henderson-Oxford	\$980,000	\$2,010,000	\$1,150,000	\$4,140,000
HKY	Hickory Regional	\$15,120,000	\$5,830,000	\$4,150,000	\$25,100,000
7W6	Hyde County	\$360,000	\$240,000	\$170,000	\$770,000
24A	Jackson County	\$360,000	\$340,000	\$240,000	\$940,000
JNX	Johnston County	\$71,850,000	\$19,450,000	\$16,540,000	\$107,840,000
ISO	Kinston Regional Jetport at Stallings Field	\$386,280,000	\$41,710,000	\$24,280,000	\$452,270,000
MEB	Laurinburg-Maxton	\$27,910,000	\$16,770,000	\$4,010,000	\$48,690,000
IPJ	Lincolnton-Lincoln County Regional	\$5,060,000	\$4,190,000	\$1,910,000	\$11,160,000

### Exhibit 5 –Output Contribution for General Aviation Airports (Continued)

Airport ID and Name		Output (dollars)			
		Direct	Indirect	Induced	Total
LBT	Lumberton Municipal	\$4,910,000	\$2,580,000	\$1,360,000	\$8,850,000
1A5	Macon County	\$7,020,000	\$3,260,000	\$1,930,000	\$12,210,000
MCZ	Martin County	\$3,050,000	\$1,170,000	\$3,030,000	\$7,250,000
MRH	Michael J Smith Field	\$19,450,000	\$8,890,000	\$5,370,000	\$33,710,000
43A	Montgomery County	\$870,000	\$330,000	\$210,000	\$1,410,000
SOP	Moore County	\$41,930,000	\$8,140,000	\$6,260,000	\$56,330,000
MWK	Mt Airy/Surry County	\$655,230,000	\$43,770,000	\$39,540,000	\$738,540,000
W40	Mt Olive Municipal	\$8,610,000	\$4,830,000	\$2,340,000	\$15,780,000
EDE	Northeastern Regional	\$3,290,000	\$1,540,000	\$1,630,000	\$6,460,000
W95	Ocracoke Island	\$1,360,000	\$860,000	\$290,000	\$2,510,000
60J	Odell Williamson Municipal	\$530,000	\$1,850,000	\$930,000	\$3,310,000
TDF	Person County	\$51,650,000	\$9,170,000	\$7,070,000	\$67,890,000
PMZ	Plymouth Municipal	\$1,150,000	\$1,700,000	\$940,000	\$3,790,000
TTA	Raleigh Exec Jetport at Sanford-Lee County	\$17,160,000	\$13,340,000	\$9,550,000	\$40,050,000
RCZ	Richmond County	\$420,000	\$100,000	\$100,000	\$620,000
SIF	Rockingham County/NC Shiloh	\$28,770,000	\$17,090,000	\$12,590,000	\$58,450,000
RWI	Rocky Mount-Wilson Regional	\$15,080,000	\$7,020,000	\$3,570,000	\$25,670,000
RUQ	Rowan County	\$62,810,000	\$17,950,000	\$17,230,000	\$97,990,000
FQD	Rutherford County-Marchman Field	\$1,790,000	\$640,000	\$360,000	\$2,790,000
CTZ	Sampson County	\$1,020,000	\$890,000	\$490,000	\$2,400,000
EHO	Shelby - Cleveland County Regional	\$27,340,000	\$6,550,000	\$5,140,000	\$39,030,000
SCR	Siler City Municipal	\$2,870,000	\$1,460,000	\$460,000	\$4,790,000
INT	Smith-Reynolds	\$272,260,000	\$135,670,000	\$97,810,000	\$505,740,000
VUJ	Stanly County	\$60,680,000	\$24,870,000	\$16,580,000	\$102,130,000
SVH	Statesville Regional	\$25,610,000	\$8,120,000	\$6,950,000	\$40,680,000
ETC	Tarboro-Edgecombe	\$5,340,000	\$2,590,000	\$890,000	\$8,820,000
LHZ	Triangle North Executive	\$5,440,000	\$9,140,000	\$8,660,000	\$23,240,000
ASJ	Tri-County	\$980,000	\$1,120,000	\$2,520,000	\$4,620,000
OCW	Warren Field	\$8,400,000	\$3,790,000	\$4,070,000	\$16,260,000
GWV	Wayne Executive Jetport	\$26,920,000	\$14,630,000	\$5,520,000	\$47,070,000
RHP	Western Carolina Regional	\$31,780,000	\$8,810,000	\$7,110,000	\$47,700,000
UKF	Wilkes County	\$3,380,000	\$1,230,000	\$800,000	\$5,410,000
<b>General Aviation Subtotal</b>		<b>\$2,736,650,000</b>	<b>\$808,510,000</b>	<b>\$491,080,000</b>	<b>\$4,036,240,000</b>

## Exhibit 6 – Employment, Payroll, and Tax Contributions for General Aviation Airports

Airport ID and Name		Employment (jobs)		Estimated Payroll Income (dollars)		Total State and Local Taxes (dollars)
		Direct	Total	Direct	Total	
AFP	Anson County - Jeff Cloud Field	20	40	\$900,000	\$1,350,000	\$249,000
GEV	Ashe County	120	260	\$2,960,000	\$5,020,000	\$460,000
HBI	Asheboro Regional	50	130	\$2,740,000	\$4,460,000	\$367,000
7A8	Avery County/Morrison Field	70	130	\$2,310,000	\$3,620,000	\$330,000
HSE	Billy Mitchell	-	10	\$90,000	\$170,000	\$5,000
BUY	Burlington-Alamance Regional	330	720	\$20,360,000	\$32,500,000	\$3,100,000
SUT	Cape Fear Rgnl Jetport/Howie Franklin Fld	760	1,710	\$38,250,000	\$61,160,000	\$5,924,000
EQY	Charlotte-Monroe Executive	60	140	\$3,250,000	\$5,380,000	\$703,000
CPC	Columbus County Municipal	170	380	\$14,830,000	\$22,580,000	\$15,521,000
ONX	Currituck County Regional	20	40	\$1,420,000	\$1,840,000	\$129,000
EYF	Curtis L Brown, Jr. Field	10	30	\$620,000	\$720,000	\$284,000
MQI	Dare County Regional	60	100	\$1,750,000	\$2,630,000	\$368,000
EXX	Davidson County	140	240	\$5,900,000	\$8,040,000	\$901,000
DPL	Duplin County	90	190	\$29,800,000	\$47,340,000	\$559,000
ECG	Elizabeth City CG Air Station/Regional	990	2,540	\$23,300,000	\$74,110,000	\$8,413,000
ZEF	Elkin Municipal	20	30	\$540,000	\$770,000	\$138,000
FFA	First Flight	-	10	\$90,000	\$170,000	\$5,000
MRN	Foothills Regional	10	20	\$260,000	\$450,000	\$74,000
AKH	Gastonia Municipal	10	30	\$550,000	\$1,000,000	\$130,000
IXA	Halifax - Northampton Regional	50	90	\$1,650,000	\$2,420,000	\$283,000
HRJ	Harnett Regional Jetport	150	400	\$13,970,000	\$19,860,000	\$2,316,000
ACZ	Henderson Field	10	20	\$210,000	\$350,000	\$56,000
HNZ	Henderson-Oxford	10	20	\$240,000	\$330,000	\$69,000
HKY	Hickory Regional	70	160	\$3,150,000	\$5,110,000	\$552,000
7W6	Hyde County	-	10	\$90,000	\$120,000	\$11,000
24A	Jackson County	-	10	\$80,000	\$110,000	\$14,000
JNX	Johnston County	250	600	\$17,080,000	\$30,370,000	\$8,655,000
ISO	Kinston Regional Jetport at Stallings Field	600	1,350	\$28,290,000	\$48,290,000	\$4,774,000
MEB	Laurinburg-Maxton	360	560	\$16,750,000	\$33,950,000	\$1,070,000
IPJ	Lincolnton-Lincoln County Regional	30	70	\$1,500,000	\$2,540,000	\$367,000

**Exhibit 7 – Employment, Payroll, and Tax Contributions for General Aviation Airports  
(Continued)**

Airport ID and Name		Employment (jobs)		Estimated Payroll Income (dollars)		Total State and Local Taxes (dollars)
		Direct	Total	Direct	Total	
LBT	Lumberton Municipal	30	50	\$760,000	\$1,100,000	\$437,000
1A5	Macon County	50	110	\$1,850,000	\$2,910,000	\$315,000
MCZ	Martin County	10	40	\$1,860,000	\$2,210,000	\$151,000
MRH	Michael J Smith Field	60	120	\$3,220,000	\$5,130,000	\$515,000
43A	Montgomery County	10	10	\$190,000	\$240,000	\$73,000
SOP	Moore County	150	300	\$7,250,000	\$10,610,000	\$1,264,000
MWK	Mt Airy/Surry County	1,290	2,420	\$72,630,000	\$94,330,000	\$32,815,000
W40	Mt Olive Municipal	60	120	\$2,170,000	\$3,760,000	\$338,000
EDE	Northeastern Regional	20	40	\$1,240,000	\$1,550,000	\$176,000
W95	Ocracoke Island	10	20	\$350,000	\$510,000	\$45,000
60J	Odell Williamson Municipal	-	10	\$120,000	\$190,000	\$22,000
TDF	Person County	100	220	\$10,410,000	\$14,320,000	\$880,000
PMZ	Plymouth Municipal	10	20	\$420,000	\$580,000	\$44,000
TTA	Raleigh Exec Jetport at Sanford-Lee County	110	220	\$5,470,000	\$11,630,000	\$919,000
RCZ	Richmond County	-	10	\$130,000	\$170,000	\$21,000
SIF	Rockingham County/NC Shiloh	140	440	\$10,030,000	\$18,300,000	\$867,000
RWI	Rocky Mount-Wilson Regional	50	120	\$3,240,000	\$5,370,000	\$1,032,000
RUQ	Rowan County	300	710	\$20,650,000	\$30,030,000	\$2,935,000
FQD	Rutherford County-Marchman Field	20	30	\$400,000	\$600,000	\$161,000
CTZ	Sampson County	10	20	\$390,000	\$550,000	\$97,000
EHO	Shelby - Cleveland County Regional	100	220	\$7,030,000	\$10,100,000	\$860,000
SCR	Siler City Municipal	20	40	\$1,660,000	\$2,880,000	\$295,000
INT	Smith-Reynolds	1,620	4,390	\$94,060,000	\$201,490,000	\$13,119,000
VUJ	Stanly County	170	660	\$14,450,000	\$29,080,000	\$785,000
SVH	Statesville Regional	170	290	\$6,440,000	\$9,490,000	\$2,420,000
ETC	Tarboro-Edgecombe	30	70	\$1,020,000	\$1,770,000	\$197,000
LHZ	Triangle North Executive	60	120	\$2,430,000	\$4,360,000	\$511,000
ASJ	Tri-County	-	20	\$610,000	\$720,000	\$52,000
OCW	Warren Field	70	140	\$3,510,000	\$4,950,000	\$446,000
GWW	Wayne Executive Jetport	120	310	\$6,680,000	\$13,740,000	\$1,001,000
RHP	Western Carolina Regional	120	280	\$9,320,000	\$12,110,000	\$478,000
UKF	Wilkes County	40	60	\$1,110,000	\$1,500,000	\$315,000
<b>General Aviation Subtotal</b>		<b>10,550</b>	<b>23,610</b>	<b>\$541,010,000</b>	<b>\$956,000,000</b>	<b>\$122,575,000</b>

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## APPENDIX A: AIRPORT INFLUENCE AREAS BY COUNTY

Airport	Counties
Albert J. Ellis (OAJ)	Onslow, Pender, Duplin, Jones, Carteret
Anson County - Jeff Cloud Field (AFP)	Anson, Richmond
Ashe County (GEV)	Ashe, Alleghany, Watauga
Asheboro Regional (HBI)	Randolph, Guilford, Chatham
Asheville Regional (AVL)	Buncombe, Henderson, Haywood, Madison, McDowell, Transylvania, Jackson, Swain, Macon
Avery County/Morrison Field (7A8)	Avery, Mitchell, McDowell, Burke
Billy Mitchell (HSE)	Dare
Burlington-Alamance Regional (BUY)	Alamance, Guilford, Orange, Caswell
Cape Fear Regional Jetport	Brunswick, New Hanover
Charlotte Douglas International (CLT)	Mecklenburg, Gaston, Cabarrus, Cleveland, Rowan, Union, Lincoln, Catawba, Iredell, Stanly, Anson
Charlotte-Monroe Executive (EQY)	Union, Mecklenburg, Anson, Cabarrus, Stanly
Clinton-Sampson County (CTZ)	Sampson
Coastal Carolina Regional (EWN)	Craven, Pamlico, Carteret
Columbus County Municipal (CPC)	Columbus
Concord Regional (JQF)	Cabarrus, Mecklenburg, Rowan, Lincoln, Iredell
Currituck County Regional (ONX)	Currituck, Camden
Curtis L Brown, Jr. Field (EYF)	Bladen
Dare County Regional (MQI)	Dare, Tyrrell
Davidson County (EXX)	Davidson, Davie
Duplin County (DPL)	Duplin, Wayne
Elizabeth City CG Air Station/Regional (ECG)	Pasquotank, Camden, Perquimans, Gates
Elkin Municipal (ZEF)	Surry, Yadkin
Fayetteville Regional/Grannis Field (FAY)	Cumberland, Hoke, Harnett, Sampson, Robeson, Bladen
First Flight (FFA)	Dare
Foothills Regional (MRN)	Caldwell, Burke
Gastonia Municipal (AKH)	Gaston, Mecklenburg
Halifax - Northampton Regional (IXA)	Halifax, Warren, Northampton
Harnett Regional Jetport (HRJ)	Harnett, Sampson, Johnston, Cumberland
Henderson Field (ACZ)	Pender, Duplin, Sampson
Henderson-Oxford (HNZ)	Granville, Vance
Hickory Regional (HKY)	Catawba, Burke, Caldwell, Alexander
Hyde County (7W6)	Hyde
Jackson County (24A)	Jackson
Johnston County (JNX)	Johnston, Wake, Wilson
Kinston Regional Jetport at Stallings Field (ISO)	Lenoir, Greene, Craven, Pitt, Jones
Laurinburg-Maxton (MEB)	Scotland, Hoke, Robeson
Lincolnton-Lincoln County Regional (IPJ)	Lincoln, Gaston, Catawba
Lumberton Municipal (LBT)	Robeson, Bladen
Macon County (1A5)	Macon, Swain, Jackson
Martin County (MCZ)	Martin, Bertie
Michael J Smith Field (MRH)	Carteret
Montgomery County (43A)	Montgomery
Moore County (SOP)	Moore, Hoke, Lee, Harnett, Richmond
Mt Airy/Surry County (MWK)	Surry, Stokes
Mt Olive Municipal (W40)	Wayne, Duplin
Northeastern Regional (EDE)	Chowan, Perquimans, Bertie, Washington,
Ocracoke Island (W95)	Hyde

<b>Airport</b>	<b>Counties</b>
Odell Williamson Municipal (60J)	Brunswick
Person County (TDF)	Person, Orange, Durham
Piedmont Triad International (GSO)	Guilford, Davidson, Forsyth, Randolph, Rockingham, Stokes, Alamance, Davie, Yadkin, Surry, Caswell
Pitt-Greenville (PGV)	Pitt, Beaufort, Greene, Edgecombe, Martin
Plymouth Municipal (PMZ)	Washington, Martin
Raleigh Executive Jetport (TTA)	Lee, Wake, Chatham
Raleigh-Durham International (RDU)	Wake, Durham, Franklin, Johnston, Chatham, Orange, Person, Alamance, Harnett, Vance, Wilson, Lee, Granville
Richmond County (RCZ)	Richmond, Scotland
Rockingham County/NC Shiloh (SIF)	Rockingham, Guilford
Rocky Mount-Wilson Regional (RWI)	Nash, Wilson, Edgecombe
Rowan County (RUQ)	Rowan, Cabarrus, Davidson, Iredell
Rutherford County-Marchman Field (FQD)	Rutherford, Polk, McDowell
Shelby - Cleveland County Regional (EHO)	Cleveland, Rutherford, Gaston, Lincoln
Siler City Municipal (5W8)	Chatham, Randolph
Smith-Reynolds (INT)	Forsyth, Stokes, Yadkin, Davie, Guilford, Davidson
Stanly County (VUJ)	Stanly, Mecklenburg, Cabarrus, Rowan, Davidson, Montgomery
Statesville Regional (SVH)	Iredell, Catawba, Davie, Alexander, Rowan
Tarboro-Edgecombe (ETC)	Edgecombe, Halifax, Martin
Triangle North Executive (LHZ)	Franklin, Wake
Tri-County (ASJ)	Hertford, Northampton, Bertie
Warren Field (OCW)	Beaufort, Pitt
Wayne Executive Jetport (GWW)	Wayne, Greene
Western Carolina Regional (RHP)	Cherokee, Graham, Clay
Wilkes County (UKF)	Wilkes
Wilmington International (ILM)	New Hanover, Brunswick, Pender, Columbus, Bladen, Onslow