The Economic Impact of Boeing in South Carolina

Prepared for
The Alliance for South Carolina's Future

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Columbia, SC
May 2010

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1. Introduction

Manufacturing has been a major economic driver in South Carolina for the last 100 years. While many have predicted the demise of the industry in the state and in the nation, South Carolina's manufacturing sector continues to be a major component in the state's economy – representing more than one-fifth of the state's gross state product. The recent announcement by The Boeing Company to locate its 787 Dreamliner factory in Charleston is another indication of the vitality of manufacturing in South Carolina.

The Dreamliner announcement has been hailed by many as the most important economic development announcement in the state's history. In terms of its relative size, scope, immediate economic impacts and potential future economic impacts, and the critical timing in the midst of the worst recession in 70 years – it certainly appears to be the most important one. The impacts of Boeing have already been felt all across the state with announcements in Greenville and Marion counties a year before the new plant will be operational.

This report is intended to help policy makers understand the overall economic impacts of Boeing's decision to locate its Dreamliner facility in South Carolina. This analysis evaluates factual data and concludes that it is clear that Boeing is making a sound investment in South Carolina and South Carolina is making a sound investment in Boeing.

This report includes a brief overview of why South Carolina uses economic development incentives. For some comparison and perspective, the report highlights the success of a similar project South Carolina courted and successfully attracted in the early 1990's --- BMW. In addition, the report summarizes the Boeing investment and incentive package. And finally, the report includes estimates of the total economic impact on South Carolina's economy from the new Boeing Dreamliner factory once the indirect, "multiplied" impacts are included.

2. Why South Carolina Uses Incentives to Attract New Manufacturing Investments

Like just about every other state in the nation, South Carolina provides numerous incentives for new and expanding businesses. While some non-practitioners argue on theoretical bases that it would be better for all and more economically efficient if South Carolina and other states did not provide incentives, the real world dictates otherwise. If South Carolina were to do away with all economic development incentives, the state would be at a great disadvantage with its competitors in the South-eastern United States. Unless all 50 states (and a host of other countries) eliminated incentives – South Carolina must continue to use incentives to effectively compete in the world economy.[1]

There are many types of incentives offered by the states in their efforts to attract new investment. A summary of those provided by South Carolina compiled by the South Carolina Department of Commerce and available on their website is provided in the Appendix to this report.[2]

One of the most important incentives South Carolina uses is the Fee-In-Lieu-of-Tax (FILOT). The FILOT is used to reduce the property taxes for new and expanding businesses. The initial FILOT incentive became law in 1987 and allows a qualifying investment to pay a lower assessment rate -- 6% for most investments and 4% for very large investments.[3] (Boeing qualified for a FILOT assessment of 4%.) FILOT has been used extensively since it was created.

Without a FILOT, industrial property is assessed at 10.5% in South Carolina. Commercial and rental property is assessed at 6% and owner-occupied residential property is assessed at 4% (and exempt from school operating taxes). The 10.5% assessment on industrial property puts South Carolina at an extreme disadvantage to our neighboring states (some counties in Georgia offer full property tax exemptions to new industry for the first 10 years -- $0 taxes for 10 years!).

For example, a $50 million investment in South Carolina would pay three or four times the property taxes that a similar investment would pay in North Carolina. The following example of select border counties demonstrates the disadvantage South Carolina property taxes create for economic developers.

> "Without a FILOT, industrial property is assessed at 10.5% in South Carolina. ...The 10.5% assessment on industrial property puts South Carolina at an extreme disadvantage to our neighboring states."

TABLE 1

LOCATION	ASSESSMENT RATIO	ESTIMATED ANNUAL PROPERTY TAXES
Lancaster County, SC	Regular 10.5%	$1,235,304
Lancaster County, SC	6% FILOT	$705,888
Lancaster County, SC	Regular 10.5%	$1,816,567
Lancaster County, SC	6% FILOT	$1,038,038
vs		
Cleveland County, NC		$360,000
Mecklenburg County, NC		$419,350
Union County, NC		$332,500
Eligible Georgia Counties		$0

Source: M&A, Inc

As seen from the comparison above, South Carolina is at an extreme disadvantage to our neighboring states in terms of property taxes on industrial property ---- ***even when a FILOT incentive is offered***.

A recent report by the Minnesota Taxpayers Association reinforces the bad news about South Carolina's high property taxes.[3] In that study, South Carolina ranks #1 in property taxes on industrial property in the United States (#1 = highest and #50 = lowest). As seen in Table 2 below, South Carolina ranked well above its neighboring states Georgia and North Carolina.

TABLE 2

$100,000 VALUED PROPERTY $50,000 Machinery and Equipment $40,000 Inventories $10,000 Fixtures			$25 MILLION VALUED PROPERTY $125,000,000 Machinery and Equipment $10,000,000 Inventories $2,500,000 Fixtures		
STATE	CITY	RANK	STATE	CITY	RANK
South Carolina	Columbia	1	South Carolina	Columbia	1
Georgia	Atlanta	18	Georgia	Atlanta	21
North Carolina	Charlotte	38	North Carolina	Charlotte	39

The FILOT incentive is extremely important for South Carolina when recruiting and attracting manufacturing investments like Boeing. Manufacturing has certainly declined in terms of employment over the last several decades, but it is still a vital component of the state's economy. Even though manufacturing employment has declined by 150,000 jobs in the last decade, the sector still contributes 20% of the state's Gross State Product. The contributions to Gross State Product have held up well even in the last ten years as seen below.

TABLE 3 Gross State Product 1998–2008 Constant 2000 Dollars

INDUSTRY	1998	2008	% CHANGE 1998-2008
All industry total	$107,126	$127,065	18.6%
Private industries	$90,887	$108,097	18.9%
Agriculture, forestry, fishing, and hunting	$795	$913	14.8%
Mining	$160	$127	-20.6%
Utilities	$2,807	$3,202	14.1%
Construction	$6,628	$4,466	-32.6%
Manufacturing	$23,994	$23,531	-1.9%
Durable goods	$10,202	$14,913	46.2%
Nondurable goods	$13,826	$8,765	-36.6%
Wholesale trade	$5,839	$7,560	29.50%
Retail trade	$8,608	$12,803	48.70%
Transportation and warehousing, excluding Postal Service	$2,482	$2,985	20.30%
Information	$2,458	$5,095	107.30%
Finance and insurance	$4,568	$5,933	29.90%
Real estate and rental and leasing	$11,330	$13,273	17.10%
Professional and technical services	$4,479	$7,107	58.70%
Management of companies and enterprises	$797	$853	7.00%
Administrative and waste services	$2,929	$4,748	62.10%
Educational services	$485	$611	26.00%
Health care and social assistance	$5,225	$7,734	48.00%
Arts, entertainment, and recreation	$1,017	$959	-5.70%
Accommodation and food services	$3,477	$4,370	25.70%
Other services, except government	$2,798	$2,858	2.10%
Government	$16,235	$18,948	16.70%

* Millions of current dollars Source: US Department of Commerce, Bureau of Economic Analysis

One of the most striking aspects of the manufacturing sector and one that has continued even with the decline in employment is the role that manufacturing plays in the property tax base of the state. This is extremely important to local governments and school districts since they are so dependent on property taxes.

> "The manufacturing sector paid more than $521 million in property taxes in 2007."

As Table 4 below indicates, the manufacturing sector pays almost 13% of all property taxes in South Carolina although it represents only about 5% of all establishments in the state. While this percentage of the total has declined over the last decade, the sector still paid over $521.0 million in property taxes in FY 2007 to local governments. The vast majority of these property taxes went to school districts across the state. In most areas of the state the school operating and debt service millage assessment represents about 60% of the total millage burden. Assuming 60% of these property taxes went to schools, the manufacturing sector paid over $300 million in tax revenues to school across the state in FY 2008.

TABLE 4 Manufacturing's Share of Property Taxes

	FY 97	% of Total	FY 08	% of Total	% Change 97 to 08
Total Property Tax Revenues	$2,142,427,074		$4,064,343,235		89.7%
Owner Occupied	$293,630,514	13.7%	$936,460,043	23%	218.9%
Agricultural (Private)	$18,744,926	0.9%	$25,109,927	0.6%	34%
Agricultural (Corporate)	$5,781,668	0.3%	$5,078,485	0.1%	-12.2%
Commercial/Rental	$623,317,477	29.1%	$1,538,629,716	37.9%	146.8%
Personal Property (Vehicles)	$440,242,442	20.5%	$437,914,884	10.8%	-0.5%
Other Personal Property County	$0	0%	$69,519,786	1.7%	NA
Manufacturing	$390,094,425	18.2%	$329,682,277	8.1%	-15.5%
Fee-in-Lieu and Joint Industrial Park	$0	0.0%	$191,499,702	4.7%	NA
Mfg + FILOT	$390,094,425	18.2%	$521,181,979	12.8%	33.6%
Utility	$254,201,202	11.9%	$346,504,937	8.5%	36.3%
Business Personal	$116,409,272	5.4%	$168,189,739	4.1%	44.5%
Motor Carrier	$0	0%	$15,753,739	0.4%	NA

Source: South Carolina Budget and Control Board, Local Government Finance Report, 2009

There has never been a more important time in the last 50 years for South Carolina to support and attract new manufacturing investment. There have been numerous accounts in the press about layoffs by city, county and school districts across the state. Budget cuts at the state level have grown to more than $1 billion over the last 24 months. Unemployment in the state is well above the national average and much worse in many rural areas.

As seen below in Table 5, there are more than 46,000 unemployed workers just in Charleston and the surrounding area according to the latest data from the South Carolina Employment Security Commission.[5]

The unemployment rates in neighboring counties ranges from 9.4% to 15.5% as of March 2010. Most economists predict that many of these jobs will not return and at best, the state will suffer through these above average unemployment rates for several years.[6] New job growth through capital intensive manufacturing investments will not replace all of these lost jobs, but they provide new opportunities for many South Carolinians.

TABLE 5 March 2010

County	Labor Force	Unemployed	Unemployment Rate
Berkeley	80,523	8,443	10.5%
Charleston	175,224	16,530	9.4%
Colleton	17,458	2,403	13.8%
Dorchester	63,902	6,272	9.8%
Georgetown	31,255	4,108	13.1%
Orangeburg	41,453	6,378	15.4%
Williamsburg	16,049	2,495	15.5%
TOTALS	425,864	46,629	10.9%

Source: South Carolina Employment Security Commission, March 2010

The importance of attracting new manufacturing industries is important for many reasons but two very important ones are the relatively high investment per job (aka…potential property taxes for schools) and the relatively high wages the industrial sector pays.

The following Table 6 highlights the Boeing Dreamliner investment per job to the average in South Carolina in several years since 2003. The capital investment per job is a good indicator of whether the new facility will help support local government, especially schools. Based on the assessment rate and local millage rates, the Boeing facility will pay almost $2.5 million a year in Charleston school taxes. Once the 15-year tax incentive is over, the facility will pay an estimated $5 million in school taxes per year.

Manufacturing firms in general pay well above what other classes of property pay in South Carolina. On a typical value of $100,000, a manufacturing firm will pay almost five times what a typical owner occupied resident of the same county would pay in total property taxes. This higher burden is a two-edged sword – it helps keep taxes lower on home owners – but at the same time it makes competition with neighboring states for new facilities that much more difficult.

While the manufacturing sector has declined in total number of jobs in the state, it still pays some of the highest wages of any sector in South Carolina.

TABLE 6 South Carolina Totals **

	Boeing Dreamliner	2008	2007	2006	2005	2004	2003
Total Private Capital Investment*	$1.025	$4.170	$4.045	$2.998	$2.662	$2.759	$1.128
Direct Jobs	3,800	18,993	15,666	14,420	12,370	13,491	8,700
Capital Investment Per Job	$269,816	$219,541	$258,205	$207,906	$215,198	$204,507	$129,712

* Billions ** Source: SC Department of Commerce

As seen in Table 7 below, the manufacturing sector pays wages well above that of the average industry in the state. The average manufacturing wage of $46,192 is more than 27% above the statewide average and there are many, many industries that pay well above the sector average. A number of industries pay two or three times the statewide average and 40 or more pay 50% or more above the state average of $36,253.

These pay differentials may actually be more than those indicated below. Most manufacturing employees in South Carolina work for firms that provide additional fringe benefits such as health care and vacation time. Many non-manufacturing jobs in the state do not provide additional benefits. If these benefits were added to the wages below the manufacturing wages would stand out even more.

> "While the manufacturing sector has declined in total number of jobs in the state, it still pays some of the highest wages of any sector in South Carolina."

TABLE 7

Industry	Average Annual Wages
South Carolina Average	$35,620
Petrochemical manufacturing	$78,780
Motor vehicle body manufacturing	$78,312
Industrial building construction	$77,844
Research and Development in Biotechnology US	$73,008
Basic chemical manufacturing	$71,084
Power generation and supply	$70,668
Pulp, paper, and paperboard mills	$69,680
Other biological product manufacturing	$69,628
Paperboard mills	$68,588
Utilities	$68,432
Turbine and power transmission equipment mfg.	$68,016
Pipeline transportation of natural gas	$65,676
Electromedical apparatus manufacturing	$62,348
Nonresidential building construction	$62,036
Plastics material and resin manufacturing	$61,204
Natural gas distribution	$60,008
Federal Government Average	$59,124
Rolled steel shape manufacturing	$58,188
Iron and steel mills	$54,184
All Manufacturing Average	$44,876
State Government Average	$40,092
Local Government Average	$38,948
Textile machinery manufacturing	$37,336
Retail Trade	$23,862
Grocery stores	$21,001
Department stores	$17,732
Full-service restaurants	$14,404
Accommodation and Food Services	$14,357

Source: South Carolina Employment Security Commission, 2009 Q2

3. BMW's Investment in South Carolina

To bring some perspective to the Boeing investment, it may help to review another major manufacturing investment that was similar in scope and importance – the BMW facility in Greer.

The initial investment by BMW was heralded at the time as one of the greatest announcements in the state's history. Few people disagreed with it at that time. The facility was going to create 2,000 jobs and BMW was going to invest at least $300 million. The capital investment per job was $229,370 (in 2009 dollars), slightly less than that of Boeing. The incentive package for BMW was reported at the time equal to $89.3 million which is roughly $136 million in 2009 dollars. Based on the 2,000 jobs created by the initial investment, the BMW incentives cost the State approximately $68,276 per job.

As seen in Table 8 below, that initial investment has mushroomed over the years. At the end of 2009, BMW has invested over $4.4 billion in South Carolina and employs 5,000 workers directly. They have over 40 suppliers in the state in 11 different counties.

Attracting BMW to South Carolina has proven to be one of the state's most prudent economic development investments with far greater returns than anyone ever anticipated. The similarities between the genesis of BMW and Boeing investments in South Carolina affirms the state's primary economic development focus of creating high quality jobs and improving the state's per capita income.

"Attracting BMW to South Carolina has proven to be one of the state's most prudent economic development investments with far greater returns than anyone ever anticipated."

TABLE 8

	1992	2009
Employees (Direct)	2,000	5,000
Captial Investment (Millions)*	$459	$4,400
Capital Investment Per Job	$229,370	$880,000
Annual Compensation	$80,000,000	$435,000,000

Source: BMW *1992 Capital Investment equaled $300 in 1992 but is reflected here in 2009 dollars Based on the Consumer Price Index

If Boeing's investment in South Carolina grows in a similar pace as BMW's did over the last 17 years, Boeing' impact would be even more impressive. As seen in the Table 9 below, if the capital investment and jobs at Boeing grow at BMW's pace (from 1992 – 2009) for the next 17 years, the total number of direct jobs created by Boeing would be 9,500 and the company would have invested almost $10 billion dollars in the State. Boeing's annual payroll would be over $800 million a year.

TABLE 9

	2010	2027
Employees (Direct)	3,800	9,500
Captial Investment (Millions)*	$1,025	$9,831
Capital Investment Per Job	$269,737	$1,034,873
Annual Compensation	$152,000,000	$826,500,000

Source: Miley & Associates, Inc.

4. Boeing's Dreamliner Investment in South Carolina

The announcement of the investment by Boeing in the fall of 2009 was also heralded as one of the greatest announcements in the state's history. While everyone is in agreement that the announcement is a major win for the state, a few have questioned whether the State made a wise investment. The BMW experience as highlighted above is indicative of why Boeing and similar investment opportunities are such an important part of attracting jobs and capital investment to South Carolina.

The new Dreamliner facility will create 3,800 new jobs (this is in addition to the 2,200 employees that Boeing already had in the area). *The investment and impact estimates in this report do not include the 150 additional jobs and additional investment already announced by Boeing in May, 2010.* [7] Boeing is going to invest at least $1,025 billion in the new facility. The capital investment per job is $269,816 – more than the statewide average in 2009 and more than BMW (1992 investment adjusted for inflation). To put the magnitude of the $1.025 billion in capital investment by Boeing in perspective, it will almost equal the entire capital investment in the state in 2003 ($1.3 billion – see Table 6).

The incentive package for Boeing is in many ways very similar to all state economic development incentive packages – there is a state component determined by State officials and there is a local component determined by county officials. In addition, the state insisted on clawback provisions in the incentive package. These clawback provisions require Boeing to reimburse the state if certain investment and employment levels are not met and maintained by Boeing.

The state component of Boeing's incentive package is shown below in Table 10 and is estimated to be $417.0 million. The majority of these funds will be from $275 million in infrastructure bond funds. It is important to note that even if Boeing were to leave before the 30 years is over, the infrastructure that was funded by the state's bonds will still be in South Carolina. The improvements that are funded with the bond funds can not be removed from the site by the company if it were stop production and leave South Carolina. The other incentives are all based on existing economic incentives that are available for any eligible investment. Many of the incentives provided to Boeing are similar to those offered to other companies investing in South Carolina in that they are performance-based. That is, the amount of incentive is tied to the amount of jobs created or the amount of capital investment made. If the company creates fewer jobs than planned, then the incentives will be less and vice versa.

Based on the 3,800 jobs created by the initial investment, the Boeing incentives will cost the State approximately $109,743 per job.

In recent reports, Boeing has indicated that the reasons it chose to locate in South Carolina were primarily the workforce, the business climate, reliable and abundant power at attractive pricing from SCANA and Santee Cooper, the location of the site near the South Carolina Ports Authority facilities, the Charleston Airport and interstate highways, the presence of the existing facility purchased from Vought and the state and local leadership's commitment to Boeing. They also referenced the company's partners in past relationships with the state.

"The announcement of the investment by Boeing in the fall of 2009 was also heralded as one of the greatest announcements in the state's history."

TABLE 10

Incentive Type	Incentive Value
State Incentives	
Infrastructure Funds	
Economic Development Bond	**$270,000,000**
Set Aside Grant	**$5,000,000**
State Incentives	
Credits	
Corporate Income Tax	
Job Tax Credits[2]	**$56,025,000**
EIZ Tax Credit[3]	**$11,000,000**
Statutory Sales Tax Incentives	
Sales Tax Exemption on Equipment	**$23,000,000**
Sales Tax Exemption on Construction Materials[4]	**$18,000,000**
Training	
readySC	**$34,000,000**
Total State Incentives	**$417,025,000**
Local Incentives	
FILOT Incentives	$53,000,000
Aircraft Tax abatements[5]	NA
Total Local Incentives	**$53,000,000**
Total State and Local Incentives	**$470,025,000**

1 Assumes $3.5 million liability for 5 years
2 Assumes 3,800 jobs are created at the project and the site is a multi-county park
3 Assumes 85% investment in equipment is qualififed as manufacturing and production equipment
4 Assumes 70% of the costs of construction are construction materials that are exempt from 71% of sales taxes
5 Not available at the time of publication

Source: Various newspaper reports October 2009 - February 2010 and estimated by Miley & Associates, Inc.

The local incentive to Boeing primarily consists of the FILOT and special source revenue credit incentives previously allowed by state law for use by local governments. Boeing will be paying an assessment rate of 4% for 30 years. Boeing will receive a 50% credit against these taxes for the first 15 years which reduces their assessment ratio to 2%. Beginning in the 16th year, Boeing will pay the assessment ratio of 4%. The 2% assessment incentive is estimated to be equal to approximately $53 million. Boeing will also be eligible for exemptions on taxes on several aircraft used to transport parts to and from the facility. These incentives were originally provided in the agreement to Vought and Boeing acquired these incentives when it bought Vought. The value of these incentives are not known at this time.

Based on the assessment rate and local millage rates, the Boeing facility will pay almost $3.5 million a year in local government property taxes. More than $2.5 million of this will go to Charleston schools. Once the 15-year tax incentive is over, the facility will pay an estimated $7 million a year in local government property taxes with more than $5 million of this going to Charleston County schools. From years 16-30, Boeing will pay more than $105 million in local property taxes to Charleston County and Charleston County schools.

In a separate, cost-benefit analysis conducted by the Coordinating Council on Economic Development, the CCED found that the Boeing investment will result in a net positive benefit to the state once all costs of incentives, local and state government are taken into account. The CCED found that the Net Present Value of all public sector benefits and all costs in the 15th years were more than $13 million. The CCED found that the private sector benefits to across the entire state were much greater. Based on their analysis, the net present value of the first 15 years of the Boeing facility will total more than $4.4 billion to the state's economy. In typical Cost-Benefit analysis, any investment that returns greater benefits than costs is considered to be a positive investment. *The conclusions of the CCED report support those reached in this report. However, the methodology used in the CCED study differs from that used in this analysis and therefore some of the estimates differ in magnitude and are not directly comparable.*

Of particular note is that Boeing did not take advantage of all the major economic development incentives that are available by state law. Boeing was eligible but did not receive a commonly used incentive that other companies usually use. The State Job Development Credits range from 2% to 5% of the withholding taxes paid to the state for employee withholding. This incentive would have been substantial for Boeing. It is estimated that Boeing would have earned over $7.2 million in JDC's per year for a total of over $108 million for the first 15 years. These fees would have reduced South Carolina income taxes by that amount.

"The Coordinating Council on Economic Development found that the Boeing investment will result in the more than $4.4 billion in private sector benefits to South Carolina's economy."

5. Economic Impact of Boeing in South Carolina

The new Boeing Dreamliner operations will create impacts to the Charleston and surrounding area and across the state in two phases. The initial impacts will occur during the construction of the Dreamliner facility. Once the facility is constructed and operational, there will also be annual economic impacts to Charleston and the surrounding area from ongoing operations of the facility.

The economic impacts from the construction and ongoing operations of the Dreamliner facility are outlined in this section of the report. This analysis utilizes impact models generated by the IMPLAN modeling system. IMPLAN is a nationally recognized system of local economic models that are specifically designed to represent local economies such as the Charleston area. The IMPLAN models are modifications of the national input-output models developed by the Bureau of Economic Analysis, US Department of Commerce. The IMPLAN models incorporate the most recent data available and are generally 2008 unless otherwise noted. The estimates are based on constant dollars and assume no inflation during the project's construction. This assumption applies to all estimates in this analysis, including: property values, incomes, sales, construction materials, etc. The assumption of constant dollars assumes revenues and costs will increase at similar rates during the construction period and afterwards.

Benefits from the Construction Phase

The construction of the Dreamliner manufacturing facility and all related construction involved in developing the Dreamliner facility will have substantial impacts on the Charleston area and the state. These impacts will be relatively short-term in nature since the construction of the facility will be completed within the next year or so. Although short-term, the magnitude of the construction effort will have far reaching impacts on the Charleston and surrounding area. A Greenville, South Carolina company for example, has already been selected to help in the construction of the new facility.

It is estimated at this time that the construction of the Dreamliner facility will cost $872 million. The total amount of the capital investment by Boeing is estimated to be more than $1 billion and will include several hundred million dollars of capital equipment. However, investments in capital equipment will not have much of a ripple effect on the local economy and are excluded in this analysis.

The initial construction phase of the Boeing facility will result in a direct investment of approximately $872 million. This investment is outlined in Table 11 below. As the construction dollars are spent and re-spent in the Charleston area, additional economic activity is created for those companies and individuals that supply goods and services to the construc-

tion of the facility. The recipients of this income will spend this income on other goods and services.

Each time, some of the purchases will be for goods and services inside Charleston and surrounding counties and some will be for goods and services from outside the area (referred to as "leakages"). The well-known "multiplier effect" estimates the aggregate amount of local buying and selling that occurs.

The multipliers used in this analysis estimate three components of total change within the local area:

- *Direct effects* represent the initial change in the industry in question.
- *Indirect effects* are changes in inter-industry transactions as supplying industries respond to increased demands from the directly affected industries.
- *Induced effects* reflect changes in local spending that result from income changes in the directly and indirectly affected industry sectors.

This cycle of spending continues until leakages from the region (spending on goods and services outside the area) stop the cycle. Due to these multiplier effects, the initial, direct investment results in indirect and induced impacts of many more dollars.

"The initial construction phase of the Boeing facility will result in a direct investment of approximately $872 million."

TABLE 11 Economic Impacts of Boeing Dreamliner Facility Construction

	Direct	Indirect	Induced	Total*
Output	$872,220,000	$251,890,000	$241,791,000	$1,365,901,000
Labor Income	$246,771,000	$91,182,000	$75,520,000	$413,473,000
Jobs	5,725	1,883	2,277	9,885

* Totals may not equal sum of components due to rounding.

While most of these jobs will be concentrated in the construction and related sectors, jobs will also be created in many other industrial sectors. Table 12 highlights the job creation in the 30 industries that will see the most job creation during this period. As seen in Table 12, jobs will be created in the professional sectors, retail, health care, food and beverage, automobile, and many other sectors in Charleston County and the surrounding area.

TABLE 12

Top 30 Industries Impacted	Total Job Supported
Architectural, engineering, and related services	353
Food services and drinking places	323
Real estate establishments	309
Wholesale trade businesses	224
Employment services	203
Legal services	157
Offices of physicians, dentists, and other health practitioners	122
Services to buildings and dwellings	112
Accounting, tax preparation, bookkeeping, and payroll services	102
Private household operations	90
Civic, social, professional, and similar organizations	86
Retail Stores - Food and beverage	80
Retail Stores - General merchandise	79
Private hospitals	70
Nursing and residential care facilities	69
Monetary authorities and depository credit intermediation activities	65
Transport by truck	62
Automotive repair and maintenance, except car wash	58
Retail Stores - Motor vehicle and parts	56
Securities, commodity contracts, investments, and related activities	53
Telecommunications	51
Retail Stores - Clothing and clothing accessories	48
Management, scientific, and technical consulting serv	47
Business support services	45
Retail Stores - Miscellaneous	45
Ready-mix concrete manufacturing	43
Retail Nonstores - Direct and electronic sales	42
Commercial and industrial machinery and equipment	38
Child day care services	36
Retail Stores - Building material and garden supply	35

As seen in Table 11, the compounding effects of the multiplier cause the initial direct investment of $872.2 million to result in an indirect impact of $251.9 million and an induced impact of $241.8 million for a total increase in output of $1.4 billion in the Charleston and surrounding area. It is estimated that there will be as many as 5,725 jobs directly supported in the greater Charleston County area from the project's construction. In addition to these direct jobs, another 4,160 jobs are estimated to be supported as indirect and induced effects of the construction activity for a total of 9,885 jobs supported in Charleston County and the surrounding area during the construction activity of the Boeing Dreamliner facility.

Labor income is another important indicator of economic activity. As seen in Table 11, the compounding effects of the multiplier cause the initial construction activity to result in a direct impact on labor income of $246.8 million dollars. This will be multiplied throughout the region and result in indirect and induced impacts of another $166.7 million in labor income for at total increase of in labor income in the region of $413.5 million.

> "Based on this level of average employment at the facility, it is estimated that the employees and economic activity associated with the Boeing facility will generate an increase in direct annual output in the Charleston and surrounding area of more than $4.5 billion."

Ongoing Benefits from the Boeing Dreamliner Facility

In addition to the impacts from the construction activity related to the Boeing facility, once the facility is constructed, Charleston and the surrounding area and many areas across the state will experience impacts from economic activity generated by the operations at the Boeing facility and the employees of Boeing. The economic impacts of the operations of the Boeing facility estimated in this study are based on the projected employment level of 3,800 new full-time workers at the Boeing Dreamliner facility.

Based on this level of average employment at the facility, it is estimated that the employees and economic activity associated with the Boeing facility will generate an increase in direct annual output on Charleston and surrounding area of more than $4.5 billion. As seen in Table 13, this direct impact will then have indirect and induced impacts of another $1.4 billion for a total of over $5.9 billion impact on the Charleston and surrounding area per year. However, the impacts from Boeing will not stop at the local area. Beyond the $5.9 billion in output generated by Boeing in the seven county study area, the facility will generate another $186 million in economic activity per year in the state for a total economic impact in South Carolina $6.14 billion in output.

Based on estimates from Boeing, there will be an additional 3,800 new jobs created at the new Boeing Dreamliner operations. However, in addition to these direct employees, there will be another 11,478 jobs supported by the indirect and induced effects for a total of 15,278 permanent jobs supported in the Charleston and surrounding area as a result of the Boeing Dreamliner operations. These impacts will begin to occur immediately once the facility is operational and will continue for the entire life of the facility. The impacts from

TABLE 13 Economic Impacts of Boeing Dreamliner Facility On-Going Operations

	Direct	Indirect	Induced	Total*
Output	$4,537,943,000	$709,261,000	$711,513,000	$5,958,716,000
Labor Income	$768,459,000	$237,146,000	$222,415,000	$1,228,020,000
Jobs	3,800	4,788	6,691	15,278

* Totals may not equal sum of components due to rounding.

Boeing do not stop in the Lowcountry. Beyond the 15,278 jobs supported in the seven county study area, the facility will generate another 809 jobs statewide for a total employment impact in South Carolina of 16,087 jobs. According to recent reports, the Dreamliner facility will have a network of over 200 companies supplying parts and services to the facility once it is operational. [9]

While 3,800 jobs will be created directly at the Boeing facility, additional jobs will also be created in many other industrial sectors. Table 14 highlights the job creation in the 30 industries that will see the most job creation during this period. As seen in Table 14, jobs will be created in the professional sectors, retail, health care, food and beverage, automobile, and many other sectors in Charleston and the surrounding area.

The indirect and induced impacts estimated above have already started in the state. For example, an aerospace company, ACAS Landing Gear Services, has announced locating a new facility in Marion, South Carolina that will employ 300 workers. The company services Boeing operations.

Perhaps just as impressive is the recent announcement by the Greenville-based BE&K Building Group. BE&K will be part of the team that won the construction work for the Boeing facility. BE&K also worked on some of the facilities at BMW.

And finally, there will be over $768.5 million of direct impacts on labor income of the Charleston and surrounding area on an annual basis from the Dreamliner operations. This direct impact will then have indirect and induced impacts of another $459.6 million for a total of over $1.2 billion impact on labor income in the Charleston and surrounding area per year. State revenues will also be impacted by the ongoing operations. Based on the CCED's methodology for estimating state revenue impacts, the $1.2 billion in labor income generated by the Boeing facility will generate $91.2 million in state income and sales taxes per year. Over the first 30 years of operation, this will total almost $2.76 billion in state tax revenues – far outpacing the cost of the state (and local) incentives.

TABLE 14

TOP 30 INDUSTRIES IMPACTED	TOTAL JOB SUPPORTED
Food services and drinking places	876
Wholesale trade businesses	802
Real estate establishments	739
Employment services	473
Offices of physicians, dentists, and other health practitioners	362
Transport by truck	313
Management of companies and enterprises	306
Services to buildings and dwellings	281
Private household operations	257
Retail Stores - Food and beverage	240
Retail Stores - General merchandise	239
Custom computer programming services	210
Private hospitals	209
Legal services	205
Nursing and residential care facilities	203
Securities, commodity contracts, investments, and related activities	203
Business support services	180
Retail Stores - Motor vehicle and parts	173
Management, scientific, and technical consulting services	169
Accounting, tax preparation, bookkeeping, and payroll services	161
Civic, social, professional, and similar organizations	158
Monetary authorities and depository credit intermediation activities	148
Architectural, engineering, and related services	147
Retail Stores - Clothing and clothing accessories	144
Retail Stores - Miscellaneous	137
Warehousing and storage	134
Retail Nonstores - Direct and electronic sales	129
Automotive repair and maintenance, except car washes	122
Telecommunications	122
Maintenance and repair construction of nonresidential structures	114

6. Summary

As outlined in the accompanying analysis, it is clear that the Boeing Dreamliner operation will produce positive economic impacts for the Charleston and the surrounding area. These impacts will be generated from both the construction phase and the permanent operation of the Boeing facility.

Boeing plans on a direct investment of more than a billion dollars at their new Dreamliner facility. The impacts from the construction of the facility will be concentrated in the first year of construction and will result in a direct impact of $872 million and an indirect impact of $251.9 million and an induced impact of $241.8 million for a total increase in output of $1.4 billion in Charleston and the surrounding area. It is estimated that there will be as many as 5,725 jobs supported in the greater Charleston County area from the project's initial construction.

In addition to these direct jobs, another 4,160 jobs are estimated to be supported as indirect and induced effects of the construction activity for a total of 9,885 jobs supported in Charleston County and the surrounding area during the construction activity of the Boeing Dreamliner facility.

Based on an estimated 3,800 new, permanent employees at the facility, it is estimated that the employees and economic activity associated with the Boeing Dreamliner will generate an increase in direct annual output in the Charleston County area of over $4.5 billion. This direct impact will then have indirect and induced impacts of another $1.4 billion for a total of over $5.9 billion impact on Charleston and the surrounding area per year.

In addition, to the 3,800 direct new employees at Boeing, there will be another 11,478 jobs supported by the indirect and induced effects for a total of 15,278 permanent jobs created and supported as a result of the ongoing operations of the Boeing Dreamliner facility in Charleston. These impacts will begin to occur immediately once the facility is operational and will continue for the life of the facility.

If the Boeing investment succeeds and grows at a similar pace as BMW in the upcountry has done since 1992, the impacts will be even greater. If Boeing grows at the same pace as BMW, there will be 9,500 direct jobs at the facility and Boeing's investment will be almost $10 billion.

[1] See for example, Burstein, M.L. and A.J. Rolnick. 1995. Congress should End the Economic War Among the States. Federal Reserve Bank of Minneapolis 1994 Annual Report 9 (1): 3-19; and Mauey, Joe, and Mark M. Spiegel. 1995. Is State and Local Competition for Firms Harmful? Federal Reserve Bank of San Francisco Weekly Letter: (95-26).
[2] See also the SC Department of Commerce website -- http://sccommerce.com/locate-sc/grants-incentives
[3] See for example: Woodward, Douglas, Harry Miley, and Holley Ulbrich. 2000. Education and Economic Development in South Carolina. The Strom Thurmond Institute. Clemson University, http://www.strom.clemson.edu/teams/ced/edecdevsc/
[4] "50-State Property Tax Comparison Study, Payable Year 2008", Minnesota Taxpayer Association, April 2009.
[5] "Workforce Trends", South Carolina Employment Security Commission, April 16, 2010.
[6] Wall Street Journal, February 11, 2010, "Economists Expect Shifting Work Force."
[7] IMPLAN is regional modeling system developed by MIG, Inc., Stillwater, MN.
[8] The latest data available for the IMPLAN modeling system are for the 2006 calendar year. However, the final dollar impacts estimated in this analysis reflect 2008 prices.
[9] Island Packet, March 3, 2010.

Methodology

This study estimates the economic impacts on the state of South Carolina from the recently announced location of the new Boeing assembly plant in Charleston. The methodology used in this study is the IMPLAN regional input-output modeling system developed by MIG, Inc. of Stillwater, Minnesota. This study uses 2008 data, the most recent data available for the IMPLAN models.

IMPLAN was developed by MIG, Inc. as a cost-effective means to develop regional input-output models. The IMPLAN accounts closely follow the accounting conventions used in the "Input-Output Study of the US Economy" by the Bureau of Economic Analysis (1980) and the rectangular format recommended by the United Nations.

The IMPLAN Input-Output Model mathematically describes commodity flows from producers to intermediate and final consumers. Purchases for final use (final demand) drive the model. Industries producing goods and services for final demand also purchase goods and services from other producers. These other producers, in turn, purchase goods and services. This buying of goods and services (indirect purchases) continues. Leakages from the region eventually stop the cycle.

The IMPLAN input-output model mathematically derives the indirect and induced effects. The resulting multipliers describe the change in output for every regional industry caused by a one-dollar change in final demand for any given industry. The notion of a multiplier rests upon the difference between the initial effect of a change in final demand and the total effects of that change. Total effects are the direct effects plus indirect effects, plus induced effects. Direct effects are the production changes associated with initial final demand changes. Indirect effects are production changes in backward-linked industries caused by the changing input needs of directly effected industries. Induced effects result from the household expenditures from the directly or indirectly generated labor income.

The multipliers used in this analysis estimate three components of total change within the local area:

- *Direct effects* represent the initial change in the industry in question.
- *Indirect effects* are changes in inter-industry transactions as supplying industries respond to increased demands from the directly affected industries.
- *Induced effects* reflect changes in local spending that result from income changes in the directly and indirectly affected industry sectors.

This cycle of spending continues until leakages from the region (spending on goods and services outside the area) stop the cycle. Due to these multiplier effects, the initial, direct investment results in indirect and induced impacts of many more dollars.

In essence, the multipliers estimated by this methodology represent the consecutive rounds of buying and selling that ripple through an economy. To produce one dollar of new product, employees must be hired and paid. The wages paid to these workers will then be spent on goods and services, such as food, gasoline, clothes, housing, etc. within the region and outside the region. As these cents are spent, they become income to the recipient, and the spending continues over and over again. The induced effect is the cumulative amount of spending.

The economic activity of the project also requires intermediate inputs to be purchased such as electricity, raw materials, transportation services, labor etc. These expenditures become income to the recipient and pay for the purchases of raw materials, labor, etc. They, in turn, are then spent over and over again in the economy. Purchases made from outside the region are considered "leakages" from the economy. The consecutive rounds of selling goods and services continue until these leakages from the region end the cycle. The indirect effect is the cumulative amount of such spending.

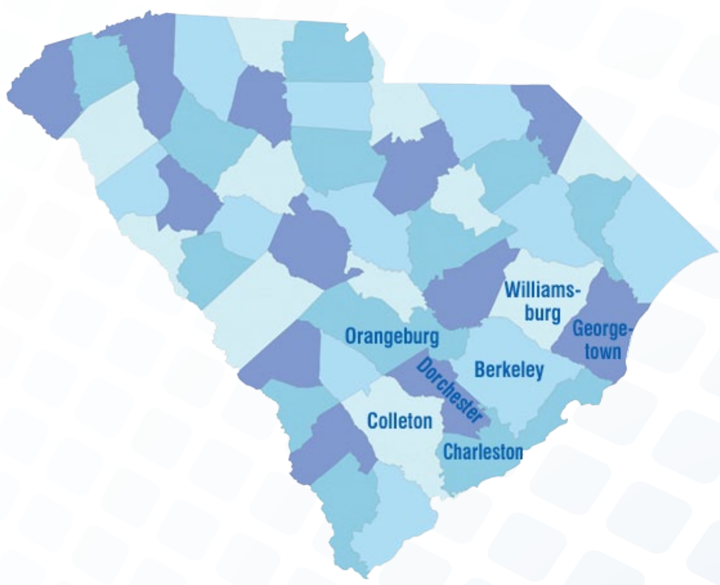
Data for this analysis is 2008 data unless otherwise noted.

Additional data such as employment and unemployment data are from the South Carolina Employment Security Commission; Bureau of Labor Statistics, US Department of Labor; the US Department of Commerce, Bureau of Economic Analysis; the SC Budget and Control Board; and the Boeing Company.

The Study Area

The economic impacts of the Boeing operations will extend throughout the metropolitan Charleston area, the surrounding Lowcountry and the entire state. However, the focus of this analysis is to estimate the impacts on the greater Charleston metropolitan area. For the purposes of this analysis, the study area is defined as the following seven counties:

Berkeley	Georgetown
Charleston	Orangeburg
Colleton	Williamsburg
Dorchester	



Factors of production such as labor and materials freely flow between and across these county lines. Today's workforce is very mobile and many workers travel 40-50 miles to work everyday.

Appendix

1. Statutory Incentives

JOB TAX CREDIT

The Job Tax Credit (JTC) is a statutory incentive offered to companies, both existing and new, that create new jobs in the state. The credit is available to companies that establish or expand corporate headquarters, manufacturing, distribution, processing, qualified service-related, research and development facilities. This credit is extremely beneficial for companies, because it is a credit against corporate income taxes, which can eliminate 50% of a company's liability.

ECONOMIC IMPACT ZONE INVESTMENT CREDIT

South Carolina allows manufacturers locating in Economic Impact Zone (EIZ) counties a one-time credit against a company's corporate income tax of up to 5% of a company's investment in new production equipment. The actual value of the credit depends on the applicable recovery period for property under the Internal Revenue Code.

CORPORATE HEADQUARTERS CREDIT

In an effort to offset the cost associated with relocating or expanding a corporate headquarters facility, South Carolina provides a generous 20% credit based on the cost of the actual portion of the facility dedicated to the headquarters operation or direct lease costs for the first five years of operation. The credit can be applied against either corporate income tax or the license fee. These credits are not limited in their ability to eliminate corporate income taxes and can potentially eliminate corporate income taxes for as long as 10 years from the year earned. Eligibility for this credit is determined by meeting a number of specific criteria.

RESEARCH AND DEVELOPMENT TAX CREDIT

In order to reward companies for increasing research and development activities in a taxable year, South Carolina offers a credit equal to 5% of the taxpayer's qualified research expenses in the state. The term "qualified research expenses" is defined in Section 41 of the Internal Revenue Code. The credit taken in any one taxable year may not exceed 50% of the company's remaining tax liability after all other credits have been applied. Any unused portion of the credit can be carried forward for 10 years from the date of the qualified expenditure.

2. Tax Structure

South Carolina's tax incentives include:

PROPERTY TAX

In South Carolina, only local governments may levy property taxes. A company's property tax liability is a function of: Property Value x Assessment Ratio x Millage.

To determine Fair Market Value, real property is appraised, while tangible personal property is recorded at cost and then depreciated based on a statutory depreciation rate (for manufacturers) and income tax depreciation (for other businesses). The Fair Market Value is then assessed at rates established in the South Carolina Constitution. The local millage rate is applied to the assessed value to determine the property taxes. Millage rates in South Carolina are site specific and set annually by local government. A mill is equal to $0.001.

Property Tax Exemptions may include inventories (raw materials, work-in-progress, finished goods), intangibles (stocks, dividends, interest) and pollution control equipment. A partial Property Tax Exemption, called an abatement, may be made available to manufacturing, research and development, corporate headquarters, office and distribution facilities meeting certain requirements.

Companies may also be able to negotiate a Fee-in-Lieu (FILOT) of property taxes, which can greatly reduce their property tax liability. This property tax incentive is offered at the discretion of local governments. Companies investing as little as $2.5 million dollars may negotiate this exemption with the county in which they locate. This 20-year incentive creates significant savings for companies by lowering the assessment ratio from 10.5% for manufacturers to as low as 6%. Furthermore, the millage may be held lower than if the property were not under a FILOT.

CORPORATE TAX

At 5%, South Carolina's Corporate Income Tax Rate is among the lowest in the Southeast. The state is currently phasing in a single factor sales formula for apportioning income that will be fully implemented by 2011.

Many companies qualify for a HYPERLINK "http://sccommerce.com/locate-sc/grants-incentives/statutory-incentives" Job Tax Credit, which eliminates up to 50% of a company's corporate income tax liability for a specified number of years. The Corporate License Tax Rate is $1 for each $1,000 of capital stock and paid-in or capital surplus, plus a $15 annual fee.

SALES TAX

South Carolina's sales and use tax rate is 6%. Counties, by approval of a majority of county voters, may assess an additional 1-2% local option sales tax. Proceeds go towards infrastructure improvements or a rollback of property taxes. A variety of sales tax exemptions for companies is offered.

3. Discretionary Incentives

JOB DEVELOPMENT CREDIT

A Job Development Credit (JDC) is a discretionary, performance-based incentive that rebates a portion of new employees' withholding taxes that can be used to address the specific needs of individual companies. JDCs are approved on a case-by-case basis by the S.C. Coordinating Council for Economic Development (CCED). To qualify, a company must meet certain business requirements and the amount a company receives depends on the company's pay structure and location.

ECONOMIC DEVELOPMENT SET-ASIDE PROGRAM

The Economic Development Set-Aside Program assists companies in locating or expanding in South Carolina through road or site improvements and other costs related to business location or expansion. Overseen by the Coordinating Council for Economic Development, it is the Council's primary business development tool for assisting local governments with road, water/sewer infrastructure, or site improvements related to business location or expansion.

ENTERPRISE ZONE RETRAINING CREDIT PROGRAM

The Enterprise Zone Retraining Credit Program helps existing industries maintain their competitive edge and retain their existing workforce by allowing them to claim a Retraining Credit for existing production employees. If approved for the Enterprise Zone Retraining Credit, companies can reimburse themselves up to 50% of approved training costs for eligible production workers (not to exceed $500 per person per year). This program is also overseen by the Coordinating Council for Economic Development.

RURAL INFRASTRUCTURE FUND

The Rural Infrastructure Fund (RIF) assists qualified counties in the state's rural areas by providing financial assistance for infrastructure and other activities that enhance economic growth and development. It can be used for job creation and/or product development. Qualified counties are designated as "Tier One" or "Tier Two" by the Department of Revenue and have received approval for an economic development strategic plan by the Coordinating Council for Economic Development.

PORT VOLUME INCREASE CREDIT

South Carolina provides a possible income tax credit to entities that use state port facilities and increase base port cargo volume by 5% over base-year totals. To qualify, a company must have 75 net tons of non-containerized cargo or 10 loaded TEUs transported through a South Carolina port for their base year.

The Coordinating Council has the sole discretion in determining eligibility for the credit and the amount of credit that a company may receive. The total amount of tax credits allowed to all qualifying companies is limited to $8 million per calendar year. A company must submit an application to the Coordinating Council to determine its qualification for, and the amount of, any income tax credit it will receive.

TOURISM INFRASTRUCTURE DEVELOPMENT GRANTS

The Tourism Infrastructure Development Grant supports new or expanding tourism or recreation facilities or designated development areas primarily through infrastructure projects. This program is generated from a share of the state admissions tax on qualified tourism and recreation establishments and is overseen by the Coordinating Council for Economic Development.

THE COORDINATING COUNCIL FOR ECONOMIC DEVELOPMENT

The Coordinating Council for Economic Development, established in 1986 by the General Assembly, was formed in response to a general need for improved coordination of economic development efforts by those state agencies involved in the recruitment of new business and the expansion of current enterprises throughout the state. The Council consists of the heads or board chairs of 10 state agencies concerned with economic development: S.C. Department of Commerce, State Ports Authority, S.C. Department of Parks, Recreation & Tourism, S.C. Department of Agriculture, S.C Technical College System, S.C. Research Authority, S.C. Employment Security Commission, S.C. Department of Revenue, Jobs for Economic Development Authority and Santee Cooper.

4. Financial Resources

South Carolina offers several financing tools to enhance the business and economic climate of the state. South Carolina's Financial Resources include:

BCI LENDING SERVICES

HYPERLINK "http://www.bcilending.com/" \t "_blank" BCI Lending Services (BCI) is a not-for-profit, statewide development finance institution that provides innovative financial products and capacity-building services to promote growth and competitiveness of new and existing small- and medium-sized businesses in South Carolina. BCI complements private sector activities through a variety of lending programs to fill gaps in funding often faced by these businesses, especially in rural and distressed areas of the state.

BUSINESS DEVELOPMENT CORPORATION

The HYPERLINK "http://www.businessdevelopment.org/" \t "_blank" Business Development Corporation (BDC) of South Carolina is a privately owned, non-banking financial institution organized for the purpose of promoting economic development within the state. It provides term loans to both new and expanding businesses that are unable to obtain financing through normal banking sources. Loans can be obtained for most business purposes and by various types of businesses, except for investment, speculative and eleemosynary ventures.

S.C. CAPITAL ACCESS PROGRAM

The purpose of the HYPERLINK "http://www.businessdevelopment.org/sccap.php" \t "_blank" S.C. Capital Access Program (SC CAP) is to promote economic development and job creation through small businesses in South Carolina by providing financial institutions with a flexible and non-bureaucratic resource.
SC CAP is based on a reserve fund concept and is fundamentally different from traditional insurance or guarantee programs, which guarantee individual loans. Rather, SC CAP works on a portfolio concept. In other words, if a financial institution participates in SC CAP, a special reserve fund, which is owned by the state, but managed by Business Development Corporation of SC, is set up to cover future losses from a portfolio of loans that the institution makes under the program. The

SC CAP reserve fund is not specific to individual loans, but is used to offset losses on any loan in the participating financial institution's SC CAP portfolio.

U.S. SMALL BUSINESS ADMINISTRATION LOAN PROGRAMS

The HYPERLINK "http://www.sba.gov/" \t "_blank" U.S. Small Business Administration's (SBA) loan programs enhance the ability of lenders to provide long- and short-term loans to small businesses that might not qualify through normal lending channels. To qualify for an SBA guaranty, the lender must certify that it cannot provide funding on reasonable terms through normal lending channels.

There are three major SBA loan programs:

HYPERLINK "http://www.sba.gov/financing/sbaloan/7a.htm" \t "_blank" Basic 7(a) Loan Guaranty: Serves as the SBA's primary business loan program to help qualified small businesses obtain financing when they might not be eligible for business loans through normal lending channels. It is also the agency's most flexible business loan program, since financing under this program can be guaranteed for a variety of general business purposes. Loan proceeds can be used for most sound business purposes including: working capital; machinery and equipment; furniture and fixtures; land and building (including purchase, renovation and new construction); leasehold improvements; and debt refinancing (under special conditions). Loan maturity is up to 10 years for working capital and generally up to 25 years for fixed asset.

HYPERLINK "http://www.sba.gov/financing/sbaloan/cdc504.htm" \t "_blank" Certified Development Company (CDC), a 504 Loan Program: Provides long-term, fixed-rate financing to small businesses to acquire real estate or machinery or equipment for expansion or modernization. A 504 project typically includes a loan secured from a private-sector lender with a senior lien, a loan secured from a CDC (funded by a 100% SBA-guaranteed debenture) with a junior lien covering up to 40% of the total cost, and a contribution of at least 10% equity from the borrower. The maximum SBA debenture generally is $1 million (and up to $1.3 million in some cases).

HYPERLINK "http://www.sba.gov/financing/sbaloan/microloans.htm" \t "_blank" Microloan, a 7(m) Loan Program: Provides short-term loans of up to $35,000 to small businesses and not-for-profit childcare centers for working capital or the purchase of inventory, supplies, furniture, fixtures, machinery and/or equipment. Proceeds cannot be used to pay existing debts or to purchase real estate. The SBA makes or guarantees a loan to an intermediary who, in turn, makes the microloan to the applicant. These organizations also provide management and technical assistance. Loans are not guaranteed by the SBA. The microloan program is available in selected locations in most states.

U.S. DEPARTMENT OF AGRICULTURE BUSINESS AND INDUSTRY GUARANTEED LOAN PROGRAM

The HYPERLINK "http://www.rurdev.usda.gov/rbs/busp/b&i_gar.htm" \t "_blank" U.S. Department of Agriculture (USDA) Business and Industry (B&I) Guaranteed Loan Program helps create jobs and stimulates rural economies by providing financial backing for rural businesses. The program provides up to 80% of a loan made by a commercial lender. Loan proceeds may be used for working capital, machinery and equipment, buildings and real estate and certain types of debt refinancing.

B&I loan guarantees can be extended to loans made by recognized commercial or other authorized lenders in rural areas (this includes all areas other than cities of more than 50,000 people and the contiguous and urbanized areas such as cities or towns).

JOBS-ECONOMIC DEVELOPMENT AUTHORITY

HYPERLINK “http://www.scjeda.net/” \t “_blank” Jobs-Economic Development Authority (JEDA) seeks to provide innovative financial direction and offer products and tools to promote growth and competitiveness among new and existing businesses, create jobs and improve living conditions in South Carolina. They accomplish this task through loans, investments, exportation and the promotion of services and capital revenue produced within the state. Created in 1983, JEDA has assisted with the creation of nearly 57,000 jobs for small and medium sized businesses and closed more than 750 loans representing more than $4 billion total.

Administered by JEDA, The New Market Tax Credit (NMTC) program is a federal tax incentive program that was authorized by Congress in 2000, to help spur the investment of $15 billion of capital into businesses that are located in low-income communities.

INVESTSC, INC.

InvestSC, Inc. can best be described as a fund of funds and is committed to promoting economic development within the state. The program provides an invaluable resource for companies already located in South Carolina or for companies looking to locate here. Formed by JEDA, InvestSC, Inc.’s purpose is to assist the Venture Capital Authority (VCA) of South Carolina in meeting their goals and objectives. The VCA has partnered with four venture capital funds that are willing to invest in companies looking to locate or expand within the state.

Source: South Carolina Department of Commerce

General Limiting Conditions

This economic impact analysis is not a budget or forecasting document and is not intended to depict a definitive course of action. Moreover, economic impact analysis is not designed as a space or facility-planning document. Many assumptions underlying fiscal and economic impact analyses are based on policy decisions which, if modified, would affect the overall results.

This study is based on estimates, assumptions and other information developed by Miley & Associates, Inc. from its independent research effort, consultations with the client and its representatives, and primary and secondary sources. We have utilized sources that are deemed to be reliable but cannot guarantee their accuracy. Moreover, estimates and analysis are based on trends and assumptions and, therefore, there will usually be differences between projected and actual results because events and circumstances frequently do not occur as expected, and those differences may be material. No responsibility is assumed for inaccuracies in reporting by the client, the client's agent and representatives or any other data source used in preparing this study.

This report is based on information that was current as of March 2010 and Miley & Associates, Inc. has not undertaken any update of its research effort since that date. We have no obligation, unless subsequently engaged, to update this report or revise this analysis as presented due to events or conditions occurring after the date of this report.

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This study is qualified in its entirety by, and should be considered in light of, these limitations, conditions and considerations.

Miley & Associates

Miley & Associates INC.

Miley & Associates is one of the Southeast's leading economic and financial consulting firms. The firm specializes in economic impact analyses, fiscal impact analyses, feasibility reports, impact fee studies and benefit/cost modeling. Our clients include national and prominent local real estate developers, school districts, local governments, regional development agencies, and other private sector development firms. Miley & Associates partners appear regularly before decision-makers at all levels of government and understand the values, needs and desires of the clients they represent. With offices located in Columbia, South Carolina, the firm is well positioned to provide clients with hands-on service for projects throughout the entire Southeast region.

Miley & Associates appreciates that every research project is unique and deserves a custom solution. Public policy decisions are not made overnight, and we excel at providing advice and counsel along the way. We represent our clients. Our business plan is simple: we focus on exceeding our client's expectations and building long-term relationships.

Miley & Associates, Inc. was founded in 1993 by Harry W. Miley, Jr. Ph. D. The Company is an economic and financial consulting firm providing a range of analytical services to public and private sector clients. Miley & Associates conducts fiscal and economic impact analyses of proposed new developments and has extensive experience in assisting clients with their economic development and community revitalization projects.