

Assessing the Economic Impact of Athens-Ben Epps Airport

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The University of Georgia

**Business Outreach Services
Small Business Development Center**

Assessing the Economic Impact of Athens-Ben Epps Airport

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Executive Summary

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Executive Summary

As part of efforts to examine the economic role of the Athens-Ben Epps Airport, the administration of the Athens-Ben Epps Airport has recently commissioned an economic impact assessment through the Applied Research Division of The University of Georgia Business Outreach Services, Small Business Development Center. The objective of the study is to quantify the employment, income and economic activity contributions of aviation by evaluating the Airport, related businesses, and the visitors that come to the area through the Airport. In addition, part of the study consisted of questionnaires to aircraft owners based at the Airport.

The economic impact was viewed from a variety of perspectives in order to take into account differences resulting from the study area examined. The following includes highlights from each portion of the study, including not only economic impact but also results from the aircraft owner survey.

Economic Impact. Each separate category of results stands alone and should not be added either to another segment of results (such as adding together the economic activity and the employee income) or to other study area results (such as adding the Primary Market Area results to Secondary Market results). The impact estimates are those resulting from Airport operations, aviation-related businesses, Airport capital expenditures and air travel visitor spending.

- In the **Primary Market Area**, consisting of Clarke, Jackson, Madison, Oconee, and Oglethorpe Counties, the annual economic impact estimates are:
 - \$11.7 million in economic activity
 - 143 full- and part-time employees
 - \$3.5 million in employee income (wages and benefits)

- In the **Secondary Market Area**, consisting of Clarke, Elbert, Greene, Madison, Oconee, Oglethorpe, Jackson, Morgan, and Walton Counties, the annual economic impact estimates are
 - \$11.8 million in economic activity

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- 146 full- and part-time employees
- \$3.6 million in employee income (wages and benefits)

- The **Urban Georgia Area** consists of Bibb, Carroll, Catoosa, Chatham, Clarke, Columbia, Dougherty, Floyd, Glynn, Hall, Houston, Lowndes, Muscogee, Oconee, Richmond and Walker Counties. In these counties, which were designated part of the study area primarily because of their use in a previous study,¹ the annual economic impact estimates are:
 - \$13.1 million in economic activity
 - 171 full- and part-time employees
 - \$4.4 million year in income (wages and benefits)

- In the **State of Georgia Study Area** which consists of all 159 counties within the State, the annual economic impact estimates are:
 - \$14.1 million in economic activity
 - 162 full- and part-time employees
 - \$4.9 million in income (wages and benefits)

Aircraft Owners. This portion of the research effort included sending questionnaires to owners of aircraft based at the Airport, a total of 50 owners. The responses represented 22 owners of 26 aircraft based at the Airport (some own more than one aircraft based there). The following are some highlights of the aircraft owners' responses to our questionnaire (particularly focusing on those aircraft for business purposes):

- Approximately 48% of those who responded use their aircraft for business purposes and come from a variety of industries including such businesses as consulting, real estate, and legal services.

- These businesses operate in Clarke, Franklin, Houston, Jackson, Lowndes, and Oconee Counties and employ an average of 38 workers.

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- Approximately 59% of the business aircraft use is for executive/staff transport purposes. Other uses include visitor/client transport, receiving supplies, and other, non-business purposes.
- Over 88% of the owners that use their aircraft for business purposes indicated that the location of Athens – Ben Epps is important or very important to their current business operations.
- Though only a few business-use aircraft owners responded to the question regarding their businesses’ annual sales, the average was over \$2,000,000 per year.

In addition to questions about their aircraft use, we asked the aircraft owners to elaborate on their answers or to describe the role that their aircraft based at Athens-Ben Epps Airport plays in their business operations or personal experience. Some of the responses included the following:

- “Loss of viable airport services would be a severe blow to the health of the local economy. It would be nearly impossible to recruit new business without providing the full range of air services.”
- “[The Airport] made locating in Athens possible.”
- “AHN [Athens Ben – Epps Airport] is the kind of airport I prefer for fuel stops and especially basing. The well-equipped AHN is also good for flight training. I very much hope the airport remains available for private and business aviation.”
- “The mobility and utility allows me to do more in less time, both personally and professionally.”

Background/Objectives

Background/Objectives

In seeking to evaluate the economic contribution of the Airport to the region, the administration of the Athens-Ben Epps Airport has commissioned a study from the Applied Research Division of The University of Georgia Business Outreach Services, Small Business Development Center. According to the *Master Plan Update*,² the Airport “currently serves as the area’s only commercial service airport, while providing a home to general aviation operators and transient business and pleasure flyers.”

Examining the role of the Athens-Ben Epps Airport on the Georgia economy involves answering several important questions. How do the Airport and affiliated businesses impact the community? How many jobs result from the Airport and affiliated businesses? How does this impact translate to activity in the local economy? Answering these questions can help to address how the Airport contributes to the local and state economies—a concept which is often misunderstood.³ Like most public use airports, Athens-Ben Epps Airport is owned and operated as part of the local government, making the understanding of its role useful to the average citizen and the community as a whole.⁴ At the same time, this Airport in many ways operates as any other business, providing jobs and purchasing local supplies and services, affecting the local economy and operating as a “community airport” in serving the local region.

An economic impact analysis is the correct course of action in order to assess the role of the Airport in the local and regional economy. This analysis serves to quantify the direct and “multiplier” effects of Athens-Ben Epps Airport, the economic activity encompassing Airport operations, aviation-related businesses, air travel visitor spending, and the resulting effects from these activities.

Estimating Economic Impact

Estimating Economic Impact

According to the Federal Aviation Administration publication titled *Estimating the Regional Economic Significance of Airports*, the two primary measures of an airport's importance are its economic impact and its transportation benefits⁵. This study will focus on the economic impact of Athens-Ben Epps Airport, requiring an understanding of what this type of assessment measures. In this case, we will look at the jobs, income and economic activity (sometimes referred to as output, sales or revenue) resulting directly and indirectly from Athens-Ben Epps Airport. This impact assessment is based on data collected directly from the Airport and businesses that are located on the Airport property as well as utilization of data collected by others (i.e. Bureau of Transportation Statistics) for estimates of air travel visitors.

The other measure of an airport's importance—transportation benefits—will not be estimated as part of this study. There may, in fact, exist a variety of impacts and benefits—economic and other—that cannot be measured through this economic impact assessment, including some of the more intangible aspects (i.e. community image) of having an airport such as Athens – Ben Epps in the community. Often these other impacts can be difficult to measure and quantify or may simply be unknown; therefore, we will focus on jobs, income, and economic activity.

Airport Operations and Businesses

The direct portion of an economic impact assessment consists of those measures resulting directly from the operation of the Airport facility and the additional businesses located on-site at the airport. As suggested in previous research, this economic activity can come from a variety of sources including not only the airport itself, but also airlines, fixed base operators, aviation-related facilities and other businesses connected to the airport facility.⁶ Direct economic impacts can include the following categories of economic activity:

- Jobs
- Income
- Property Values
- Business Sales/Revenue (economic activity/output)
- Value Added

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- Business Profit

The documentation of these actual effects can be determined by surveys of the impacted groups and/or businesses or through the examination of existing data on these specific data categories.⁷ The specific details of the data collected for this study can be found in the *Methodology* section of this report.

Capital Spending

Athens-Ben Epps Airport not only affects the local economy by operating as other businesses in employing workers and purchasing local supplies and services, but also makes local capital expenditures for maintenance and/or expansion of the local facilities. This spending is above and beyond regular operating expenditures for the Airport. In a 1992 study of the Airport, facility and service improvements were suggested in order for the Airport to maintain its role in the overall system.⁸ As a result, many of these improvements have been completed, are in the process of completion, or are scheduled to begin. These improvements are largely funded by federal monies that would not otherwise be received in the local area.

In order to measure these local expenditures for construction and maintenance projects, Airport management provided researchers with the 5-year plan for capital spending, from which we will use an average capital expenditure to estimate the economic impact. Capital expenditures are often considered “one-time” expenses, used over a particular time frame but not considered a regularly recurring expense such as an operating expense. However, given the regular nature of these expenses at Athens – Ben Epps as well as projected similar expenses through 2008, we will count this type of capital spending as an annual expense for the near future, using an average in our estimates in order to even out annual differences.

Air Travel Visitors

According to the FAA publication *Estimating the Regional Economic Significance of Airports*,⁹ the primary off-airport effects are the result of spending by visitors in various travel-related industry sectors. These include spending such as those for food, lodging, entertainment, shopping, local transportation and other related services. Measuring these

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effects that occur off-site must begin with the estimation of *non-local* visitors—a critical component of this economic impact assessment. To count only non-local visitor spending is reasonable and customary in order to provide the most accurate and conservative estimate of economic impact.

In addition, the businesses that use the airport facilities can be considered part of the off-site effects because without the airport, their business operations would be greatly affected or would not exist. The data for this portion of the study was collected from information about some of the businesses that utilize the Airport by a survey sent to the owners of the aircraft based at Athens – Ben Epps. More details about this survey can be found in the *Methodology* section.

Multiplier Effects

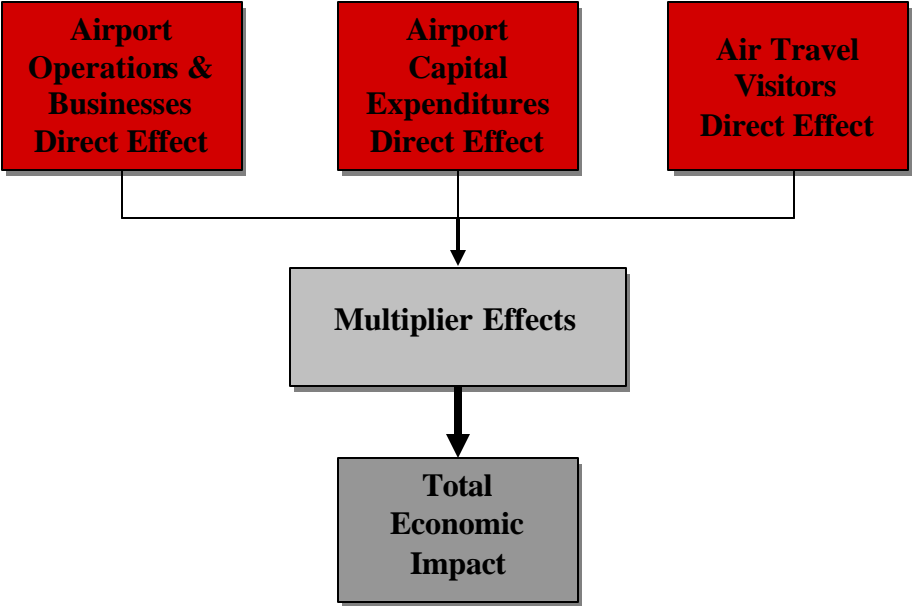
In addition to the other effects, there are *multiplier effects* that occur throughout the economy. These effects result from spending being circulated throughout the economy through local purchases of goods and services as well as household spending of employees in the directly affected industries. For example, the Airport may spend \$100 locally for the purchase of some type of supplies, or a visitor may spend \$100 on hotels/motels, restaurants, gas purchases, entertainment venues, and/or retail purchases. From the original \$100, some portion would immediately leave the area since some goods may not be produced locally (for example, a business owner may have to pay a supplier that is in another state). The remainder of the money then circulates through spending and re-spending by local businesses and their employees, with all eventually being exhausted from the local area.

The original \$100 would be the direct effect, while the sum of all the related spending would be the multiplier effects. For example, if the multiplier effects totaled \$40, the total economic impact would be \$140, with a *multiplier* of 1.4 (total effects (\$100 + \$40)/direct effects (\$100)), which implies that for every \$100 of spending by the Airport (or related business or visitor) there will be an additional \$40 of spending throughout the local area (*this is an example only, not a universal multiplier figure for such spending*). The multiplier can be analyzed from a variety of perspectives, including jobs, income, or economic activity generated by the Airport and related businesses in order to assess the

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magnitude of the local economic *interactions* between businesses and consumers. As might be expected, effects can vary for different sectors of the economy, depending on how much is spent locally for supplies or equipment, and how large an economic area is being examined. These effects result from the re-circulation of spending by the suppliers to the aviation and related industries, industries frequented by visitors, and by workers in those industries.

Figure 1. Economic Impact Categories



Source: Adapted from Georgia Statewide Aviation System Plan: Economic Impact Methodology Paper, Working Paper No. 2, Wilbur Smith Associates Project Team, March 1993, page 3. Customized for this study by The University of Georgia, Business Outreach Services, Small Business Development Center, Applied Research Division, 2003.

Methodology

Methodology

Airport Operations and Businesses/Capital Expenditures

The Airport Operations and Capital Expenditure portions of the economic impact assessment were compiled from data obtained from Airport management. They provided complete information about their revenues and expenses, enabling researchers to obtain totals for the operation. In addition, the Airport business information was collected by sending a questionnaire to the businesses located on the Airport site. A total of 8 businesses on the airport site received a six-question survey, with an introductory letter from Airport management and a follow-up call from researchers in order to encourage responses or address any questions that respondents might have. The surveys inquired about their operations, including employment, employee county of residence, annual payroll and revenue. A copy of this questionnaire is attached as Appendix A. Six businesses responded with complete questionnaires and one returned an almost complete questionnaire. The other figures were estimated by interviews with Airport management combined with secondary data sources regarding average wages and sales by business type.

In order to avoid an overestimation of the economic impact, the analysis utilized only the portion of business revenues for local purchases. The portion of local purchases was obtained through the use of a regional purchase coefficient (RPC) determined by the economic analysis model ¹⁰ This is an estimation of the local purchases in a particular industry, which prevents counting the dollars that actually leave the area through non-local purchases.

Aircraft Owner Information

In order to collect information about businesses utilizing the Airport for their operations, but are not directly located at the Airport site, a brief questionnaire was mailed to 50 owners of Athens-Ben Epps based aircraft. A total of 22 of these questionnaires were returned, representing approximately 26 total aircraft (some of the owners have more than one aircraft). Because some of the responses were incomplete (particularly in relation to business sales), there is inadequate information to accurately input the figures into the economic impact model, though the results can still give an idea of the importance of the

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Airport. See the *Aircraft Owners Survey Findings* section for a summary of responses from aircraft owners.

Air Travel Visitor Spending

The estimates of air travel visitor spending come from various sources, as no visitor spending survey was conducted as part of this study. Conserving resources by utilizing applicable data sources and methods in order to estimate visitor spending and the amount attributable to the presence of an airport is common practice for this type of study. Estimates of the length of stay and expenditures by spending category were obtained from a recently released report by the Georgia Department of Industry, Trade and Tourism (GDITT) titled *Economic Impact of Travel on Georgia 2002 Profile*,¹¹ while other data was collected from the sources mentioned below.

The total air travel visitor estimates combine the commercial service visitors and the general aviation visitors. The estimation of the number of commercial service destination passengers to Athens-Ben Epps Airport was collected from data released by the U.S. Bureau of Transportation Statistics (BTS) available through TranStats, an intermodal transportation database.¹² Both the *Small Air Carrier Statistics* and the *Airline Origin and Destination Survey* were used to obtain the best available estimates of destination passengers to the Airport. We will use a three year average figure of destination passengers in order to smooth out annual differences. According to a report from the Washington State Department of Transportation,¹³ approximately 40% of all commercial service enplanements can be assumed visitors. According to an FAA publication,¹⁴ somewhere between 30% and 70% of arrivals are visitors, depending on the local level of visitation, while other studies¹⁵ indicate a similar range. Based on interviews with Airport management, approximately 50% of the commercial service arrivals are actually visitors to the area. As this figure is consistent with the previously mentioned studies, it will be used for the impact assessment.

As the Bureau of Transportation Statistics numbers address only passengers of commercial air carriers, a separate estimation was required for the calculation of the passengers arriving at the Airport as a result of general aviation activities. As found in the *Master Plan Update*,¹⁶ general aviation “is defined as that portion of civil aviation that

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encompasses all facets of aviation except air carriers holding a certificate of convenience and necessity from the Civil Aeronautics Board, and large aircraft commercial operators.”

Among the research studies examining the economic impact of airports reviewed for this assessment, various methods of determining visitors (both general aviation and commercial service) were used, though all were very similar in nature. The most important aspect to this estimation is an awareness that not all who arrive at an airport are from outside the local area. To ensure that the economic impact estimates are not overstated, it is vital to count only a portion of arrivals as visitors. For our purposes, we will utilize a combination of sources based on data availability. The adapted methodology will follow this strategy:

- a) Estimate the number of annual itinerant general aviation operations (defined as all aircraft arrivals and departures *other than* those which operate in local practice areas within a 20-mile radius of the airport, or simulated approaches or low passes at the airport executed by any aircraft¹⁷).
- b) As recommended by the Aircraft Owners and Pilots Association (AOPA),¹⁸ divide the total number of transient operations by 2 to determine annual transient arrivals. (The implicit assumption in this method is that 50% of all transient operations are arrivals.¹⁹) In addition, this figure was discussed with Airport management, and it was agreed that it was reasonable for the characteristics of the Airport.
- c) The AOPA recommendations further suggest that the figure (from Step b) be multiplied by the average number of occupants per aircraft, which AOPA assumes to be 2.5 persons based on FAA estimates. Airport management discussed this figure with researchers and agreed that the average FAA figure is reasonable for the area and the Airport. The end result of these calculations (a,b,c) is an estimate of the number of general aviation visitors.

The calculation of general aviation visitors must be added to the number of commercial service visitors for a *total* number of visitors. Interestingly, the recent GDITT study titled *Economic Impact of Travel on Georgia 2002 Profile* indicated that most of the visitors to Georgia in 2002 were overnight travelers, with only 7.9% indicating that they were “day-trippers.”²⁰

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The following methodology was utilized to calculate the total air travel visitor spending:

- a) Estimate the number of “visitor days” per year by multiplying the estimated total number of visitors (above) through Athens – Ben Epps times the average length of stay in Georgia.
- b) Multiply the number of visitor days times the average spending amount per day (for each category of spending – see Table 1) for travelers to Georgia.

The result of these calculations is an estimate of air travel visitor spending by category in order to determine the directly affected industries. Failure to break the spending into these categories would reduce the accuracy of the impact estimate, because where visitors spend their dollars is important. We analyzed the visitor data using the IMPLAN model, broken down by customized economic region in order to calculate the direct and multiplier effects for each area. Table 1 summarizes the visitor expenditures by category.

Table 1. Visitor Expenditures by Category

<u>Spending Category</u>	<u>Average Spending Per Person/Night*</u>
Lodging	\$ 69.59
Food	\$ 19.84
Entertainment and Recreation	\$ 4.88
General Retail Trade	\$ 6.71
Local Transportation	\$ 7.79
Daily Expenditure (2002)	\$108.81
Average Length of Stay in Georgia	2.3 nights

Source: Adapted from data contained in *Economic Impact of Travel on Georgia 2002 Profile*, a study prepared for the Georgia Department of Industry, Trade & Tourism by the Travel Industry Association of America, Washington, D.C. Calculations by The University of Georgia Business Outreach Services, Small Business Development Center, Applied Research, 2003.

* Note: Average daily expenditure and lodging amounts were given in report; other categories were estimated based on total expenditure distributions found in the GDITT report. The figure of \$108.81 per night is an average per person for an overnight traveler, and is considered a mid-range estimate of spending as a day-tripper would average only \$51.92 per day, while a business traveler would average expenditures of \$144.07 per day. See the GDITT report for further details. It would not be unreasonable to think that a substantial portion of business travelers would arrive via Athens – Ben Epps Airport. The *Aircraft Owner Survey Findings* section of this report indicates that executive/staff transport is a top use among aircraft owners.

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Economic Impact Assessment

The economic impact effects of the previously mentioned components were analyzed utilizing the nationally recognized IMPLAN (IMpact Analysis for PLANning) model. This model was originally developed by the United States Department of Agriculture Forest Service in cooperation with the Federal Emergency Management Agency and the United States Department of the Interior, Bureau of Land Management in order to help the Forest Service in its land and resource management planning. This is a “predictive economic input-output model” designed to assess how overall economic activity can change as a result of one or more initial economic activities.²¹ The model examines the relationships between businesses and consumers within the local economy and will result in an estimate of the direct and multiplier effects for the local and regional area. This assessment is neither a cost/benefit analysis nor a specific feasibility analysis, but is an estimation of the current role of Athens-Ben Epps Airport in the local economy. All model results are in year 2000 dollars (the most current product available from IMPLAN), though not all of the figures used for data input are. Therefore, a deflator will be used, as built-in to the IMPLAN model, utilizing Bureau of Labor Statistics data. Final tables will be re-inflated to reflect 2002 dollars as were the numbers reported by the Airport and affiliated businesses.

Study Area

There are four study areas selected, in collaboration with Airport Management, for this research: the Primary Market Area, Secondary Market Area, the Urban Georgia area, and the entire State of Georgia area. The study areas are defined in the following manner:

- **Primary Market Area** consists of Clarke, Jackson, Madison, Oconee, and Oglethorpe Counties
- **Secondary Market Area** consists of Clarke, Elbert, Greene, Madison, Oconee, Oglethorpe, Jackson, Morgan, and Walton Counties
- **Urban Georgia Area** consists of Bibb, Carroll, Catoosa, Chatham, Clarke, Columbia, Dougherty, Floyd, Glynn, Hall, Houston, Lowndes, Muscogee, Oconee, Richmond, and Walker Counties
- **State of Georgia Study Area** consists of all 159 counties within the State.

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The Primary and Secondary Market study areas were determined to be consistent with the Master Plan Update for the Airport dated July 2002. The delineation of the Urban Georgia area is based on an impact study completed for the Airport through the Georgia Department of Transportation in 1993,²² utilized to facilitate comparisons with that study. The study areas are *not* to be interpreted as individual components of the total impact of the Airport, but as different perspectives from which to view the same impact.

As suggested in guidelines by the Transportation Research Board, an impact assessment should encompass a study area that includes the “area of influence and any affected sub-areas,” a view which supports the use of the designated market areas determined in the *Master Plan*.²³ The time frame of the study utilizes the most current information available from airport businesses, adjusted to reflect the base year of the economic impact model.

Economic Impact Estimates

Economic Impact Estimates

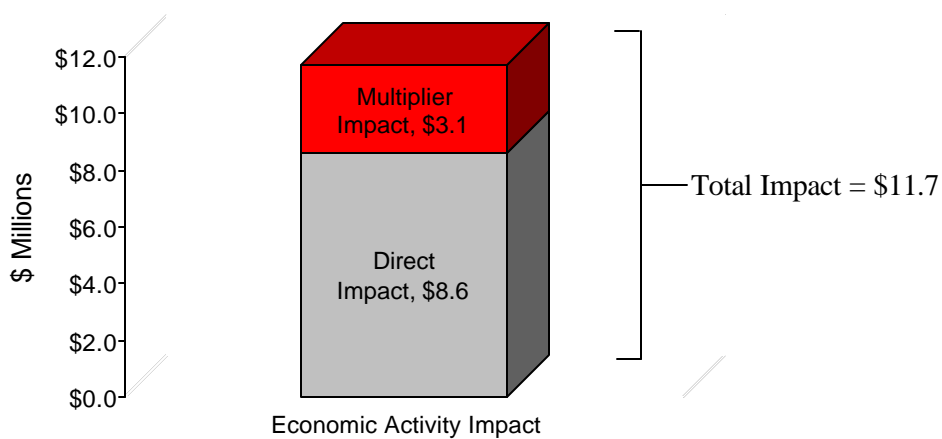
The following tables show the cumulative annual impact estimates for the Athens-Ben Epps Airport within each customized study area. Each table represents the annual economic impact for the study area only and does not include any other economic areas. Each table highlights the annual economic impact of Airport operations, aviation-related businesses, capital expenditures, and air travel visitor spending in terms of output, employment and income on the area economy. Multiplier figures (Total effects/Direct effects) are typically higher in a larger economic area, as there is less opportunity for *leakage*, or spending that takes place in any sector of the economy that does not in turn re-spend those dollars within the region.²⁴

The following figure (Figure 2) illustrates the distribution of the total economic impact for the Primary Market Area, showing which portion can be attributed to direct or multiplier effects for economic activity.

An economic impact analysis does not include any of the non-economic benefits of a facility such as Athens-Ben Epps Airport or affiliated businesses, nor does it represent what would happen to the local economy if those facilities were to no longer exist in the area.

Figure 2. Primary Market Area Economic Impact

(\$ Millions 2002)



Source: The University of Georgia, Business Outreach Services, Small Business Development Center, Applied Research Division using IMPLAN model, 2003.

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Primary Market Area

Table 2 shows the impact for the Primary Market Area, which includes the counties of Clarke, Jackson, Madison, Oconee, and Oglethorpe Counties. The Airport operations, aviation-related businesses, capital expenditures and air travel visitor spending generate an estimated \$11.7 million annually in economic activity, supports over 140 full- and part-time employees in these counties, and produces approximately \$3.5 million each year in employee income (wages and benefits) for county residents.

Table 2. Primary Market Area Summary of Annual Economic Impact

(\$Millions 2002; employment in number of jobs)

Impact Category	Direct Impacts			Total Impacts		
	Jobs	Employee Income	Economic Activity	Jobs	Employee Income	Economic Activity
Airport Operations and Businesses	40	\$1.1	\$3.7	57	\$1.7	\$5.1
Capital Spending	9	\$.31	\$1.0	15	\$.48	\$1.5
Visitor Spending	56	\$.89	\$3.9	71	\$1.3	\$5.2
Total Annual Impact	104	\$2.3	\$8.6	143	\$3.5	\$11.7

Note: All categories may not calculate precisely due to rounding.

Source: The University of Georgia, Business Outreach Services, Small Business Development Center, Applied Research Division using IMPLAN model, 2003.

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Secondary Market Area

Table 3 shows the impact for the Secondary Market Area, which includes the counties of Clarke, Elbert, Greene, Madison, Oconee, Oglethorpe, Jackson, Morgan, and Walton Counties. The Airport operations, aviation-related businesses, capital expenditures and air travel visitor spending generate an estimated \$11.8 million annually in economic activity, supports over 140 full- and part-time employees in these counties, and produces approximately \$3.6 million each year in employee income (wages and benefits) for these county residents.

Table 3. Secondary Market Area Summary of Annual Economic Impact

(\$Millions 2002; employment in number of jobs)

Impact Category	Direct Impacts			Total Impacts		
	Jobs	Employee Income	Economic Activity	Jobs	Employee Income	Economic Activity
Airport Operations and Businesses	40	\$1.1	\$3.7	58	\$1.7	\$5.1
Capital Spending	9	\$.31	\$1.0	15	\$.48	\$1.5
Visitor Spending	56	\$.95	\$3.9	73	\$1.4	\$5.3
Total Annual Impact	105	\$2.4	\$8.6	146	\$3.6	\$11.8

Note: All categories may not calculate precisely due to rounding.

Source: The University of Georgia, Business Outreach Services, Small Business Development Center, Applied Research Division using IMPLAN model, 2003.

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Urban Georgia Market Area

Table 4 shows the impact for the Urban Georgia Market Area, a designation determined from previous studies of Airport impact, not related to the contiguous nature of the counties, but by similarities between the areas. This study area includes the counties of Bibb, Carroll, Catoosa, Chatham, Clarke, Columbia, Dougherty, Floyd, Glynn, Hall, Houston, Lowndes, Muscogee, Oconee, Richmond, and Walker Counties.

The Airport operations, aviation-related businesses, capital expenditures and air travel visitor spending as viewed from this perspective generate an estimated \$13.1 million annually in economic activity, support over 170 full- and part-time employees, and produces approximately \$4.4 million each year in income (wages and benefits) for workers.

Table 4. Urban Georgia Market Area Summary of Annual Economic Impact
(\$Millions 2002; employment in number of jobs)

Impact Category	Direct Impacts			Total Impacts		
	Jobs	Employee Income	Economic Activity	Jobs	Employee Income	Economic Activity
Airport Operations and Businesses	40	\$1.1	\$3.7	63	\$1.9	\$5.6
Capital Spending	9	\$.32	\$1.0	16	\$.54	\$1.6
Visitor Spending	68	\$1.3	\$4.0	92	\$2.0	\$5.9
Total Annual Impact	116	\$2.7	\$8.6	171	\$4.4	\$13.1

Note: All categories may not calculate precisely due to rounding.

Source: The University of Georgia, Business Outreach Services, Small Business Development Center, Applied Research Division using IMPLAN model, 2003.

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State of Georgia Study Area

Table 5 shows the impact for the entire State of Georgia Study Area, which includes all 159 counties. The Airport operations, aviation-related businesses, capital expenditures and air travel visitor spending generate an estimated \$14.1 million annually in economic activity, supports over 160 full- and part-time employees in these counties, and produces approximately \$4.9 million each year in income (wages and benefits) for state workers.

Table 5. State of Georgia Area Summary of Annual Economic Impact

(\$Millions 2002; employment in number of jobs)

Impact Category	Direct Impacts			Total Impacts		
	Jobs	Employee Income	Economic Activity	Jobs	Employee Income	Economic Activity
Airport Operations and Businesses	40	\$1.1	\$3.7	60	\$1.9	\$5.7
Capital Spending	8	\$.34	\$1.0	16	\$.64	\$1.7
Visitor Spending	60	\$1.4	\$4.2	86	\$2.4	\$6.7
Total Annual Impact	108	\$2.9	\$8.9	162	\$4.9	\$14.1

Note: All categories may not calculate precisely due to rounding.

Source: The University of Georgia, Business Outreach Services, Small Business Development Center, Applied Research Division using IMPLAN model, 2003.

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Economic Impact Summary

The economic impact of Athens-Ben Epps Airport is illustrated in the previous tables by individual components and differing study areas, ranging from a total impact of \$11.1 to \$14.1 million, depending upon the perspective. When aggregated into major industry sectors as designated in the IMPLAN model (Agriculture, Mining, Construction, Manufacturing, Transportation/Communication/Public Utilities (TCPU), Trade, Finance/Insurance/Real Estate (FIRE), Services, Government, Institutions and Other), we can examine which sectors are most affected. From all perspectives, the impact of the Airport Operations and Businesses is primarily felt in the Transportation and related sector (TCPU) with over two-thirds of the total impact occurring in this aggregated sector. The Services, Trade, and FIRE sectors, respectively, comprise the majority of the impact for jobs, income and economic activity, though each segment of the economy experiences some impact.

Table 6 summarizes the total annual impact for each portion of the impact assessment, arranged by customized study area.

Table 6. Athens-Ben Epps Airport Complete Summary of Annual Economic Impact
(\$Millions 2002; employment in number of jobs)

Study Area	Direct Impacts			Total Impacts		
	Jobs	Employee Income	Economic Activity	Jobs	Employee Income	Economic Activity
Primary Market Area	104	\$2.3	\$8.6	143	\$3.5	\$11.7
Secondary Market Area	105	\$2.4	\$8.6	146	\$3.6	\$11.8
Urban Georgia Area	116	\$2.7	\$8.6	171	\$4.4	\$13.1
State of Georgia Area	108	\$2.9	\$8.9	162	\$4.9	\$14.1

Note: All categories may not calculate precisely due to rounding. Source: The University of Georgia, Business Outreach Services, Small Business Development Center, Applied Research Division using IMPLAN model, 2003.

Aircraft Owner Survey Findings

Aircraft Owner Survey Findings

As part of this study, researchers sent questionnaires to owners of aircraft based at the Airport. Out of approximately 50 owners, we received 22 returned questionnaires. The 22 returned questionnaires accounted for 26 aircraft, as some of the owners have more than one aircraft based at Athens-Ben Epps. The following are some highlights of the aircraft owners' responses, particularly focusing on business purposes):

- Approximately 48% of those who responded use their aircraft for business purposes and come from a variety of industries including such businesses as consulting, real estate, and legal services.
- These businesses operate in Clarke, Franklin, Houston, Jackson, Lowndes, and Oconee Counties and employ an average of 38 workers (totals range from 1 to 200 workers).
- The business-use aircraft average approximately 97 hours per year (for business use only) ranging from 8 to 350 total annual hours.
- Approximately 59% of the business aircraft use is for executive/staff transport purposes. Other uses include visitor/client transport, receiving supplies, and other, non-business purposes.
- These business-use aircraft owners spend an average of \$32,400 annually on aircraft operating expenses (i.e. fuel, maintenance, and service) and an average of \$12,700 for annual aircraft capital costs (i.e. lease payments and equipment purchases).
- Over 88% of the owners using their aircraft for business purposes indicated that the location of Athens – Ben Epps is important or very important to their current business operations.
- When asked about their plans for the future (within the next five years), many of the owners said that they planned to make no changes in their aircraft (43%), while nearly half (48%) plan to buy more aircraft or

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upgrade their current aircraft. The remaining intend to sell their aircraft (approximately 9%).

- Most of the aircraft owners indicated that they would use the next closest Airport if Athens-Ben Epps Airport were no longer available. The airports mentioned include those in Barrow, Jackson and Walton Counties.
- Though only a few responded to the question regarding their businesses' annual sales, the average was over \$2,000,000 per year.

Several of the owners of aircraft based at Athens – Ben Epps elaborated on why the presence of the Airport is important to their current business operations. Their answers primarily included responses related to the importance of time in their business operations. One, however, indicated the importance of the instrument approach and facilities, while another expressed some interest in relocating aircraft due to lack of hangar space. Many of the aircraft owners responded with general comments about the Airport; all of their comments are listed below.

- “Loss of viable airport services would be a severe blow to the health of the local economy. It would be nearly impossible to recruit new business without providing the full range of air services.”
- “Would like to see quicker movement for building the airline terminal off Lexington Rd. to separate general aviation from commercial aviation. They got the property — don't let it sit idle for years.”
- “[The Airport] made locating in Athens possible.”
- “AHN is a well-equipped small airport with a tower and an ILS. I am a private pilot who uses my own aircraft for trips around the SE. AHN is the kind of airport I prefer for fuel stops and especially basing. The well-equipped AHN is also good for flight training. I very much hope the Airport remains available for private and business aviation.

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- “The mobility & utility allows me to do more in less time both personally & professionally. My beach house would not be practical without the use of my A/C & my area of work would of necessity diminish.”
- “Occasional big flights to view prospective property purchases.”
- “Tremendous asset for Athens and general aviation.”
- “Although we do not use our airplane in our business, we do have business associates who fly into Athens to visit job sites or future job sites. This may happen as much as 10 times per year.”
- “We call on customers & suppliers throughout the Southeast also our suppliers all so we carry customers on trips.”
- “It would be nice if they would buy a long, long, long handled light bulb changer to keep available in the ops bldg for owners to use in the hangers since they will not change lights in the hangers.”
- “I use my airplane for personal uses. The only business activity I have is flying myself to medical meetings. I have had an interest in the Athens airport all my life and I am concerned about its future. My opinion is different from the majority but I am interested in the growth of Athens as well as the Airport. Currently, Athens is anti-business – the last corporate business that came to this town was about 30 years ago. IBM-BMW-Mercedes come-look-go elsewhere. Seems like more businesses go into Oconee Co. or Barrow Co. rather than to Clarke Co. and if we don’t look out Winder will have more corporate jet traffic than we do.

Whatever we do will take a group effort if we wish to be successful. The business community and the University and the public

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needs to use the airport. In order to get them to do so we need better service, a better public image, and a runway long enough to accommodate an airliner capable of at best 100 seats and a thousand miles. A Boeing 737 will do that but requires about 6500 feet of runway – 7000 feet even better. A passenger terminal that is easy to get to that the public can see from a major highway. Relocating the terminal to near Hwy 78 might help. More mainstream activity on the airport – like a restaurant in the terminal.

Develop the capability to fly the University athletic teams out of here rather than drive them to Atlanta and then fly.

Georgia, by my last count, has 14 cities with runways of 6000 feet or more. I listed them on your introductory letter. If Athens could use the land at the western end of its current runway – 9 – 27 to expand to 7000 feet, I think it would be a big help.”

These findings show that a variety of business types and sizes utilize Athens-Ben Epps Airport in their business operations and plan to either continue or expand this use in the near future. The owners that responded to our questionnaire generally indicate a personal satisfaction with the Airport facilities, and that the aviation-related portion of their business is a critical part of their business operations and the Athens area business community as a whole.

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Endnotes

- ¹ Wilbur Smith & Associates (1993). Georgia statewide aviation system plan: Economic impact methodology paper, working paper No. 2. p. 10.
- ² LPA Group Aviation Consultants (2002). Master plan update draft report: Athens- Ben Epps Airport. pp. 1-3.
- ³ Weisbrod, G. (1991). Economic impact of improving general aviation airports. *Transportation Research Record #1274*.
- ⁴ Butler, S. & Kiernan, L. (1992). Estimating the regional economic significance of airports. Federal Aviation Administration, Washington, D.C.: Office of Airport Planning, p. 1.
- ⁵ Butler, S. & Kiernan, L., p. 2.
- ⁶ Butler, S. & Kiernan, L., p. 29.
- ⁷ Adapted from Weisbrod, G.
- ⁸ Wilbur Smith & Associates, Georgia statewide aviation system plan.
- ⁹ Butler, S. & Kiernan, L.
- ¹⁰ The Regional Purchase Coefficient (RPC) is defined in the glossary of the IMPLAN software as “Ratios representing the portion of regional demands purchased from local producers.” Olson, D. & Lindall, S. (2000). IMPLAN professional software, analysis, and data guide (2nd ed.). Stillwater, MN: Minnesota IMPLAN Group, Inc.
- ¹¹ Travel Industry Association of America (April 2003). Economic impact of travel on Georgia 2002 profile. Washington, D.C.: Georgia Department of Industry, Trade and Tourism, p. 14. Retrieved May 29, 2003 from http://www.georgia.org/tourism/pressroom/tia_impact_full.doc
- ¹² Database and all related tables, Bureau of Transportation Statistics (2003). Retrieved May 29, 2003 http://www.transtats.bts.gov/Databases.asp?Mode_ID=1&Mode_Desc=Aviation&Subject_ID2=0
- ¹³ Washington State Department of Transportation Aviation Division (n.d.). Measuring the economic contribution of general aviation and commercial service airports in Washington. p. 37. Retrieved March 13, 2003 from <http://www.wsdot.wa.gov/aviation/Planning/EconImpactofAirports/PDFs/ImpactReport/Impact%20Report1to15.pdf>
- ¹⁴ Butler, S. & Kiernan, L.
- ¹⁵ A study by The Massachusetts Aeronautics Commission titled *Economic Impact of Public-Use Airports in Massachusetts* suggested a range between 40% and 80% of arrival passengers can be considered visitors, based on their interviews with various airport managers. The report was accessed online February 25, 2003 at <http://www.edrgroup.com/pages/MAC.html>. The online version of the report does not mention the report date, though further research reveals a citation of the report which indicates that the report is dated 1997. This citation can be found at <http://www.ci.norwood.ma.us/Airport/Airport%20Facilities.htm> accessed online May 13, 2003.
- ¹⁶ LPA Group Aviation Consultants, pp. 1-6.
- ¹⁷ Federal Aviation Administration (1985). Advisory Circular 150/5070-6A, Airport master plans, p. 22. (as quoted in Master plan update Athens-Ben Epps Airport, July 2002.)
- ¹⁸ Aircraft Owners and Pilots Association (n.d.). What’s your airport worth? (provided by Athens – Ben Epps Airport Administration). Original document not publicly available, though available to AOPA members online at www.aopa.org.
- ¹⁹ A similar study by the Washington State Department of Transportation, Aviation Division, asserted that if arrivals to the airport number greater than 10,000 it should be assumed that 55% of them are visiting aircraft. In an effort to produce conservative and reasonable estimates of economic impact, we will estimate 50% as recommended by the AOPA.
- ²⁰ Travel Industry Association of America (April 2003). Economic impact of travel on Georgia 2002 profile. Washington, D.C.: Georgia Department of Industry, Trade and Tourism, p. 14. Available online at http://www.georgia.org/tourism/pressroom/tia_impact_full.doc

Endnotes (continued)

- ²¹ Olson, D. & Lindall, S. (2000). IMPLAN professional software, analysis, and data guide (2nd ed.). Stillwater, MN: Minnesota IMPLAN Group, Inc., p. i www.implan.com
- ²² Wilbur Smith & Associates.
- ²³ Weisbrod, G. & Weisbrod, B. (October 1997). Assessing the economic impact of transportation projects: How to choose the appropriate technique for your project. Washington, D.C.: Transportation Research Board, Transportation Research Circular #477, p. 13. Retrieved March 13, 2003 from <http://gulliver.trb.org/publications/circulars/circular477.pdf>
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Appendices

Appendix A. Airport Business Questionnaire



The University of Georgia

Business Outreach Services
Small Business Development Center Network

AIRPORT BUSINESS QUESTIONNAIRE

ALL INFORMATION SPECIFIC TO YOUR
INDIVIDUAL FIRM WILL BE KEPT CONFIDENTIAL

1. How many FULL-TIME PAID employees (35 or more hours per week) worked for your business at Athens – Ben Epps Airport in 2002?

2. How many PART-TIME PAID employees (less than 35 hours per week) worked for your business at Athens – Ben Epps Airport in 2002?

3. Approximately what percentage of all of your Athens – Ben Epps Airport employees lives

OUTSIDE of Clarke County

 %

OUTSIDE of Clarke, Barrow, Jackson, Madison, Oconee or Oglethorpe Counties

 %

4. What was the TOTAL ANNUAL PAYROLL (including wages, salaries and benefits) for employees of your business in 2002?

 \$

5. What were the TOTAL REVENUES OR SALES for your business at Athens – Ben Epps Airport for 2002?

 \$

6. If the information provided is for a fiscal year (FY), please provide the dates covered.

FY: _____
(Month/Year to Month/Year)

Comments: May we use your comments in our report? Yes No

*Thank you for your time and participation in this important study.
Please return your completed questionnaire in the enclosed envelope by
April 30, 2003*

5. Estimate the PERCENT of total aircraft use attributable to:

Executive/staff transport	_____	%
Visitor/client transport	_____	%
Supplier/contractor transport	_____	%
Receiving supplies	_____	%
Delivery of products	_____	%
Aerial surveying	_____	%
Flight Instruction	_____	%
Non-business use	_____	%
Other (list below)	_____	%

Total	100	%

6. How much do you spend on ANNUAL basis for:

6a. Aircraft operating expenses (fuel, maintenance, service) \$_____

6b. Aircraft capital costs (lease payments, equipment purchases) \$_____

7. How important is the proximity to the Athens – Ben Epps Airport to your CURRENT business operations?

Very important

Unimportant

Important

Not at all important

Why or Why not? _____

8. How important was the proximity to the Athens – Ben Epps Airport to your business's DECISION to locate in the area?

Very important

Unimportant

Important

Not at all important

Why or Why not? _____

9. Within the next 5 years, do you plan to (check all that apply):

Buy more aircraft

Sell your aircraft

Upgrade your aircraft

Make no changes

10. What would be your reaction if the Athens – Ben Epps Airport were no longer available?
(Check all that apply)

- Substitute other modes of transportation, such as truck, rail or bus
- Use the next closest airport (Please specify) _____
- Relocate business
- Relocate aircraft
- Go out of business
- Sell aircraft
- Make fewer trips
- Other (Please list) _____

This space is provided for you to elaborate on any of your answers or to describe the role that your aircraft based at Athens – Ben Epps Airport plays in your business operations or personal experience:

May we use your comments in our report? Yes No

If we may use your business name with the comment(s) above, please complete the section below.

Business Name (If applicable): _____

Contact Person: _____

Phone Number: _____

Thank you for your time and participation in this important study.

Please return the completed survey in the enclosed envelope

*by **April 30, 2003.***