



Economic and Fiscal Impact of AirTran Airways on the Wichita MSA

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Executive Summary

Good airline service is an important factor in urban economic development. Frequent service to a variety of destinations at competitive rates are reflected in a high level of passenger enplanements, which facilitates easy face-to-face contact with businesses in other cities, attracting new firms to the metro area and stimulating employment at established companies.¹ Recognizing the importance of air service to the area's economic growth, business and government leaders spearheaded the development of the FairFares program in the spring of 2002. As a joint public/private initiative between the city of Wichita and local businesses, the FairFares program was designed to attract and retain new low-cost carriers to Wichita's Mid-Continent Airport through the use of subsidies. As a result of the FairFares program, low-cost carrier AirTran Airways started service at Wichita's Mid-Continent Airport in 2002. After several years of success, the Center for Economic Development and Business Research, W. Frank Barton School of Business, Wichita State University was contracted by the Wichita Airport Authority to determine the economic impact of AirTran Airways on the Wichita Metropolitan Statistical Area (MSA) comprised of Butler, Harvey, Sedgwick and Sumner counties.

Low-cost carrier AirTran Airway's, entrance into the Wichita market generated positive economic and fiscal impacts for the Wichita MSA.

The economic impact of low-cost air service occurs in a number of ways including:

- Increased sales, wages and employment generated by business activity. In the case of this analysis, the operations of AirTran were analyzed including the firm's Wichita employment, payroll, and expenditures of AirTran flight crews on overnight stays.
- Increased airport activity measured by enplanements and increased airport spending, such as increased concession and parking revenues.
- Decreased ticket prices as a result of increased competition, benefiting all Mid-Continent passengers whether flying AirTran or not.

Taking into account multiplier impacts, the average annual number of Wichita metro area jobs attributed to low-cost carrier AirTran Airways' entrance into the Wichita market totaled 9,720 during the six-year analysis period from 2002 through 2007. The average annual payroll for these jobs totaled \$283.4 million.

Fiscal impacts are usually estimated using two measures 1) a return on investment percentage and 2) a benefit-cost ratio. These measures view the taxing entities' expenditures as a public investment. Public benefits are measured by tax collections. If public benefits exceed public costs then the rate of return is greater than 100 percent and the benefit-cost ratio is greater than 1. For example, a benefit-cost ratio of 1.55 would show benefits during the relevant analysis period were 155 percent of public costs. In other words, for every \$1 of public expenditures the taxing entity received back that dollar plus another 55 cents. Conversely, a benefit-cost ratio of 0.75 would show that public benefits were only 75 percent of public costs – costs exceed benefits. In other words, for every \$1 of public expenditures the taxing entity received back only 75 cents.

¹ Brueckner, Jan K., *Airline Traffic and Urban Economic Development*, Urban Studies, Vol. 40, No. 8 1455-1469, July 2003, pg. 1467.

An opportunity cost exists for the use of public funds for subsidies. If public funds were not used to provide subsidies, they would be available for alternative use. Estimating the potential economic impact of alternative uses of these opportunity costs was beyond the scope of this analysis.

For the purpose of this analysis, subsidy data amounts were given to the Center for Economic Development and Business Research from the Kansas Affordable Air Fares Program. It should be noted that the Center is aware that not all funds provided by the city of Wichita, Sedgwick County and the state of Kansas to the Kansas Affordable Air Fares Program were given directly to AirTran Airways. We acknowledge that some of these funds were used to subsidize other low-cost carriers, for marketing expenditures and for administrative costs. Consequently, the costs of subsidies for AirTran were overstated in this report.

Taking into account multiplier impacts, total fiscal benefits attributed to low-cost carrier AirTran Airways' entrance into the Wichita market totaled \$15.4 million for the city of Wichita, \$7.2 million for Sedgwick County and \$107.3 million for the state of Kansas during the six-year analysis period from 2002 through 2007. During this same period, the city of Wichita has provided subsidies to the FairFares and Kansas Affordable Air Fares program totaling nearly \$10 million, Sedgwick County has provided \$2,275,000 million and the state of Kansas has provided \$10 million.

Using these estimates of fiscal costs and benefits arising from the entrance of low-cost carrier AirTran Airways into the Wichita market, the rate of return and fiscal benefit-cost ratios for FairFares and the Kansas Affordable Airfares Program were estimated for the six-year analysis period. For each of the taxing entities under consideration the benefits exceeded the costs of the program.

- | | | |
|-----------------------------------|-----------------------|-------------------------|
| • For the city of Wichita | 34.8% rate of return | 1.35 benefit-cost ratio |
| • For Sedgwick County | 86.2% rate of return | 1.86 benefit-cost ratio |
| • For the state of Kansas | 425.4% rate of return | 5.25 benefit-cost ratio |
| • For the three entities combined | 263.9% rate of return | 3.64 benefit-cost ratio |

Estimated Economic and Fiscal Impacts of the Entrance of Low-Cost Carrier AirTran Airways into the Wichita Mid-Continent Market

Introduction

Good airline service is an important factor in urban economic development. Frequent service to a variety of destinations at competitive rates are reflected in a high level of passenger enplanements, which facilitates easy face-to-face contact with businesses in other cities, attracting new firms to the metro area and stimulating employment at established companies.² Recognizing the importance of air service to the area's economic growth, business and government leaders spearheaded the development of the FairFares program in the spring of 2002. As a joint public/private initiative between the city of Wichita and local businesses, the FairFares program was designed to attract and retain new low-cost carriers to Wichita's Mid-Continent Airport through the use of subsidies. As a result of the FairFares program, low-cost carrier AirTran Airways started service at Wichita's Mid-Continent Airport in 2002. After several years of success, the Center for Economic Development and Business Research, W. Frank Barton School of Business, Wichita State University was contracted by the Wichita Airport Authority to determine the economic impact of AirTran Airways on the Wichita Metropolitan Statistical Area (MSA) comprised of Butler, Harvey, Sedgwick and Sumner counties.

The economic impact of low-cost air service occurs in a number of ways including:

- Increased sales, wages and employment generated by business activity. In the case of this analysis, the operations of AirTran were analyzed including the firm's Wichita employment, payroll, and expenditures of AirTran flight crews on overnight stays.
- Increased airport activity measured by enplanements and increased airport spending, such as increased concession and parking revenues.
- Decreased ticket prices as a result of increased competition, benefiting all Mid-Continent passengers whether flying AirTran or not.

In order to estimate the impact of the FairFares program and the entrance of AirTran into the market, a prior analysis base year needed to be established. Given the tremendous impact of the 2001 terrorist attacks on air service nationwide, the authors opted to use 2000 as the baseline year for this study. In other words, to estimate the impact of AirTran's entrance on enplanements and ticket prices, comparisons were made between 2000 and the analysis period of 2002 through 2007.³

As noted above, economic impacts arise from increased employment, sales and lower ticket prices. Fiscal impacts are usually estimated using two measures 1) a return on investment percentage and 2) a benefit-cost ratio. These measures view the taxing entities' expenditures as a public investment. Public benefits are measured by tax collections. If public benefits exceed

² Brueckner, Jan K., *Airline Traffic and Urban Economic Development*, Urban Studies, Vol. 40, No. 8 1455-1469, July 2003, pg. 1467.

³ AirTran started its Wichita operations in May 2002. For the purposes of this analysis, a simplifying assumption was made that AirTran operated for the full year of 2002.

public costs then the rate of return is greater than 100 percent and the benefit-cost ratio is greater than 1. For example, a benefit-cost ratio of 1.55 would show benefits during the relevant analysis period were 155 percent of public costs. In other words, for every \$1 of public expenditures the taxing entity received back that dollar plus another 55 cents. Conversely, a benefit-cost ratio of 0.75 would show that public benefits were only 75 percent of public costs – costs exceed benefits. In other words, for every \$1 of public expenditures the taxing entity received back only 75 cents.

An opportunity cost exists for the use of public funds for subsidies. If public funds were not used to provide subsidies, they would be available for alternative use. Estimating the potential economic impact of alternative uses of these opportunity costs was beyond the scope of this analysis.

The remainder of this report presents the authors’ estimates of the economic and fiscal impacts of AirTran Airways’ entrance into the Wichita Mid-Continent market.

AirTran Operations

AirTran Airways operations directly affected the Wichita MSA economy in two ways, overnight stays of AirTran flight crews and employment of individuals in the Wichita area.

Overnight Stays of AirTran Flight Crews

Flight crews rent hotel rooms, which charge sales tax and transient guest taxes. Flight crews also spend money on food and entertainment during their overnight stays. For the purpose of this analysis, the simplifying assumption was made that there were no additional government costs incurred as a result of the overnight stays of flight crews.

There were an estimated two flight crews totaling 10 employees that stayed in the Wichita area every night of the year. The room rate was estimated at \$36.04, while average spending was assumed to be \$30 a stay. Total transient guest taxable sales per year are calculated by multiplying the number of employees by the room rate by the number of days in a year. Total transient guest taxable sales per year were estimated at \$131,546. Total taxable retail sales are calculated by multiplying the number of employees by the average spending amount by the number of days in a year. Total taxable retail sales per year were estimated to be \$109,500. It was assumed that 85 percent of spending occurred in the Wichita area, 95 percent of spending occurred in Sedgwick County and 100 percent occurred in the State of Kansas.

Table 1. Visitor Spending Per Year

Visitor Spending Per Year			
	Percentage	Transient Guest Taxable Sales	Taxable Retail Sales
Total		\$131,546	\$109,500
City	85%	\$111,814	\$93,075
County	95%	\$124,969	\$104,025
State	100%	\$131,546	\$109,500

The net fiscal benefits of AirTran overnight stays of pilots and crews were estimated to total \$49,677 for the city of Wichita, \$7,172 for Sedgwick County and \$67,519 for the state of Kansas

between 2002 and 2007 when AirTran entered the Wichita travel market. On an annual basis, the average net fiscal benefits for the city of Wichita totaled \$8,280, for Sedgwick County totaled \$1,195 and for the state of Kansas totaled \$11,253.

Table 2. Visitor (Overnight Pilots & Crews) – Summary Fiscal Revenues and Costs 2002-2007

Visitor (Overnight Pilots & Crews) - Summary Fiscal Revenues and Costs							
	Sales Tax	Property Tax	Transient Guest Tax	Corporate & Personal Income Tax	Other Revenues	Costs	Balance
City	\$14,220	\$0	\$35,457	\$0	\$0	\$0	\$49,677
County	\$7,172	\$0	\$0	\$0	\$0	\$0	\$7,172
State	\$67,519	\$0	\$0	\$0	\$0	\$0	\$67,519

Employees of AirTran Airways

AirTran Airways employs 17 individuals. It is assumed that if AirTran was to exit the Wichita market, 30 percent of its employees would be absorbed back into the labor market by other airlines at Mid-Continent Airport. Seventy percent of AirTran employees would no longer have jobs in the air transportation industry. Therefore, in this analysis AirTran was credited with 12 direct employees with an average annual wage of \$27,060. This assumption was made as a result of the substitution impact. Substitution occurs when new investment merely displaces current resources and jobs from one entity to another. Expansion in some industries does not lead to a net economic gain for the region. For example, an expansion of a fast-food chain will generally displace consumers and workers from existing fast-food restaurants, but not contribute to new consumers or additional jobs to the local economy. In other words, the substitution percentage estimates the percentage of new dollars/jobs/sales brought into the community versus the percent of existing community dollars/jobs/sale that are simply being shuffled among existing competitors (no new dollars brought into the community).

In estimating the economic impact, the added earnings of personnel were deemed the “direct” effect, which in turn generated what are referred to as “indirect” and “induced” effects (multiplier impacts). The indirect effects arose from regional inter-industry economic activity resulting from the direct impact, while induced effects arose from the economic activity resulting from new household spending out of the employee compensation received as part of the direct and indirect effects. The total economic impact was estimated as the sum of direct and indirect/induced employment. The Center for Economic Development and Business Research used RIMS II multipliers in the Center’s Fiscal Benefit-Cost⁴ model to calculate indirect/induced effects as well as total effects.⁵

Taking into account the multiplier impacts, the total economic impact of AirTran’s Wichita employment and payroll included 33 jobs supporting an average annual payroll of \$726,561 (\$4.4 million in payroll for the six-year period 2002-2007).

⁴ Fiscal Benefit-Cost Model methodology is discussed further in Appendix A.

⁵ RIMS II Multiplier methodology is discussed further in Appendix B.

Table 3. Average Annual Economic Impact of AirTran Employees

AVERAGE ANNUAL ECONOMIC IMPACT OF AIRTRAN EMPLOYEES	
<i>Average Annual Number of Jobs Over the 6-Year Period</i>	
Direct	12
Indirect/Induced	21
Total	33
<i>Average Annual Payroll Earnings Over the 6-Year Period</i>	
Direct	\$324,720
Indirect/Induced	\$401,841
Total	\$726,561

Direct employees of AirTran Airways and the subsequent indirect/induced employees generated fiscal impacts for state and local government entities in a variety of ways including:

- City, county and state sales tax collections arising from purchases,
- State income tax collections arising from employee’s wages, and
- Other city, county and state tax collections such as franchise fees, fees from filing forms, traffic violations and the like.

In addition to fiscal benefits there are fiscal costs.

- Fiscal costs arise from new employees and residents. For example, new residents might increase the cost of providing community protection and/or social services.

The net fiscal benefits (benefits minus costs) arising from AirTran’s direct employment and payroll was estimated at \$31,061 for the city of Wichita, \$13,193 for Sedgwick County and \$270,856 for the state of Kansas over the six-year analysis period. On an annual basis, the direct net fiscal benefits average \$5,177 for the city of Wichita, \$2,199 for Sedgwick County and \$45,143 for the state of Kansas.

Table 4. AirTran Employee – Summary Fiscal Revenues and Costs 2002-2007

AirTran Employee - Summary Fiscal Revenues and Costs							
	Sales Tax	Property Tax	Transient Guest Tax	Corporate & Personal Income Tax	Other Revenues	Costs	Balance
City	\$26,395	\$0	\$0	\$0	\$10,624	\$5,958	\$31,061
County	\$13,311	\$0	\$0	\$0	\$3,719	\$3,837	\$13,193
State	\$101,758	\$0	\$0	\$136,455	\$63,011	\$30,368	\$270,856

Summary Fiscal Impact of AirTran’s Operations

Taking into account the impact of AirTran’s Wichita employment, payroll and flight crew expenditures and the multiplier impacts, the total net fiscal benefits of AirTran operations were \$80,738 for the city of Wichita, \$20,365 for Sedgwick County and \$338,375 for the state of Kansas over the six-year analysis period. On an annual basis, the total net fiscal benefits average \$13,456 for the city of Wichita, \$3,394 for Sedgwick County and \$56,396 for the state of Kansas.

Table 5. AirTran Visitors and Employees – Summary of Total Fiscal Revenues and Costs 2002-2007

AirTran Visitor and Employee - Summary Fiscal Revenues and Costs							
	Sales Tax	Property Tax	Transient Guest Tax	Corporate & Personal Income Tax	Other Revenues	Costs	Balance
City	\$40,615	\$0	\$35,457	\$0	\$10,624	\$5,958	\$80,738
County	\$20,483	\$0	\$0	\$0	\$3,719	\$3,837	\$20,365
State	\$169,277	\$0	\$0	\$136,455	\$63,011	\$30,368	\$338,375

Increased Wichita Mid-Continent Airport Activity

With the entrance of a low-cost carrier, the activity at Wichita’s Mid-Continent Airport increased. Increased activity was measured by the number of enplanements and by concession revenues, which included rental car activity, food and gift sales, telephone and other utilities and the like. These increases in activity generated new jobs, payroll and increases in taxable retail sales.

Calculating Increased Employment from Increased Airport Activity

AirTran Airways entered the Wichita market with ticket prices below those of other existing market competitors. AirTran’s lower prices increased the level of competition, forcing existing airlines in the Wichita market to lower prices as well. As would be expected, the drop in overall prices led to an increase in demand for Airport services as measured by an increase in the number of enplanements.

Research has documented that increased airport activity leads to increased employment within a metropolitan area. This employment growth arises from increased access to customers, increased transfers of ideas and technology and other agglomeration effects⁶ that are not typically captured in traditional impact studies. One of the best known analyses of this phenomenon is Brueckner’s⁷ 2003 study of the expansion of Chicago O’Hare International Airport. In his analysis of urban airports, Brueckner found an increase in airport activity of 10 percent, on average, increased employment in the metropolitan area by 0.782 percent.

Using this estimate of elasticity between airport activity and metropolitan area employment, the authors estimated the increased employment in the Wichita metropolitan area arising from the increased airport activity as a result of AirTran’s entrance into the market.

⁶ In the economic literature, agglomeration effects refer to external economies at the geographical level. The idea is that concentrating firms in a similar industry and/or supply chain in the same geographic area may improve scientific spillover, linkages and collaborations among the firms benefiting the individual firms and the industry overall.

⁷ Brueckner, Jan K. 2003. Airline Traffic and Urban Economic Development. *Urban Studies* 40 (8):1455-1469.

To calculate the number of net new jobs attributable to increased airport activity in 2002:

- First, calculate the percentage change in total airport activity (enplanements) between 2000 and 2002 at Wichita Mid-Continent Airport:

$$\frac{(2002 \text{ enplanements} - 2000 \text{ enplanements})}{2000 \text{ enplanements}} \\ ((1,337,270 - 1,126,462) / 1,126,462) * 100 = 18.71\%$$

- Second, multiply the percentage change calculated in step 1 by the seventy percent of increased activity attributed to AirTran.

$$18.71\% \times 70\% = 13.1\%$$

- Third, based on Brueckner's theory, multiply the percentage change in airport activity attributable to AirTran calculated in step 2 above by 0.782 percent and divide by 10 percent (for every 10 percent increase in activity there is a 0.782 percent increase in total Wichita MSA employment).

$$(13.1\% \times 0.782\%) / 10\% = 1.02\%$$

- Fourth, multiply the percent increase in total Wichita MSA employment calculated in step 3 above by the total number of employees in the Wichita MSA in 2000.

$$1.02\% \times 295,200 = 3,012 \text{ new jobs in 2002}$$

From this analysis, it was estimated that total Wichita MSA employment in 2002 was 3,012 jobs higher than it would have been had AirTran not entered the market and increased airport activity. It should be noted that in 2002 most airports nationwide were experiencing declines in activity while Wichita was enjoying significant increases in airport activity.

Table 6. Direct New Jobs from Increased Activity - Calculations

Direct New Jobs from Increased Activity - Calculations							
	2000	2002	2003	2004	2005	2006	2007
Wichita MidContinent Activity	1,126,462	1,337,270	1,431,610	1,498,749	1,486,590	1,460,331	1,596,229
Percent Net Increase/Decrease Enplanements Compared to 2002		18.71%	8.37%	14.34%	13.26%	10.92%	22.99%
Level Change Enplanements Compared to 2002		210,808	94,340	161,479	149,320	123,061	258,959
Percent Increased Activity Attributed to AirTran (70%)		13.10%	5.86%	4.17%	-0.76%	-1.63%	8.44%
Percent Increase in Total MSA Employment (Brueckner Effect)		1.02%	0.46%	0.33%	-0.06%	-0.13%	0.66%
Total Wichita MSA Employment 2000	295,200						
Net New Jobs - Increased Activity Positions		3,012	1,351	963	(174)	(377)	1,949

Which industries benefited from increased airport activity? IMPLAN modeling software was used to determine the distribution of net new jobs within the Wichita MSA based on the relationship between the airline transportation industry and all other industries. The allocations created by IMPLAN were then used in the CEDBR Fiscal Benefit-Cost Model to determine the number of indirect/induced and total net new jobs and their associated fiscal impacts on state and local government entities.⁸

In this analysis, it was assumed that 70 percent of net additional activity between 2003 and 2007 was attributable to AirTran. A reasonable argument can be made, that any increased airport activity occurring between 2003 and 2007 after the 2002 entrance of AirTran into the market should be attributed entirely to growth in the business cycle. The authors' assumption presumes that AirTran's impact on competitor activity (number of flights, destinations, times and prices) continued beyond its initial year of entrance into the market. Therefore, the calculations would underestimate AirTran's impact on the market if the net increases in airport activity following 2002 were not considered. On the other hand, to attribute all of the net increase in airport activity to AirTran following its entrance into the market likely overstates its economic impact. The authors did not have access to any data that would shed light onto the length of competitor impacts beyond AirTran's 2002 entrance into the market.

Taking into account the multiplier effects, the average annual economic impact from increased activity at Wichita Mid-Continent Airport was estimated to be 9,183 total jobs. These jobs had an average annual payroll of \$268.3 million. Total payroll of all jobs created through increased enplanements attributed to AirTran for the six-year analysis period was estimated to be \$1.6 billion.

Table 7. Economic Impact of Employment from Increased Activity

AVERAGE ANNUAL ECONOMIC IMPACT OF EMPLOYMENT FROM INCREASED ACTIVITY	
<i>Average Annual Number of Jobs Over the 6-Year Period</i>	
Direct	4,892
Indirect/Induced	4,291
Total	9,183
<i>Average Annual Payroll Earnings Over the 6-Year Period</i>	
Direct	\$148,051,508
Indirect/Induced	\$120,254,294
Total	\$268,305,802

The new metro area employment arising from increased airport activity and the subsequent indirect/induced employees generated fiscal impacts for state and local government entities in a variety of ways including:

- City, county and state sales tax collections arising from purchases,
- State income tax collections arising from employee's wages, and
- Other city, county and state tax collections such as franchise fees, fees from filing forms, traffic violations and the like.

⁸ Summary tables containing direct, indirect/induced and total jobs and wages over the six-year analysis period can be found in Appendix D.

In addition to fiscal benefits there are fiscal costs.

- Fiscal costs arise from new employees and residents. For example, new residents might increase the cost of providing community protection and/or social services.

Including direct, indirect/induced and multiplier impacts, the net fiscal benefits from increased airport activity and the resulting employment growth since AirTran entered the Wichita travel market totaled \$11.5 million for the city of Wichita, \$4.8 million for Sedgwick County and \$87.6 million for the State of Kansas between 2002 and 2007.

Table 8. Increased Activity Employment – Summary Fiscal Revenues and Costs

Increased Activity Employment - Summary Fiscal Revenues and Costs							
	Sales Tax	Property Tax	Transient Guest Tax	Corporate & Personal Income Tax	Other Revenues	Costs	Balance
City	\$9,626,692	\$0	\$0	\$0	\$4,279,593	\$2,399,977	\$11,506,308
County	\$4,854,966	\$0	\$0	\$0	\$1,497,996	\$1,545,549	\$4,807,413
State	\$37,113,269	\$0	\$0	\$37,348,131	\$25,381,047	\$12,232,295	\$87,610,152

Increased Concession Spending

Increased activity at Wichita Mid-Continent Airport led to an increase in “concessions”.

Concessions include rental car activity, food and gift sales, telephone and other utilities and the like.

In 2000, Mid-Continent Airport generated \$1.2 million in retail sales tax collections from concessionary sales. Using this 2000 base year amount to estimate increased sales tax revenues from concessions, the difference between each year’s sales tax revenues and 2000 sales tax revenues was calculated. This number was then multiplied by 70 percent to obtain the amount of increased concessions attributed to AirTran Airways.

Table 9. Retail Sales Tax Collections from Airport Concessions

Retail Sales Tax Collections from Airport Concessions- Attributed to AirTran						
	2002	2003	2004	2005	2006	2007
Sales Taxes Generated	\$1,277,964	\$1,282,363	\$1,382,535	\$1,666,902	\$1,843,249	\$2,022,355
Amount Above 2000						
Concession Sales	\$75,222	\$79,620	\$179,793	\$464,159	\$640,506	\$819,612
Amount Attributed to AirTran	\$52,655	\$55,734	\$125,855	\$324,912	\$448,354	\$573,729

Increased sales at the airport generated additional sales tax collections for the city, county and state. These additional sales tax collections between 2002 and 2007 totaled \$254,514 for the city of Wichita, \$128,358 for Sedgwick County, and \$1.1 million for the state of Kansas.

On an annual basis, the total sales tax collections, averaged \$42,419 for the city of Wichita, \$21,393 for Sedgwick County and \$191,337 for the state of Kansas.

Table 10. Increased Retail Sales Tax Collections from Airport Concessions Attributable to AirTran – Summary of Fiscal Revenues and Costs 2002-2007

Increased Sales Tax Collections from Concessions - Summary of Fiscal Revenues and Costs							
	2002	2003	2004	2005	2006	2007	Total
Wichita	\$8,475	\$8,971	\$20,257	\$52,297	\$72,167	\$92,347	\$254,514
Other Sedg. Co. Cities*	\$1,677	\$1,775	\$4,007	\$10,344	\$14,275	\$18,266	\$50,344
Sedgwick County	\$4,274	\$4,524	\$10,216	\$26,375	\$36,395	\$46,573	\$128,358
Kansas	\$38,229	\$40,464	\$91,374	\$235,895	\$325,517	\$416,543	\$1,148,023
Total	\$52,655	\$55,734	\$125,855	\$324,912	\$448,354	\$573,729	\$1,581,239

*Note: Every incorporated city in Sedgwick County benefits from total retail sales. County taxable retail sales collections are distributed using the state of Kansas formula, based in part on city size. Distributions are not based on the city location of the sale.

Increased Activity Total Fiscal Government Impacts

Taking into account the impact of increased enplanements on area employment and the impact of increased concessionary sales on government tax collections, along with the multiplier impacts, the total net fiscal benefits of increased airport activity attributed to AirTran totaled \$11.8 million for the city of Wichita, \$4.9 million for Sedgwick County and \$88.8 million for the state of Kansas over the six-year analysis period. On an annual basis, the total net fiscal benefits averaged \$1,960,137 for the city of Wichita, \$822,629 for Sedgwick County and \$14,793,029 for the state of Kansas.

Table 11. Increased Activity Employment and Concessions – Summary of Fiscal Revenues and Costs

Increased Activity Employment and Concessions - Summary of Fiscal Revenues and Costs							
	Sales Tax	Property Tax	Transient Guest Tax	Corporate & Personal Income Tax	Other Revenues	Costs	Balance
City	\$9,881,206	\$0	\$0	\$0	\$4,279,593	\$2,399,977	\$11,760,823
County	\$4,983,324	\$0	\$0	\$0	\$1,497,996	\$1,545,549	\$4,935,771
State	\$38,261,292	\$0	\$0	\$37,348,131	\$25,381,047	\$12,232,295	\$88,758,174

Savings from Decreased Ticket Prices⁹

AirTran Airways was able to enter the Wichita air travel market at a lower ticket price than other carriers in the area. Lower ticket prices offered by AirTran increased competition, forcing other carriers to decrease their tickets prices in the Wichita market. By third quarter 2007, the average ticket price for domestic itinerary fares for Wichita Mid-Continent Airport decreased 12.3 percent from third quarter 2000 when the average price was \$421.59. The average ticket price in third quarter 2007 was \$369.82¹⁰.

Calculating Savings from Decreased Ticket Prices

In order to calculate 2002 increased jobs from decreased ticket prices:

⁹ Calculations and assumptions were provided by: Harrah, Janet. 2005. Impacts of Fair Fare\$ Airline Ticket Price Reduction at Wichita Mid-Continent Airport. Wichita, KS: CEDBR: Wichita State University.

¹⁰ Bureau of Transportation Statistics: Origins and Destinations Survey

Average Wichita Mid-Continent ticket price in 2000 as a percentage of average United States ticket price in 2000.

$$\$422 / \$344 = 122.75\%$$

This implies that without the impact of low-fare carriers, Wichita ticket prices are 122.75 percent of United States ticket prices. Carrying through with this assumption, one could multiply 122.75 percent by the average price of a United States ticket in each year, starting with 2002.

$$\$307 \times 122.75\% = \$377$$

This amount is what the average ticket price would have been in Wichita had a low-fare carrier not entered the market. In order to calculate the savings to consumers on ticket prices, one would subtract average Wichita Mid-Continent ticket prices from the estimated Wichita price at 122.75 percent of U.S. prices.

$$\$377 - \$294 = \$84$$

\$84 is the average savings per ticket purchased in 2002 for a Wichita Mid-Continent flight.

In 2000, there were 1,062,824 passengers in and out of Wichita. This is assumed to be the total expected number of passengers at any given time without the influence of a low-fare carrier. Any passengers above the 1,062,824 are new passengers and therefore are not "saving" by the decreased ticket prices. These additional passengers are accounted for in the increased activity section of this report. In 2002 passenger counts were below the expected number of passengers. Therefore, that year total passengers were used to calculate savings from decreased ticket prices instead of the expected number of passengers shown above as 1,062,824.

Total expected passengers multiplied by savings per ticket gives total annual savings from decreased ticket prices.

$$1,001,112 \times \$84 = \$83,969,559 \text{ in savings in 2002}$$

Table 12. Savings from Decreased Ticket Prices - Calculations

Savings from Decreased Ticket Prices - Calculations						
	2002	2003	2004	2005	2006	2007
United States Avg. Price	\$307	\$313	\$297	\$306	\$331	\$328
Wichita Mid-Continent Avg. Price	\$294	\$290	\$319	\$364	\$400	\$370
Wichita Prices at 122.75% of US Prices	\$377	\$384	\$364	\$376	\$406	\$402
Savings per ticket	\$84	\$94	\$45	\$12	\$6	\$32
Total Expected Passengers						
Total Expected Passengers	1,001,112	1,062,824	1,062,824	1,062,824	1,062,824	1,062,824
Total Annual Savings of Expected Passengers						
Total Annual Savings of Expected Passengers	\$83,969,559	\$99,995,094	\$48,116,489	\$12,339,881	\$6,137,870	\$34,435,300

Itemizing Savings from Decreased Ticket Prices

Saved dollars from ticket prices were allocated to both leisure and business travelers. It was assumed that 50 percent of passengers were leisure travelers and 50 percent were business travelers. Savings to leisure travelers were spent by individuals while savings by a business traveler were spent by the business. Leisure travelers have different spending patterns than businesses.

Leisure travelers are assumed to have spent any additional monies in the Wichita MSA. Fifty percent of these additional expenditures are assumed to be subject to the county/state retail sales tax.

Business spending from saved monies was assumed to have been spent as follows:

- 10 percent of the total savings was assumed to have been spent on capital expenditures – all of which is subject to property tax.
- 36 percent of the saved money was assumed to have been spent on additional payroll. These payroll dollars may have been spent for retention, raises or new hires. Increased payroll created taxable income for the state and additional sales taxes through employee spending.
- 36 percent of total savings was assumed to have been spent on operating expenditures – 50 percent of which were assumed to have been subject to the retail sales tax.
- 18 percent of total savings were viewed as increased business profits. One hundred percent of these profits were assumed to have been subject to the state’s corporate income tax.

Table 13. Savings from Decreased Ticket Prices - Itemization

Savings from Decreased Ticket Prices - Itemization						
	2002	2003	2004	2005	2006	2007
Leisure	\$41,984,779	\$49,997,547	\$24,058,244	\$6,169,941	\$3,068,935	\$17,217,650
Taxable Retail Sales	\$20,992,390	\$24,998,773	\$12,029,122	\$3,084,970	\$1,534,467	\$8,608,825
Business	\$41,984,779	\$49,997,547	\$24,058,244	\$6,169,941	\$3,068,935	\$17,217,650
Capital Expenditures	\$4,198,478	\$4,999,755	\$2,405,824	\$616,994	\$306,893	\$1,721,765
Direct Payroll	\$15,114,521	\$17,999,117	\$8,660,968	\$2,221,179	\$1,104,817	\$6,198,354
Operating Expenditures	\$15,114,521	\$17,999,117	\$8,660,968	\$2,221,179	\$1,104,817	\$6,198,354
Profits	\$7,557,260	\$8,999,558	\$4,330,484	\$1,110,589	\$552,408	\$3,099,177

Economic Impact from Decreased Ticket Prices

The 36 percent of businesses ticket savings spent on additional payroll created both a fiscal and an economic impact. These payroll dollars may have been spent for retention, raises or new hires – the economic impact. As new payroll dollars are spent by employees, they created more jobs and more wages – induced/indirect economic effects. These dollars also created taxable income for the state and additional sales tax collections through employee spending – the fiscal impact.

The average annual economic impact from decreased ticket prices at Wichita Mid-Continent Airport was estimated to be 504 total full-time equivalent jobs¹¹. Total payroll for these jobs averaged \$14.3 million annually. Total payroll generated by all jobs created as a result of reduced ticket prices for the six-year analysis period was estimated to be \$85.9 million.

Table 14. Annual Average Economic Impacts from Decreased Ticket Prices

ANNUAL AVERAGE ECONOMIC IMPACT FROM DECREASED TICKET PRICES	
<i>Average Annual Number of Jobs Over the 6-Year Period</i>	
Direct Full-Time Equivalent	261
Indirect/Induced Full-Time Equivalent	244
Total Full-Time Equivalent	504
<i>Average Annual Payroll Earnings Over the 6-Year Period</i>	
Direct Full-Time Equivalent	\$8,549,826
Indirect/Induced Full-Time Equivalent	\$5,768,567
Total Full-Time Equivalent	\$14,318,393

Savings from Decreased Ticket Prices - Total Fiscal Government Impacts

Taking into account the impact of decreased ticket prices, along with the multiplier impacts, the total net fiscal benefits were \$1.2 million for the city of Wichita, \$675,667 for Sedgwick County and \$6.2 million for the state of Kansas over the six-year analysis period. On an annual basis, the total net fiscal benefits averaged \$195,417 for the city of Wichita, \$112,611 for Sedgwick County and \$1,027,947 for the state of Kansas.

¹¹ Jobs from business savings are referred to as full-time equivalent jobs because there may not have been an actual increase in employment. There was an increase in direct payroll dollars. These payroll dollars may have been spent on raises, benefits, training or other employee compensations or new positions.

Table 15. Savings from Decreased Ticket Prices – Summary of Fiscal Revenues and Costs 2002-2007

Savings From Decreased Ticket Prices - Summary Fiscal Revenues and Costs							
	Sales Tax	Property Tax	Transient Guest Tax	Corporate & Personal Income Tax	Other Revenues	Costs	Balance
City	\$995,102	\$177,398	\$0	\$0	\$0	\$0	\$1,172,500
County	\$501,853	\$173,814	\$0	\$0	\$0	\$0	\$675,667
State	\$4,313,413	\$119,267	\$0	\$1,735,002	\$0	\$0	\$6,167,683

Cumulative Impact of AirTran Airways

The entrance of low-cost carrier AirTran Airways impacted the Wichita MSA economy in a variety of ways including:

- Increased employment and payroll from direct hires by AirTran
- Increased taxable retail sales as a result of crew layovers,
- Increased airport activity as measured by enplanements and airport concession sales,
- Increased employment and payroll as a result of increased airport activity (Brueckner effect), and
- Lower average ticket prices at Wichita Mid-Continent Airport.

The average annual number of Wichita metro area jobs attributed to AirTran’s entrance into the market was 9,720. The average annual payroll for these jobs totaled \$283.4 million.

Table 16. Average Annual Economic Impact of AirTran Airways

AVERAGE ANNUAL ECONOMIC IMPACT OF AIRTRAN AIRWAYS	
<i>Average Annual Number of Jobs Over the 6-Year Period</i>	
Direct	5,165
Indirect/Induced	4,556
Total	9,720
<i>Average Annual Payroll Earnings Over the 6-Year Period</i>	
Direct	\$156,926,054
Indirect/Induced	\$126,424,702
Total	\$283,350,756

For the purpose of this analysis, subsidy data amounts were given to the Center for Economic Development and Business Research from the Kansas Affordable Air Fares Program. It should be noted that the Center is aware that not all funds provided by the city of Wichita, Sedgwick County and the state of Kansas to the Kansas Affordable Air Fares Program were given directly to AirTran Airways. We acknowledge that some of these funds were used to subsidize other low-cost carriers, marketing expenditures and administrative costs. Consequently, the costs of subsidies for AirTran were overstated in this report.

Table 17. Subsidy Amounts from Government

Subsidy Amounts from Government				
Year	Funding by County	Funding by City	Funding by State	Total funding
2002	\$0	\$3,200,000	\$0	\$3,200,000
2003	\$0	\$832,953	\$0	\$832,953
2004	\$0	\$2,358,487	\$0	\$2,358,487
2005	\$1,000,000	\$1,856,568	\$0	\$2,856,568
2006	\$1,000,000	\$1,000,000	\$5,000,000	\$7,000,000
2007	\$750,000	\$750,000	\$5,000,000	\$6,500,000
Total	\$2,750,000	\$9,998,008	\$10,000,000	\$22,748,008

AirTran Airways created fiscal impacts to government entities in a variety of ways since 2002.

- Increased wages, business spending and visitors to the area resulted in \$58.9 million in additional retail sales tax collections from 2002-2007. The annual average retail sales tax collections were estimated to be \$9.8 million.
- Capital expenditures from business savings on air fares increased property tax collections by an estimated \$470,479 between 2002 and 2007 or \$78,413 per year.
- Transient guest taxes of \$35,347 were attributed to AirTran flight crew expenditures. The average annual amounts of transient guest taxes collected were \$5,891.
- Corporate and personal income taxes increased as a result of increased employment and business profits. Income taxes were estimated to be \$39.2 million over the six-year analysis period. This is an average annual increase of \$6.5 million in corporate and personal income taxes per year.
- Additional workers and residents to the Wichita MSA generated additional tax collections by spending money on government services such as utilities. Other collections totaled \$31.2 million for the six-year analysis period or an annual average of \$5.2 million.

Costs associated with AirTran Airways were attributed to subsidies given to AirTran and costs attributed to a larger workforce.

- The costs attributed to a larger workforce include the cost of educating new employee’s children or other increased social benefits.
- Subsidies were given to AirTran Airways through a public/private partnership geared towards lowering the costs of air fares.

Total costs attributed to AirTran Airways for the city of Wichita were \$11.4 million, costs for Sedgwick County were \$3.8 million and costs for the state of Kansas were \$20.4 million.

Table 18. Fiscal Impact of AirTran Airways - Distributed

Summary of Total Fiscal Revenues and Costs from AirTran - Distributed							
	Sales Tax	Property Tax	Transient Guest Tax	Corporate & Personal Income Tax	Other Revenues	Costs	Balance
City	\$10,876,267	\$177,398	\$35,457	\$0	\$4,290,218	\$11,411,569	\$3,967,770
County	\$5,485,156	\$173,814	\$0	\$0	\$1,501,715	\$3,845,694	\$3,314,991
State	\$42,560,593	\$119,267	\$0	\$39,219,588	\$25,444,057	\$20,431,100	\$86,912,405
Combined	\$58,922,015	\$470,479	\$35,457	\$39,219,588	\$31,235,990	\$35,688,363	\$94,195,166

Using these estimates of fiscal costs and benefits arising from the entrance of low-cost carrier AirTran Airways into the Wichita market, the rate of return and fiscal benefit-cost ratios for FairFares and the Kansas Affordable Airfares Program were estimated for the six-year analysis period. For each of the taxing entities under consideration the benefits exceeded the costs of the program.

- | | | |
|-----------------------------------|-----------------------|-------------------------|
| • For the city of Wichita | 34.8% rate of return | 1.35 benefit-cost ratio |
| • For Sedgwick County | 86.2% rate of return | 1.86 benefit-cost ratio |
| • For the state of Kansas | 425.4% rate of return | 5.25 benefit-cost ratio |
| • For the three entities combined | 263.9% rate of return | 3.64 benefit-cost ratio |

Table 19. Fiscal Impact AirTran Airways

FISCAL IMPACT AIRTRAN AIRWAYS		
City Fiscal Impacts. - Wichita		Discounted
Present value of net benefits		\$3,967,770
<i>Rate of Return on Investment</i>		
Net public benefits 6-year period		\$3,967,770
Public costs 6-year period		\$11,411,569
ROI		34.8%
<i>Benefit-Cost Ratio</i>		
Public benefits 6-year period		\$15,379,339
Public costs 6-year period		\$11,411,569
Benefit-Cost Ratio		1.35
County Fiscal Impacts. - Sedgwick		Discounted
Present value of net benefits		\$3,314,991
<i>Rate of Return on Investment</i>		
Net public benefits 6-year period		\$3,314,991
Public costs 6-year period		\$3,845,694
ROI		86.2%
<i>Benefit-Cost Ratio</i>		
Public benefits 6-year period		\$7,160,685
Public costs 6-year period		\$3,845,694
Benefit-Cost Ratio		1.86
State Fiscal Impacts		Discounted
Present value of net benefits		\$86,912,405
<i>Rate of Return on Investment</i>		
Net public benefits 6-year period		\$86,912,405
Public costs 6-year period		\$20,431,100
ROI		425.4%
<i>Benefit-Cost Ratio</i>		
Public benefits 6-year period		\$107,343,505
Public costs 6-year period		\$20,431,100
Benefit-Cost Ratio		5.25
Combined Fiscal Impacts		Discounted
Present value of net benefits		\$94,195,166
<i>Rate of Return on Investment</i>		
Net public benefits 6-year period		\$94,195,166
Public costs 6-year period		\$35,688,363
ROI		263.9%
<i>Benefit-Cost Ratio</i>		
Public benefits 6-year period		\$129,883,529
Public costs 6-year period		\$35,688,363
Benefit-Cost Ratio		3.64

Disclaimer

In the preparation of this report, the Center for Economic Development and Business Research assumed that all information and data provided by other reports and research is accurate and reliable. CEDBR did not take extraordinary steps to verify or audit such information, but relied on such information and data as provided for purposes of the project.

This project requires CEDBR to make predictive forecasts, estimates and/or projections (hereinafter collectively referred to as “FORWARD-LOOKING STATEMENTS”). These FORWARD-LOOKING STATEMENTS are based on information and data provided by other reports and research, which involves risks, uncertainties and assumptions that are difficult to predict. The FORWARD-LOOKING STATEMENTS should not be considered as *guarantees or assurances* that a certain level of performance will be achieved or that certain events will occur. While CEDBR believes that all FORWARD-LOOKING STATEMENTS it provides are reasonable based on the information and data available at the time of writing, actual outcomes and results are dependent on a variety of factors and may differ materially from what is expressed or forecast. CEDBR does not assume any responsibility for any and all decisions made or actions taken based upon the FORWARD-LOOKING STATEMENTS provided by CEDBR.

Appendix

Appendix A. Fiscal Benefit-Cost Model Methodology

The Fiscal Benefit-Cost model (FBC) was developed by the Center for Economic Development and Business Research, W. Frank Barton School of Business at Wichita State University at the request of the Greater Wichita Economic Development Coalition, the city of Wichita and Sedgwick County. The model was designed to assist city, county and area economic development agencies in accessing the potential economic and fiscal impacts of providing incentive packages as part of the region's economic development efforts.

The FBC model was created to imitate the cash flows of the economy. Actual tax rates for retail sales, personal income, corporate income, property, and guest taxes were used in the creation of this model. This allows the Center to allocate tax collections identically to that of the area. Information on average wages, inflation rates, substitution and household demographics are also used. The FBC model is an input-output model.

Appendix B. Multiplier Impacts Using RIMS II¹²

Effective planning for public- and private-sector projects and programs at the national, state, and local levels requires a systematic analysis of the economic impacts of these projects and programs on the affected regions. In turn, systematic analysis of economic impacts must account for the inter-industry relationships within regions because these relationships largely determine how regional economies are likely to respond to project and program changes. Thus, regional input-output (I-O) multipliers, which account for inter-industry relationships within regions, are useful tools for conducting economic impact analysis.

RIMS II is based on an accounting framework called an I-O table. For each industry, an I-O table shows the industrial distribution of inputs purchased and outputs sold. A typical I-O table in RIMS II is derived mainly from two data sources: BEA's national I-O table, which shows the input and output structure of nearly 500 U.S. industries, and the BEA's regional economic accounts, which are used to adjust the national I-O table to show a region's industrial structure and trading patterns.

Using RIMS II for impact analysis has several advantages. RIMS II multipliers can be estimated for any region composed of one or more counties and for any industry, or group of industries, in the national I-O table. The accessibility of the main data sources for RIMS II keeps the cost of estimating regional multipliers relatively low. Empirical tests show that estimates based on relatively expensive surveys and RIMS II-based estimates are similar in magnitude.

RIMS II is widely used in both the public and private sector. In the public sector, for example, the Department of Defense uses RIMS II to estimate the regional impacts of military base closings. State transportation departments use RIMS II to estimate the regional impacts of airport construction and expansion. In the private sector, analysts and consultants use RIMS II to estimate the regional impacts of a variety of projects, such as the development of shopping malls and sports stadiums.¹³

¹² This section is taken from *Measuring Gross Economic Impacts Associated with the Amtrak High Speed Rail Corridor Program*, prepared by the Center for Urban Transportation Research, University of South Florida, March 2000, pp. 4-7.

¹³ RIMS II multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Source: Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

Appendix C. IMPLAN Impact Study Methodology

The Minnesota IMPLAN Group Inc. impact assessment software, IMPLAN: v2 is employed to analyze AirTran's contribution to the Kansas State economy. IMPLAN is a general use impact assessment package formulated around the Leontief (1986) input-output matrix system. The input-output approach to impact assessment is well documented and, as evident in its extensive use, is highly respected by regional analysts¹⁴.

The IMPLAN methodology for impact analysis relies on the Social Accounting methods presented by Richard Stone. The Social Accounting approach employs what is known as a social accounting matrix (SAM) that enumerates accounting flows across industry production sectors, institutions (households, corporations, governments), and capital formation. The SAM is a double-entry bookkeeping system similar to the T-Accounts in financial accounting that track payments across industry sectors, institutions, and capital formation. Within this system, transfers across SAM components as well as within components are recorded.

IMPLAN utilizes many data sources when constructing a regional SAM including data from the Bureau of Census, the Bureau of Economic Analysis, and the Bureau of Labor Statistics. Ratios are formed to project employment, labor income, government transfers, government tax receipts and other measures to the common driver output which is the value of all goods and services produced in the SAM region. A change in output demand of any given industry therefore drives all relevant SAM components.

All components of the SAM are interrelated. For instance, if a printing press exits in the market covered by the SAM, then there is a direct reduction in the total number of employees working in the printing industry, a reduction in the printing industry wage disbursements, and a reduction in purchases of the inputs that go into a printing business such as paper, ink, advertising, etc. These direct reductions in flows will trickle to other components of the SAM. Reduction in wages and employment lead to indirect reductions in such industries as retail sales. This slowing of retail sales will lead to reductions in employment in retail sales, and the chain of events continue to the extent that the reductions recorded within the SAM framework exceed the initial direct reductions in employment from the closure of the printing industry. This tendency for the total effect to exceed the direct effect is the result of the impact multiplier and is summarily measured as the ratio of the total change to the initial change.

Implicit assumptions include,

1. constant returns to scale,
2. no supply constraints, and
3. fixed commodity input structure.

The first restriction implies that industry average productivity does not depend on the size of the operations. The second implies that firms can freely locate regional inputs in the same proportion at all times. The final assumption fixes input proportions such that substitution from one input of the production process to another is not possible.

¹⁴ Coughlin, Cletus C., and Thomas B. Mandelbaum. 1991. A Consumer's Guide to Regional Economic Multipliers. *The Federal Reserve Bank of St. Louis Review* 73 (1):19-32.

Appendix D. Tables of Employment from Increased Airport Activity

Table 20. Direct Cumulative Jobs from Increased Airport Activity

Direct Cumulative Jobs from Increased Activity						
	2002	2003	2004	2005	2006	2007
Ag, Forestry, Fish & Hunting	24	34	42	40	37	53
Mining	12	17	21	20	19	26
Utilities	6	9	10	10	9	13
Construction	77	111	135	131	121	171
Manufacturing	189	273	333	322	299	420
Wholesale Trade	71	102	125	121	112	158
Air Transportation	65	99	123	119	109	159
Transportation and Warehousing	65	94	115	111	103	144
Retail Trade	483	700	854	826	766	1077
Information	35	51	62	60	56	79
Finance & Insurance	136	196	239	232	215	302
Real Estate & Rental	94	137	167	161	149	210
Professional- Scientific & Tech Services	83	119	146	141	131	184
Management of Companies	12	17	21	20	19	26
Administrative & Waste Services	112	162	198	191	177	250
Educational Services	83	119	146	141	131	184
Health & Social Services	436	631	770	745	691	972
Arts- Entertainment & Recreation	88	128	156	151	140	197
Accomodation & Food Services	312	452	552	534	495	696
Other Services	224	324	396	383	355	499
Government & Other	407	589	718	695	644	906
Total	3,012	4,365	5,329	5,154	4,777	6,727

Table 21. Indirect/Induced Cumulative Jobs from Increased Airport Activity

Indirect/Induced Cumulative Jobs from Increased Activity						
	2002	2003	2004	2005	2006	2007
Ag, Forestry, Fish & Hunting	19	27	33	32	30	42
Mining	15	22	27	26	24	34
Utilities	14	20	25	24	22	32
Construction	70	101	123	119	110	155
Manufacturing	298	431	526	509	472	664
Wholesale Trade	80	116	141	137	127	178
Air Transportation	119	181	226	218	201	291
Transportation and Warehousing	29	43	52	50	47	66
Retail Trade	634	917	1119	1082	1004	1412
Information	52	75	91	88	82	115
Finance & Insurance	135	196	239	231	214	302
Real Estate & Rental	108	157	191	185	172	241
Professional- Scientific & Tech Services	71	102	125	121	112	158
Management of Companies	12	17	21	20	19	26
Administrative & Waste Services	47	67	82	80	74	104
Educational Services	33	47	58	56	52	73
Health & Social Services	276	399	487	471	437	615
Arts- Entertainment & Recreation	29	42	51	50	46	65
Accomodation & Food Services	84	122	149	144	134	188
Other Services	107	155	189	183	169	238
Government & Other	404	585	714	690	640	901
Total	2,635	3,824	4,670	4,517	4,186	5,899

Table 22. Total Cumulative Jobs from Increased Airport Activity

Total Cumulative Jobs from Increased Activity						
	2002	2003	2004	2005	2006	2007
Ag, Forestry, Fish & Hunting	42	61	75	72	67	94
Mining	27	39	48	46	43	60
Utilities	20	29	35	34	32	45
Construction	146	212	258	250	232	326
Manufacturing	487	704	859	831	771	1085
Wholesale Trade	151	218	266	258	239	336
Air Transportation	183	280	350	337	310	450
Transportation and Warehousing	94	136	166	161	149	210
Retail Trade	1117	1617	1973	1908	1769	2489
Information	87	126	154	149	138	194
Finance & Insurance	271	392	479	463	429	604
Real Estate & Rental	203	293	358	346	321	452
Professional- Scientific & Tech Services	153	222	271	262	243	342
Management of Companies	24	34	42	40	37	52
Administrative & Waste Services	159	229	280	271	251	353
Educational Services	115	167	203	197	182	257
Health & Social Services	712	1031	1258	1216	1128	1587
Arts- Entertainment & Recreation	118	170	208	201	186	262
Accomodation & Food Services	397	575	701	678	629	884
Other Services	331	479	585	565	524	738
Government & Other	811	1174	1432	1385	1284	1807
Total	5,647	8,190	9,999	9,671	8,964	12,626

Table 23. Direct Cumulative Payroll from Increased Airport Activity

Direct Cumulative Payroll from Increased Activity						
	2002	2003	2004	2005	2006	2007
Ag, Forestry, Fish & Hunting	\$805,664	\$1,166,211	\$1,422,803	\$1,376,333	\$1,275,977	\$1,795,351
Mining	\$607,785	\$879,778	\$1,073,348	\$1,038,292	\$962,584	\$1,354,395
Utilities	\$201,416	\$291,553	\$355,701	\$344,083	\$318,994	\$448,838
Construction	\$2,723,778	\$3,942,713	\$4,810,193	\$4,653,091	\$4,313,808	\$6,069,699
Manufacturing	\$8,934,550	\$12,932,906	\$15,778,418	\$15,263,090	\$14,150,171	\$19,909,855
Wholesale Trade	\$2,955,948	\$4,278,782	\$5,220,205	\$5,049,711	\$4,681,508	\$6,587,069
Air Transportation	\$2,304,113	\$3,526,684	\$4,396,751	\$4,239,180	\$3,898,885	\$5,660,013
Transportation and Warehousing	\$2,311,609	\$3,346,091	\$4,082,302	\$3,948,973	\$3,661,031	\$5,151,216
Retail Trade	\$9,880,759	\$14,302,559	\$17,449,424	\$16,879,521	\$15,648,738	\$22,018,399
Information	\$1,355,278	\$1,961,787	\$2,393,422	\$2,315,252	\$2,146,433	\$3,020,117
Finance & Insurance	\$5,875,854	\$8,505,395	\$10,376,761	\$10,037,853	\$9,305,935	\$13,093,822
Real Estate & Rental	\$3,222,655	\$4,664,846	\$5,691,210	\$5,505,334	\$5,103,908	\$7,181,403
Professional- Scientific & Tech Services	\$3,151,257	\$4,561,495	\$5,565,120	\$5,383,362	\$4,990,830	\$7,022,297
Management of Companies	\$402,832	\$583,106	\$711,401	\$688,167	\$637,989	\$897,675
Administrative & Waste Services	\$3,826,903	\$5,539,505	\$6,758,312	\$6,537,584	\$6,060,891	\$8,527,916
Educational Services	\$2,819,823	\$4,081,740	\$4,979,809	\$4,817,167	\$4,465,920	\$6,283,727
Health & Social Services	\$15,240,671	\$22,061,118	\$26,915,030	\$26,035,977	\$24,137,545	\$33,962,488
Arts- Entertainment & Recreation	\$3,021,239	\$4,373,293	\$5,335,510	\$5,161,251	\$4,784,914	\$6,732,565
Accomodation & Food Services	\$3,393,907	\$4,912,736	\$5,993,641	\$5,797,887	\$5,375,130	\$7,563,022
Other Services	\$4,160,447	\$6,022,314	\$7,347,351	\$7,107,384	\$6,589,144	\$9,271,188
Government & Other	\$13,897,701	\$20,117,148	\$24,543,345	\$23,741,753	\$22,010,605	\$30,969,799
Total	\$91,094,191	\$132,051,761	\$161,200,058	\$155,921,246	\$144,520,940	\$203,520,854

Table 24. Indirect/Induced Cumulative Payroll from Increased Airport Activity

Indirect/Induced Cumulative Payroll from Increased Activity						
	2002	2003	2004	2005	2006	2007
Ag, Forestry, Fish & Hunting	\$640,019	\$926,438	\$1,130,274	\$1,093,359	\$1,013,636	\$1,426,227
Mining	\$787,838	\$1,140,408	\$1,391,321	\$1,345,881	\$1,247,745	\$1,755,627
Utilities	\$483,177	\$699,406	\$853,290	\$825,422	\$765,235	\$1,076,717
Construction	\$2,476,732	\$3,585,109	\$4,373,909	\$4,231,056	\$3,922,545	\$5,519,178
Manufacturing	\$14,116,574	\$20,433,970	\$24,929,875	\$24,115,658	\$22,357,247	\$31,457,539
Wholesale Trade	\$3,343,177	\$4,839,303	\$5,904,052	\$5,711,224	\$5,294,786	\$7,449,974
Air Transportation	\$4,227,127	\$6,470,054	\$8,066,279	\$7,777,200	\$7,152,894	\$10,383,860
Transportation and Warehousing	\$1,048,083	\$1,517,118	\$1,850,916	\$1,790,464	\$1,659,911	\$2,335,561
Retail Trade	\$12,951,838	\$18,747,995	\$22,872,950	\$22,125,912	\$20,512,585	\$28,862,026
Information	\$1,977,727	\$2,862,791	\$3,492,666	\$3,378,594	\$3,132,242	\$4,407,189
Finance & Insurance	\$5,868,401	\$8,494,606	\$10,363,598	\$10,025,120	\$9,294,131	\$13,077,213
Real Estate & Rental	\$3,701,381	\$5,357,809	\$6,536,640	\$6,323,151	\$5,862,094	\$8,248,200
Professional- Scientific & Tech Services	\$2,703,148	\$3,912,851	\$4,773,760	\$4,617,848	\$4,281,134	\$6,023,726
Management of Companies	\$400,737	\$580,074	\$707,702	\$684,588	\$634,671	\$893,007
Administrative & Waste Services	\$1,590,336	\$2,302,037	\$2,808,534	\$2,716,806	\$2,518,708	\$3,543,923
Educational Services	\$1,113,830	\$1,612,287	\$1,967,025	\$1,902,781	\$1,764,038	\$2,482,072
Health & Social Services	\$9,638,434	\$13,951,790	\$17,021,478	\$16,465,552	\$15,264,954	\$21,478,399
Arts- Entertainment & Recreation	\$994,674	\$1,439,807	\$1,756,595	\$1,699,224	\$1,575,324	\$2,216,544
Accomodation & Food Services	\$917,554	\$1,328,175	\$1,620,401	\$1,567,479	\$1,453,185	\$2,044,689
Other Services	\$1,987,029	\$2,876,257	\$3,509,095	\$3,394,487	\$3,146,975	\$4,427,919
Government & Other	\$13,808,756	\$19,988,398	\$24,386,268	\$23,589,805	\$21,869,737	\$30,771,593
Total	\$84,776,573	\$123,066,684	\$150,316,628	\$145,381,612	\$134,723,778	\$189,881,183

Table 25. Total Cumulative Payroll from Increased Airport Activity

Total Cumulative Payroll from Increased Activity						
	2002	2003	2004	2005	2006	2007
Ag, Forestry, Fish & Hunting	\$1,445,683	\$2,092,650	\$2,553,077	\$2,469,693	\$2,289,613	\$3,221,577
Mining	\$1,395,622	\$2,020,186	\$2,464,670	\$2,384,173	\$2,210,329	\$3,110,021
Utilities	\$684,593	\$990,959	\$1,208,991	\$1,169,505	\$1,084,230	\$1,525,554
Construction	\$5,200,510	\$7,527,822	\$9,184,102	\$8,884,147	\$8,236,353	\$11,588,877
Manufacturing	\$23,051,124	\$33,366,876	\$40,708,293	\$39,378,749	\$36,507,418	\$51,367,393
Wholesale Trade	\$6,299,125	\$9,118,085	\$11,124,257	\$10,760,935	\$9,976,294	\$14,037,043
Air Transportation	\$6,531,240	\$9,996,737	\$12,463,030	\$12,016,380	\$11,051,778	\$16,043,873
Transportation and Warehousing	\$3,359,692	\$4,863,209	\$5,933,218	\$5,739,437	\$5,320,942	\$7,486,778
Retail Trade	\$22,832,597	\$33,050,554	\$40,322,374	\$39,005,433	\$36,161,323	\$50,880,424
Information	\$3,333,005	\$4,824,578	\$5,886,087	\$5,693,846	\$5,278,675	\$7,427,306
Finance & Insurance	\$11,744,255	\$17,000,000	\$20,740,359	\$20,062,973	\$18,600,067	\$26,171,036
Real Estate & Rental	\$6,924,036	\$10,022,655	\$12,227,850	\$11,828,485	\$10,966,002	\$15,429,603
Professional- Scientific & Tech Services	\$5,854,405	\$8,474,346	\$10,338,881	\$10,001,210	\$9,271,964	\$13,046,023
Management of Companies	\$803,569	\$1,163,179	\$1,419,103	\$1,372,755	\$1,272,660	\$1,790,683
Administrative & Waste Services	\$5,417,239	\$7,841,542	\$9,566,846	\$9,254,390	\$8,579,600	\$12,071,839
Educational Services	\$3,933,654	\$5,694,028	\$6,946,834	\$6,719,948	\$6,229,958	\$8,765,800
Health & Social Services	\$24,879,105	\$36,012,908	\$43,936,508	\$42,501,529	\$39,402,499	\$55,440,887
Arts- Entertainment & Recreation	\$4,015,914	\$5,813,100	\$7,092,105	\$6,860,475	\$6,360,238	\$8,949,109
Accomodation & Food Services	\$4,311,462	\$6,240,911	\$7,614,043	\$7,365,366	\$6,828,315	\$9,607,711
Other Services	\$6,147,476	\$8,898,572	\$10,856,445	\$10,501,871	\$9,736,119	\$13,699,108
Government & Other	\$27,706,457	\$40,105,546	\$48,929,613	\$47,331,558	\$43,880,342	\$61,741,392
Total	\$175,870,763	\$255,118,445	\$311,516,686	\$301,302,858	\$279,244,719	\$393,402,037