

Kansas AVIATION



Kansas Aviation Economic Impact Study



Prepared for:
Kansas Department of Transportation
Division of Aviation

Prepared by:
Wilbur Smith Associates
with assistance from:
Burns & McDonnell

TECHNICAL REPORT

KANSAS AVIATION ECONOMIC IMPACT STUDY

MAY 2010

Prepared for:

**THE KANSAS DEPARTMENT OF
TRANSPORTATION
DIVISION OF AVIATION**

Prepared by:

WILBUR SMITH ASSOCIATES, INC.

6600 Clough Pike
Cincinnati, Ohio 45244
513-233-3700

With assistance from:

BURNS & MCDONNELL

TABLE OF CONTENTS

INTRODUCTION	1
STUDY SUMMARY	2
SOCIOECONOMIC OVERVIEW OF KANSAS	7
Population	8
Gross State Product and Industry Mix	11
Employment	12
Aviation-Related Employment	13
Per Capita Personal Income	14
STUDY APPROACH	14
The Economic Modeling Process	15
Data Requirements for the Economic Modeling Process	16
Surveys, Data Collection Methods, and Model Assumptions	18
Airport Operations and On-Airport Activities (First Round Impacts)	18
Commercial Service Visitors (First Round Indirect Impacts)	19
General Aviation Visitors (First Round Indirect Impacts)	21
Study Multipliers (Second Round Impacts)	23
EMPLOYMENT, PAYROLL, AND OUTPUT IMPACTS FOR STUDY AIRPORTS	24
Employment Impacts	24
Employment from On-Airport Activity	25
Employment from Commercial Service Visitor Spending	25
Employment from General Aviation Visitor Spending	26
Total Employment	27
Payroll Impacts	27
Payroll from On-Airport Activity	27
Payroll from Commercial Service Visitor Spending	28
Payroll from General Aviation Visitor Spending	28
Total Annual Payroll	29
Output Impacts	29
Output from On-Airport Activity and Businesses	29
Output from Commercial Service Visitor Spending	30
Output from General Aviation Visitor Spending	30
Total Annual Output	31
ADDITIONAL AREAS OF ECONOMIC BENEFIT	31
Airport and Heliport Use by Hospitals	32
Clinics	32
Patient Transfers	33
Air Cargo Uses	33
Other Comments	34
Benefits from Aerial Applicators	34
Off-Airport Aerospace Manufacturing Impacts	37
Estimating Impacts with an Input-Output Model	38
Data Requirements for Aerospace Manufacturing Impact Estimates	39
Aerospace Manufacturing Impacts	39
Value Added Benefits from Off-Airport Aviation Dependent Businesses	40
Qualitative Airport Benefits	42

Economic Impact of Kansas City International Airport in Kansas.....	43
Kansas City International Market	44
Businesses at Kansas City International	44
Kansas City International Impacts in Kansas	45
ECONOMIC IMPACT SUMMARY	46

LIST OF FIGURES

Figure 1: Kansas Airports Included In Economic Analysis.....	3
Figure 2: 2000-2008 Kansas Population Growth.....	9
Figure 3: 2008-2020 Kansas Population Growth Forecast.....	10
Figure 4: On-Airport Aerospace Manufacturing’s Total Output in Kansas (in \$ billions)	38
Figure 5: Comparison of Aviation Economic Activity in Kansas (in \$ billions).....	48

LIST OF TABLES

Table 1: Total Economic Impacts for Kansas Airports.....	5
Table 2: Kansas Gross State Product by Industry for 2008	12
Table 3: Kansas Employment by Industry for 2008	13
Table 4: Enplanements & Percent Visitors at Kansas Commercial Service Airports – 2009	20
Table 5: Kansas IMPLAN Multipliers by Economy Sector	24
Table 6: Kansas On-Airport Employment.....	25
Table 7: Kansas Employment from Commercial Service Visitor Spending.....	26
Table 8: Kansas Employment from General Aviation Visitor Spending	26
Table 9: Kansas Total Airport Employment.....	27
Table 10: Kansas On-Airport Activity Payroll.....	27
Table 11: Kansas Annual Payroll from Commercial Service Visitor Spending.....	28
Table 12: Kansas Annual Payroll from General Aviation Visitor Spending	28
Table 13: Kansas Airports Total Annual Payroll	29
Table 14: Kansas On-Airport Activity Output	30
Table 15: Kansas Output from Commercial Service Visitor Spending	30
Table 16: Kansas Output from General Aviation Visitor Spending.....	31
Table 17: Kansas Airports Total Annual Output	31
Table 18: Estimate of Acres Sprayed by Ag Aircraft in Kansas	36
Table 19: Typical Aerial Applicator Benefits to Crops in Kansas.....	37
Table 20: Total Economic Impact of Off-Airport Aerospace Manufacturing in Kansas.....	39
Table 21: Total Economic Impact of Kansas City International Airport.....	45
Table 22: Economic Impact of Kansas City International Airport in Kansas	46
Table 23: Economic Impact Summary for Airports in Kansas	47

APPENDIX

Table A-1: Estimates of General Aviation Itinerant Arrivals at Kansas Airports	A-1
Table A-2: Estimates of General Aviation Visitors at Kansas Airports.....	A-5
Table A-3: Estimates of Annual Expenditures by General Aviation Visitors to Kansas Airports ...	A-8
Table A-4: Estimates of Commercial Service Visitors at Kansas Airports	A-11
Table A-5: Estimates of Commercial Service Visitor Expenditures at Kansas Airports	A-11
Table A-6: Kansas On-Airport Employment	A-12
Table A-7: Kansas General Aviation Visitor-Related Employment	A-15
Table A-8: Kansas Commercial Service Visitor-Related Employment.....	A-18
Table A-9: Kansas Airport’s Total Employment	A-19
Table A-10: Kansas On-Airport Payroll	A-22
Table A-11: Kansas General Aviation Visitor-Related Payroll	A-25
Table A-12: Kansas Commercial Service Visitor-Related Payroll.....	A-28
Table A-13: Kansas Airport’s Total Payroll	A-29
Table A-14: Kansas On-Airport Output.....	A-32
Table A-15: Kansas General Aviation Visitor-Related Output.....	A-35
Table A-16: Kansas Commercial Service Visitor-Related Output	A-38
Table A-17: Kansas Airport’s Total Output	A-39
Table A-18: Kansas Airport’s Total Economic Impacts	A-42
Table A-19: Qualitative Benefits of Kansas Airports	A-45

ECONOMIC IMPACT ANALYSIS OF KANSAS AIRPORTS

INTRODUCTION

Air transportation is a key contributor to Kansas' economy. Airports and aviation help to both support and stimulate economic activity throughout the state. The Kansas Department of Transportation's Division of Aviation completed this study in 2010 to measure the value of air services in Kansas. The statewide economic impact study shows how aviation serves as an economic engine for Kansas. The study also documents various ways air transportation is used in Kansas and other benefits that air transportation supports.

Of all the positive impacts that aviation brings to Kansas, aircraft manufacturing is among the most notable. Wichita was one of the first cities to establish a commitment to aircraft manufacturing, leading to the title "Air Capital of the United States" in the 1920s. Without the rich history of aircraft manufacturing in Kansas, the aviation industry would not be what it is today. Famous founding fathers of aircraft manufacturing, such as Walter Beech, Clyde Cessna, and Lloyd Stearman, all have historic ties to Kansas. That long tradition continues today with companies like Cessna and Bombardier Learjet operating aircraft plants in Wichita, leading to Wichita being known as the "Air Capital of the World."

Air transportation benefits Kansas in many ways. Air transportation is essential for business attraction and retention. Airports play a key role in economic development for many communities. In today's time-sensitive environment, air transportation improves overall business efficiency by enabling businesses to improve customer service and the delivery of their products to market. Airports in Kansas are the gateway to the nation's air transportation system and the world's economy.

Many of the economic benefits identified in this study are associated with commercial and general aviation airports that serve communities throughout Kansas. Beyond the boundaries of the airports are companies in Kansas engaged in the production of products and services that supply and support the aviation industry. This study identifies the economic benefits of these aviation-related companies. Throughout Kansas, there are hundreds of businesses whose efficiency is improved and whose productivity is increased through their use of aviation. Estimates of the private sector economic activity in Kansas that is supported by air transportation are provided in this report.

Air transportation is not only important to businesses in Kansas, it also helps to support tourism, agriculture, emergency medical services, the military, and public safety. Airports enable doctors to reach smaller towns in Kansas, and they facilitate the transfer of patients to larger medical centers. Airports increase accessibility to better health care throughout the state. Aircraft applying pesticides to crops fly from Kansas airports. Airports help to support services which are vital to all citizens in Kansas. Even if they never use an airport directly, citizens benefit from an improved quality of life that air transportation helps to support. Through simple things such as package delivery and the ability to visit family and friends, aviation in Kansas helps promote safer, healthier, and more productive lives.

STUDY SUMMARY

The 140 public-use airports in Kansas are important transportation resources as well as critical economic catalysts. **Figure 1** shows the location of each of these airports. Airports in Kansas support the air travel needs of Kansas residents, businesses, and visitors. This report highlights the important economic contributions that Kansas realizes from its airports by quantifying employment, payroll, and total economic activity associated with these airports. The analysis presented in this report considers the annual economic benefits accrued in 2009 associated with airport operations, on-airport construction, visitors who arrive via commercial airlines, and visitors who arrive on privately-owned general aviation aircraft. These estimates of economic activity do not equal the value of an airport's infrastructure.

In addition, this study summarizes other benefits attributed to airports in Kansas that are not as easily quantified. These sub-studies analyzed specific areas or users of aviation that are not typically captured by a traditional economic impact study. These additional areas of analysis are:

[Airport and Heliport Use by Hospitals](#) – Many hospitals depend on aviation to quickly move critically ill or injured patients, deliver drugs and organs, and transport healthcare workers. This analysis examined how hospitals throughout Kansas make use of local airports and heliports, and the benefits that result from those uses.

[Agricultural Application](#) – The economic benefits of agricultural applicators in terms of the number of people they employ and the revenues they generate are captured in the traditional economic impact study. However, the benefits that they provide to the farmers that use them are typically ignored. This analysis addresses the positive impacts commercial agriculture gains from the agricultural application of chemicals to crops.

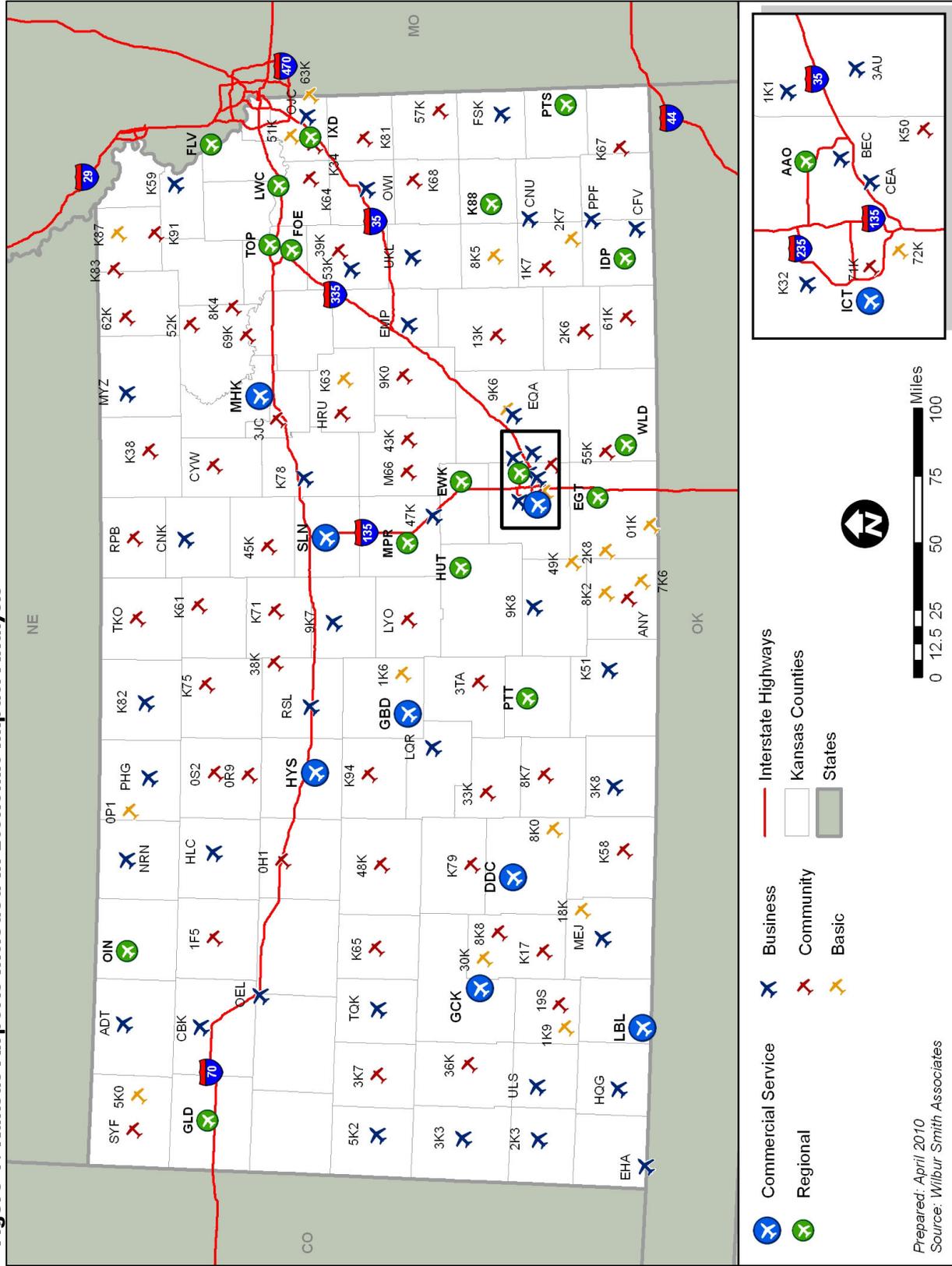
[Off-Airport Aerospace Manufacturing](#) – Because of the significance of aircraft manufacturing in Kansas, there is a substantial component of aerospace subassembly and parts manufacturing that takes place off-airport. This analysis estimated the extent of the economic impact of this segment of the aviation industry.

[Value Added Benefits from Off-Airport Aviation Dependent Businesses](#) – In addition to the jobs and revenue associated with the businesses on airports in Kansas, there are businesses throughout Kansas that benefit from airports even though they are not located on the airport. This analysis examines how they benefit and to what degree they value Kansas airports.

[Qualitative Airport Benefits](#) – Airports provide contributions in forms other than jobs, payroll and economic activity. This section highlights some of the airport benefits that are not easily assigned a number value.

[Kansas City International Airport](#) – While not located in Kansas, the Kansas City International Airport provides jobs to residents of Kansas and brings visitors to the state. This analysis estimates the portion of this airport's economic impacts that benefits Kansas.

Figure 1: Kansas Airports Included In Economic Impact Analysis



Prepared: April 2010
Source: Wilbur Smith Associates

These more detailed analyses provide examples of how Kansas airports improve the livelihoods of the residents of Kansas, over and above the jobs, payroll, and economic output that they generate.

In 2009, Kansas' system of public airports was comprised of eight commercial service and 132 general aviation airports. Technical assistance and funding for these 140 public airports are provided by the Kansas Department of Transportation Division of Aviation.

The system of 140 public-use airports generated \$10.4 billion of economic activity and supported tens of thousands of quality jobs in 2009. This included expenditures by hundreds of on-airport businesses and millions of visitors, as well as the multiplier effect associated with this spending. In addition, Kansas residents increasingly depend on civil aviation to support their health, welfare, and safety needs. In brief, the 140 public-use airports included in the system:

- ✈ Supported approximately 47,650 jobs
- ✈ Generated \$2.3 billion in annual payroll
- ✈ Produced \$10.4 billion in annual economic activity

Clearly, the airports of Kansas are a major catalyst to the state's growing economy. Other findings included:

- ✈ Aerospace manufacturing accounts for the overwhelming majority of aviation related economic activity in the state, responsible for 82 percent of total output.
- ✈ Aviation's total economic output and associated expenditures from the airports and visitors who arrive by air comprised 8.5 percent of the state's 2009 estimated gross domestic product.
- ✈ With approximately 47,650 Kansas residents owing their jobs, directly or indirectly, to aviation, 2.5 percent of all jobs in the state were tied to Kansas airports.
- ✈ Kansas' airports serve as vital business links and support critical services such as medical care, agriculture support, search and rescue, law enforcement, recreation, and environmental services.

Table 1 lists the total employment, payroll, and output for the 140 Kansas study airports. These economic benefits include impacts from on-airport businesses and government agencies, spending by visitors using commercial airlines and general aviation, and the induced impacts resulting from the recirculation of money spent by all of the aforementioned activities.

Table 1: Total Economic Impacts for Kansas Airports

<i>Associated City</i>	<i>Airport Name</i>	<i>Total Employment</i>	<i>Total Payroll</i>	<i>Total Output</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	159	\$5,267,500	\$19,582,400
Garden City	Garden City Regional	187	\$5,774,100	\$25,296,900
Great Bend	Great Bend Municipal	119	\$4,482,500	\$12,199,000
Hays	Hays Regional	179	\$5,769,100	\$24,579,200
Liberal	Liberal Mid-America Regional	200	\$6,122,500	\$28,725,500
Manhattan	Manhattan Regional	233	\$6,483,200	\$22,888,900
Salina	Salina Municipal	995	\$39,613,600	\$146,843,800
Wichita	Wichita Mid-Continent	22,313	\$1,196,316,900	\$4,685,303,200
Commercial Service Airports Total		24,385	\$1,269,829,400	\$4,965,418,900
General Aviation Airports				
Abilene	Abilene Municipal	18	\$359,400	\$1,069,600
Anthony	Anthony Municipal	3	\$92,300	\$517,200
Anthony	Wilcox Field	7	\$46,400	\$52,500
Ashland	Harold Krier Field	4	\$120,200	\$858,900
Atchison	Amelia Earhart	7	\$162,900	\$499,400
Atwood	Atwood-Rawlins County	30	\$814,400	\$5,908,500
Augusta	Augusta Municipal	122	\$5,048,700	\$23,753,300
Baldwin City	Vinland Valley Aerodrome	82	\$2,959,200	\$3,536,400
Belleville	Belleville Municipal	4	\$111,100	\$692,100
Beloit	Moritz Memorial	18	\$577,300	\$2,265,100
Benton	Stearman Field	22	\$519,600	\$2,675,200
Bird City	Bressler Field	11	\$227,500	\$660,200
Burlington	Coffey County	15	\$433,500	\$1,993,900
Chanute	Chanute-Martin Johnson	35	\$1,077,800	\$3,160,000
Cimarron	Cimarron Municipal	1	\$23,100	\$130,300
Clay Center	Clay Center Municipal	14	\$291,100	\$1,081,400
Coffeyville	Coffeyville Municipal	15	\$220,000	\$1,120,900
Colby	Shalz Field	20	\$596,000	\$4,036,800
Coldwater	Comanche County	1	\$19,400	\$72,000
Concordia	Blosser Municipal	8	\$134,800	\$437,000
Dighton	Dighton	less than 1	\$30,100	\$66,800
El Dorado	Capt. Jack Thomas	13	\$496,500	\$1,778,600
Elkhart	Elkhart-Morton County	11	\$333,000	\$2,440,900
Ellinwood	Ellinwood Municipal	11	\$423,800	\$3,312,500
Ellsworth	Ellsworth Municipal	8	\$242,800	\$1,494,600
Emporia	Emporia Municipal	53	\$2,160,100	\$6,330,100
Eureka	Eureka Municipal	5	\$189,000	\$561,700
Fort Scott	Fort Scott Municipal	8	\$200,100	\$1,238,000
Fredonia	Fredonia	1	\$4,400	\$15,200
Gardner	Gardner Municipal	15	\$282,400	\$1,008,800
Garnett	Garnett Municipal	8	\$277,400	\$669,100
Goodland	Renner Field-Goodland Municipal	125	\$3,721,200	\$15,465,400
Greensburg	Paul Windle Municipal	1	\$56,200	\$424,000
Harper	Harper Municipal	5	\$172,700	\$1,344,700
Herington	Herington Regional	12	\$249,400	\$1,141,400

<i>Associated City</i>	<i>Airport Name</i>	<i>Total Employment</i>	<i>Total Payroll</i>	<i>Total Output</i>
Hill City	Hill City Municipal	13	\$292,700	\$1,513,700
Hillsboro	Alfred Schroeder Field	1	\$41,500	\$223,600
Hoxie	Hoxie-Sheridan County	13	\$452,700	\$3,485,800
Hugoton	Hugoton Municipal	16	\$490,000	\$2,154,000
Hutchinson	Hutchinson Municipal	169	\$5,336,400	\$15,182,400
Independence	Independence Municipal	2,066	\$88,226,500	\$578,142,300
Ingalls	Ingalls Municipal	7	\$281,600	\$2,341,100
Iola	Allen County	31	\$711,700	\$2,871,600
Jetmore	Jetmore Municipal	less than 1	\$2,900	\$16,900
Johnson	Stanton County Municipal	41	\$999,900	\$6,142,200
Junction City	Freeman Field	91	\$3,333,200	\$12,608,600
Kingman	Kingman-Clyde Cessna Field	13	\$228,500	\$994,100
Kinsley	Kinsley Municipal	35	\$1,424,500	\$13,117,600
Lakin	Lakin	11	\$441,400	\$1,541,700
Larned	Larned-Pawnee County	11	\$326,900	\$2,243,100
Lawrence	Lawrence Municipal	96	\$3,558,900	\$10,722,800
Leavenworth	Sherman Army Airfield	30	\$960,300	\$2,701,000
Leoti	Mark Hoard Memorial	18	\$635,800	\$5,003,000
Lincoln	Lincoln Municipal	11	\$338,000	\$2,561,700
Lyndon	Pomona Lake	1	\$26,400	\$139,700
Lyons	Lyons-Rice County Municipal	28	\$710,600	\$3,591,400
Mankato	Mankato	5	\$167,600	\$941,200
Marion	Marion Municipal	3	\$62,300	\$196,100
Marysville	Marysville Municipal	7	\$334,600	\$813,400
McPherson	McPherson	34	\$856,600	\$2,369,800
Meade	Meade Municipal	7	\$178,400	\$1,178,600
Medicine Lodge	Medicine Lodge	less than 1	\$27,600	\$146,400
Minneapolis	Minneapolis City-County	6	\$119,300	\$866,100
Montezuma	Montezuma Municipal	10	\$201,400	\$1,223,900
Moundridge	Moundridge Municipal	16	\$583,700	\$2,559,700
Neodesha	Neodesha Municipal	1	\$27,800	\$124,600
Ness City	Ness City Municipal	less than 1	\$8,900	\$38,000
Newton	Newton City/County	440	\$16,712,000	\$56,889,300
Norton	Norton Municipal	10	\$299,100	\$2,304,100
Oakley	Oakley Municipal	26	\$557,300	\$3,916,000
Oberlin	Oberlin Municipal	12	\$177,900	\$805,600
Olathe	Cedar Air Park	10	\$90,800	\$288,100
Olathe	Johnson County Executive	377	\$10,012,500	\$36,608,900
Olathe	New Century AirCenter	478	\$24,907,400	\$92,854,500
Osage City	Osage City Municipal	45	\$2,077,100	\$7,071,600
Osborne	Osborne Municipal	9	\$147,900	\$1,223,500
Oswego	Oswego Municipal	2	\$14,000	\$81,400
Ottawa	Ottawa Municipal	10	\$233,000	\$875,100
Oxford	Oxford Municipal	3	\$66,400	\$345,600
Paola	Miami County	29	\$952,500	\$3,390,000
Parsons	Tri-City	19	\$407,800	\$1,810,700
Phillipsburg	Phillipsburg Municipal	8	\$262,100	\$1,977,700
Pittsburg	Atkinson Municipal	54	\$1,727,900	\$7,114,500

<i>Associated City</i>	<i>Airport Name</i>	<i>Total Employment</i>	<i>Total Payroll</i>	<i>Total Output</i>
Pleasanton	Gilmore	4	\$91,000	\$477,700
Pratt	Pratt Regional	47	\$1,228,100	\$5,319,900
Rose Hill	Cook Airfield	6	\$115,900	\$503,600
Russell	Russell Municipal	13	\$340,900	\$1,856,700
Sabetha	Sabetha Municipal	less than 1	\$22,300	\$83,500
Satanta	Satanta Municipal	3	\$119,000	\$920,600
Scott City	Scott City Municipal	17	\$394,600	\$1,916,700
Smith Center	Smith Center Municipal	17	\$470,600	\$3,018,100
	Cheyenne County			
St. Francis	Municipal	17	\$306,700	\$1,303,700
Stafford	Stafford Municipal	less than 1	\$19,700	\$38,900
Sublette	Sublette Flying Club	3	\$42,100	\$173,600
	Syracuse-Hamilton County			
Syracuse	Municipal	29	\$724,100	\$4,532,200
Topeka	Forbes Field	1,303	\$54,134,500	\$99,960,000
Topeka	Philip Billard Municipal	199	\$6,800,700	\$14,258,300
Tribune	Tribune Municipal	5	\$151,800	\$899,700
Ulysses	Ulysses	39	\$1,189,400	\$5,716,500
WaKeeney	Trego WaKeeney	6	\$124,000	\$899,700
Wamego	Wamego Municipal	1	\$30,800	\$184,100
	Washington County			
Washington	Memorial	13	\$277,600	\$1,445,700
Wellington	Wellington Municipal	35	\$1,025,400	\$4,660,400
Wichita	Beech Factory	11,014	\$486,998,500	\$1,783,759,000
Wichita	Cessna Aircraft Field	3,020	\$133,614,700	\$890,973,900
Wichita	Col. James Jabara	738	\$33,592,300	\$89,923,600
Wichita	Riverside	8	\$177,700	\$582,300
Wichita	Westport	11	\$310,100	\$1,170,100
Winfield/Arkansas City	Strother Field	1,669	\$156,983,300	\$1,542,667,500
Yates Center	Yates Center	less than 1	\$500	\$11,200
Other General Aviation Airports*		13	\$52,400	\$167,700
General Aviation Airports Total		23,266	\$1,072,046,800	\$5,444,550,100
All Airports Total		47,651	\$2,341,876,200	\$10,409,969,000

* Other General Aviation Airports includes Argonia Municipal, Bucklin, C.E. Grutzmacher Municipal, Caldwell Municipal, Cotton Wood Falls, Council Grove Municipal, Elk County, Fowler, Hiawatha Municipal, Hillside, Horton Municipal, Lucas, Norwich, Patty Field, Plainville Airpark, Rush County, Sedan City, Seneca Municipal, St. Marys Airpark, Stockton Municipal, Van Pak, and Westport Auxiliary. Sources: Wilbur Smith Associates and IMPLAN multipliers. Prepared: April 2010.

Tables that break down the information in Table 1 into more detailed categories can be found in the appendix at the end of this report.

SOCIOECONOMIC OVERVIEW OF KANSAS

The magnitude of the economic impact of Kansas' airports is linked to the demand that is generated within the state for aviation services. While some amount of air traffic will be tied to the state's tourism activities, much of the growth in aviation activity in Kansas is driven by its residents

and businesses. As population, employment, and income levels rise in the state, so too does demand for airline travel, air cargo shipments, personal flying, and other aviation-related activities. This section will inventory Kansas' general economic characteristics.

Population

In 1990, according to the U.S. Census Bureau, the population of Kansas consisted of 2.4 million persons. By the year 2000, the population had grown to over 2.6 million, representing an average annual growth rate of approximately 0.8 percent. From 2000 to 2008, an annual growth rate of 0.5 percent is seen as the estimated population of Kansas reached over 2.8 million, making Kansas the 33rd most populated state in the nation. By comparison, U.S. population grew 1 percent annually during the same period. Kansas has seen slow but steady population growth since 1990, and ranks 32nd in the U.S. in total population growth since the year 2000.

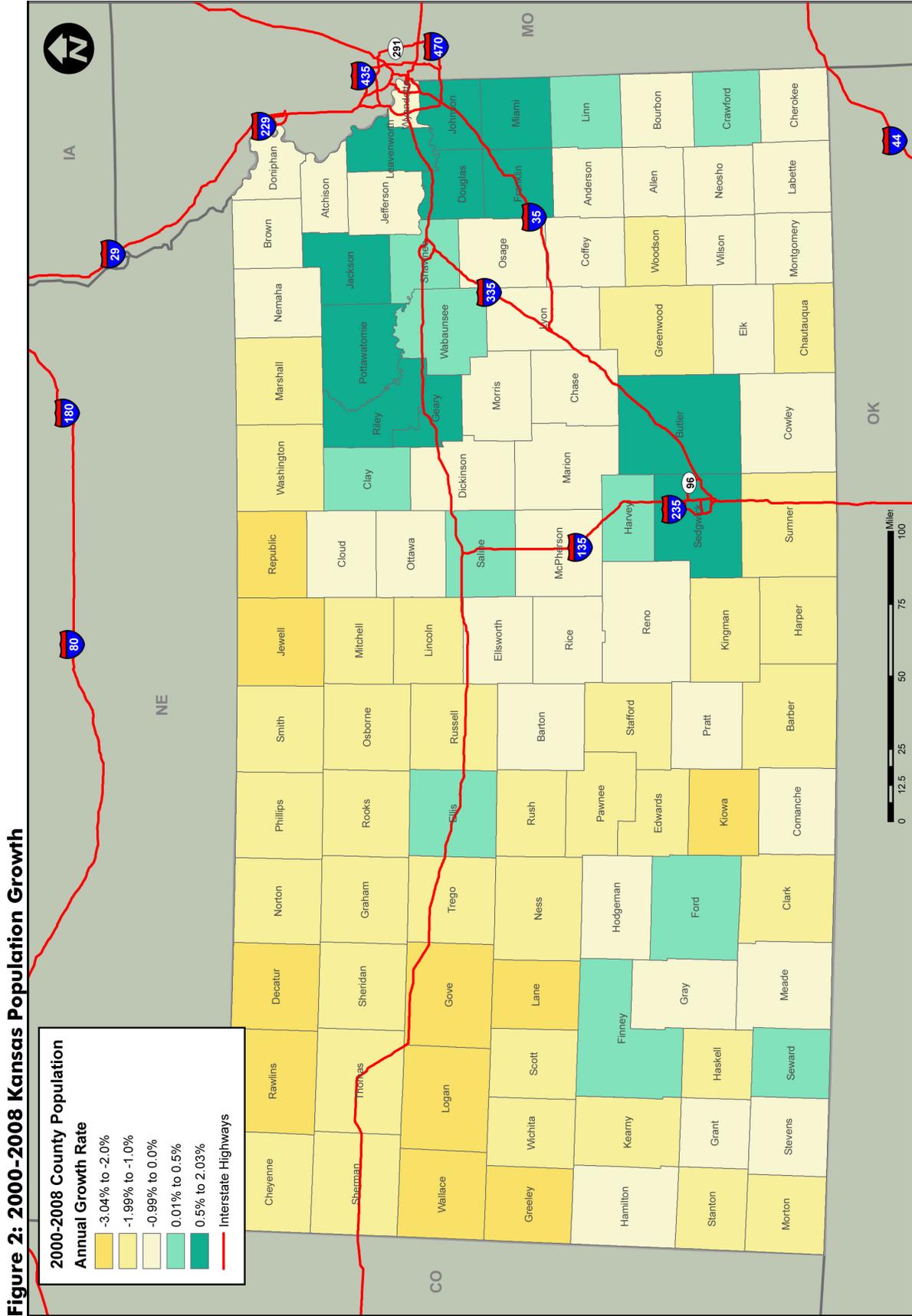
Despite an overall growth in population in Kansas between 2000 and 2008, only 22 of the 105 counties experienced a growth in population. This can be attributed to a trend of 'rural flight,' which is a pattern of people migrating from rural to urban areas. Of the 22 counties that saw growth in population, only 11 experienced an average annual growth rate greater than or equal to the statewide rate of 0.5 percent. With a growth rate of 2.0 percent annually, Johnson County experienced the most rapid growth during this period. Douglas and Riley Counties also experienced relatively rapid annual growth with 1.7 and 1.5 percent respectively since 2000.

Figure 2 illustrates population growth rates for Kansas by county from 2000 to 2008. As can be seen in the figure, the fastest growing counties are generally around the metropolitan areas of Kansas City and Wichita.

Future population projections based on U.S. Census data indicate that the population growth trends experienced from 2000 to 2008 will continue to slow. Kansas' population as a whole is expected to grow nearly 2.9 percent by 2020. This represents a total increase of 3 percent and an average annual increase of 0.3 percent.

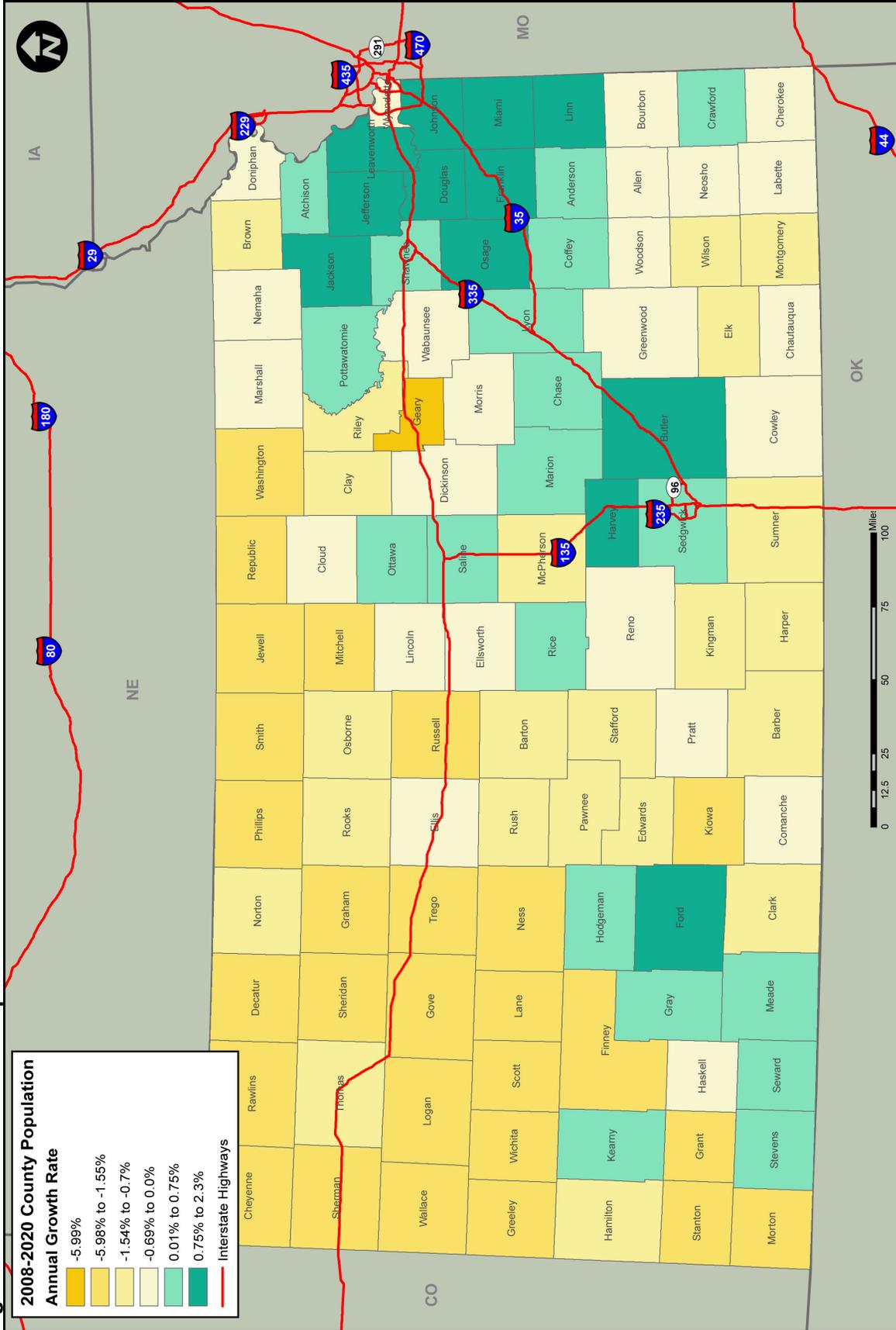
At the county level, 73 of the 105 counties in Kansas are expected to lose population. Of the remaining counties expected to see growth, 19 are expected to experience an average annual growth rate greater than or equal to the statewide rate of 0.4 percent. Johnson County is expected to continue to have the fastest growing population, followed by Miami, Jackson, Douglas, and Leavenworth Counties. Johnson County is also expected to reach a population of approximately 701,000 by 2020, remaining the most populous county in the state. **Figure 3** shows population growth rate forecasts for Kansas by county from 2008 to 2020. As with historic growth, the highest projected growth rates are in those counties around Kansas City and Wichita. High growth is also expected around Topeka and along the I-70 corridor to the west of Topeka.

Another region expected to experience high population growth is Ford County and its county seat of Dodge City.



Source: Wilbur Smith Associates; U.S. Census Bureau

Figure 3: 2008-2020 Kansas Population Growth Forecast



Source: Wilbur Smith Associates; U.S. Census Bureau; Wichita State University Center for Economic Development and Business Research

Gross State Product and Industry Mix

Kansas' Gross State Product (the state equivalent of Gross Domestic Product, or GDP) in 2008 was more than \$122.7 billion, ranking 32th in the United States. This was an increase of five percent annually from \$82.8 billion in 2000. By comparison, the national Gross Domestic Product grew 4.8 percent annually during the same period. The economy of Kansas is relatively diversified as no single industry, with the exception of government, represents greater than 10 percent of the gross state product.

Historically, a major sector of Kansas' economy has been agriculture, driven by the global demand for grain and food exports. In 2008, agriculture made up only three percent of the gross state product. Government is the largest sector of Kansas' economy, as local, state, and federal governments constitute 14 percent of the gross state product. Durable goods manufacturing is the second largest sector at 10 percent gross state product, while real estate and health care are the next most productive industries at eight and seven percent, respectively. Aerospace plays a major role in the productivity of durable goods manufacturing, as several large aircraft corporations have manufacturing facilities in Kansas, including Spirit AeroSystems, Boeing, Cessna, Learjet, Hawker Beechcraft, and their respective suppliers. It is also important to note that the mining industry has significant presence in Kansas, as it is the eighth largest producer of oil and natural gas in the U.S.¹ As shown in **Table 2**, retail and wholesale trade, information, finance and insurance, and professional and technical services are other industries in Kansas with above average productivity.

¹ U.S. Energy Information Administration

Table 2: Kansas Gross State Product by Industry For 2008

<i>Industry</i>	<i>Gross State Product (In Millions)</i>	<i>Percent</i>
Agriculture, Forestry, Fishing, and Hunting	\$3,584	2.9%
Mining	\$3,376	2.8%
Utilities	\$2,767	2.3%
Construction	\$4,364	3.6%
Durable Goods Manufacturing	\$11,881	9.7%
Non-durable Goods Manufacturing	\$6,718	5.5%
Wholesale Trade	\$7,634	6.2%
Retail Trade	\$8,102	6.6%
Transportation and Warehousing	\$4,448	3.6%
Information	\$7,220	5.9%
Finance and Insurance	\$6,851	5.6%
Real Estate, Rental, and Leasing	\$10,037	8.2%
Professional and Technical Services	\$6,833	5.6%
Management of Companies	\$2,002	1.6%
Administrative and Waste Service	\$3,674	3.0%
Educational Services	\$645	0.5%
Health Care and Social Assistance	\$8,801	7.2%
Arts, Entertainment, and Recreation	\$519	0.4%
Accommodation and Food Services	\$2,927	2.4%
Other Services	\$2,929	2.4%
Government	\$17,418	14.2%
Total	\$122,730	100%

Source: US Bureau of Economic Analysis

Employment

In 2008, the workforce in Kansas totaled nearly 1.9 million workers. This was an increase of about 1 percent annually from the 1.6 million workers identified in the year 2000. In 2008, Kansas experienced employment growth in most of the major industry sectors despite the economic recession that officially began in December 2007. However, at 0.8 percent, it was the weakest growth rate in employment since 2005, and it brings the average growth rate to 0.9 percent annually from 2000 to 2008. The statewide unemployment rate increased to 4.4 percent in 2008 from 4.1 percent in 2007, indicating further unemployment growth in 2009. With mounting layoffs from the recession, the unemployment rate in Kansas peaked in mid 2009 at 7.2 percent. Indicators from early 2010 show the unemployment rate dropping from its peak, to approximately 6.5 percent.

Despite these short-term labor market indications, long-term labor demands indicate continued employment growth as Kansas remains a relatively diversified economy.² **Table 3** presents employment in Kansas categorized by industry for the year 2008.

² Kansas Department of Labor – 2009 Kansas Economic Report

Table 3 Kansas Employment by Industry For 2008

<i>Industry</i>	<i>Employment</i>	<i>Percent</i>
Agriculture, Forestry, Fishing, and Hunting	72,956	3.9%
Mining	27,854	1.5%
Utilities	7,835	0.4%
Construction	100,466	5.4%
Durable Goods Manufacturing	125,113	6.7%
Non-durable Goods Manufacturing	68,645	3.7%
Wholesale Trade	68,537	3.7%
Retail Trade	190,110	10.1%
Transportation and Warehousing	59,567	3.2%
Information	43,074	2.3%
Finance and Insurance	89,158	4.8%
Real Estate, Rental, and Leasing	62,268	3.3%
Professional and Technical Services	96,210	5.1%
Management of Companies	14,541	0.8%
Administrative and Waste Service	99,595	5.3%
Educational Services	24,235	1.3%
Health Care and Social Assistance	188,997	10.1%
Arts, Entertainment, and Recreation	28,016	1.5%
Accommodation and Food Services	111,494	5.9%
Other Services	98,721	5.3%
Government	297,742	15.9%
Total	1,875,134	100%

Source: US Bureau of Economic Analysis

Aviation-Related Employment

Aircraft manufacturing has a significant presence in Kansas. Bombardier Learjet, Cessna Aircraft and Hawker Beechcraft all operate aircraft manufacturing plants in Kansas. The recent economic recession hit the aviation industry especially hard, and these companies are expected to need time to recover.

Bombardier produces the Learjet in Wichita and saw demand for its business jets start to drop off in late 2008 and continued through 2009. In response, Bombardier downsized its Kansas workforce by approximately 800 employees in 2009.

Cessna Aircraft began laying off employees in response to the recession in November 2008. With the increase in cancellations of aircraft orders, Cessna continued laying off employees through 2009 and into 2010. By early 2010, Cessna had furloughed approximately 8,200 employees, most of them in Kansas, leaving a global workforce of less than 8,000. Despite the harsh economic conditions, Cessna representatives have said that they see signs of a recovery, and expect the piston market to lead the rebound, although they are not expecting substantial growth until mid 2011.

Hawker Beechcraft, which operates aircraft plants in Wichita and Salina, has laid off nearly 3,500 employees since business started dropping off in late 2008. Layoffs continued into 2010 and the company notified its employees that it will close its plant in Salina, although no timeline has been announced.

Based on the examples of these three major aircraft manufacturers, it is obvious that the aviation industry in Kansas has undergone a dramatic downturn. Because of the cyclic nature of the industry, a recovery is expected to take place eventually, but when it will occur is still unknown.

Per Capita Personal Income

Personal income can be used as an indication of how much people will spend on the consumption of goods and services, including aviation. It can be assumed that the greater the amount of income, the greater the purchasing power one has. Per capita personal income for the state of Kansas was approximately \$28,500 in 2000, and grew to \$38,900 by 2008. The change in this figure represents an annual growth rate of 4.0 percent. By comparison, per capita personal income for the U.S. as a whole grew from \$30,300 to \$40,200 in the same period, for a 3.6 percent annual growth rate. In 2009, the effects of the recession were reflected in Kansas per capita income, with it dropping 2.5 percent to \$37,900. While still below the national per capita income average of \$39,100. The drop in Kansas was slightly less than the 2.6 percent decrease suffered by the national average.

From the statistics reported above, it is clear that Kansas felt its fair share of the economic recession. However, there are indications that the state is poised for economic growth. Between 2000 and 2008, Kansas' population grew steadily at approximately 4 percent and the state's population is expected to continue to expand, especially in the more urbanized areas. The gross state product of Kansas grew faster than that of the U.S. average.

Employment in the aviation sector in Kansas has contracted substantially, and the possibility of additional layoffs among aircraft manufacturers before the economy rebounds is a lingering risk. Kansas' economy, which trades a variety of goods and services ranging from food to aerospace products, exhibits the diversity necessary to increase the potential for strong economic recovery. Once such measures regain traction and indicate stable economic growth, demand for aviation activities and aviation related businesses in the state should increase, although they typically lag behind the recovery of other economic sectors.

STUDY APPROACH

The total economic impact of each airport in this analysis is quantified in terms of employment, payroll, and output. Output represents total spending or economic activity and accounts for the total value of aviation-related activities supported by the airports included in this analysis. This section presents the economic impact of the airports in terms of three aviation-dependent groups:

- ✈ Airport operations and on-airport activities
- ✈ Visitors traveling to Kansas via commercial airlines
- ✈ Visitors traveling to/within Kansas via general aviation aircraft

Airport operations and on-airport activities, as well as Kansas visitors, are responsible for a significant percentage of the economic activity or benefit associated with the airports. However, other aspects of aviation make significant contributions to the state's economy.



Many hospitals routinely use aviation to provide health services. A survey of Kansas hospitals was performed as part of this study to measure those benefits. Commercial agriculture also gains from aviation through aerial applicators that spray crops with pesticides that increase yield, and apply fertilizer and seed when ground based systems are limited by weather conditions. An estimate of these benefits is included in this study. Lastly, a separate non-aviation business survey identified the importance of aviation to non-aviation employers throughout the state.

The Economic Modeling Process

All economic impacts from the 140 airports considered in this analysis were calculated using an input-output model. The input-output model considers economic benefits associated with on-airport activities, commercial service visitors, and general aviation visitors arriving at the airports. Impacts are discussed as:

First Round Impacts – First round impacts include both direct and indirect impacts. Direct impacts are the benefits associated with businesses located at the airport, which are directly related to the provision of general aviation services. Direct impacts include the employment, payroll, and spending of businesses such as fixed base operators (FBOs), flight schools, aircraft repair facilities, and on-airport government entities, including airport management and operations staff. Capital expenditures are also included in first round impacts.

Indirect impacts occur as a result of air travel (both scheduled commercial and general aviation), but generally take place off-airport. These impacts are attributed to the expenditures of visitors who arrive in Kansas by air. Visitor expenditures support employment and payroll in service-related industries such as lodging, food and beverage, retail, and entertainment. Visitor spending for aviation-related goods and services (such as avgas purchases by visiting general aviation pilots) is not accounted for in the visitor expenses; instead, it is included in the appropriate tenant's economic impacts.

Second Round Impacts – Second round impacts consist of induced impacts. Induced impacts are the benefits resulting from the recirculation of direct and indirect impacts within

the economy. This recirculation is typically referred to as the multiplier effect. For example, as airport employees spend their salary for housing, food, and services, those expenditures circulate through the economy resulting in increased spending, payroll, and employment throughout Kansas. As this money is spent over and over again, some of it leaks beyond the boundaries of Kansas, and thus no longer benefits the state's citizens. The economic model uses parameters specific to Kansas to estimate the leakage effect associated with these second round impacts.

Total Impacts – Total impacts are the sum of all first round (direct and indirect) and second round (induced) economic activities attributable to an airport or the system of airports.

The Impact Analysis for Planning (IMPLAN) model was used to measure the multiplier effect and to quantify induced impacts. An input-output model, in its most basic form, is a linear model that estimates purchases and sales between various sectors of the economy. This modeling process is considered to be one of the leading methods available for estimating the total economic impact of an industry (in this case, airports).

The IMPLAN model contains a large economic database that is used to generate input-output tables. IMPLAN multipliers and input-output tables specific to Kansas' industrial sectors were obtained and used in this analysis. The model used for this analysis requires impact estimates for three separate components of the economy. These categories are:

Employment – Employment is based on the total of full-time jobs plus part-time jobs. In this analysis, two part-time positions are the equivalent of a single full-time position.

Payroll – Payroll represents the annual salary, wages, and benefits paid to all employees.

Economic Output (Spending) – Output for on-airport activities is typically assumed to be the sum of annual gross sales and average annual capital expenditures. While this assumption works well for profit-oriented tenants, it must be modified for organizations that do not generate sales, such as government tenants or corporate flight departments. In order to estimate the impact of these important tenant-related activities, output is assumed to be the sum of payroll, operating expenditures, and average annual capital improvement outlays. While airlines do generate sales, ticket revenue is usually transferred outside the area being modeled. This makes it difficult to assign that revenue to specific airports, so airlines are treated in a manner similar to organizations that do not generate sales. For visitors using an airport, output is assumed to equal visitor spending.

It is important to note that payroll and output cannot be combined because elements of economic benefit related to payroll are also contained, to some extent, in the output estimate. Each of the three impact components (employment, payroll, and output) stands alone as a measure of an airport's or the airport system's total economic impact.

Data Requirements for the Economic Modeling Process

A number of data collection efforts were undertaken to gather information related to economic activity occurring at the Kansas airports considered in this analysis. These data were inputs to the

modeling process to identify total economic impacts. The following groups were part of the data gathering effort to estimate first round impacts:

Airport Operations – This group includes airport tenants that are businesses with employees, such as airlines, FBOs, flight schools, concessionaires, airport restaurants, and governmental agencies. Governmental agencies include public airport sponsors, Federal Aviation Administration (FAA), as well as various other state and federal agencies.

Commercial Service Visitors – This group includes estimated non-local passengers (visitors) arriving via commercial airlines. Average visitor spending for this group was estimated from passenger surveys conducted for this analysis, along with data from other economic impact studies.

General Aviation Visitors – Impacts from general aviation visitors are produced by non-local passengers arriving via private or business aircraft. General aviation visitors are associated with that portion of each airport's itinerant general aviation operations that are transient (or visiting) in nature. Itinerant operations are those that leave the airport's local airspace. Some itinerant operations at an airport are attributable to residents of the airport's market area who fly their planes to more distant locations and subsequently return to their home airport. The remaining itinerant operations are attributed to visitors. Itinerant operations performed by visitors are considered transient operations. Impacts for this group were estimated using survey data from airports across Kansas.

Construction Impacts – Each year, airports undertake capital improvement projects (CIP), such as runway rehabilitation or terminal improvements. In addition, businesses and other agencies undertake capital improvement projects. These projects employ persons in jobs such as construction, architecture, engineering, and consulting. For this analysis, construction impacts are included in the first round direct impact category. The following steps were used to estimate construction impacts:

1. CIP data for 2006-2009 was gathered from airport managers as well as aviation-related businesses and government agencies located on each airport.
2. CIP data for the period was averaged to avoid showing peaks or troughs in construction activity.
3. The IMPLAN model indicates that every \$1 million spent annually on construction activity supports approximately 6.0 construction-related jobs in Kansas. These jobs include construction workers, equipment operators, foremen, engineers, architects, and managers.
4. Data from the U.S. Bureau of Labor Statistics was used to determine average pay for construction workers in Kansas, and this average was applied to each construction-related employee to determine payroll related to CIP activity.

First round (direct and indirect) economic impacts presented in this report were estimated primarily through surveys undertaken specifically to support this study. IMPLAN multipliers were then applied to first round impacts to estimate subsequent second round economic impacts.

Surveys, Data Collection Methods, and Model Assumptions

The model requires an extensive data gathering effort in order to estimate first round impacts. Those efforts and their results are explained, along with the assumptions needed to arrive at first round impacts.

The methods used to collect information from each group considered in the first round impacts are discussed in the ensuing sections, followed by an explanation of the second round impacts resulting from the recirculation of the first round impacts.

Airport Operations and On-Airport Activities (First Round Direct Impacts)

Airport sponsors/owners were contacted to provide names, mailing addresses, and telephone numbers for each airport tenant. All airport tenant/businesses having aviation-related employees on Kansas airports during 2009 were contacted to collect information regarding their economic activity. Since the purpose of this study was to measure the economic impacts of each Kansas airport, a distinction was made between those on-airport tenants that depended on the airport and those that did not. For example, an aviation insurance business located on an airport would not be designated as aviation-related since an insurance business does not need an airport to operate. A survey was provided to each aviation-related tenant and follow-up calls were made to obtain responses and to verify information on returned surveys. Airport tenants at each airport were grouped into 24 categories to aid in analysis. These categories consisted of:

- ✈ Airlines (passenger only)
- ✈ Aerial applicators
- ✈ Air ambulances
- ✈ Air cargo
- ✈ Aircraft maintenance
- ✈ Airport management
- ✈ Air traffic control (this was subdivided into public, i.e., FAA, and private ATC)
- ✈ Charter
- ✈ Concessions (this was subdivided into categories for GA airports and commercial service airports)
- ✈ Corporate flight departments
- ✈ FBOs (this was subdivided into small and large FBO categories based on employment)
- ✈ Federal government (not including ATC or TSA)
- ✈ Flight instruction (this was subdivided into independent flight schools and those associated with colleges/universities)
- ✈ Ground transportation
- ✈ Hangar rental/development
- ✈ Military
- ✈ Parking
- ✈ Rental car
- ✈ State/local government
- ✈ Transportation Security Administration



The survey sent to each airport tenant, including airport sponsors/managers, requested the following information:

- ✦ Type of aviation activity conducted by the business/tenant
- ✦ Number of full-time and part-time employees
- ✦ Estimated total annual wages and benefits paid to employees in 2009
- ✦ Estimated total capital improvement expenditures for each year, 2006 through 2009
- ✦ Estimated total operating expenses (excluding payroll and capital improvements previously identified) for 2009
- ✦ Estimated total gross sales (where applicable) by the business on the airport in 2009

In addition, on-airport entities were asked to identify any businesses that sub-lease property from them so that they could be included in the analysis.

A high response rate was desired for the airport tenant/business survey. Several rounds of follow-up telephone calls were made to non-responding entities and to airport managers to obtain the



greatest response rate possible for on-airport employment. For airport tenant/businesses who did not supply complete information on payroll, expenses, output, and CIP, estimates were developed using ratios of payroll, expenses, output, and CIP per employee. These ratios were developed from survey data obtained from those tenants and businesses who did respond to the survey. For those categories of tenants that did not have sufficient Kansas data to provide reliable averages, additional data was used from economic studies conducted in nearby states.

For purposes of estimating second round impacts, airport tenants were classified into one of three categories (aviation, concession, and government), based upon the nature of their business. This was done to facilitate subsequent IMPLAN modeling of second round impact multipliers. For this analysis, a set of aviation multipliers was used for airlines, aircraft maintenance, FBOs, air cargo, flight schools, and corporate flight departments. Retail, food and beverage, car rental, and parking tenants had a set of concession multipliers applied to estimate second round impacts. Government related entities, including military units, received their own set of multipliers for estimating second round impacts. Impacts stemming from construction projects were broken out from each tenant so a set of construction-related multipliers could be used before adding those impacts back into the on-airport benefits.

Commercial Service Visitors (First Round Indirect Impacts)

Airline flights to and from Kansas' commercial service airports provide access for thousands of business- and pleasure-related visitors. Visitors using commercial service airports as a gateway to the state contribute to the economy through their expenditures for food, lodging, entertainment, transportation, retail sales, and other goods and services. Numerous service industries also benefit from the multiplier or spin-off effects stemming from visitor spending. Among the commercial service airports in Kansas, Wichita Mid-Continent Airport clearly draws the largest number of

visitors. These travelers are a mix of business and leisure travelers to the area. Other commercial service airports in Kansas provide access for conducting business or getting to the leisure opportunities found around the state.

The spending patterns of commercial service visitors to Kansas were estimated based on the results of departing passenger surveys. Passengers at Wichita Mid-Continent Airport were surveyed for two days. Because of limited airline service at other airports, smaller survey efforts were undertaken at these airports, supplemented by requests that station managers continue data gathering with survey forms that were left behind and could be mailed back for analysis.

During passenger surveys, departing passengers were interviewed prior to boarding and asked several questions. Departing passengers were first asked to indicate whether they were a resident of the airport area or a visitor. Those passengers who indicated that they were visitors were asked several questions to determine the following:

- ✦ The purpose of their trip (business or personal)
- ✦ Duration of their stay
- ✦ Total expenditures during their stay in each of the following categories: lodging, food and beverage, rental car, taxi, auto gas, entertainment/recreation, retail, and other
- ✦ The total number of people that accounted for the expenditure estimates they identified

For each commercial service airport, the following methodology was used to estimate commercial service visitor impacts.

Enplanement data for 2009 for each of the commercial service airports was obtained from the FAA database of passenger traffic (except for Great Bend Municipal, which used data from its 2008 study). The percentage of visiting passengers was estimated for each airport, using a sampling of FAA origin and destination data from 2009. This data for each airport is shown in **Table 4**. Visiting passengers ranged from 43 percent at Great Bend Municipal Airport to 55 percent at Manhattan Regional Airport.

Table 4: Enplanements & Percent Visitors at Kansas Commercial Service Airports - 2009

<i>Airport Name</i>	<i>Associated City</i>	<i>Enplanements</i>	<i>Percent Visitors</i>	<i>Visitors</i>
Commercial Service Airports				
Dodge City Regional	Dodge City	4,800	55.0%	2,642
Garden City Regional	Garden City	10,500	51.9%	5,451
Great Bend Municipal	Great Bend	1,000	43.0%	430
Hays Regional	Hays	8,800	52.6%	4,627
Liberal Mid-America Regional	Liberal	7,000	52.3%	3,659
Manhattan Regional	Manhattan	15,573	55.5%	8,641
Salina Municipal	Salina	4,654	44.0%	2,049
Wichita Mid-Continent	Wichita	746,283	43.5%	324,335
Commercial Service Airports Total		798,610	44.1%	351,833

Source: FAA 5010 data and FAA O&D data.
Prepared: April 2010.

Average length of stay and average daily expenditures for visitors (less rental car expenditures, which are captured in the on-airport impacts of the rental car companies) for each of the airports

was based on survey data gathered from airline passengers departing from the Kansas commercial service airports. These estimates were applied to the number of annual visitors for each airport to determine total economic activity (or output) generated by commercial airline visitors on an annual basis.

The following example demonstrates the calculations used to estimate commercial service visitor impacts.

Manhattan Regional Airport reported 15,573 enplanements during 2009. Passenger survey data indicates that 27 percent of these enplanements were visitors to the area, or approximately 4,200 visitors traveling through Manhattan Regional Airport.

$$15,573 \text{ enplanements} \times 27 \text{ percent visitors} = 4,200 \text{ visitors}$$

Survey data from Manhattan Regional Airport provided estimates of average length of stay (3.9 days) and average spending (\$100 per visitor per day). These averages are used to calculate visitor's annual spending (or output) of approximately \$1.6 million.

$$4,200 \text{ visitors} \times \$100 \text{ per visitor per day} \times 3.9 \text{ days} = \$1.6 \text{ million}$$

In order to estimate employment associated with commercial service visitor expenditures, Kansas specific employment ratios per \$1 million of visitor output were developed using the IMPLAN model. It was estimated that approximately 13.2 persons are employed in Kansas as result of every \$1 million in commercial service visitor output. That results in an estimated 21 visitor-related jobs associated with visitors arriving via Manhattan Regional Airport on commercial airlines.

$$\$1.6 \text{ million} \times 13.2 \div \$1,000,000 = 21 \text{ jobs}$$

In order to estimate payroll impacts associated with employment supported by commercial service visitors, average state wages for appropriate industry sectors were applied to the estimated number of employees supported by commercial airline visitor spending. Most visitor expenditures take place in the hotel/motel, food/beverage, entertainment, retail, and transportation sectors. Based on data obtained from the U.S. Bureau of Labor Statistics, an average payroll of \$20,200 per employee in Kansas was assumed for these job categories.

$$21 \text{ jobs} \times \$20,200 = \$424,400 \text{ annual payroll}$$

The same calculation was used for each commercial service airport, using the average stay and spending numbers appropriate for each airport. Detailed tables showing the commercial service visitor impacts at each commercial service airport can be found in the appendix at the end of this report.

General Aviation Visitors (First Round Indirect Impacts)

General aviation refers to all segments of aircraft activity that are not related to the commercial airlines or the military. Visitors to Kansas use general aviation aircraft to enjoy both the leisure

opportunities available in Kansas as well as to conduct business. For example, many general aviation pilots travel to Wichita for training at the many FlightSafety International facilities in the city.

Kansas is a frequent fueling stop for general aviation aircraft traveling coast to coast. Salina Municipal Airport has fostered a reputation for fast turn times and economical fuel prices to encourage cross-country aircraft to stop for refueling.

The economic activity produced by general aviation visitors in Kansas was determined by surveying transient pilots and passengers. Surveys were delivered to FBO managers throughout the state system of airports. The survey requested the following information:

- ✦ The airport where the survey was received
- ✦ The number of travelers in the aircraft
- ✦ The type of aircraft
- ✦ The purpose of the trip
- ✦ The length of stay in the airport area
- ✦ The estimated expenditures during the trip
- ✦ Where the aircraft is based
- ✦ The approximate number of annual trips in general aviation aircraft made by the pilot for business, pleasure, and training purposes
- ✦ Estimates of changes in annual flying hours since 2008
- ✦ Estimates of expected changes in annual flying hours over the next two years
- ✦ Further comments regarding the value of the Kansas aviation system to the pilot and his or her business

This survey data was used to develop an estimate of visitor expenditures. These estimates included the average number of visitors per aircraft, and the average expenditure per visitor per trip. Recognizing that these averages vary at different types of airports, Kansas' airports were grouped into one of four categories based on the airport's classification in the state system plan (with regional and commercial service airports combined into a single category). Survey data within each group of airports was used to estimate the average number of visitors per arriving aircraft, how long those visitors stayed, and how much each spent during their stay.

Data from FAA 5010 forms for each airport were used to develop estimates of itinerant aircraft operations, which are operations by aircraft coming from another airport. Since many of these operations are aircraft that are returning to their home base, an estimate of true transient aircraft was needed. It was assumed that 33 percent of itinerant aircraft operations were true transients, based on data gathered from other studies. Together, all of these estimates were used to assess the level of general aviation visitor spending at each airport as illustrated in the following example.

Augusta Municipal Airport was estimated to have approximately 15,000 itinerant operations in 2009, or 7,500 annual arrivals (since it is assumed that all arrivals have a corresponding departure). Furthermore, it was assumed that 33 percent of these itinerant arrivals were true transient arrivals, or:

$7,500 \text{ itinerant arrivals} \times 33 \text{ percent} = 2,475 \text{ transient arrivals.}$

Transient pilot survey data for the group of airports including Augusta Municipal provided estimates of the average number of visitors per aircraft, including the pilot (1.9 visitors), and the average spending (\$45 per visitor per trip). These averages were used to calculate the total annual visitors (4,744 visitors) and the impacts of those visitors spending in the region around Augusta Municipal, or approximately \$213,500 per year.

$2,475 \text{ transient arrivals} \times 1.9 \text{ visitors per arrival} = 4,744 \text{ visitors}$
 $4,744 \text{ visitors} \times \$45 \text{ per visitor} = \$213,500 \text{ annual spending by visitors to}$
 Augusta Municipal

To determine payroll and employment impacts resulting from this visitor spending (or output), multiplier ratios based on \$1 million of output were used. In other words, ratios developed by the input-output model indicate that for every \$1 million of general aviation visitor output, approximately 20.0 full-time positions in other industries are created. Most of these jobs are in the service and retail sectors. Visitors using general aviation at Augusta Municipal would then support approximately 4.3 full-time positions.

$\$213,500 \times 20.0 \text{ jobs} \div \$1,000,000 = 4.3 \text{ jobs}$

The average annual statewide salary for service/retail industries (\$20,200) was then applied to the estimate of employment to calculate the payroll impacts associated with general aviation visitors. In this example, visitor-related payroll created by the 4.3 full-time positions is estimated to total approximately \$86,200

$4.3 \text{ jobs} \times \$20,200 = \$86,200 \text{ annual payroll}$

The operational and visitor impact data for each study airport can be found in the appendix at the end of this report.

Study Multipliers (Second Round Impacts)

Employment, payroll, and output impacts derived from airport businesses/tenants and on-airport activities, as well as visitors, comprise each airport's first round direct and indirect economic impacts. As these impacts enter the economy, they circulate among other sectors, creating a second round of additional spending beyond the first round. This phenomenon is referred to the multiplier effect.

Multiplier effects arise from various interdependencies within an economic system. For example, the operation of an airport requires inputs in the form of supplies, equipment, and maintenance. These inputs generate a boost in sales for those businesses providing these services and products. Moreover, the goods and services themselves require inputs for their production. The process continues as a large number of impacts re-circulate through the economy. The total requirement for goods and services is the multiple of the initial needs of the airports considered in this analysis; hence it is referred to using the term "multiplier."

Multipliers for estimating second round impacts were derived from the IMPLAN model. The multipliers used in this analysis were developed specifically to measure the economic impacts that occur within Kansas. Individual multipliers for each sector of the economy being modeled were used. The multipliers for the sectors of the economy used for modeling on-airport impacts and visitor impacts in this analysis are depicted in **Table 5**.

Table 5: Kansas IMPLAN Multipliers by Economy Sector

<i>Economy Sector</i>	<i>Employment Multiplier</i>	<i>Payroll Multiplier</i>	<i>Output Multiplier</i>
Government	1.97	1.67	1.68
Construction C.I.P. (Note 1)	2.97	2.10	1.58
Concessions (Note 2)	1.26	1.53	1.63
Aviation (Note 3)	2.19	1.84	1.54
Commercial Service Visitor Expenditures (Note 4)	1.53	1.70	1.65
General Aviation Visitor Expenditures (Note 4)	1.33	1.56	1.63

Sources: Wilbur Smith Associates and IMPLAN multipliers.

Notes: 1. Construction multipliers are the weighted average of the Construct Other New Nonresidential Structures, Asphalt Manufacturing, Cement Manufacturing, Concrete Manufacturing, Maintenance of Nonresidential Structures, and Architectural-Engineering Services multipliers.

2. Concessions multipliers are the weighted average of the Food Services and Drinking Places, Hotels and Motels – Including Casino Hotels, Business Support Services, and Miscellaneous Retail Store multipliers.

3. Aviation multipliers are the weighted average of the Aircraft Manufacturing, Aircraft Engine and Engine Parts Manufacturing, Other Aircraft Parts and Auxiliary Equipment Manufacturing, and Transport by Air multipliers.

4. Visitor expenditures multipliers are the weighted average of the Food Services and Drinking Places, Hotels and Motels – Including Casino Hotels, Automotive Equipment Rental and Leasing, and Miscellaneous Retail Store multipliers. Weightings were different for commercial service and general aviation visitor multipliers to reflect the difference in their spending habits.

Prepared: February 2010.

The multipliers presented in Table 5 were used to estimate second round impacts in this analysis. For example, \$100 in first round expenditures (output) in the aviation sector supports a total output impact equivalent to \$154. In this example, second round impacts would be \$54 (\$154 minus \$100).

The methodology discussed in this section was applied to each of the study airports. By following this methodology, estimates of total employment, annual payroll, and annual output/spending associated with each airport were developed.

EMPLOYMENT, PAYROLL, AND OUTPUT IMPACTS FOR STUDY AIRPORTS

The airports in this analysis help to accommodate the travel needs of business and leisure visitors to Kansas. The airports themselves are also significant generators of economic activity. Airports help to support jobs, payroll, and output for Kansas' economy. The following sections discuss economic impacts associated with employment, annual payroll, and total annual economic activity (output) for study airports. The combined impact of all of Kansas' 140 airports is shown in each section. Detailed tables showing the impacts of each individual airport can be found in the appendix at the end of this report.

Employment Impacts

The findings of this analysis indicate that airports in Kansas are an important source of jobs. Employment, as defined in this analysis, is based on estimates where part-time jobs are treated as half of a full-time job. Employment impacts are calculated for on-airport businesses/tenants and

visitors. On-airport activity includes private businesses and government agencies. For on-airport military units, their employment was also considered. Spending for capital improvement projects (CIP) and other improvement and construction projects also contributes to on-airport employment.

Employment from On-Airport Activity

Table 6 identifies the total number of jobs supported by on-airport aviation-related tenants and businesses at system airports. These jobs comprise those people who are engaged in the provision of aviation-related services on the airport, such as aircraft fuel sales, aircraft maintenance, flight training, aircraft manufacturing, and charter services. In the case of the Kansas Air National Guard at Forbes Field and the Army Reserve at New Century AirCenter, the full and part-time military personnel and the military-related civilian employees associated with aviation-related activities were also included. In addition, construction workers supported by airport CIPs were included in this analysis.

In total, there are 20,763 first round jobs supported by the operation of Kansas’ airports. It is important to note that this employment estimate does not include jobs associated with non-aviation businesses which, for various reasons, are located on an airport. For instance, some airports have industrial or business parks that include companies that are not related to the airport or aviation in any way. Employment related to these businesses is not included in the employment estimate shown in Table 6.

Table 6: Kansas On-Airport Employment

	<i>First Round Employment</i>	<i>Second Round Employment</i>	<i>Total Employment</i>
Commercial Service Airports On-Airport Employment	10,179	11,567	21,746
General Aviation Airports On-Airport Employment	10,584	12,334	22,918
Total On-Airport Employment	20,763	23,901	44,664

Source: Wilbur Smith Associates and IMPLAN multipliers.
Prepared: April 2010.

Second round impacts are those jobs that are created by multiplier effects stemming from first round jobs associated with tenants and businesses at Kansas’ airports. For example, an employee of a fuel distributor may owe a portion of his job to an airport since the distributor sells fuel to the airport’s FBO. As a result of on-airport tenant activity, additional second round employment is created. Second round impacts associated with the day-to-day operation of Kansas’ airports add 23,901 positions to the economy. When first round and second round employment is considered, Kansas’ airport tenants contributed 44,664 jobs to Kansas’ employment base. Of this total, 21,746 jobs are associated with the commercial service airports and 22,918 jobs are associated with the general aviation airports.

Employment from Commercial Service Visitor Spending

Visitors arriving via commercial airlines spend money, which supports jobs beyond those found at the airport. **Table 7** identifies the number of employees in Kansas whose jobs are supported by the spending of visitors arriving on commercial airlines via Kansas’ seven airports with commercial service.

Table 7: Kansas Employment from Commercial Service Visitor Spending

	<i>First Round Employment</i>	<i>Second Round Employment</i>	<i>Total Employment</i>
Commercial Service Visitor Employment	1,616	865	2,481

Sources: Wilbur Smith Associates and IMPLAN multipliers.
Prepared: April 2010.

As previously discussed, it is possible to calculate visitor spending, and subsequently, the number of jobs supported by visitors. First round jobs supported by visitor spending are attributed to a variety of sectors; however, most of the jobs are concentrated in the hotel/motel, restaurant, leisure and entertainment, and retail sectors.

There are an estimated 1,616 first round jobs directly supported by commercial service visitor spending. Second round impacts include those jobs that exist due to the multiplier effect. Second round impacts result in 865 additional positions supported by the spending of commercial service visitors. When first round and second round visitor-related employment impacts are combined, approximately 2,481 jobs are supported by spending from visitors to Kansas who arrive via the commercial airlines.

Employment from General Aviation Visitor Spending

Similar to visitors using commercial airline service, intra-state and inter-state visitors using general aviation aircraft typically spend money while visiting, thereby helping to support additional employment. **Table 8** identifies the number of Kansas jobs supported by spending from visitors using general aviation aircraft to travel to the state.

Table 8: Kansas Employment from General Aviation Visitor Spending

	<i>First Round Employment</i>	<i>Second Round Employment</i>	<i>Total Employment</i>
Commercial Service Airport General Aviation Visitor Employment	122	36	158
General Aviation Airport Visitor Employment	260	88	348
Total General Aviation Visitor Employment	382	124	506

Source: Wilbur Smith Associates and IMPLAN multipliers.
Prepared: February 2010.

First round jobs associated with general aviation visitor spending are usually found off-airport and are attributed to a variety of sectors; however, most of these jobs are concentrated in the hotel/motel, restaurant, recreational and entertainment, and retail sectors. As a result of general aviation visitor expenditures in Kansas, there are 382 first round jobs supported in Kansas.

Second round employment includes those jobs that exist due to continued circulation (multiplier impact) of general aviation visitor expenditures. Second round impacts result in 124 additional jobs. When first round and second round general aviation visitor-related employment impacts are combined, 506 jobs are supported by the spending of visitors using general aviation aircraft in Kansas.

Total Employment

Table 9 identifies the total number of jobs supported by activities at study airports. As a result of on-airport activities and spending by visitors using the study airports, there are 22,761 first round jobs. The multiplier effect (second round impact) adds 24,890 additional jobs. In total, 47,651 jobs are supported in Kansas by aviation-related operators, businesses, and visitors to the study airports.

Table 9: Kansas Total Airport Employment

	Total First Round Employment	Total Second Round Employment	Total Employment
Commercial Service Airport Employment	11,917	12,468	24,385
General Aviation Airport Employment	10,844	12,422	23,266
Total Employment	22,761	24,890	47,651

Source: Wilbur Smith Associates and IMPLAN multipliers.
Prepared: April 2010.

Payroll Impacts

Employment linked to study airports results in a significant annual payroll benefit to Kansas. Payroll impacts relate to the previously identified employment benefits associated with on-airport businesses and their activities, commercial service visitors, and general aviation visitors.

Payroll from On-Airport Activity

Table 10 identifies annual payroll benefits associated with on-airport activity at each of the study airports.

Table 10: Kansas On-Airport Activity Payroll

	First Round Payroll	Second Round Payroll	Total Payroll
Commercial Service Airports On-Airport Payroll	\$664,698,600	\$545,714,300	\$1,210,412,900
General Aviation Airports On-Airport Payroll	\$583,619,300	\$479,988,900	\$1,063,608,200
Total On-Airport Payroll	\$1,248,317,900	\$1,025,703,200	\$2,274,021,100

Sources: Wilbur Smith Associates and IMPLAN multipliers.
Prepared: April 2010.

As previously noted, this payroll includes on-airport businesses, including aircraft manufacturers such as Cessna. Payroll supported by airport construction projects, and on-airport payroll from the Kansas Air National Guard and Army Reserve (if associated with aviation activity) at Forbes Field and New Century AirCenter, respectively, are also included.

This study shows that first round annual payroll impacts are \$1.2 billion. This payroll impact ripples throughout the Kansas economy, creating second round payroll impacts that can be measured through the IMPLAN model. The second round annual payroll impact related to on-airport tenants and businesses at the study airports, estimated through the IMPLAN multipliers, is approximately

\$1.0 billion. Total payroll impacts produced by airports, which include first round and second round annual payroll, exceed \$2.3 billion annually.

Payroll from Commercial Service Visitor Spending

Table 11 identifies the annual payroll impact attributed to employees whose jobs are supported by spending by commercial service visitors using the study airports.

Table 11: Kansas Annual Payroll from Commercial Service Visitor Spending

	<i>First Round Payroll</i>	<i>Second Round Payroll</i>	<i>Total Payroll</i>
Commercial Service Airport Visitor Payroll	\$32,643,200	\$22,967,800	\$55,611,000

Sources: Wilbur Smith Associates and IMPLAN multipliers.
Prepared: April 2010.

First round payroll consists of wages and benefits paid to employees working at restaurants, hotels/motels, retail businesses, and other service industries that are used by commercial service visitors. First round annual payroll attributable to spending by commercial service visitors is estimated at more than \$32.6 million.

As employees in the service industries spend their payroll, the money continues to circulate in Kansas, generating additional employment and subsequent payroll. Annual second round payroll impacts associated with commercial service visitor-supported employment are estimated at nearly \$23.0 million. When first round and second round annual payroll impacts stemming from commercial service visitor spending in Kansas are combined, a total annual payroll impact in excess of \$55.6 million is produced.

Payroll from General Aviation Visitor Spending

Table 12 identifies the payroll impacts attributed to spending by visitors using general aviation to reach Kansas.

Table 12: Kansas Annual Payroll from General Aviation Visitor Spending

	<i>First Round Payroll</i>	<i>Second Round Payroll</i>	<i>Total Payroll</i>
Commercial Service Airport Payroll	\$2,433,300	\$1,372,200	\$3,805,500
General Aviation Airport Payroll	\$5,393,700	\$3,044,900	\$8,438,600
Total General Aviation Visitor Payroll	\$7,827,000	\$4,417,100	\$12,244,100

Sources: Wilbur Smith Associates and IMPLAN multipliers.
Prepared: April 2010.

First round payroll includes salaries paid to employees working in visitor-related businesses and other service industries that are utilized by general aviation visitors. First round annual payroll attributable to spending by general aviation visitors is estimated at more than \$7.8 million.

As employees in the visitor-related industries spend their payroll, this spending continues to circulate, generating additional employment and subsequent payroll. The second round annual

payroll impact associated with general aviation visitor spending is estimated at approximately \$4.4 million. When first round and second round payroll impacts stemming from general aviation visitor spending are combined, a total payroll impact of more than \$12.2 million is produced.

Total Annual Payroll

The combined benefit of airport businesses/tenants, on-airport activities, commercial service visitor, and general aviation visitor-related payroll in Kansas is identified in **Table 13**. The collective first round annual payroll impact supported by the study airports is nearly \$1.3 billion. With approximately \$1.1 billion in second round annual payroll benefits, more than \$2.3 billion in total annual payroll is realized in Kansas as a result of visitor spending and on-airport activity associated with the study airports.

Table 13: Kansas Airports Total Annual Payroll

	<i>Total First Round Payroll</i>	<i>Total Second Round Payroll</i>	<i>Total Payroll</i>
Commercial Service Airport Payroll	\$699,775,100	\$570,054,300	\$1,269,829,400
General Aviation Airport Payroll	\$589,013,000	\$483,033,800	\$1,072,046,800
Total Payroll	\$1,288,788,100	\$1,053,088,100	\$2,341,876,200

Sources: Wilbur Smith Associates and IMPLAN multipliers.
Prepared: April 2010.

Output Impacts

Output, or economic activity, is defined as annual gross sales and average annual capital expenditures for on-airport businesses and activities. The exceptions are organizations such as corporate flight departments and government agencies that do not generate revenue. Airlines are also exceptions since it is difficult to attribute revenues to specific airports. Output for these types of organizations is defined as the sum of annual capital expenditures, payroll, and operating expenses. Output related to commercial service and general aviation visitors is defined as expenditures made during their visits. Annual economic output benefiting Kansas' economy is discussed in this section.

Output from On-Airport Activity and Businesses

Table 14 identifies first round, second round, and total annual output for all on-airport activities. As aviation-related businesses and government entities located on each study airport spend money, these expenditures ripple through Kansas' economy. For example, if an airport were to improve or expand its terminal to provide additional services, money would be spent on construction materials, labor, and other services.

Table 14: Kansas On-Airport Activity Output

	<i>First Round Output</i>	<i>Second Round Output</i>	<i>Total Output</i>
Commercial Service Airports On-Airport Output	\$3,070,560,300	\$1,682,951,100	\$4,753,511,400
General Aviation Airports On-Airport Output	\$3,510,134,600	\$1,912,687,800	\$5,422,822,400
Total On-Airport Output	\$6,580,694,900	\$3,595,638,900	\$10,176,333,800

Sources: Wilbur Smith Associates and IMPLAN multipliers.
Prepared: April 2010.

Total first round annual output from on-airport businesses and activities is estimated at nearly \$6.6 billion. Second round airport related output or spending impacts are estimated using IMPLAN multipliers. Using the IMPLAN model, second round annual output is estimated at \$3.6 billion. When first round and second round impacts are combined, the total annual output for the study airports attributed to the airports approaches \$10.2 billion. Airports with large aerospace manufacturing facilities, such as Wichita Mid-Continent Airport, had significant total outputs that are generated by the sale of aircraft. Strother Field, because of its large GE engine overhaul facility, also had significant amounts of economic output.

Output from Commercial Service Visitor Spending

Table 15 identifies the output attributed to commercial visitor spending.

Table 15: Kansas Output from Commercial Service Visitor Spending

	<i>First Round Output</i>	<i>Second Round Output</i>	<i>Total Output</i>
Commercial Service Airports Visitor Output	\$122,804,400	\$79,304,100	\$202,108,500

Sources: Wilbur Smith Associates and IMPLAN multipliers.
Prepared: April 2010.

First round output is comparable to total annual visitor expenditures. First round output from commercial service visitor spending is estimated at more than \$122.8 million. As the service industries re-spend this output, the spending continues to circulate resulting in second round impacts. Second round annual impacts related to commercial service visitor output or spending are estimated at approximately \$79.3 million. In total, the combined annual output from commercial service visitor spending exceeds \$202.1 million.

Output from General Aviation Visitor Spending

Table 16 identifies the output attributed to general aviation visitors using airports in Kansas. First round annual output is comparable to all general aviation visitor expenditures at these airports and is estimated at almost \$19.4 million.

Table 16: Kansas Output from General Aviation Visitor Spending

	<i>First Round Output</i>	<i>Second Round Output</i>	<i>Total Output</i>
Commercial Service Airport Output	\$6,024,700	\$3,774,300	\$9,799,000
General Aviation Airport Output	\$13,358,700	\$8,369,000	\$21,727,700
Total General Aviation Visitor Output	\$19,383,400	\$12,143,300	\$31,526,700

Sources: Wilbur Smith Associates and IMPLAN multipliers.
Prepared: April 2010.

As the service industries re-spend first round output, money continues to circulate, resulting in second round impacts. The second round impacts related to general aviation visitor output are estimated at more than \$12.1 million each year. The total annual output from spending by visitors arriving via general aviation visitors at Kansas' airports is approximately \$31.5 million.

Total Annual Output

The total combined annual output related to on-airport activities and commercial service and general aviation visitor spending is presented in **Table 17**. First round annual output measures more than \$6.7 billion. Second round output impacts are estimated at approximately \$3.7 billion annually. Combined first round and second round output from airport activities, visitors, and the multiplier effect produce a total annual output estimate of more than \$10.4 billion for Kansas' economy which comprises 8.5 percent of Kansas' estimated gross domestic product of \$122.7 billion.

Table 17: Kansas Airports Total Annual Output

	<i>Total First Round Output</i>	<i>Total Second Round Output</i>	<i>Total Output</i>
Commercial Service Airport Output	\$3,199,389,400	\$1,766,029,500	\$4,965,418,900
General Aviation Airport Output	\$3,523,493,300	\$1,921,056,800	\$5,444,550,100
Total Output	\$6,722,882,700	\$3,687,086,300	\$10,409,969,000

Sources: Wilbur Smith Associates and IMPLAN multipliers.
Prepared: April 2010.

While the economic output of Kansas' airports is significant, there are additional benefits that Kansas' airports provide its citizens. The next sections describe some of these other benefits and the impacts they have on the state and its people.

ADDITIONAL AREAS OF ECONOMIC BENEFIT

As detailed previously, certain areas of aviation provide benefits to Kansas that are not captured in the traditional economic model described above and used to quantify the impacts of airports in Kansas. These additional areas of economic benefit are:

- ✈ Hospitals
- ✈ Aerial applicators
- ✈ Off-airport aerospace manufacturers
- ✈ Aviation dependent businesses

- ✈ Qualitative airport benefits
- ✈ Kansas City International Airport

This section describes the benefits associated with these specific areas and the methods used to estimate their nature and scope.

Airport and Heliport Use by Hospitals

In purely economic terms, aviation use by the healthcare industry is only a tiny part of aviation's overall impact. Jobs at Kansas-based air ambulance companies comprised only 3 percent of all first round on-airport employment, with their payroll and output accounting for even less, based on the estimates of this study.

However, aviation serves a critical role in providing communities, especially those in rural areas, with access to medical services. The ability to rapidly and safely move patients and medical personnel throughout Kansas is an aviation benefit that cannot be measured in terms of jobs, payroll, and economic output. When a medivac flight transports a trauma patient to a hospital, possibly saving a life in the process, the benefit far exceeds the economic impact of operating the medivac flight. This section examines the ways that communities across Kansas use aviation to support their healthcare system and improve their lives.

To better understand the important roles that airports play in supporting medical care, nearly 200 hospitals across Kansas were sent surveys asking for information on their use of aircraft to transport patients, which airports their patients and medical teams use, and the use of local airports to support clinics held at the hospital. Additional questions asked for information on the hospital's use of air cargo to ship items such as medical equipment, lab work, and documents.

More than 80 hospitals responded to the survey, resulting in a response rate in excess of 43 percent. Hospitals from 74 cities across Kansas responded, providing a cross-section sampling of how hospitals throughout Kansas, from rural regions to major metropolitan areas, make use of airports.

Clinics

Of the responding hospitals, nearly 82 percent indicated that they host specialty clinics. The number of monthly clinics hosted by Kansas hospitals ranged from one to 100, with the median number of clinics occurring eight times per month. Many of these clinics are held at hospitals in less populated areas of Kansas, and general aviation airports make it possible for medical specialists from urban centers to attend these clinics. More than 38 percent of the hospitals hosting specialty clinics reported that doctors used local airports to fly to and from these clinics. Often, these doctors are flying long distances from major cities, such as Denver or Kansas City, with one hospital reporting a specialist making a round trip of 450 miles to attend a regular clinic. The schedule flexibility that general aviation offers makes this possible.

Patient Transfers

Aviation plays a critical role in getting patients to the healthcare facilities where needed services are provided. An overwhelming majority, nearly 92 percent, of surveyed hospitals reported using aviation for patient transfer purposes. Hospitals in Kansas make use of both helicopters and fixed-wing aircraft to transfer patients. Of the hospitals that make use of aviation for patient transfers, 67 percent use helicopters to move patients directly to and from the hospital, usually via a hospital helipad. Interestingly, patient transfer by helicopter is so critical to some hospitals that they conduct these operations without a helipad. Hospitals lacking helipads reported employing helicopters for patient transfers by using nearby open spaces, such as parking lots, or, in one case, a baseball field. The frequency of use of helicopter patient transfers to and from hospitals ranged from less



than once per month to as many as 40 times per month, with a median use of approximately three flights per month.

Nearly 63 percent of hospitals using aviation for patient transfers reported using the local airport. About half reported using multi-engine aircraft for these transfers, a third reported using single-engine aircraft and the

remainder used helicopters to transfer patients from their local airport. The number of monthly medical flights out of local airports ranged from less than one to more than 60. The median use of local airports was two flights per month.

Hospitals transferred patients to many different cities, both in and out of Kansas. Wichita was the most frequently reported city for transferring patients, followed by Kansas City, then Hays. Several of the locations were outside of Kansas, including Denver, Joplin, Amarillo, and Tulsa. These distant destinations are possible because of the access provided by general aviation.

Air Cargo Uses

In addition to using airports to move doctors and patients around the state, hospitals also use airports to move a variety of medical items and important paperwork via air cargo or overnight delivery services.

Drug shipments and other medical supplies were by far the most commonly shipped item via airports. More than 30 percent of responding hospitals indicated they relied on shipping drugs by aircraft. Documents were the next most common item sent by air, with more than 24 percent of responding hospitals using the service.

More than 18 percent of responding hospitals reported shipping hospital equipment by air. Nearly 16 percent used aircraft to deliver diagnostic tests, and more than 14 percent sent blood, tissue, and other samples by air.

Other Comments

Besides the benefits that airports provide hospitals as outlined above, numerous hospitals provided comments indicating just how important their local airport is in terms of providing medical services.

“As a regional trauma center, the proximity of an airport to [our medical center] and other population centers throughout Kansas is very important in the transfer of patients for care.”

“We are 180 miles from the nearest Level I trauma center, 180 miles from the nearest newborn intensive care unit. It is critical that we be able to transfer critical patients quickly.”

Hospitals also recognize that simply having an airport doesn't necessarily provide the capabilities needed. Sometimes, it is necessary to expand the airport in order to provide the necessary services, as this hospital stated.

“An upgrade to our airport was recently completed and this has been a huge help. The airport is vital to the quality of care for our community.”

Finally, airports are an important element in the development of medical tourism, an industry that takes advantage of the mobility provided by aviation to give patients greater selection among medical service providers.

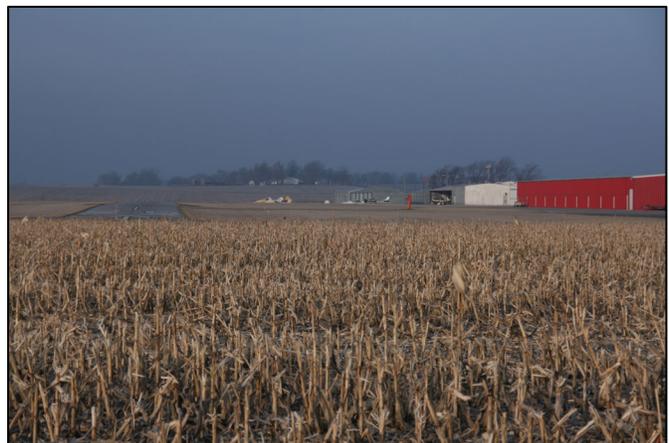
“Due to our medical tourism program, our patients use commercial airline carriers to reach Wichita from Canada and other cities and states outside Kansas.”

In short, the benefits that airports provide hospitals throughout Kansas are varied and extensive. Without these airports, the quality of life that Kansans enjoy would be diminished.

Benefits from Agricultural Applicators

As part of the U.S. Grain Belt, Kansas plays a major role in the production of agricultural products for the nation and the world. In 2009, Kansas harvested more than 21 million acres of crops valued at nearly \$7 billion, which placed it among the top 10 states in agricultural production. Kansas consistently ranks number one among U.S. states in terms of wheat production, typically accounting for around 20 percent of U.S. wheat production in any given year. Kansas is also a top producer of sorghum, typically producing more bushels of this livestock feed than any other state. In past years, Kansas has produced more than 40 percent of the nation's sorghum crop. Other major crops produced in Kansas include corn, soybeans, and sunflowers.

Aviation has a significant role in supporting the Kansas agricultural industry. In general, agricultural applicators apply



pesticides to Kansas crops without damaging plants in the way ground rigs can to certain crops. They are also used to respond quickly to outbreaks of plant disease or insect infestation. Without these actions, some, or even all of the economic value of a crop can be lost. Estimating the economic value of crops that are preserved, or even enhanced by agricultural applicators is challenging. This is largely due to a lack of data available for estimating the impact of agricultural applicators, but also because of the wide variety of quantifiable benefits provided by agricultural applicators. In addition to preserving the yield of agricultural crops through pesticide spraying, agricultural applicators also improve pastures for cattle grazing through weed suppression spraying. Agricultural applicators have also been used in Kansas to seed and fertilize certain crops when land conditions make it impractical to use ground vehicles.

Because of the lack of reliable data for any given year, this section quantifies the benefits Kansas commercial agriculture derives from agricultural applicators for a typical year instead of a specific year. Every year, a variety of pesticides are applied by agricultural applicators to crops in Kansas. Some, such as herbicides, are typically applied every year, while others, such as fungicides and insecticides, are applied only as needed. Outbreaks of crop-damaging insects or plant-killing fungus may only occur every few years, but can threaten the economic viability of an entire crop.

As a result of this large variance in pesticide application, this analysis examined agricultural data from 1998 to 2009 and derived an estimated range of benefits that the Kansas commercial agriculture industry can expect to gain from agricultural applicators in a typical year. This analysis only took into account benefits derived from the application of fungicides, herbicides, and insecticides to commercial agriculture. There was insufficient data available to estimate the benefits from seeding and fertilizing by air, as well as the application of pesticides to pasture. These actions provide benefits over and above what is estimated in this section.

In order to estimate the value agricultural applicators add to Kansas' commercial crops, it is necessary to estimate the number of acres agricultural applicators spray in a typical year, the types of crops grown in that acreage, and the portion of the crop preserved or enhanced due to the agricultural application. The U.S.



Department of Agriculture (USDA) periodically surveys farmers on their use of

pesticides for various crops, but data on the method of application is not made available. However, the National Agricultural Aviation Association (NAAA) estimates that 25 percent of all commercially applied pesticides are applied by aircraft. Using this information along with the USDA data, minimum and maximum estimates of acres sprayed by aircraft were derived for seven major crops³ grown in Kansas. Other crops grown in Kansas benefit from aerial application of chemicals, but their acreage and value was not significant compared to these seven crops. The data from

³ These seven crops are alfalfa/hay, corn, cotton, sorghum, soybeans, sunflowers, and wheat. These are the seven top revenue producing crops in Kansas and account for more than 99 percent of the value of all Kansas crops in 2009.

these seven crops over the period 1998 to 2009 indicates that between 2.8 million and 3.5 million acres in Kansas are sprayed by aircraft in a typical year.

To check the reasonableness of this acreage estimate, a range of acres sprayed was developed based on the number of agricultural application aircraft registered in Kansas. In 2009, there were 266 agricultural application aircraft registered in Kansas, according to an FAA database. The majority, 229, are piston powered, while the rest are turbine powered. **Table 18** shows the assumptions used to estimate how many acres each type of aircraft sprayed. Piston aircraft were assumed to spray between 20,000 and 40,000 acres annually. Turbine powered aircraft were assumed to spray between 40,000 and 60,000 acres, mainly due to the reduced downtime turbine aircraft experience compared to piston aircraft as a result of the higher reliability of their powerplant.

Table 18: Estimate of Acres Sprayed by Ag Aircraft in Kansas

<i>Type and Number of Ag Aircraft</i>		<i>Acres Sprayed per Aircraft</i>		<i>Acres Sprayed</i>	
		<i>Minimum</i>	<i>Maximum</i>	<i>Minimum</i>	<i>Maximum</i>
Piston	229	20,000	40,000	4,580,000	9,160,000
Turbine	37	40,000	60,000	1,480,000	2,220,000
Total	266			6,060,000	11,380,000

Source: FAA and Wilbur Smith Associates
 Prepared: April 2010.

This resulted in an estimate of agricultural aircraft in Kansas spraying between 6 million and 11 million acres. Several factors may explain the difference between this estimate and the estimate stated above. The lower estimate (2.8 million to 3.5 million acres) included only commercial crops and did not account for the spraying of pasture land. The lower estimate also excluded the aerial application of seeds and fertilizer. The lower estimate only analyzed agricultural applicators in commercial operation and did not account for any agricultural applicators that were not part of a commercial aerial spraying business, as the higher estimate (6 million to 11 million acres) likely did since it accounted for all agricultural aircraft registered in the state. Regardless of the reasons behind the lower estimate, using it instead of a higher one provides some assurance that the final calculation is not overstated.

To determine how much value agricultural applicators provide Kansas agriculture, the first step is estimating the total value of Kansas agriculture. Starting with an average number of acres harvested for each of the seven crops, a range of minimum and maximum yields and crop prices (adjusted for inflation), reported by the USDA for Kansas from 2001 to 2009, was used to estimate the value of these crops in a typical year. **Table 19** shows that the total crop value for a year is estimated between \$3 billion and \$8 billion. As noted earlier, the value of the 2009 harvest in Kansas was nearly \$7 billion, which falls within this estimate.

The portion of this crop value that was attributed to aerial spraying was based on the conservative estimate of acres sprayed by agricultural applicators, determined earlier. On top of this, minimum and maximum estimates of the portion of the yield preserved by the pesticide application were provided by experts from the College of Agriculture at Kansas State University. These estimates ranged from the pesticide having no impact on preserving the crop yield to 100 percent of the crop yield, (i.e., if the pesticide were not applied by aircraft, harvesting the crop would not be economically viable), but generally fell between 10 percent and 40 percent. The results of all these

estimates are shown in Table 19, with the crop value attributed to agricultural applicators ranging from a low of approximately \$67 million to a high of \$1.2 billion. Those figures correspond to between 2 percent and 14 percent of the total value of the seven crops analyzed.

Table 19: Typical Aerial Applicator Benefits to Crops in Kansas

Crop	Total Crop Value (\$ millions)		Acres Sprayed by Aircraft		Value Attributed to Aerial Applicators (\$ millions)		Percent of Total Crop Value	
	Minimum	Max	Minimum	Max	Minimum	Max	Minimum	Max
Alfalfa/Hay	\$499.2	\$992.2	45,500	91,000	\$1.5	\$23.8	0.3%	2.4%
Corn	\$829.5	\$2,101.2	690,000	769,300	\$36.1	\$509.5	4.4%	24.2%
Cotton	\$10.2	\$30.6	13,500	14,700	\$0.5	\$7.5	4.9%	24.5%
Sorghum	\$238.6	\$1,048.6	640,000	647,100	\$10.7	\$238.6	4.5%	22.8%
Soybeans	\$396.3	\$1,323.3	676,300	719,400	\$9.3	\$198.5	2.3%	15.0%
Sunflowers	\$23.1	\$67.2	40,800	40,800	\$0.5	\$11.0	2.2%	16.4%
Wheat	\$1,030.4	\$2,939.5	686,300	1,173,400	\$8.0	\$233.7	0.8%	8.0%
Total	\$3,027.3	\$8,502.6	2,792,400	3,455,700	\$66.6	\$1,222.6	2.2%	14.4%

Sources: Professor D. Jardine (KSU), Professor D. Peterson (KSU), Professor J. Whitworth (KSU), and Wilbur Smith Associates.
Prepared: April 2010.

With as much as 14 percent of the Kansas harvest depending upon aerial applicators each year, it is obvious the critical role that aviation plays in the production of agricultural products.

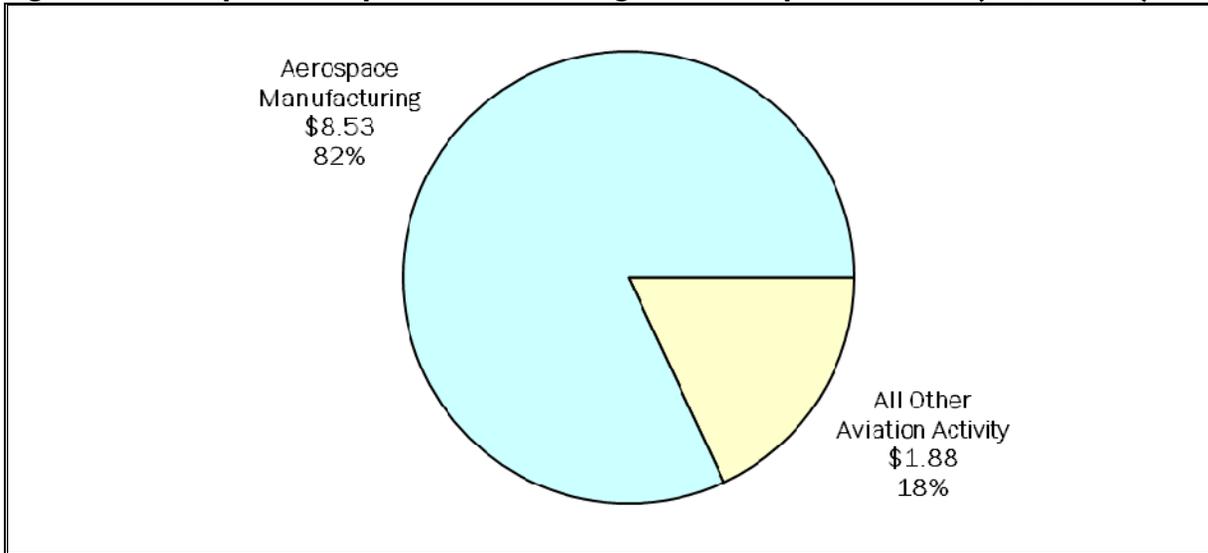
Off-Airport Aerospace Manufacturing Impacts

Aviation and aerospace companies make up a large sector of the Kansas economy. The state has attracted many businesses that are engaged in the development, production, and manufacturing of aircraft, aviation support systems, aircraft components, and other aviation or aerospace-related products. These aerospace manufacturing firms are responsible for a significant portion of the economic benefits that aviation brings to Kansas. Sales of aircraft generate billions in revenue that then ripple through the Kansas economy. To illustrate the extent to which aerospace manufacturing alone impacts the Kansas economy, **Figure 4** shows the split in total economic output associated with airports between aerospace manufacturing and all other airport activity.

With 82 percent of total output from airports attributed to aerospace manufacturing businesses, it is clear how dominant this segment of the aviation industry is in Kansas. Yet, this only accounts for the aerospace manufacturing that takes place on airports. As this section of the report shows, a substantial portion of the aerospace manufacturing industry takes place at locations that are not on airports. Many companies that specialize in manufacturing aircraft parts and sub-assemblies do not need an airport location to operate.

With its rich aviation history, especially in the Wichita area, it is no surprise that aerospace manufacturing plays such an important role in the Kansas economy. Some of the most well known aircraft manufacturers in the industry started in Wichita, including Cessna, Beechcraft, and Learjet. From that base of aircraft production, numerous other aerospace manufacturing companies have started and expanded operations in Kansas. One of the most notable is Spirit AeroSystems, one of the world's largest suppliers of commercial airline assemblies and components. With more than 10,000 employees at its Wichita headquarters and factories, Spirit AeroSystems is the largest

Figure 4: On-Airport Aerospace Manufacturing’s Total Output in Kansas (in \$ billions)



Source: Wilbur Smith Associates.
Prepared: April 2010.

aerospace business in the state. In addition, both Airbus and Boeing operate facilities in Wichita, along with a multitude of other aerospace companies.

An example of the aerospace manufacturing industry outside of Wichita is TECT Aerospace, a fabricator of business jet wing structures and other aviation components. TECT Aerospace has facilities in Wellington and Park City, Kansas, in addition to its Wichita operations.

Without these Kansas-based businesses, numerous on-airport aviation-related businesses would not be able to operate as efficiently as they do, if at all. So, in addition to the workforce directly employed by these businesses, numerous other aviation workers in Kansas depend upon these businesses. This section estimates the economic impacts of this important off-airport industry sector.



Estimating Impacts with an Input-Output Model

As with other economic impacts previously discussed in this report, total economic impacts associated with the aerospace manufacturing industry are quantified in terms of employment, payroll, and output. As before, employment is expressed in full-time equivalents (FTE), where each part-time job is treated as half a full-time job. First round and second round impacts were estimated through the use of the IMPLAN model. More information on the modeling process used in this analysis can be found in the previous section entitled *The Economic Modeling Process*.

There are approximately 110 aerospace manufacturing businesses located off-airport in Kansas. For the most part, these aerospace businesses are engaged in manufacturing aircraft, aircraft engines, or aircraft parts. The following section describes where the information used to estimate the impacts of these businesses was obtained.

Data Requirements for Aerospace Manufacturing Impact Estimates

Employment data were collected for each off-airport aviation-related business through sources such as the Wichita Business Journal, Manta, and Dun and Bradstreet. This employment data was converted to a full-time equivalent employment number by treating each part-time employee as half of a full-time employee.

Estimates of payroll, sales and capital improvement projects were based on per employee ratios obtained from a recent detailed study⁴ of aviation economics. That study surveyed aerospace companies and gathered data on average employee payroll, sales per employee, and capital improvement project expenditures per employee for three different types of aerospace companies – aircraft manufacturing, aircraft maintenance, and aircraft parts. These per employee ratios were applied to the off-airport aerospace company’s employee numbers (based on its classification as a manufacturing, maintenance, or parts business) to obtain estimates of employee payroll and economic output. These estimates of direct impacts were used in the model to produce estimates of second round and total impacts.

Aerospace Manufacturing Impacts

The economic benefits associated with off-airport aerospace manufacturing in Kansas are significant. As shown in **Table 20**, this sector of the Kansas economy is directly responsible for nearly 21,400 jobs. Spirit AeroSystems accounts for approximately half of these employees, with Boeing employees comprising another significant portion.

Table 20: Total Economic Impact of Off-Airport Aerospace Manufacturing in Kansas

	<i>Employment</i>	<i>Payroll</i>	<i>Output</i>
First Round Impacts	21,375	\$851,602,700	\$6,971,412,400
Second Round Impacts	25,625	\$715,584,300	\$2,529,455,100
Total Impacts	47,000	\$1,567,187,000	\$9,500,867,500

Source: Dun & Bradstreet, IMPLAN Multipliers, Manta, *Wichita Business Journal*, and Wilbur Smith Associates.
 Prepared: April 2010.

Comparing this to on-airport estimates of aircraft manufacturing, which includes the numerous aircraft factories in Wichita (Beechcraft, Bombardier Learjet, and Cessna) along with other Kansas aircraft manufacturing facilities such as the Cessna plant in Independence, shows how significant the off-airport aerospace manufacturing industry is. The on-airport aircraft manufacturing businesses directly employ an estimated 11,000 workers, giving a combined total of more than 32,000 employees, of which off-airport aerospace manufacturing accounts for two out of every three of these workers.

⁴ Florida Statewide Aviation Economic Impact Study, March 2010.

The 21,400 off-airport aerospace manufacturing direct jobs earned a combined payroll of nearly \$852 million and generated an economic output of almost \$7.0 billion. Induced impacts, resulting from the recirculation of the direct economic benefits, added another 25,600 jobs with nearly \$716 million in payroll and \$2.5 billion in output.

Adding all these benefits together, off-airport aerospace manufacturing supports 47,000 jobs that earn almost \$1.6 billion in payroll and produce \$9.5 billion in economic output.

Other studies have examined the aerospace manufacturing industry in an effort to quantify the economic benefits it provides the economy. A 2006 study commissioned by the General Aviation Manufacturers Association⁵ estimated the economic contribution of general aviation (of which aircraft manufacturing and sales is a major component) in the U.S. at \$150 billion, with Kansas contributing \$7.1 billion, or 4.8 percent of the U.S. total. This estimate is below the estimate in this study largely because it does not take into account the impacts from commercial aviation manufacturing. As stated above, Spirit Aerospace, a manufacturer of commercial airplane assemblies, accounts for approximately half of the off-airport aerospace manufacturing employment.

A 2006 study⁶ commissioned by Kansas, Inc. examined the employment and payroll attributed to the aerospace industry in Kansas. Their analysis estimated the aerospace industry in Kansas employed 139,662 people in 2005 with a payroll of nearly \$5.6 billion. This estimate included all impacts, first round and the multiplier effects of the second round. For 2009, the study projected employment would rise to 157,210 with a payroll of \$8.2 billion. This projected estimate of aerospace employment and payroll is significantly above the estimate in this study for two reasons. The Kansas, Inc. study used rather aggressive growth rates to project future estimates, especially for payroll. Employment was forecast to grow at an average annual rate of 2.4 percent, while payroll had an unusually high annual growth rate of 8.9 percent. While this rate of growth may have been reasonable for the aerospace industry in 2004, it does not take into account the recent recession, which resulted in significantly lower growth in payroll and a contraction in employment. Additionally, the Kansas, Inc. study used multipliers that were substantially higher than the multipliers used in this study, which helps to inflate the total employment and payroll. The employment multiplier used in the Kansas, Inc. study was 77 percent higher and the payroll multiplier was 44 percent higher. Using similar multipliers would put the total employment estimates within 10 percent of each other. However, even when using similar multipliers, the payroll estimates differ greatly, mostly because of the high average annual growth rate forecast in the Kansas, Inc. study.

Value Added Benefits from Off-Airport Aviation Dependent Businesses

Many employers in Kansas, while not located directly at the airport, benefit from the proximity and availability of the state's airports. Without these airports, many companies in the region would experience adverse effects in business activity levels. Because of the efficiencies gained by the

⁵ *General Aviation's Contribution to the U.S. Economy*, May 2006, by MergeGlobal.

⁶ *Kansas Aerospace Industry Forecast*, May 2006, by the Center for Economic Development and Business Research.

availability of aviation, many businesses receive additional benefits. This section identifies the benefits that businesses in Kansas derive from the day-to-day operation of these airports.

Approximately 1,500 businesses in the state received surveys designed to assess their dependence on Kansas' airports. While it is impossible to make exact estimates of all the additional benefits that businesses in Kansas derive from use of these airports, it is possible to make some broad assumptions as to how the airports benefit the region's non-aviation business community. More than 270 businesses responded. The survey sought information on topics such as reliance on commercial airline service and air cargo, employment, and important factors considered when a business is expanding or relocating. Other questions asked businesses to provide information regarding reliance on general aviation at Kansas' airports. The surveys also attempted to gauge any change in reliance on aviation in Kansas as a result of the global economic downturn of 2008/2009. The survey sampled many types of businesses, with an emphasis on businesses in the state that have a propensity to use aviation services.

The survey confirmed that many businesses in the region depend on the state's airports for the transport of employees, clients and suppliers as well as goods. Without access to these airports, some companies would be forced to cut employment or possibly locate outside of Kansas.

According to U.S. Department of Commerce, Bureau of Economic Analysis (BEA) data, there are nearly 1.9 million employees in the state. The industrial sectors surveyed above account for approximately 515,000 employees. Based on the survey data approximately 13 percent of the business activity in the sampled industrial sectors is linked to the availability of Kansas' airports. In order to estimate the additional regional benefit from the availability of the state's airports, one can assume that approximately 13 percent of the 515,000 employees (approximately 67,000 jobs) can attribute their employment to the airports and the efficiencies gained from their operation.

These 67,000 jobs represent 3.6 percent of Kansas' entire workforce of 1.9 million public and private employees. These value added jobs are in addition to the 37,500 supported directly by the airports and indirectly by visitor spending. In all, 5.6 percent of all jobs in Kansas are supported by, or depend upon, the airport system.

Key findings of the business survey are as follows:

- ✦ Approximately 78 percent of the respondents indicated that they utilize commercial airline service related to their routine business functions.
- ✦ Approximately 47 percent of respondents indicated that their company averages at least one trip per month on a commercial airline.
- ✦ Approximately 25 percent of the respondents indicated that their company owns, leases, charters, or has fractional ownership of general aviation aircraft.
- ✦ Approximately 71 percent of the respondents indicated that they have customers or suppliers who travel by scheduled airline service to visit the surveyed company.
- ✦ Approximately 68 percent of respondents indicated that they use air cargo/package express on a regular basis. Of these businesses, 50 percent indicated that they ship packages weighing 2 pounds or less; 62 percent indicated that they ship packages weighing 2 to 70 pounds; and 30 percent indicated that they ship packages weighing more than 70 pounds.

- ✦ Approximately 38 percent of respondents indicated that a change to their business would be necessary if, hypothetically, airports were not available in Kansas. These changes ranged from relocating their headquarters out of state, to suspension of all business operations in Kansas.
- ✦ Approximately 40 percent of respondents indicated that their commercial service travel expenditures decreased in 2009 as a result of the global economic downturn, while 54 percent experienced no change in these expenditures. Over the next 2 years, 33 percent of respondents indicated that they anticipate an increase in commercial service travel expenditures.
- ✦ Approximately 20 percent of respondents indicated that their general aviation travel expenditures decreased in 2009 as a result of the global economic downturn, while 71 percent experienced no change in these expenditures. Over the next 2 years, 16 percent of respondents indicated that they anticipate an increase in general aviation expenditures.

The final section of the business survey contained questions regarding the importance of various factors considered when a business contemplates relocation or expansion. The top 13 factors, ranked in relative order of importance by Kansas businesses, are as follows:

1. Convenient highway access
2. Quality of life
3. Available trained workforce
4. Tax incentives
5. Proximity of input suppliers
6. **Commercial Service Airport**
7. Universities and high-tech research and development centers
8. Availability of natural resources and raw materials
9. **General aviation airport**
10. An urban business district
11. Historic location of business
12. Rail transportation facilities
13. Water transportation facilities

In addition, approximately 47 percent of all survey respondents indicated that the presence of a commercial service airport was of importance to the decision of business location; while approximately 31 percent of respondents indicated that the proximity to a general aviation airport is of importance in their location decision.

Qualitative Airport Benefits

The preceding sections of this study discussed the quantitative benefits derived from aviation in Kansas. Beyond the quantitative aspects of aviation benefits, there are also qualitative benefits that deserve consideration when the total value of an airport system is analyzed. Qualitative benefits are those activities which take place at an airport on a regular basis that add to the quality of life, but are difficult to assign a dollar value. Qualitative benefits typically enhance the health, welfare, or safety of individuals in the airport's market area. While it may be difficult to place a dollar value on such impacts, these benefits improve the quality of life of Kansas' residents in a variety of ways.

The activities contributing to the qualitative benefits vary throughout the airport system, yet each airport contributes in some way to the quality of life of residents of Kansas. Some examples of the qualitative benefits of aviation at Kansas system airports include:

- ✈ Facilitating emergency medical transport
- ✈ Providing police support
- ✈ Conducting search-and-rescue operations
- ✈ Supporting the U.S. military and other government organizations
- ✈ Assisting with prisoner transport
- ✈ Supporting rangeland firefighting efforts
- ✈ Supporting statewide agricultural activities
- ✈ Providing entertainment opportunities (e.g., museums, air shows)
- ✈ Hosting school field trips and other educational events
- ✈ Serving as a staging area for community events

Information supplied by the airports themselves has highlighted some of the more notable examples of the qualitative benefits derived from Kansas' airport system. Numerous life-saving emergency medical evacuations and operations occur at airports throughout the state. In addition, airports in Kansas play an important role in agricultural production, as detailed previously.

Based on information provided by airports that responded to our survey efforts, **Table A-19** in the appendix attempts to tabulate the qualitative benefits each airport provides. The activities listed in Table A-19 are not all inclusive, but instead account for the most common types of aviation operations at these airports. Other additional aviation activity likely takes place at these airports beyond what is shown in Table A-19.

What is most notable is no matter how large or small the contributions, all airports contribute in some way to the quality of life of Kansas residents.

Economic Impact of Kansas City International Airport in Kansas

This economic impact study examined the positive benefits that airports within Kansas provide the state and its people. However, Kansas also supports aviation activity that takes place outside the state. Kansas City International Airport, located just across the Kansas border in Missouri, relies on Kansas to operate efficiently. Half of Kansas City International's reliever airports (the airports intended to provide more general aviation access to a metropolitan area and thereby relieve congestion at a commercial service airport) are located in Kansas – Johnson County Executive Airport and New Century AirCenter. Because of its proximity to Kansas, Kansas City International draws a substantial portion of its employees, and airline passengers, from Kansas. This section quantifies these important impacts as they relate to Kansas.

The 2006 study, *The Economic Impact of Kansas City International Airport*, was used to determine the impacts related to Kansas. This analysis was based on data available in existing reports and discussions with airport staff. The Kansas City Aviation Department was contacted to help determine the distribution of impacts.

Kansas City International Market

Kansas City International is classified as a medium hub airport based on its reported enplanements of 5.8 million revenue passengers in 2008. It ranked 38th in passenger enplanements and 39th in enplaned cargo tonnage. According to airport management, residents from communities in the four-state region of Missouri, Kansas, Nebraska, and Iowa drive to Kansas City International for its airline services. Likewise, some visitors to Kansas arrive through Kansas City International.

The bi-state Kansas City, Missouri-Kansas Metropolitan Statistical Area (MSA) is defined as Kansas City International's primary impact region, consisting of the following Kansas counties: Franklin, Johnson, Leavenworth, Linn, Miami, and Wyandotte. The secondary impact region is defined as the airport's total air service area, which is composed of the Kansas City MSA and the following adjoining Kansas counties: Atchison, Douglas, Jefferson, and Shawnee (which includes Topeka, the capital of Kansas). Together, these 10 Kansas counties have a population of more than 1.1 million residents and are home to seven Fortune 500 corporations.

Businesses at Kansas City International

Twelve airlines provide Kansas City International with scheduled passenger service to U.S., Mexican and Canadian destinations. The airlines are Air Canada Jazz, American, Continental, Delta, Frontier, AirTran, Mesa, Midwest, Northwest, Southwest, United, and US Airways. The six cargo carriers operating at the airport are Airborne Express, BAX Global, DHL, Federal Express, Kitty Hawk Air Cargo, and United Parcel Service. More than 20 companies are engaged in the provision of airline and airport support services, such as Allied Aviation, Kansas City International Car Care, Jet Delivery, CAM Contract Aircraft Maintenance, TUG Technologies, Parks Maintenance, and Huntleigh USA. Terminal concessions are provided by HMS Host and The Paradises Shops, which offer retail and food and beverage concession shops to passengers throughout the airport. Executive Beechcraft acts as the airport's sole fixed base operator, providing fuel and aircraft services to general aviation users.

On the land-side of the terminal, ground transportation is provided by the major car rental agencies such as Avis, Budget, Dollar, Enterprise, Hertz, Thrifty, and Vanguard. Airport management and other government agencies that are employed at the airport include the Kansas City Aviation Department, FAA, U.S. Customs and Border Protection, U.S. Postal Service, as well as the Kansas City police and fire departments. Other jobs on the airport can be attributed to short or long-term services provided by contractors, consultants, developers, and other professionals for a wide range of architectural, construction, management, and planning purposes.

In 2006, the largest share of direct jobs at Kansas City International was in the provision of facility and business support services, accounting for 26 percent of full-time equivalent (FTE) jobs.⁷ Employment by government agencies accounted for the second largest share of FTE jobs with 23 percent of the total. Contract and service professionals represent the third largest share of FTE jobs (13 percent), which reflects the diverse capital improvement projects implemented at Kansas City

⁷ A FTE job takes into account all employment by counting any part-time job as equivalent to half a full-time job.

International. Passenger airlines and general aviation accounted for roughly 11 percent of FTE jobs, while ground transportation represented 10.6 percent of FTE jobs at Kansas City International in 2006.

Kansas City International Impacts in Kansas

The 2006 study, *The Economic Impact of Kansas City International Airport*, estimated the airport was responsible for more than 61,000 jobs, and generated economic activity in excess of \$5.5 billion, as shown in **Table 21**.

Table 21: Total Economic Impact of Kansas City International Airport

<i>Impact Measure</i>	<i>First Round Direct</i>	<i>First Round Indirect</i>	<i>Second Round Induced</i>	<i>Total Impacts</i>
Employment (FTE jobs)	5,845	27,250	28,354	61,449
Payroll (\$ millions)	\$322.4	\$461.7	\$832.2	\$1,616.3
Output (\$ millions)	\$1,113.3	\$1,450.7	\$2,985.5	\$5,549.5

Sources: *The Economic Impact of Kansas City International Airport 2006*, Unison Maximus Consulting Solutions, December 2007.
Prepared: April 2010.

The portion of these economic benefits that flow into Kansas was estimated by analyzing the three main components of each benefit – direct, indirect and induced.

Direct impacts result from economic activities conducted by the businesses and organizations operating at Kansas City International Airport. According to 2009 employee identification badge data, provided by the Kansas City Aviation Department, 14.3 percent, or 544, of 3,800 employees at Kansas City International resided in Kansas. Given that this is purely a count of badges and does not take into consideration the non-badged employees or contractors, employment data from the 2006 economic impact study was also examined. In that study, a similar employee residency evaluation revealed that 13 percent, or 763, of 5,845 direct FTE jobs at Kansas City International were identified as residents of Kansas. This percentage was applied to the direct payroll and output impact numbers for Kansas City International to determine the benefits taking place in Kansas. This resulted in a direct payroll figure of \$42.1 million and an output of \$145.4 million attributed to Kansas.

Indirect impacts result primarily from expenditures by visiting passengers who arrive through Kansas City International. This spending by visitors generates activity in the local leisure and hospitality, ground transportation, and retail trade economic sectors that cater to area visitors. To determine the indirect impacts in Kansas of visitors arriving through Kansas City International, a Kansas-Missouri visitor ratio was established by using the number of hotel rooms in greater Kansas City, Missouri versus the number of hotel rooms in greater Kansas City, Kansas. The breakdown of hotel rooms between Missouri and Kansas (including Topeka and Lawrence in Kansas) shows that 47.4 percent of hotel capacity in Kansas City International’s market area is located in Kansas. When applied to each of Kansas City International’s indirect impact measures to determine indirect impacts in Kansas, it results in 12,917 jobs, \$218.8 million in payroll, and \$687.6 million in output attributed to Kansas.

Induced impacts result from the direct and indirect impacts, and represent the subsequent economic activities generated in the impact region. Regional input-output multipliers allow for an

estimation of the induced impacts, commonly referred to as the multiplier effect, which reflects the underlying inter-industry relationships and self-sufficiency of the impact region. The estimation of Kansas City International’s induced impacts in Kansas is based on the same U.S. Bureau of Economic Analysis multipliers used to determine the direct and indirect impacts of Kansas City International’s impact region as a whole. These multipliers were subsequently applied to Kansas City International’s direct and indirect impacts specific to Kansas to determine induced impacts.

Table 22 below summarizes the components of Kansas City International’s economic impacts in the state of Kansas.

Table 22: Economic Impact of Kansas City International Airport in Kansas

<i>Impact Measure</i>	<i>First Round Direct</i>	<i>First Round Indirect</i>	<i>Second Round Induced</i>	<i>Total Impacts</i>
Employment (FTE jobs)	763	12,917	11,720	25,400
Payroll (\$ millions)	\$42.1	\$218.8	\$277.0	\$537.9
Output (\$ millions)	\$145.4	\$687.6	\$970.0	\$1,803.0

Sources: Wilbur Smith Associates and IMPLAN multipliers.
 Prepared: April 2010.

The Kansas City International Airport is responsible for approximately 25,400 jobs in Kansas, or more than 41 percent of the airport’s total employment impact. Those Kansas employees earned nearly \$538 million in wages and benefits, or approximately 33 percent of the payroll attributed to the airport. Finally, Kansas City International was estimated to produce \$1.8 billion in economic activity in Kansas, or nearly 33 percent of the total output of the airport.

ECONOMIC IMPACT SUMMARY

The 140 airports considered in this analysis are a major catalyst for Kansas’ economy. In 2009, the annual economic activity of the airports was estimated at \$10.4 billion. This includes expenditures and operations associated with on-airport businesses and activities and spending by thousands of visitors using general aviation and commercial airlines to reach Kansas. This estimate also includes second round impacts measured using study multipliers from the economic input-output model. The vast majority of this output, 82 percent, is attributed to the strong aerospace manufacturing base found on Kansas’ airports.

It should be noted that the \$10.4 billion of economic impact from the study airports does not include additional impacts that were evaluated outside of the economic model. These impacts include the benefits to commercial agriculture from aerial applicators (estimated between \$66.6 million and \$1.2 billion in any given year), off-airport aerospace manufacturing (estimated at \$9.5 billion), Kansas City International Airport (\$1.8 billion) and the hard to quantify benefits provided by airports, such as life-saving medical flights. Again, these estimates were not included in the overall impacts.

Table 23 provides a summary of economic impacts for the 140 Kansas airports analyzed in this study. As shown, the airports help to support a total of 47,651 jobs that have an annual payroll of more than \$2.3 billion. The airports in Kansas account for a total of approximately \$10.4 billion in total annual economic output.

In addition to these quantifiable benefits, there are numerous quality of life benefits, such as medical flights, that Kansas' airports provide.

Table 23: Economic Impact Summary for Airports in Kansas

	<i>First Round Impacts</i>	<i>Second Round Impacts</i>	<i>Total Impacts</i>
Employment			
On-Airport Impacts	20,763	23,901	44,664
Commercial Service Visitor Impacts	1,616	865	2,481
General Aviation Visitor Impacts	382	124	506
Total Employment	22,761	24,890	47,651
Payroll			
On-Airport Impacts	\$1,248,317,900	\$1,025,703,200	\$2,274,021,100
Commercial Service Visitor Impacts	\$32,643,200	\$22,967,800	\$55,611,000
General Aviation Visitor Impacts	\$7,827,000	\$4,417,100	\$12,244,100
Total Payroll	\$1,288,788,100	\$1,053,088,100	\$2,341,876,200
Output			
On-Airport Impacts	\$6,580,694,900	\$3,595,638,900	\$10,176,333,800
Commercial Service Visitor Impacts	\$122,804,400	\$79,304,100	\$202,108,500
General Aviation Visitor Impacts	\$19,383,400	\$12,143,300	\$31,526,700
Total Output	\$6,722,882,700	\$3,687,086,300	\$10,409,969,000

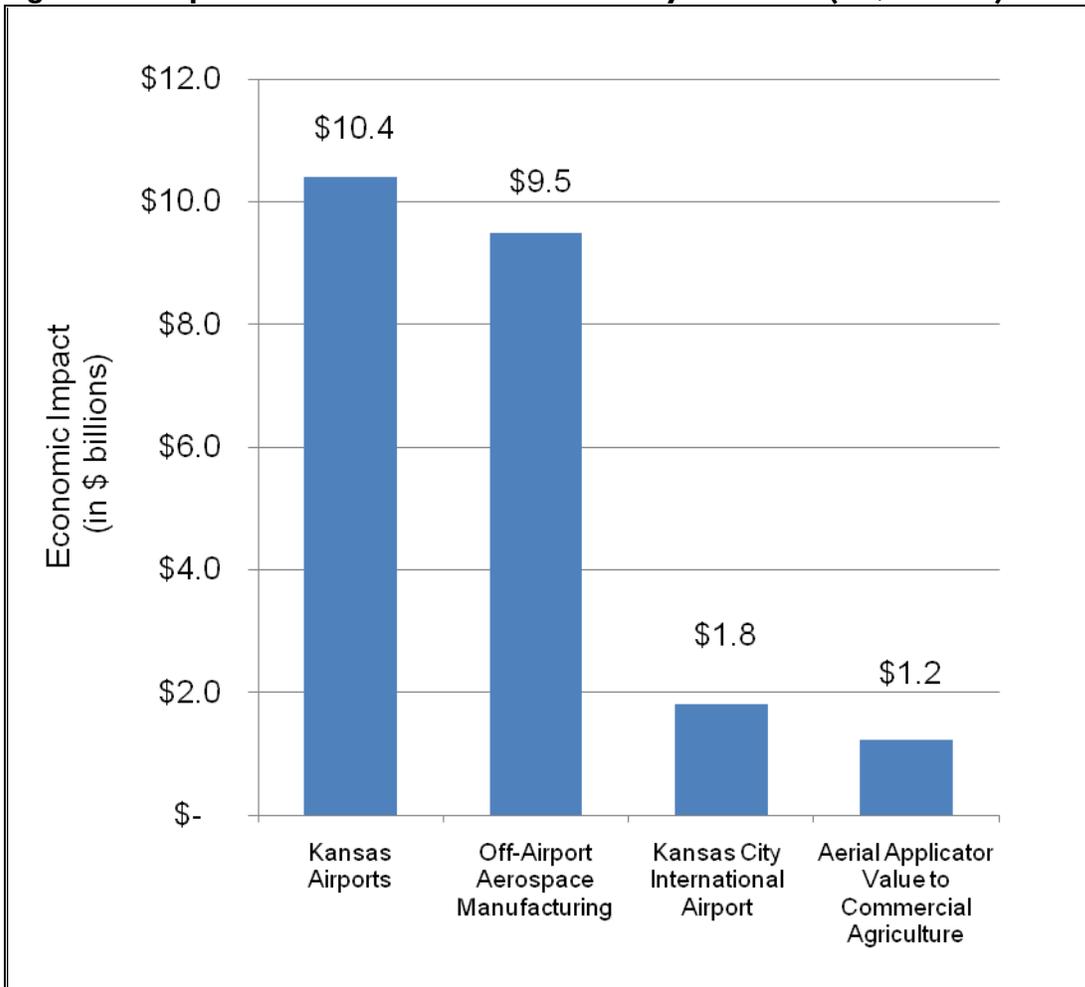
Sources: Wilbur Smith Associates and IMPLAN multipliers.
 Prepared: April 2010.

These are the impacts associated with traditional economic impact modeling. Other sections of this report have highlighted economic impacts resulting from other aviation and airport related activities that are typically not part of a traditional economic modeling effort. Also included is the economic impact resulting from Kansas City International Airport. Kansas supports this airport through general aviation reliever airports and providing part of its market area. As a result, Kansas benefits economically from the operation of Kansas City International Airport.

To put these other benefits into perspective, **Figure 5** compares the estimated economic activity resulting from these activities to the output of the study airports.

As can be seen, the output of the study airports is the largest component of the pie chart. Nevertheless, it is apparent that there is a significant amount of economic activity related to off-airport aerospace manufacturing.

Figure 5: Comparison of Aviation Economic Activity in Kansas (in \$ billions)



Source: Wilbur Smith Associates.
Prepared: April 2010.

Furthermore, even though the economic contribution from aerial applicators and Kansas City International Airport is only a fraction of the impact from Kansas airports, each segment delivers in excess of \$1 billion in economic impact annually to the Kansas economy. When added all together, aviation accounts for approximately \$23 billion in economic impacts in Kansas.

Key study findings are as follows:

- ✈ More than 634,000 visitors use the study airports to travel to Kansas, with the majority coming through Kansas' commercial service airports.
- ✈ Of the 634,000 visitors who arrived in Kansas via the study airports, more than 282,000 arrived on general aviation aircraft.
- ✈ Approximately 47,650 Kansas residents owe their jobs, directly or indirectly, to the study airports. These employees represent 2.5 percent of all the estimated 1.9 million jobs in Kansas.⁸

⁸ U.S. Bureau of Labor Statistics

- ✈ The 47,650 jobs tied to the study airports have an estimated annual payroll of \$2.3 billion.
- ✈ The total economic impact identified in this analysis (\$10.4 billion) comprises 8.5 percent of Kansas' estimated gross domestic product of \$122.7 billion.⁹

As this economic impact analysis has shown, airports in Kansas are major economic catalysts for the state and for the communities they serve. In addition to economic benefits, airports provide communities with links to the national air transportation system, and they support many health, welfare, and safety services which improve the quality of life for all residents, businesses, and visitors.

⁹ U.S. Bureau of Economic Analysis

APPENDIX A: Economic Impact Tables

ECONOMIC IMPACT DATA TABLES

This section of the Kansas airports economic impact appendix contains tables providing details of the 2009 economic impact for each individual Kansas airport. The tables present information on the number of jobs, payroll, and economic output associated with each airport’s tenants, general aviation visitors, and, where appropriate, commercial service visitors. Summary tables provide a combined total for jobs, payroll and economic output. Additional details are provided for the estimates of visitor expenditures.

Table A-1: Estimates of General Aviation Itinerant Arrivals at Kansas Airports

<i>Associated City</i>	<i>Airport</i>	<i>Total GA Operations</i>	<i>GA Itinerant Percent</i>	<i>GA Itinerant Operations</i>	<i>GA Itinerant Arrivals</i>
Commercial Service Airports					
Dodge City	Dodge City Regional	18,000	33%	6,000	3,000
Garden City	Garden City Regional	11,604	89%	10,380	5,190
Great Bend	Great Bend Municipal	15,417	25%	3,830	1,915
Hays	Hays Regional	29,000	52%	15,000	7,500
Liberal	Liberal Mid-America Regional	39,000	56%	22,000	11,000
Manhattan	Manhattan Regional	24,686	53%	13,048	6,524
Salina	Salina Municipal	55,964	40%	22,141	11,071
Wichita	Wichita Mid-Continent	94,768	71%	67,380	33,690
Commercial Service Airports Total		288,439	55%	159,779	79,890
General Aviation Airports					
Abilene	Abilene Municipal	35,000	57%	20,000	10,000
Anthony	Anthony Municipal	6,200	48%	3,000	1,500
Anthony	Wilcox Field	80	13%	10	5
Ashland	Harold Krier Field	2,500	20%	500	250
Atchison	Amelia Earhart	16,000	31%	5,000	2,500
Atwood	Atwood-Rawlins County	12,000	33%	4,000	2,000
Augusta	Augusta Municipal	36,000	42%	15,000	7,500
Baldwin City	Vinland Valley Aerodrome	800	13%	100	50
Belleville	Belleville Municipal	7,600	39%	3,000	1,500
Beloit	Moritz Memorial	20,000	40%	8,000	4,000
Benton	Stearman Field	10,500	5%	500	250
Bird City	Bressler Field	1,600	6%	100	50
Burlington	Coffey County	20,000	40%	8,000	4,000
Chanute	Chanute-Martin Johnson	25,000	36%	9,000	4,500
Cimarron	Cimarron Municipal	3,500	14%	500	250
Clay Center	Clay Center Municipal	22,000	45%	10,000	5,000
Coffeyville	Coffeyville Municipal	5,500	27%	1,500	750
Colby	Shalz Field	5,500	36%	2,000	1,000
Coldwater	Comanche County	800	50%	400	200

Table A-1: Estimates of General Aviation Itinerant Arrivals at Kansas Airports (cont.)

<i>Associated City</i>	<i>Airport</i>	<i>Total GA Operations</i>	<i>GA Itinerant Percent</i>	<i>GA Itinerant Operations</i>	<i>GA Itinerant Arrivals</i>
Concordia	Blosser Municipal	14,150	43%	6,150	3,075
Dighton	Dighton	1,500	33%	500	250
El Dorado	Capt. Jack Thomas	13,200	27%	3,500	1,750
Elkhart	Elkhart-Morton County	6,000	43%	2,600	1,300
Ellinwood	Ellinwood Municipal	1,150	13%	150	75
Ellsworth	Ellsworth Municipal	20,000	30%	6,000	3,000
Emporia	Emporia Municipal	30,000	50%	15,000	7,500
Eureka	Eureka Municipal	4,000	25%	1,000	500
Fort Scott	Fort Scott Municipal	10,580	33%	3,500	1,750
Fredonia	Fredonia	3,950	16%	650	325
Gardner	Gardner Municipal	26,000	30%	7,800	3,900
Garnett	Garnett Municipal	11,000	45%	5,000	2,500
Goodland	Renner Field-Goodland Municipal	42,000	76%	32,000	16,000
Greensburg	Paul Windle Municipal	3,700	41%	1,500	750
Harper	Harper Municipal	3,100	35%	1,100	550
Herington	Herington Regional	11,600	52%	6,000	3,000
Hill City	Hill City Municipal	14,500	14%	2,000	1,000
Hillsboro	Alfred Schroeder Field	5,000	50%	2,500	1,250
Hoxie	Hoxie-Sheridan County	11,500	22%	2,500	1,250
Hugoton	Hugoton Municipal	10,000	20%	2,000	1,000
Hutchinson	Hutchinson Municipal	46,753	37%	17,267	8,634
Independence	Independence Municipal	9,150	44%	4,050	2,025
Ingalls	Ingalls Municipal	1,200	0%	0	0
Iola	Allen County	16,000	50%	8,000	4,000
Jetmore	Jetmore Municipal	600	17%	100	50
Johnson	Stanton County Municipal	23,000	38%	8,700	4,350
Junction City	Freeman Field	28,000	50%	14,000	7,000
Kingman	Kingman-Clyde Cessna Field	9,600	40%	3,800	1,900
Kinsley	Kinsley Municipal	2,300	35%	800	400
Lakin	Lakin	4,000	13%	500	250
Larned	Larned-Pawnee County	11,900	40%	4,800	2,400
Lawrence	Lawrence Municipal	30,450	55%	16,800	8,400
Leavenworth	Sherman Army Airfield	19,100	52%	9,900	4,950
Leoti	Mark Hoard Memorial	5,000	20%	1,000	500
Lincoln	Lincoln Municipal	14,000	29%	4,000	2,000
Lyndon	Pomona Lake	300	33%	100	50
Lyons	Lyons-Rice County Municipal	12,000	58%	7,000	3,500
Mankato	Mankato	5,400	56%	3,000	1,500
Marion	Marion Municipal	9,000	33%	3,000	1,500
Marysville	Marysville Municipal	8,000	44%	3,500	1,750
McPherson	McPherson	40,000	50%	20,000	10,000
Meade	Meade Municipal	5,000	40%	2,000	1,000
Medicine Lodge	Medicine Lodge	2,400	50%	1,200	600

Table A-1: Estimates of General Aviation Itinerant Arrivals at Kansas Airports (cont.)

<i>Associated City</i>	<i>Airport</i>	<i>Total GA Operations</i>	<i>GA Itinerant Percent</i>	<i>GA Itinerant Operations</i>	<i>GA Itinerant Arrivals</i>
Minneapolis	Minneapolis City-County	11,000	45%	5,000	2,500
Montezuma	Montezuma Municipal	1,000	10%	100	50
Moundridge	Moundridge Municipal	9,500	58%	5,500	2,750
Neodesha	Neodesha Municipal	1,200	33%	400	200
Ness City	Ness City Municipal	4,000	25%	1,000	500
Newton	Newton City/County	64,194	40%	25,675	12,838
Norton	Norton Municipal	5,000	20%	1,000	500
Oakley	Oakley Municipal	12,100	42%	5,100	2,550
Oberlin	Oberlin Municipal	7,000	40%	2,800	1,400
Olathe	Cedar Air Park	3,300	9%	300	150
Olathe	Johnson County Executive	70,107	65%	45,812	22,906
Olathe	New Century AirCenter	54,847	59%	32,150	16,075
Osage City	Osage City Municipal	2,700	19%	500	250
Osborne	Osborne Municipal	5,200	31%	1,600	800
Oswego	Oswego Municipal	600	30%	180	90
Ottawa	Ottawa Municipal	6,500	38%	2,500	1,250
Oxford	Oxford Municipal	2,500	40%	1,000	500
Paola	Miami County	9,900	37%	3,700	1,850
Parsons	Tri-City	5,500	55%	3,000	1,500
Phillipsburg	Phillipsburg Municipal	9,000	39%	3,500	1,750
Pittsburg	Atkinson Municipal	23,500	36%	8,500	4,250
Pleasanton	Gilmore	2,000	25%	500	250
Pratt	Pratt Regional	11,000	35%	3,800	1,900
Rose Hill	Cook Airfield	10,200	2%	200	100
Russell	Russell Municipal	12,000	50%	6,000	3,000
Sabetha	Sabetha Municipal	4,250	38%	1,600	800
Satanta	Satanta Municipal	3,000	17%	500	250
Scott City	Scott City Municipal	8,000	40%	3,200	1,600
Smith Center	Smith Center Municipal	4,000	38%	1,500	750
St. Francis	Cheyenne County Municipal	3,800	21%	800	400
Stafford	Stafford Municipal	1,600	25%	400	200
Sublette	Sublette Flying Club	600	50%	300	150
Syracuse	Syracuse-Hamilton County Municipal	5,000	28%	1,400	700
Topeka	Forbes Field	16,671	24%	4,076	2,038
Topeka	Philip Billard Municipal	60,757	60%	36,170	18,085
Tribune	Tribune Municipal	2,650	9%	250	125
Ulysses	Ulysses	21,100	28%	6,000	3,000
WaKeeney	Trego WaKeeney	1,900	47%	900	450
Wamego	Wamego Municipal	3,500	71%	2,500	1,250
Washington	Washington County Memorial	1,700	47%	800	400
Wellington	Wellington Municipal	18,000	56%	10,000	5,000
Wichita	Beech Factory	28,200	6%	1,700	850
Wichita	Cessna Aircraft Field	100	100%	100	50

Table A-1: Estimates of General Aviation Itinerant Arrivals at Kansas Airports (cont.)

<i>Associated City</i>	<i>Airport</i>	<i>Total GA Operations</i>	<i>GA Itinerant Percent</i>	<i>GA Itinerant Operations</i>	<i>GA Itinerant Arrivals</i>
Wichita	Col. James Jabara	37,000	51%	19,000	9,500
Wichita	Riverside	14,000	29%	4,000	2,000
Wichita	Westport	860	7%	60	30
Winfield/Arkansas City	Strother Field	6,500	46%	3,000	1,500
Yates Center	Yates Center	1,300	23%	300	150
Other General Aviation Airports *		23,940	35%	8,440	4,220
General Aviation Airports Total		1,388,939	43%	592,390	296,195
All Airports Total		1,677,378	45%	752,169	376,085

* Other General Aviation Airports includes Argonia Municipal, Bucklin, C.E. Grutzmacher Municipal, Caldwell Municipal, Cotton Wood Falls, Council Grove Municipal, Elk County, Fowler, Hiawatha Municipal, Hillside, Horton Municipal, Lucas, Norwich, Patty Field, Plainville Airpark, Rush County, Sedan City, Seneca Municipal, St. Marys Airpark, Stockton Municipal, Van Pak, and Westport Auxiliary. Source: Wilbur Smith Associates and FAA 5010 data. Prepared: April 2010.

Table A-2: Estimates of General Aviation Visitors at Kansas Airports

<i>Associated City</i>	<i>Airport</i>	<i>GA Itinerant Arrivals</i>	<i>Visitors per Arrival</i>	<i>Estimated GA Visitors</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	3,000	2.7	2,668
Garden City	Garden City Regional	5,190	2.7	4,615
Great Bend	Great Bend Municipal	1,915	2.8	1,205
Hays	Hays Regional	7,500	2.7	6,669
Liberal	Liberal Mid-America Regional	11,000	2.7	9,781
Manhattan	Manhattan Regional	6,524	2.7	5,801
Salina	Salina Municipal	11,071	2.7	9,844
Wichita	Wichita Mid-Continent	33,690	2.7	29,956
Commercial Service Airports Total		79,890		70,537
General Aviation Airports				
Abilene	Abilene Municipal	10,000	1.9	6,325
Anthony	Anthony Municipal	1,500	1.5	743
Anthony	Wilcox Field	5	1.5	2
Ashland	Harold Krier Field	250	1.5	124
Atchison	Amelia Earhart	2,500	1.9	1,581
Atwood	Atwood-Rawlins County	2,000	1.9	1,265
Augusta	Augusta Municipal	7,500	1.9	4,744
Baldwin City	Vinland Valley Aerodrome	50	1.5	25
Belleville	Belleville Municipal	1,500	1.5	743
Beloit	Moritz Memorial	4,000	1.5	1,980
Benton	Stearman Field	250	1.9	158
Bird City	Bressler Field	50	1.5	25
Burlington	Coffey County	4,000	1.9	2,530
Chanute	Chanute-Martin Johnson	4,500	1.9	2,846
Cimarron	Cimarron Municipal	250	1.5	124
Clay Center	Clay Center Municipal	5,000	1.5	2,475
Coffeyville	Coffeyville Municipal	750	1.9	474
Colby	Shalz Field	1,000	1.9	633
Coldwater	Comanche County	200	1.9	127
Concordia	Blosser Municipal	3,075	1.9	1,945
Dighton	Dighton	250	1.5	124
El Dorado	Capt. Jack Thomas	1,750	1.9	1,107
Elkhart	Elkhart-Morton County	1,300	1.9	822
Ellinwood	Ellinwood Municipal	75	1.5	37
Ellsworth	Ellsworth Municipal	3,000	1.9	1,898
Emporia	Emporia Municipal	7,500	1.9	4,744
Eureka	Eureka Municipal	500	1.5	248
Fort Scott	Fort Scott Municipal	1,750	1.9	1,107
Fredonia	Fredonia	325	1.5	161
Gardner	Gardner Municipal	3,900	1.5	1,931
Garnett	Garnett Municipal	2,500	1.5	1,238
Goodland	Renner Field-Goodland Municipal	16,000	2.7	14,227

Table A-2: Estimates of General Aviation Visitors at Kansas Airports (cont.)

<i>Associated City</i>	<i>Airport</i>	<i>GA Itinerant Arrivals</i>	<i>Visitors per Arrival</i>	<i>Estimated GA Visitors</i>
Greensburg	Paul Windle Municipal	750	1.5	371
Harper	Harper Municipal	550	1.5	272
Herington	Herington Regional	3,000	1.5	1,485
Hill City	Hill City Municipal	1,000	1.9	633
Hillsboro	Alfred Schroeder Field	1,250	1.5	619
Hoxie	Hoxie-Sheridan County	1,250	1.5	619
Hugoton	Hugoton Municipal	1,000	1.9	633
Hutchinson	Hutchinson Municipal	8,634	2.7	7,677
Independence	Independence Municipal	2,025	2.7	1,801
Ingalls	Ingalls Municipal	0	1.5	0
Iola	Allen County	4,000	2.7	3,557
Jetmore	Jetmore Municipal	50	1.5	25
Johnson	Stanton County Municipal	4,350	1.9	2,751
Junction City	Freeman Field	7,000	1.5	3,465
Kingman	Kingman-Clyde Cessna Field	1,900	1.9	1,202
Kinsley	Kinsley Municipal	400	1.5	198
Lakin	Lakin	250	1.5	124
Larned	Larned-Pawnee County	2,400	1.9	1,518
Lawrence	Lawrence Municipal	8,400	2.7	7,469
Leavenworth	Sherman Army Airfield	4,950	2.7	4,401
Leoti	Mark Hoard Memorial	500	1.5	248
Lincoln	Lincoln Municipal	2,000	1.5	990
Lyndon	Pomona Lake	50	1.5	25
Lyons	Lyons-Rice County Municipal	3,500	1.5	1,733
Mankato	Mankato	1,500	1.5	743
Marion	Marion Municipal	1,500	1.5	743
Marysville	Marysville Municipal	1,750	1.9	1,107
McPherson	McPherson	10,000	2.7	8,892
Meade	Meade Municipal	1,000	1.9	633
Medicine Lodge	Medicine Lodge	600	1.9	380
Minneapolis	Minneapolis City-County	2,500	1.5	1,238
Montezuma	Montezuma Municipal	50	1.5	25
Moundridge	Moundridge Municipal	2,750	1.9	1,739
Neodesha	Neodesha Municipal	200	1.5	99
Ness City	Ness City Municipal	500	1.5	248
Newton	Newton City/County	12,838	2.7	11,415
Norton	Norton Municipal	500	1.9	316
Oakley	Oakley Municipal	2,550	1.9	1,613
Oberlin	Oberlin Municipal	1,400	2.7	1,245
Olathe	Cedar Air Park	150	1.5	74
Olathe	Johnson County Executive	22,906	1.9	14,488
Olathe	New Century AirCenter	16,075	2.7	14,293
Osage City	Osage City Municipal	250	1.9	158

Table A-2: Estimates of General Aviation Visitors at Kansas Airports (cont.)

<i>Associated City</i>	<i>Airport</i>	<i>GA Itinerant Arrivals</i>	<i>Visitors per Arrival</i>	<i>Estimated GA Visitors</i>
Osborne	Osborne Municipal	800	1.5	396
Oswego	Oswego Municipal	90	1.5	45
Ottawa	Ottawa Municipal	1,250	1.9	791
Oxford	Oxford Municipal	500	1.5	248
Paola	Miami County	1,850	1.5	916
Parsons	Tri-City	1,500	1.9	949
Phillipsburg	Phillipsburg Municipal	1,750	1.9	1,107
Pittsburg	Atkinson Municipal	4,250	2.7	3,779
Pleasanton	Gilmore	250	1.5	124
Pratt	Pratt Regional	1,900	2.7	1,689
Rose Hill	Cook Airfield	100	1.5	50
Russell	Russell Municipal	3,000	1.9	1,898
Sabetha	Sabetha Municipal	800	1.5	396
Satanta	Satanta Municipal	250	1.5	124
Scott City	Scott City Municipal	1,600	1.9	1,012
Smith Center	Smith Center Municipal	750	1.9	474
St. Francis	Cheyenne County Municipal	400	1.5	198
Stafford	Stafford Municipal	200	1.5	99
Sublette	Sublette Flying Club	150	1.5	74
Syracuse	Syracuse-Hamilton County Municipal	700	1.9	443
Topeka	Forbes Field	2,038	2.7	1,812
Topeka	Philip Billard Municipal	18,085	2.7	16,081
Tribune	Tribune Municipal	125	1.9	79
Ulysses	Ulysses	3,000	1.9	1,898
WaKeeney	Trego WaKeeney	450	1.5	223
Wamego	Wamego Municipal	1,250	1.5	619
Washington	Washington County Memorial	400	1.5	198
Wellington	Wellington Municipal	5,000	2.7	4,446
Wichita	Beech Factory	850	1.9	538
Wichita	Cessna Aircraft Field	50	1.9	32
Wichita	Col. James Jabara	9,500	2.7	8,447
Wichita	Riverside	2,000	1.9	1,265
Wichita	Westport	30	1.5	15
Winfield/Arkansas City	Strother Field	1,500	2.7	1,334
Yates Center	Yates Center	150	1.5	74
Other General Aviation Airports *		4,220	1.5	2,089
General Aviation Airports Total		296,195	2.1	211,724
All Airports Total		376,085	2.3	282,261

* Other General Aviation Airports includes Argonia Municipal, Bucklin, C.E. Grutzmacher Municipal, Caldwell Municipal, Cotton Wood Falls, Council Grove Municipal, Elk County, Fowler, Hiawatha Municipal, Hillside, Horton Municipal, Lucas, Norwich, Patty Field, Plainville Airpark, Rush County, Sedan City, Seneca Municipal, St. Marys Airpark, Stockton Municipal, Van Pak, and Westport Auxiliary. Source: Wilbur Smith Associates. Prepared: April 2010.

Table A-3: Estimates of Annual Expenditures by General Aviation Visitors to Kansas Airports

<i>Associated City</i>	<i>Airport</i>	<i>Estimated GA Visitors</i>	<i>Avg. Visitor Spending per Trip</i>	<i>Annual GA Visitor Expenditures</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	2,668	\$85	\$226,700
Garden City	Garden City Regional	4,615	\$85	\$392,300
Great Bend	Great Bend Municipal	1,205	\$109	\$131,400
Hays	Hays Regional	6,669	\$85	\$566,800
Liberal	Liberal Mid-America Regional	9,781	\$85	\$831,400
Manhattan	Manhattan Regional	5,801	\$85	\$493,100
Salina	Salina Municipal	9,844	\$85	\$836,700
Wichita	Wichita Mid-Continent	29,956	\$85	\$2,546,300
Commercial Service Airports Total		70,537	\$85	\$6,024,700
General Aviation Airports				
Abilene	Abilene Municipal	6,325	\$45	\$284,600
Anthony	Anthony Municipal	743	\$23	\$16,700
Anthony	Wilcox Field	2	\$11	\$0
Ashland	Harold Krier Field	124	\$23	\$2,800
Atchison	Amelia Earhart	1,581	\$45	\$71,200
Atwood	Atwood-Rawlins County	1,265	\$45	\$56,900
Augusta	Augusta Municipal	4,744	\$45	\$213,500
Baldwin City	Vinland Valley Aerodrome	25	\$23	\$600
Belleville	Belleville Municipal	743	\$23	\$16,700
Beloit	Moritz Memorial	1,980	\$23	\$44,600
Benton	Stearman Field	158	\$45	\$7,100
Bird City	Bressler Field	25	\$11	\$300
Burlington	Coffey County	2,530	\$45	\$113,900
Chanute	Chanute-Martin Johnson	2,846	\$45	\$128,100
Cimarron	Cimarron Municipal	124	\$23	\$2,800
Clay Center	Clay Center Municipal	2,475	\$23	\$55,700
Coffeyville	Coffeyville Municipal	474	\$45	\$21,300
Colby	Shalz Field	633	\$45	\$28,500
Coldwater	Comanche County	127	\$45	\$5,700
Concordia	Blosser Municipal	1,945	\$45	\$87,500
Dighton	Dighton	124	\$23	\$2,800
El Dorado	Capt. Jack Thomas	1,107	\$45	\$49,800
Elkhart	Elkhart-Morton County	822	\$45	\$37,000
Ellinwood	Ellinwood Municipal	37	\$11	\$400
Ellsworth	Ellsworth Municipal	1,898	\$45	\$85,400
Emporia	Emporia Municipal	4,744	\$45	\$213,500
Eureka	Eureka Municipal	248	\$23	\$5,600
Fort Scott	Fort Scott Municipal	1,107	\$45	\$49,800
Fredonia	Fredonia	161	\$23	\$3,600
Gardner	Gardner Municipal	1,931	\$23	\$43,400
Garnett	Garnett Municipal	1,238	\$23	\$27,800
Goodland	Renner Field-Goodland Municipal	14,227	\$85	\$1,209,300

Table A-3: Estimates of Annual Expenditures by General Aviation Visitors to Kansas Airports (cont.)

<i>Associated City</i>	<i>Airport</i>	<i>Estimated GA Visitors</i>	<i>Avg. Visitor Spending per Trip</i>	<i>Annual GA Visitor Expenditures</i>
Greensburg	Paul Windle Municipal	371	\$23	\$8,400
Harper	Harper Municipal	272	\$11	\$3,100
Herington	Herington Regional	1,485	\$23	\$33,400
Hill City	Hill City Municipal	633	\$45	\$28,500
Hillsboro	Alfred Schroeder Field	619	\$23	\$13,900
Hoxie	Hoxie-Sheridan County	619	\$23	\$13,900
Hugoton	Hugoton Municipal	633	\$45	\$28,500
Hutchinson	Hutchinson Municipal	7,677	\$85	\$652,500
Independence	Independence Municipal	1,801	\$85	\$153,000
Ingalls	Ingalls Municipal	0	\$11	\$0
Iola	Allen County	3,557	\$85	\$302,300
Jetmore	Jetmore Municipal	25	\$23	\$600
Johnson	Stanton County Municipal	2,751	\$45	\$123,800
Junction City	Freeman Field	3,465	\$23	\$78,000
Kingman	Kingman-Clyde Cessna Field	1,202	\$45	\$54,100
Kinsley	Kinsley Municipal	198	\$23	\$4,500
Lakin	Lakin	124	\$23	\$2,800
Larned	Larned-Pawnee County	1,518	\$45	\$68,300
Lawrence	Lawrence Municipal	7,469	\$85	\$634,900
Leavenworth	Sherman Army Airfield	4,401	\$85	\$374,100
Leoti	Mark Hoard Memorial	248	\$23	\$5,600
Lincoln	Lincoln Municipal	990	\$23	\$22,300
Lyndon	Pomona Lake	25	\$23	\$600
Lyons	Lyons-Rice County Municipal	1,733	\$23	\$39,000
Mankato	Mankato	743	\$23	\$16,700
Marion	Marion Municipal	743	\$23	\$16,700
Marysville	Marysville Municipal	1,107	\$45	\$49,800
McPherson	McPherson	8,892	\$85	\$755,800
Meade	Meade Municipal	633	\$45	\$28,500
Medicine Lodge	Medicine Lodge	380	\$45	\$17,100
Minneapolis	Minneapolis City-County	1,238	\$23	\$27,800
Montezuma	Montezuma Municipal	25	\$23	\$600
Moundridge	Moundridge Municipal	1,739	\$45	\$78,300
Neodesha	Neodesha Municipal	99	\$11	\$1,100
Ness City	Ness City Municipal	248	\$23	\$5,600
Newton	Newton City/County	11,415	\$85	\$970,200
Norton	Norton Municipal	316	\$45	\$14,200
Oakley	Oakley Municipal	1,613	\$45	\$72,600
Oberlin	Oberlin Municipal	1,245	\$85	\$105,800
Olathe	Cedar Air Park	74	\$11	\$800
Olathe	Johnson County Executive	14,488	\$45	\$652,000
Olathe	New Century AirCenter	14,293	\$85	\$1,214,900
Osage City	Osage City Municipal	158	\$45	\$7,100
Osborne	Osborne Municipal	396	\$23	\$8,900

Table A-3: Estimates of Annual Expenditures by General Aviation Visitors to Kansas Airports (cont.)

<i>Associated City</i>	<i>Airport</i>	<i>Estimated GA Visitors</i>	<i>Avg. Visitor Spending per Trip</i>	<i>Annual GA Visitor Expenditures</i>
Oswego	Oswego Municipal	45	\$23	\$1,000
Ottawa	Ottawa Municipal	791	\$45	\$35,600
Oxford	Oxford Municipal	248	\$23	\$5,600
Paola	Miami County	916	\$23	\$20,600
Parsons	Tri-City	949	\$45	\$42,700
Phillipsburg	Phillipsburg Municipal	1,107	\$45	\$49,800
Pittsburg	Atkinson Municipal	3,779	\$85	\$321,200
Pleasanton	Gilmore	124	\$23	\$2,800
Pratt	Pratt Regional	1,689	\$85	\$143,600
Rose Hill	Cook Airfield	50	\$23	\$1,100
Russell	Russell Municipal	1,898	\$45	\$85,400
Sabetha	Sabetha Municipal	396	\$23	\$8,900
Satanta	Satanta Municipal	124	\$11	\$1,400
Scott City	Scott City Municipal	1,012	\$45	\$45,500
Smith Center	Smith Center Municipal	474	\$45	\$21,300
St. Francis	Cheyenne County Municipal	198	\$23	\$4,500
Stafford	Stafford Municipal	99	\$23	\$2,200
Sublette	Sublette Flying Club	74	\$23	\$1,700
Syracuse	Syracuse-Hamilton County Municipal	443	\$45	\$19,900
Topeka	Forbes Field	1,812	\$85	\$154,000
Topeka	Philip Billard Municipal	16,081	\$85	\$1,366,800
Tribune	Tribune Municipal	79	\$45	\$3,600
Ulysses	Ulysses	1,898	\$45	\$85,400
WaKeeney	Trego WaKeeney	223	\$23	\$5,000
Wamego	Wamego Municipal	619	\$23	\$13,900
Washington	Washington County Memorial	198	\$23	\$4,500
Wellington	Wellington Municipal	4,446	\$85	\$377,900
Wichita	Beech Factory	538	\$45	\$24,200
Wichita	Cessna Aircraft Field	32	\$45	\$1,400
Wichita	Col. James Jabara	8,447	\$85	\$718,000
Wichita	Riverside	1,265	\$45	\$56,900
Wichita	Westport	15	\$23	\$300
Winfield/Arkansas City	Strother Field	1,334	\$85	\$113,400
Yates Center	Yates Center	74	\$11	\$800
Other General Aviation Airports *		2,089	\$19	\$40,300
General Aviation Airports Total		211,724	\$63	13,358,700
All Airports Total		282,261	\$69	19,383,400

* Other General Aviation Airports includes Argonia Municipal, Bucklin, C.E. Grutzmacher Municipal, Caldwell Municipal, Cotton Wood Falls, Council Grove Municipal, Elk County, Fowler, Hiawatha Municipal, Hillside, Horton Municipal, Lucas, Norwich, Patty Field, Plainville Airpark, Rush County, Sedan City, Seneca Municipal, St. Marys Airpark, Stockton Municipal, Van Pak, and Westport Auxiliary. Source: Wilbur Smith Associates. Prepared: April 2010.

Table A-4: Estimates of Commercial Service Visitors at Kansas Airports

<i>Associated City</i>	<i>Airport</i>	<i>Enplaned Passengers</i>	<i>Percent Visitors</i>	<i>Commercial Service Visitors</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	4,800	55.0%	2,642
Garden City	Garden City Regional	10,500	51.9%	5,451
Great Bend	Great Bend Municipal	1,000	43.0%	430
Hays	Hays Regional	8,800	52.6%	4,627
Liberal	Liberal Mid-America Regional	7,000	52.3%	3,659
Manhattan	Manhattan Regional	15,573	55.5%	8,641
Salina	Salina Municipal	4,654	44.0%	2,049
Wichita	Wichita Mid-Continent	746,283	43.5%	324,335
Commercial Service Airports Total		798,610	44.1%	351,833

Source: Wilbur Smith Associates.
Prepared: April 2010.

Table A-5: Estimates of Commercial Service Visitor Expenditures at Kansas Airports

<i>Associated City</i>	<i>Airport</i>	<i>Commercial Service Visitors</i>	<i>Spending per Visitor</i>	<i>Visitor Expenditures</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	2,642	\$235	\$619,700
Garden City	Garden City Regional	5,451	\$158	\$863,000
Great Bend	Great Bend Municipal	430	\$325	\$139,600
Hays	Hays Regional	4,627	\$360	\$1,665,700
Liberal	Liberal Mid-America Regional	3,659	\$235	\$858,200
Manhattan	Manhattan Regional	8,641	\$388	\$3,348,600
Salina	Salina Municipal	2,049	\$106	\$217,200
Wichita	Wichita Mid-Continent	324,335	\$355	\$115,092,400
Commercial Service Airports Total		351,833	\$349	\$122,804,400

Source: Wilbur Smith Associates.
Prepared: April 2010.

Table A-6: Kansas On-Airport Employment

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round On-Airport Employment</i>	<i>Second Round On-Airport Employment</i>	<i>Total On- Airport Employment</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	66	75	141
Garden City	Garden City Regional	81	79	160
Great Bend	Great Bend Municipal	54	59	113
Hays	Hays Regional	61	69	130
Liberal	Liberal Mid-America Regional	77	84	161
Manhattan	Manhattan Regional	75	77	152
Salina	Salina Municipal	451	517	968
Wichita	Wichita Mid-Continent	9,314	10,607	19,921
Commercial Service Airports Total		10,179	11,567	21,746
General Aviation Airports				
Abilene	Abilene Municipal	4	6	10
Anthony	Anthony Municipal	2	1	3
Anthony	Wilcox Field	3	4	7
Ashland	Harold Krier Field	1	3	4
Atchison	Amelia Earhart	3	2	5
Atwood	Atwood-Rawlins County	13	15	28
Augusta	Augusta Municipal	54	62	116
Baldwin City	Vinland Valley Aerodrome	38	44	82
Belleville	Belleville Municipal	2	2	4
Beloit	Moritz Memorial	9	8	17
Benton	Stearman Field	10	12	22
Bird City	Bressler Field	5	6	11
Burlington	Coffey County	6	6	12
Chanute	Chanute-Martin Johnson	15	17	32
Cimarron	Cimarron Municipal	0	1	1
Clay Center	Clay Center Municipal	6	7	13
Coffeyville	Coffeyville Municipal	7	7	14
Colby	Shalz Field	9	10	19
Coldwater	Comanche County	1	0	1
Concordia	Blosser Municipal	3	3	6
Dighton	Dighton	0	0	0
El Dorado	Capt. Jack Thomas	6	6	12
Elkhart	Elkhart-Morton County	5	5	10
Ellinwood	Ellinwood Municipal	5	6	11
Ellsworth	Ellsworth Municipal	3	3	6
Emporia	Emporia Municipal	22	25	47
Eureka	Eureka Municipal	2	3	5
Fort Scott	Fort Scott Municipal	4	3	7
Fredonia	Fredonia	1	0	1
Gardner	Gardner Municipal	7	7	14
Garnett	Garnett Municipal	4	3	7
Goodland	Renner Field-Goodland Municipal	44	49	93
Greensburg	Paul Windle Municipal	1	0	1
Harper	Harper Municipal	3	2	5
Herington	Herington Regional	6	5	11
Hill City	Hill City Municipal	5	7	12

Table A-6: Kansas On-Airport Employment (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round On-Airport Employment</i>	<i>Second Round On-Airport Employment</i>	<i>Total On-Airport Employment</i>
Hillsboro	Alfred Schroeder Field	1	0	1
Hoxie	Hoxie-Sheridan County	6	7	13
Hugoton	Hugoton Municipal	7	8	15
Hutchinson	Hutchinson Municipal	81	71	152
Independence	Independence Municipal	941	1,121	2,062
Ingalls	Ingalls Municipal	3	4	7
Iola	Allen County	11	12	23
Jetmore	Jetmore Municipal	0	0	0
Johnson	Stanton County Municipal	17	21	38
Junction City	Freeman Field	41	48	89
Kingman	Kingman-Clyde Cessna Field	6	6	12
Kinsley	Kinsley Municipal	16	19	35
Lakin	Lakin	6	5	11
Larned	Larned-Pawnee County	5	4	9
Lawrence	Lawrence Municipal	37	42	79
Leavenworth	Sherman Army Airfield	10	10	20
Leoti	Mark Hoard Memorial	8	10	18
Lincoln	Lincoln Municipal	5	5	10
Lyndon	Pomona Lake	0	1	1
Lyons	Lyons-Rice County Municipal	13	14	27
Mankato	Mankato	2	3	5
Marion	Marion Municipal	1	2	3
Marysville	Marysville Municipal	3	3	6
McPherson	McPherson	7	7	14
Meade	Meade Municipal	3	3	6
Medicine Lodge	Medicine Lodge	0	0	0
Minneapolis	Minneapolis City-County	2	3	5
Montezuma	Montezuma Municipal	6	4	10
Moundridge	Moundridge Municipal	7	7	14
Neodesha	Neodesha Municipal	0	1	1
Ness City	Ness City Municipal	0	0	0
Newton	Newton City/County	189	225	414
Norton	Norton Municipal	5	5	10
Oakley	Oakley Municipal	11	13	24
Oberlin	Oberlin Municipal	4	5	9
Olathe	Cedar Air Park	5	5	10
Olathe	Johnson County Executive	164	196	360
Olathe	New Century AirCenter	214	232	446
Osage City	Osage City Municipal	20	25	45
Osborne	Osborne Municipal	5	4	9
Oswego	Oswego Municipal	1	1	2
Ottawa	Ottawa Municipal	4	5	9
Oxford	Oxford Municipal	1	2	3
Paola	Miami County	16	12	28
Parsons	Tri-City	8	10	18
Phillipsburg	Phillipsburg Municipal	4	3	7
Pittsburg	Atkinson Municipal	21	24	45
Pleasanton	Gilmore	2	2	4

Table A-6: Kansas On-Airport Employment (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round On-Airport Employment</i>	<i>Second Round On-Airport Employment</i>	<i>Total On-Airport Employment</i>
Pratt	Pratt Regional	21	22	43
Rose Hill	Cook Airfield	3	3	6
Russell	Russell Municipal	5	6	11
Sabetha	Sabetha Municipal	0	0	0
Satanta	Satanta Municipal	2	1	3
Scott City	Scott City Municipal	8	8	16
Smith Center	Smith Center Municipal	8	8	16
St. Francis	Cheyenne County Municipal	8	9	17
Stafford	Stafford Municipal	0	0	0
Sublette	Sublette Flying Club	1	2	3
Syracuse	Syracuse-Hamilton County Municipal	13	15	28
Topeka	Forbes Field	653	646	1,299
Topeka	Philip Billard Municipal	83	80	163
Tribune	Tribune Municipal	3	2	5
Ulysses	Ulysses	17	20	37
WaKeeney	Trego WaKeeney	2	4	6
Wamego	Wamego Municipal	0	1	1
Washington	Washington County Memorial	6	7	13
Wellington	Wellington Municipal	11	14	25
Wichita	Beech Factory	5,028	5,985	11,013
Wichita	Cessna Aircraft Field	1,378	1,642	3,020
Wichita	Col. James Jabara	330	389	719
Wichita	Riverside	3	3	6
Wichita	Westport	5	6	11
Winfield/Arkansas City	Strother Field	761	905	1,666
Yates Center	Yates Center	0	0	0
Other General Aviation Airports *		7	6	13
General Aviation Airports Total		10,584	12,334	22,918
All Airports Total		20,763	23,901	44,664

* Other General Aviation Airports includes Argonia Municipal, Bucklin, C.E. Grutzmacher Municipal, Caldwell Municipal, Cotton Wood Falls, Council Grove Municipal, Elk County, Fowler, Hiawatha Municipal, Hillside, Horton Municipal, Lucas, Norwich, Patty Field, Plainville Airpark, Rush County, Sedan City, Seneca Municipal, St. Marys Airpark, Stockton Municipal, Van Pak, and Westport Auxiliary. Source: Wilbur Smith Associates and IMPLAN multipliers. Prepared: April 2010.

Table A-7: Kansas General Aviation Visitor-Related Employment

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round GA Visitor Employment</i>	<i>Second Round GA Visitor Employment</i>	<i>Total GA Visitor Employment</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	5	1	6
Garden City	Garden City Regional	8	2	10
Great Bend	Great Bend Municipal	3	0	3
Hays	Hays Regional	11	4	15
Liberal	Liberal Mid-America Regional	17	5	22
Manhattan	Manhattan Regional	10	3	13
Salina	Salina Municipal	17	5	22
Wichita	Wichita Mid-Continent	51	16	67
Commercial Service Airports Total		122	36	158
General Aviation Airports				
Abilene	Abilene Municipal	6	2	8
Anthony	Anthony Municipal	0	0	0
Anthony	Wilcox Field	0	0	0
Ashland	Harold Krier Field	0	0	0
Atchison	Amelia Earhart	1	1	2
Atwood	AtwoodORawlins County	1	1	2
Augusta	Augusta Municipal	4	2	6
Baldwin City	Vinland Valley Aerodrome	0	0	0
Belleville	Belleville Municipal	0	0	0
Beloit	Moritz Memorial	1	0	1
Benton	Stearman Field	0	0	0
Bird City	Bressler Field	0	0	0
Burlington	Coffey County	2	1	3
Chanute	ChanuteOMartin Johnson	3	0	3
Cimarron	Cimarron Municipal	0	0	0
Clay Center	Clay Center Municipal	1	0	1
Coffeyville	Coffeyville Municipal	0	1	1
Colby	Shalz Field	1	0	1
Coldwater	Comanche County	0	0	0
Concordia	Blosser Municipal	2	0	2
Dighton	Dighton	0	0	0
El Dorado	Capt. Jack Thomas	1	0	1
Elkhart	ElkhartOMorton County	1	0	1
Ellinwood	Ellinwood Municipal	0	0	0
Ellsworth	Ellsworth Municipal	2	0	2
Emporia	Emporia Municipal	4	2	6
Eureka	Eureka Municipal	0	0	0
Fort Scott	Fort Scott Municipal	1	0	1
Fredonia	Fredonia	0	0	0
Gardner	Gardner Municipal	1	0	1
Garnett	Garnett Municipal	1	0	1
Goodland	Renner FieldOGoodland Municipal	24	8	32
Greensburg	Paul Windle Municipal	0	0	0
Harper	Harper Municipal	0	0	0
Herington	Herington Regional	1	0	1
Hill City	Hill City Municipal	1	0	1

Table A-7: Kansas General Aviation Visitor-Related Employment (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round GA Visitor Employment</i>	<i>Second Round GA Visitor Employment</i>	<i>Total GA Visitor Employment</i>
Hillsboro	Alfred Schroeder Field	0	0	0
Hoxie	HoxieOSheridan County	0	0	0
Hugoton	Hugoton Municipal	1	0	1
Hutchinson	Hutchinson Municipal	13	4	17
Independence	Independence Municipal	3	1	4
Ingalls	Ingalls Municipal	0	0	0
Iola	Allen County	6	2	8
Jetmore	Jetmore Municipal	0	0	0
Johnson	Stanton County Municipal	2	1	3
Junction City	Freeman Field	2	0	2
Kingman	KingmanOClyde Cessna Field	1	0	1
Kinsley	Kinsley Municipal	0	0	0
Lakin	Lakin	0	0	0
Larned	LarnedOPawnee County	1	1	2
Lawrence	Lawrence Municipal	13	4	17
Leavenworth	Sherman Army Airfield	7	3	10
Leoti	Mark Hoard Memorial	0	0	0
Lincoln	Lincoln Municipal	0	1	1
Lyndon	Pomona Lake	0	0	0
Lyons	LyonsORice County Municipal	1	0	1
Mankato	Mankato	0	0	0
Marion	Marion Municipal	0	0	0
Marysville	Marysville Municipal	1	0	1
McPherson	McPherson	15	5	20
Meade	Meade Municipal	1	0	1
Medicine Lodge	Medicine Lodge	0	0	0
Minneapolis	Minneapolis CityOCounty	1	0	1
Montezuma	Montezuma Municipal	0	0	0
Moundridge	Moundridge Municipal	2	0	2
Neodesha	Neodesha Municipal	0	0	0
Ness City	Ness City Municipal	0	0	0
Newton	Newton City/County	19	7	26
Norton	Norton Municipal	0	0	0
Oakley	Oakley Municipal	1	1	2
Oberlin	Oberlin Municipal	2	1	3
Olathe	Cedar Air Park	0	0	0
Olathe	Johnson County Executive	13	4	17
Olathe	New Century AirCenter	24	8	32
Osage City	Osage City Municipal	0	0	0
Osborne	Osborne Municipal	0	0	0
Oswego	Oswego Municipal	0	0	0
Ottawa	Ottawa Municipal	1	0	1
Oxford	Oxford Municipal	0	0	0
Paola	Miami County	0	1	1
Parsons	TriOCity	1	0	1
Phillipsburg	Phillipsburg Municipal	1	0	1
Pittsburg	Atkinson Municipal	6	3	9
Pleasanton	Gilmore	0	0	0

Table A-7: Kansas General Aviation Visitor-Related Employment (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round GA Visitor Employment</i>	<i>Second Round GA Visitor Employment</i>	<i>Total GA Visitor Employment</i>
Pratt	Pratt Regional	3	1	4
Rose Hill	Cook Airfield	0	0	0
Russell	Russell Municipal	2	0	2
Sabetha	Sabetha Municipal	0	0	0
Satanta	Satanta Municipal	0	0	0
Scott City	Scott City Municipal	1	0	1
Smith Center	Smith Center Municipal	0	1	1
St. Francis	Cheyenne County Municipal	0	0	0
Stafford	Stafford Municipal	0	0	0
Sublette	Sublette Flying Club	0	0	0
Syracuse	SyracuseOHamilton County Municipal	0	1	1
Topeka	Forbes Field	3	1	4
Topeka	Philip Billard Municipal	27	9	36
Tribune	Tribune Municipal	0	0	0
Ulysses	Ulysses	2	0	2
WaKeeney	Trego WaKeeney	0	0	0
Wamego	Wamego Municipal	0	0	0
Washington	Washington County Memorial	0	0	0
Wellington	Wellington Municipal	8	2	10
Wichita	Beech Factory	0	1	1
Wichita	Cessna Aircraft Field	0	0	0
Wichita	Col. James Jabara	14	5	19
Wichita	Riverside	1	1	2
Wichita	Westport	0	0	0
Winfield/Arkansas City	Strother Field	2	1	3
Yates Center	Yates Center	0	0	0
Other General Aviation Airports *		0	0	0
General Aviation Airports Total		260	88	348
All Airports Total		382	124	506

* Other General Aviation Airports includes Argonia Municipal, Bucklin, C.E. Grutzmacher Municipal, Caldwell Municipal, Cotton Wood Falls, Council Grove Municipal, Elk County, Fowler, Hiawatha Municipal, Hillside, Horton Municipal, Lucas, Norwich, Patty Field, Plainville Airpark, Rush County, Sedan City, Seneca Municipal, St. Marys Airpark, Stockton Municipal, Van Pak, and Westport Auxiliary. Source: Wilbur Smith Associates and IMPLAN multipliers. Prepared: April 2010.

Table A-8: Kansas Commercial Service Visitor-Related Employment

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round Commercial Service Visitor Employment</i>	<i>Second Round Commercial Service Visitor Employment</i>	<i>Total Commercial Service Visitor Employment</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	8	4	12
Garden City	Garden City Regional	11	6	17
Great Bend	Great Bend Municipal	2	1	3
Hays	Hays Regional	22	12	34
Liberal	Liberal Mid-America Regional	11	6	17
Manhattan	Manhattan Regional	44	24	68
Salina	Salina Municipal	3	2	5
Wichita	Wichita Mid-Continent	1,515	810	2,325
Commercial Service Airports Total		1,616	865	2,481

Source: Wilbur Smith Associates and IMPLAN multipliers.
 Prepared: April 2010.

Table A-9: Kansas Airport's Total Employment

<i>Associated City</i>	<i>Airport Name</i>	<i>Total First Round Employment</i>	<i>Total Second Round Employment</i>	<i>Total Employment</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	79	80	159
Garden City	Garden City Regional	100	87	187
Great Bend	Great Bend Municipal	59	60	119
Hays	Hays Regional	94	85	179
Liberal	Liberal Mid-America Regional	105	95	200
Manhattan	Manhattan Regional	129	104	233
Salina	Salina Municipal	471	524	995
Wichita	Wichita Mid-Continent	10,880	11,433	22,313
Commercial Service Airports Total		11,917	12,468	24,385
General Aviation Airports				
Abilene	Abilene Municipal	10	8	18
Anthony	Anthony Municipal	2	1	3
Anthony	Wilcox Field	3	4	7
Ashland	Harold Krier Field	1	3	4
Atchison	Amelia Earhart	4	3	7
Atwood	Atwood-Rawlins County	14	16	30
Augusta	Augusta Municipal	58	64	122
Baldwin City	Vinland Valley Aerodrome	38	44	82
Belleville	Belleville Municipal	2	2	4
Beloit	Moritz Memorial	10	8	18
Benton	Stearman Field	10	12	22
Bird City	Bressler Field	5	6	11
Burlington	Coffey County	8	7	15
Chanute	Chanute-Martin Johnson	18	17	35
Cimarron	Cimarron Municipal	0	1	1
Clay Center	Clay Center Municipal	7	7	14
Coffeyville	Coffeyville Municipal	7	8	15
Colby	Shalz Field	10	10	20
Coldwater	Comanche County	1	0	1
Concordia	Blosser Municipal	5	3	8
Dighton	Dighton	0	0	0
El Dorado	Capt. Jack Thomas	7	6	13
Elkhart	Elkhart-Morton County	6	5	11
Ellinwood	Ellinwood Municipal	5	6	11
Ellsworth	Ellsworth Municipal	5	3	8
Emporia	Emporia Municipal	26	27	53
Eureka	Eureka Municipal	2	3	5
Fort Scott	Fort Scott Municipal	5	3	8
Fredonia	Fredonia	1	0	1
Gardner	Gardner Municipal	8	7	15
Garnett	Garnett Municipal	5	3	8
Goodland	Renner Field-Goodland Municipal	68	57	125
Greensburg	Paul Windle Municipal	1	0	1
Harper	Harper Municipal	3	2	5
Herington	Herington Regional	7	5	12
Hill City	Hill City Municipal	6	7	13

Table A-9: Kansas Airport's Total Employment (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>Total First Round Employment</i>	<i>Total Second Round Employment</i>	<i>Total Employment</i>
Hillsboro	Alfred Schroeder Field	1	0	1
Hoxie	Hoxie-Sheridan County	6	7	13
Hugoton	Hugoton Municipal	8	8	16
Hutchinson	Hutchinson Municipal	94	75	169
Independence	Independence Municipal	944	1,122	2,066
Ingalls	Ingalls Municipal	3	4	7
Iola	Allen County	17	14	31
Jetmore	Jetmore Municipal	0	0	0
Johnson	Stanton County Municipal	19	22	41
Junction City	Freeman Field	43	48	91
Kingman	Kingman-Clyde Cessna Field	7	6	13
Kinsley	Kinsley Municipal	16	19	35
Lakin	Lakin	6	5	11
Larned	Larned-Pawnee County	6	5	11
Lawrence	Lawrence Municipal	50	46	96
Leavenworth	Sherman Army Airfield	17	13	30
Leoti	Mark Hoard Memorial	8	10	18
Lincoln	Lincoln Municipal	5	6	11
Lyndon	Pomona Lake	0	1	1
Lyons	Lyons-Rice County Municipal	14	14	28
Mankato	Mankato	2	3	5
Marion	Marion Municipal	1	2	3
Marysville	Marysville Municipal	4	3	7
McPherson	McPherson	22	12	34
Meade	Meade Municipal	4	3	7
Medicine Lodge	Medicine Lodge	0	0	0
Minneapolis	Minneapolis City-County	3	3	6
Montezuma	Montezuma Municipal	6	4	10
Moundridge	Moundridge Municipal	9	7	16
Neodesha	Neodesha Municipal	0	1	1
Ness City	Ness City Municipal	0	0	0
Newton	Newton City/County	208	232	440
Norton	Norton Municipal	5	5	10
Oakley	Oakley Municipal	12	14	26
Oberlin	Oberlin Municipal	6	6	12
Olathe	Cedar Air Park	5	5	10
Olathe	Johnson County Executive	177	200	377
Olathe	New Century AirCenter	238	240	478
Osage City	Osage City Municipal	20	25	45
Osborne	Osborne Municipal	5	4	9
Oswego	Oswego Municipal	1	1	2
Ottawa	Ottawa Municipal	5	5	10
Oxford	Oxford Municipal	1	2	3
Paola	Miami County	16	13	29
Parsons	Tri-City	9	10	19
Phillipsburg	Phillipsburg Municipal	5	3	8
Pittsburg	Atkinson Municipal	27	27	54
Pleasanton	Gilmore	2	2	4

Table A-9: Kansas Airport's Total Employment (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>Total First Round Employment</i>	<i>Total Second Round Employment</i>	<i>Total Employment</i>
Pratt	Pratt Regional	24	23	47
Rose Hill	Cook Airfield	3	3	6
Russell	Russell Municipal	7	6	13
Sabetha	Sabetha Municipal	0	0	0
Satanta	Satanta Municipal	2	1	3
Scott City	Scott City Municipal	9	8	17
Smith Center	Smith Center Municipal	8	9	17
St. Francis	Cheyenne County Municipal	8	9	17
Stafford	Stafford Municipal	0	0	0
Sublette	Sublette Flying Club	1	2	3
Syracuse	Syracuse-Hamilton County Municipal	13	16	29
Topeka	Forbes Field	656	647	1,303
Topeka	Philip Billard Municipal	110	89	199
Tribune	Tribune Municipal	3	2	5
Ulysses	Ulysses	19	20	39
WaKeeney	Trego WaKeeney	2	4	6
Wamego	Wamego Municipal	0	1	1
Washington	Washington County Memorial	6	7	13
Wellington	Wellington Municipal	19	16	35
Wichita	Beech Factory	5,028	5,986	11,014
Wichita	Cessna Aircraft Field	1,378	1,642	3,020
Wichita	Col. James Jabara	344	394	738
Wichita	Riverside	4	4	8
Wichita	Westport	5	6	11
Winfield/Arkansas City	Strother Field	763	906	1,669
Yates Center	Yates Center	0	0	0
Other General Aviation Airports *		7	6	13
General Aviation Airports Total		10,844	12,422	23,266
All Airports Total		22,761	24,890	47,651

* Other General Aviation Airports includes Argonia Municipal, Bucklin, C.E. Grutzmacher Municipal, Caldwell Municipal, Cotton Wood Falls, Council Grove Municipal, Elk County, Fowler, Hiawatha Municipal, Hillside, Horton Municipal, Lucas, Norwich, Patty Field, Plainville Airpark, Rush County, Sedan City, Seneca Municipal, St. Marys Airpark, Stockton Municipal, Van Pak, and Westport Auxiliary. Source: Wilbur Smith Associates and IMPLAN multipliers. Prepared: April 2010.

Table A-10: Kansas On-Airport Payroll

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round On-Airport Payroll</i>	<i>Second Round On-Airport Payroll</i>	<i>Total On-Airport Payroll</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	\$2,730,800	\$2,118,200	\$4,849,000
Garden City	Garden City Regional	\$2,974,100	\$2,173,700	\$5,147,800
Great Bend	Great Bend Municipal	\$2,149,000	\$2,181,700	\$4,330,700
Hays	Hays Regional	\$2,587,900	\$2,066,100	\$4,654,000
Liberal	Liberal Mid-America Regional	\$2,971,800	\$2,247,100	\$5,218,900
Manhattan	Manhattan Regional	\$2,677,400	\$1,980,100	\$4,657,500
Salina	Salina Municipal	\$21,587,200	\$17,394,700	\$38,981,900
Wichita	Wichita Mid-Continent	\$627,020,400	\$515,552,700	\$1,142,573,100
Commercial Service Airports Total		\$664,698,600	\$545,714,300	\$1,210,412,900
General Aviation Airports				
Abilene	Abilene Municipal	\$98,900	\$80,700	\$179,600
Anthony	Anthony Municipal	\$49,400	\$32,300	\$81,700
Anthony	Wilcox Field	\$25,400	\$21,000	\$46,400
Ashland	Harold Krier Field	\$66,200	\$52,200	\$118,400
Atchison	Amelia Earhart	\$68,900	\$49,100	\$118,000
Atwood	Atwood-Rawlins County	\$438,900	\$339,500	\$778,400
Augusta	Augusta Municipal	\$2,689,100	\$2,224,800	\$4,913,900
Baldwin City	Vinland Valley Aerodrome	\$1,610,400	\$1,348,400	\$2,958,800
Belleville	Belleville Municipal	\$58,100	\$42,400	\$100,500
Beloit	Moritz Memorial	\$304,900	\$244,300	\$549,200
Benton	Stearman Field	\$303,900	\$211,200	\$515,100
Bird City	Bressler Field	\$129,200	\$98,100	\$227,300
Burlington	Coffey County	\$217,300	\$144,300	\$361,600
Chanute	Chanute-Martin Johnson	\$562,600	\$434,300	\$996,900
Cimarron	Cimarron Municipal	\$12,900	\$8,400	\$21,300
Clay Center	Clay Center Municipal	\$147,400	\$108,500	\$255,900
Coffeyville	Coffeyville Municipal	\$118,700	\$87,800	\$206,500
Colby	Shalz Field	\$324,600	\$253,400	\$578,000
Coldwater	Comanche County	\$9,500	\$6,300	\$15,800
Concordia	Blosser Municipal	\$45,700	\$33,800	\$79,500
Dighton	Dighton	\$17,000	\$11,300	\$28,300
El Dorado	Capt. Jack Thomas	\$257,300	\$207,700	\$465,000
Elkhart	Elkhart-Morton County	\$175,400	\$134,200	\$309,600
Ellinwood	Ellinwood Municipal	\$234,900	\$188,600	\$423,500
Ellsworth	Ellsworth Municipal	\$108,900	\$80,000	\$188,900
Emporia	Emporia Municipal	\$1,116,900	\$908,400	\$2,025,300
Eureka	Eureka Municipal	\$106,000	\$79,500	\$185,500
Fort Scott	Fort Scott Municipal	\$101,600	\$67,000	\$168,600
Fredonia	Fredonia	\$1,300	\$800	\$2,100
Gardner	Gardner Municipal	\$144,600	\$110,400	\$255,000
Garnett	Garnett Municipal	\$156,100	\$103,700	\$259,800
Goodland	Renner Field-Goodland Municipal	\$1,660,400	\$1,297,000	\$2,957,400
Greensburg	Paul Windle Municipal	\$28,100	\$22,800	\$50,900
Harper	Harper Municipal	\$95,400	\$75,400	\$170,800
Herington	Herington Regional	\$139,400	\$88,900	\$228,300
Hill City	Hill City Municipal	\$160,400	\$114,300	\$274,700
Hillsboro	Alfred Schroeder Field	\$19,800	\$12,900	\$32,700

Table A-10: Kansas On-Airport Payroll (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round On-Airport Payroll</i>	<i>Second Round On-Airport Payroll</i>	<i>Total On-Airport Payroll</i>
Hoxie	Hoxie-Sheridan County	\$247,300	\$196,600	\$443,900
Hugoton	Hugoton Municipal	\$271,700	\$200,300	\$472,000
Hutchinson	Hutchinson Municipal	\$2,761,400	\$2,162,800	\$4,924,200
Independence	Independence Municipal	\$47,977,600	\$40,152,200	\$88,129,800
Ingalls	Ingalls Municipal	\$153,500	\$128,100	\$281,600
Iola	Allen County	\$302,200	\$218,500	\$520,700
Jetmore	Jetmore Municipal	\$1,500	\$1,000	\$2,500
Johnson	Stanton County Municipal	\$533,200	\$388,500	\$921,700
Junction City	Freeman Field	\$1,805,100	\$1,478,900	\$3,284,000
Kingman	Kingman-Clyde Cessna Field	\$111,500	\$82,800	\$194,300
Kinsley	Kinsley Municipal	\$792,600	\$629,100	\$1,421,700
Lakin	Lakin	\$259,100	\$180,500	\$439,600
Larned	Larned-Pawnee County	\$160,900	\$122,900	\$283,800
Lawrence	Lawrence Municipal	\$1,734,900	\$1,423,000	\$3,157,900
Leavenworth	Sherman Army Airfield	\$435,100	\$288,900	\$724,000
Leoti	Mark Hoard Memorial	\$350,600	\$281,700	\$632,300
Lincoln	Lincoln Municipal	\$179,900	\$144,000	\$323,900
Lyndon	Pomona Lake	\$15,700	\$10,300	\$26,000
Lyons	Lyons-Rice County Municipal	\$391,700	\$294,300	\$686,000
Mankato	Mankato	\$89,400	\$67,600	\$157,000
Marion	Marion Municipal	\$28,800	\$22,900	\$51,700
Marysville	Marysville Municipal	\$168,400	\$134,700	\$303,100
McPherson	McPherson	\$215,000	\$164,200	\$379,200
Meade	Meade Municipal	\$91,700	\$68,700	\$160,400
Medicine Lodge	Medicine Lodge	\$10,100	\$6,700	\$16,800
Minneapolis	Minneapolis City-County	\$56,200	\$45,500	\$101,700
Montezuma	Montezuma Municipal	\$116,100	\$84,900	\$201,000
Moundridge	Moundridge Municipal	\$293,000	\$241,300	\$534,300
Neodesha	Neodesha Municipal	\$16,400	\$10,700	\$27,100
Ness City	Ness City Municipal	\$3,300	\$2,100	\$5,400
Newton	Newton City/County	\$8,815,600	\$7,283,500	\$16,099,100
Norton	Norton Municipal	\$162,100	\$128,000	\$290,100
Oakley	Oakley Municipal	\$293,400	\$218,100	\$511,500
Oberlin	Oberlin Municipal	\$65,800	\$45,300	\$111,100
Olathe	Cedar Air Park	\$49,900	\$40,400	\$90,300
Olathe	Johnson County Executive	\$5,254,800	\$4,345,900	\$9,600,700
Olathe	New Century AirCenter	\$13,677,300	\$10,462,700	\$24,140,000
Osage City	Osage City Municipal	\$1,132,400	\$940,200	\$2,072,600
Osborne	Osborne Municipal	\$82,600	\$59,700	\$142,300
Oswego	Oswego Municipal	\$8,100	\$5,300	\$13,400
Ottawa	Ottawa Municipal	\$121,100	\$89,400	\$210,500
Oxford	Oxford Municipal	\$38,000	\$24,900	\$62,900
Paola	Miami County	\$526,700	\$412,800	\$939,500
Parsons	Tri-City	\$223,100	\$157,700	\$380,800
Phillipsburg	Phillipsburg Municipal	\$128,900	\$101,700	\$230,600
Pittsburg	Atkinson Municipal	\$857,000	\$668,000	\$1,525,000
Pleasanton	Gilmore	\$53,900	\$35,300	\$89,200
Pratt	Pratt Regional	\$658,400	\$479,000	\$1,137,400
Rose Hill	Cook Airfield	\$64,200	\$51,000	\$115,200

Table A-10: Kansas On-Airport Payroll (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round On-Airport Payroll</i>	<i>Second Round On-Airport Payroll</i>	<i>Total On-Airport Payroll</i>
Russell	Russell Municipal	\$165,800	\$121,200	\$287,000
Sabetha	Sabetha Municipal	\$10,000	\$6,700	\$16,700
Satanta	Satanta Municipal	\$66,100	\$52,000	\$118,100
Scott City	Scott City Municipal	\$215,700	\$150,100	\$365,800
Smith Center	Smith Center Municipal	\$265,700	\$191,400	\$457,100
St. Francis	Cheyenne County Municipal	\$176,000	\$127,900	\$303,900
Stafford	Stafford Municipal	\$11,000	\$7,300	\$18,300
Sublette	Sublette Flying Club Syracuse-Hamilton County Municipal	\$23,500	\$17,500	\$41,000
Syracuse		\$409,200	\$302,300	\$711,500
Topeka	Forbes Field	\$32,225,200	\$21,812,000	\$54,037,200
Topeka	Philip Billard Municipal	\$3,474,800	\$2,462,500	\$5,937,300
Tribune	Tribune Municipal	\$87,700	\$61,900	\$149,600
Ulysses	Ulysses	\$632,900	\$502,600	\$1,135,500
WaKeeney	Trego WaKeeney	\$67,700	\$53,100	\$120,800
Wamego	Wamego Municipal	\$13,300	\$8,700	\$22,000
Washington	Washington County Memorial	\$158,800	\$116,000	\$274,800
Wellington	Wellington Municipal	\$436,200	\$350,500	\$786,700
Wichita	Beech Factory	\$265,032,000	\$221,951,200	\$486,983,200
Wichita	Cessna Aircraft Field	\$72,698,800	\$60,915,000	\$133,613,800
Wichita	Col. James Jabara	\$18,194,000	\$14,944,800	\$33,138,800
Wichita	Riverside	\$85,000	\$56,700	\$141,700
Wichita	Westport	\$169,700	\$140,200	\$309,900
Winfield/Arkansas City	Strother Field	\$85,391,300	\$71,520,400	\$156,911,700
Yates Center	Yates Center	\$0	\$0	\$0
Other General Aviation Airports *		\$16,200	\$10,600	\$26,800
General Aviation Airports Total		\$583,619,300	\$479,988,900	\$1,063,608,200
All Airports Total		\$1,248,317,900	\$ 1,025,703,200	\$2,274,021,100

* Other General Aviation Airports includes Argonia Municipal, Bucklin, C.E. Grutzmacher Municipal, Caldwell Municipal, Cotton Wood Falls, Council Grove Municipal, Elk County, Fowler, Hiawatha Municipal, Hillside, Horton Municipal, Lucas, Norwich, Patty Field, Plainville Airpark, Rush County, Sedan City, Seneca Municipal, St. Marys Airpark, Stockton Municipal, Van Pak, and Westport Auxiliary. Source: Wilbur Smith Associates and IMPLAN multipliers. Prepared: April 2010.

Table A-11: Kansas General Aviation Visitor-Related Payroll

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round GA Visitor Payroll</i>	<i>Second Round GA Visitor Payroll</i>	<i>Total GA Visitor Payroll</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	\$91,600	\$51,600	\$143,200
Garden City	Garden City Regional	\$158,400	\$89,400	\$247,800
Great Bend	Great Bend Municipal	\$53,100	\$29,900	\$83,000
Hays	Hays Regional	\$228,900	\$129,100	\$358,000
Liberal	Liberal Mid-America Regional	\$335,800	\$189,300	\$525,100
Manhattan	Manhattan Regional	\$199,200	\$112,300	\$311,500
Salina	Salina Municipal	\$337,900	\$190,600	\$528,500
Wichita	Wichita Mid-Continent	\$1,028,400	\$580,000	\$1,608,400
Commercial Service Airports Total		\$2,433,300	\$1,372,200	\$3,805,500
General Aviation Airports				
Abilene	Abilene Municipal	\$115,000	\$64,800	\$179,800
Anthony	Anthony Municipal	\$6,700	\$3,900	\$10,600
Anthony	Wilcox Field	\$0	\$0	\$0
Ashland	Harold Krier Field	\$1,100	\$700	\$1,800
Atchison	Amelia Earhart	\$28,700	\$16,200	\$44,900
Atwood	Atwood-Rawlins County	\$23,000	\$13,000	\$36,000
Augusta	Augusta Municipal	\$86,200	\$48,600	\$134,800
Baldwin City	Vinland Valley Aerodrome	\$200	\$200	\$400
Belleville	Belleville Municipal	\$6,700	\$3,900	\$10,600
Beloit	Moritz Memorial	\$18,000	\$10,100	\$28,100
Benton	Stearman Field	\$2,900	\$1,600	\$4,500
Bird City	Bressler Field	\$100	\$100	\$200
Burlington	Coffey County	\$46,000	\$25,900	\$71,900
Chanute	Chanute-Martin Johnson	\$51,700	\$29,200	\$80,900
Cimarron	Cimarron Municipal	\$1,100	\$700	\$1,800
Clay Center	Clay Center Municipal	\$22,500	\$12,700	\$35,200
Coffeyville	Coffeyville Municipal	\$8,600	\$4,900	\$13,500
Colby	Shalz Field	\$11,500	\$6,500	\$18,000
Coldwater	Comanche County	\$2,300	\$1,300	\$3,600
Concordia	Blosser Municipal	\$35,300	\$20,000	\$55,300
Dighton	Dighton	\$1,100	\$700	\$1,800
El Dorado	Capt. Jack Thomas	\$20,100	\$11,400	\$31,500
Elkhart	Elkhart-Morton County	\$14,900	\$8,500	\$23,400
Ellinwood	Ellinwood Municipal	\$200	\$100	\$300
Ellsworth	Ellsworth Municipal	\$34,500	\$19,400	\$53,900
Emporia	Emporia Municipal	\$86,200	\$48,600	\$134,800
Eureka	Eureka Municipal	\$2,200	\$1,300	\$3,500
Fort Scott	Fort Scott Municipal	\$20,100	\$11,400	\$31,500
Fredonia	Fredonia	\$1,500	\$800	\$2,300
Gardner	Gardner Municipal	\$17,500	\$9,900	\$27,400
Garnett	Garnett Municipal	\$11,200	\$6,400	\$17,600
Goodland	Renner Field-Goodland Municipal	\$488,400	\$275,400	\$763,800
Greensburg	Paul Windle Municipal	\$3,400	\$1,900	\$5,300
Harper	Harper Municipal	\$1,200	\$700	\$1,900
Herington	Herington Regional	\$13,500	\$7,600	\$21,100
Hill City	Hill City Municipal	\$11,500	\$6,500	\$18,000

Table A-11: Kansas General Aviation Visitor-Related Payroll (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round GA Visitor Payroll</i>	<i>Second Round GA Visitor Payroll</i>	<i>Total GA Visitor Payroll</i>
Hillsboro	Alfred Schroeder Field	\$5,600	\$3,200	\$8,800
Hoxie	Hoxie-Sheridan County	\$5,600	\$3,200	\$8,800
Hugoton	Hugoton Municipal	\$11,500	\$6,500	\$18,000
Hutchinson	Hutchinson Municipal	\$263,500	\$148,700	\$412,200
Independence	Independence Municipal	\$61,800	\$34,900	\$96,700
Ingalls	Ingalls Municipal	\$0	\$0	\$0
Iola	Allen County	\$122,100	\$68,900	\$191,000
Jetmore	Jetmore Municipal	\$200	\$200	\$400
Johnson	Stanton County Municipal	\$50,000	\$28,200	\$78,200
Junction City	Freeman Field	\$31,500	\$17,700	\$49,200
Kingman	Kingman-Clyde Cessna Field	\$21,800	\$12,400	\$34,200
Kinsley	Kinsley Municipal	\$1,800	\$1,000	\$2,800
Lakin	Lakin	\$1,100	\$700	\$1,800
Larned	Larned-Pawnee County	\$27,600	\$15,500	\$43,100
Lawrence	Lawrence Municipal	\$256,400	\$144,600	\$401,000
Leavenworth	Sherman Army Airfield	\$151,100	\$85,200	\$236,300
Leoti	Mark Hoard Memorial	\$2,200	\$1,300	\$3,500
Lincoln	Lincoln Municipal	\$9,000	\$5,100	\$14,100
Lyndon	Pomona Lake	\$200	\$200	\$400
Lyons	Lyons-Rice County Municipal	\$15,700	\$8,900	\$24,600
Mankato	Mankato	\$6,700	\$3,900	\$10,600
Marion	Marion Municipal	\$6,700	\$3,900	\$10,600
Marysville	Marysville Municipal	\$20,100	\$11,400	\$31,500
McPherson	McPherson	\$305,300	\$172,100	\$477,400
Meade	Meade Municipal	\$11,500	\$6,500	\$18,000
Medicine Lodge	Medicine Lodge	\$6,900	\$3,900	\$10,800
Minneapolis	Minneapolis City-County	\$11,200	\$6,400	\$17,600
Montezuma	Montezuma Municipal	\$200	\$200	\$400
Moundridge	Moundridge Municipal	\$31,600	\$17,800	\$49,400
Neodesha	Neodesha Municipal	\$400	\$300	\$700
Ness City	Ness City Municipal	\$2,200	\$1,300	\$3,500
Newton	Newton City/County	\$391,900	\$221,000	\$612,900
Norton	Norton Municipal	\$5,700	\$3,300	\$9,000
Oakley	Oakley Municipal	\$29,300	\$16,500	\$45,800
Oberlin	Oberlin Municipal	\$42,700	\$24,100	\$66,800
Olathe	Cedar Air Park	\$300	\$200	\$500
Olathe	Johnson County Executive	\$263,300	\$148,500	\$411,800
Olathe	New Century AirCenter	\$490,700	\$276,700	\$767,400
Osage City	Osage City Municipal	\$2,900	\$1,600	\$4,500
Osborne	Osborne Municipal	\$3,600	\$2,000	\$5,600
Oswego	Oswego Municipal	\$400	\$200	\$600
Ottawa	Ottawa Municipal	\$14,400	\$8,100	\$22,500
Oxford	Oxford Municipal	\$2,200	\$1,300	\$3,500
Paola	Miami County	\$8,300	\$4,700	\$13,000
Parsons	Tri-City	\$17,200	\$9,800	\$27,000
Phillipsburg	Phillipsburg Municipal	\$20,100	\$11,400	\$31,500
Pittsburg	Atkinson Municipal	\$129,700	\$73,200	\$202,900
Pleasanton	Gilmore	\$1,100	\$700	\$1,800

Table A-11: Kansas General Aviation Visitor-Related Payroll (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round GA Visitor Payroll</i>	<i>Second Round GA Visitor Payroll</i>	<i>Total GA Visitor Payroll</i>
Pratt	Pratt Regional	\$58,000	\$32,700	\$90,700
Rose Hill	Cook Airfield	\$400	\$300	\$700
Russell	Russell Municipal	\$34,500	\$19,400	\$53,900
Sabetha	Sabetha Municipal	\$3,600	\$2,000	\$5,600
Satanta	Satanta Municipal	\$600	\$300	\$900
Scott City	Scott City Municipal	\$18,400	\$10,400	\$28,800
Smith Center	Smith Center Municipal	\$8,600	\$4,900	\$13,500
St. Francis	Cheyenne County Municipal	\$1,800	\$1,000	\$2,800
Stafford	Stafford Municipal	\$900	\$500	\$1,400
Sublette	Sublette Flying Club	\$700	\$400	\$1,100
Syracuse	Syracuse-Hamilton County Municipal	\$8,000	\$4,600	\$12,600
Topeka	Forbes Field	\$62,200	\$35,100	\$97,300
Topeka	Philip Billard Municipal	\$552,100	\$311,300	\$863,400
Tribune	Tribune Municipal	\$1,400	\$800	\$2,200
Ulysses	Ulysses	\$34,500	\$19,400	\$53,900
WaKeeney	Trego WaKeeney	\$2,000	\$1,200	\$3,200
Wamego	Wamego Municipal	\$5,600	\$3,200	\$8,800
Washington	Washington County Memorial	\$1,800	\$1,000	\$2,800
Wellington	Wellington Municipal	\$152,600	\$86,100	\$238,700
Wichita	Beech Factory	\$9,800	\$5,500	\$15,300
Wichita	Cessna Aircraft Field	\$600	\$300	\$900
Wichita	Col. James Jabara	\$290,000	\$163,500	\$453,500
Wichita	Riverside	\$23,000	\$13,000	\$36,000
Wichita	Westport	\$100	\$100	\$200
Winfield/Arkansas City	Strother Field	\$45,800	\$25,800	\$71,600
Yates Center	Yates Center	\$300	\$200	\$500
Other General Aviation Airports *		\$16,000	\$9,600	\$25,600
General Aviation Airports Total		\$5,393,700	\$3,044,900	\$8,438,600
All Airports Total		\$7,827,000	\$4,417,100	\$12,244,100

* Other General Aviation Airports includes Argonia Municipal, Bucklin, C.E. Grutzmacher Municipal, Caldwell Municipal, Cotton Wood Falls, Council Grove Municipal, Elk County, Fowler, Hiawatha Municipal, Hillside, Horton Municipal, Lucas, Norwich, Patty Field, Plainville Airpark, Rush County, Sedan City, Seneca Municipal, St. Marys Airpark, Stockton Municipal, Van Pak, and Westport Auxiliary. Source: Wilbur Smith Associates and IMPLAN multipliers. Prepared: April 2010.

Table A-12: Kansas Commercial Service Visitor-Related Payroll

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round Commercial Service Visitor Payroll</i>	<i>Second Round Commercial Service Visitor Payroll</i>	<i>Total Commercial Service Visitor Payroll</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	\$161,600	\$113,700	\$275,300
Garden City	Garden City Regional	\$222,200	\$156,300	\$378,500
Great Bend	Great Bend Municipal	\$40,400	\$28,400	\$68,800
Hays	Hays Regional	\$444,400	\$312,700	\$757,100
Liberal	Liberal Mid-America Regional	\$222,200	\$156,300	\$378,500
Manhattan	Manhattan Regional	\$888,800	\$625,400	\$1,514,200
Salina	Salina Municipal	\$60,600	\$42,600	\$103,200
Wichita	Wichita Mid-Continent	\$30,603,000	\$21,532,400	\$52,135,400
Commercial Service Airports Total		\$32,643,200	\$22,967,800	\$55,611,000

Source: Wilbur Smith Associates and IMPLAN multipliers.
 Prepared: April 2010.

Table A-13: Kansas Airport's Total Payroll

Associated City	Airport Name	Total First Round Payroll	Total Second Round Payroll	Total Payroll
Commercial Service Airports				
Dodge City	Dodge City Regional	\$2,984,000	\$2,283,500	\$5,267,500
Garden City	Garden City Regional	\$3,354,700	\$2,419,400	\$5,774,100
Great Bend	Great Bend Municipal	\$2,242,500	\$2,240,000	\$4,482,500
Hays	Hays Regional	\$3,261,200	\$2,507,900	\$5,769,100
Liberal	Liberal Mid-America Regional	\$3,529,800	\$2,592,700	\$6,122,500
Manhattan	Manhattan Regional	\$3,765,400	\$2,717,800	\$6,483,200
Salina	Salina Municipal	\$21,985,700	\$17,627,900	\$39,613,600
Wichita	Wichita Mid-Continent	\$658,651,800	\$537,665,100	\$1,196,316,900
Commercial Service Airports Total		\$699,775,100	\$570,054,300	\$1,269,829,400
General Aviation Airports				
Abilene	Abilene Municipal	\$213,900	\$145,500	\$359,400
Anthony	Anthony Municipal	\$56,100	\$36,200	\$92,300
Anthony	Wilcox Field	\$25,400	\$21,000	\$46,400
Ashland	Harold Krier Field	\$67,300	\$52,900	\$120,200
Atchison	Amelia Earhart	\$97,600	\$65,300	\$162,900
Atwood	Atwood-Rawlins County	\$461,900	\$352,500	\$814,400
Augusta	Augusta Municipal	\$2,775,300	\$2,273,400	\$5,048,700
Baldwin City	Vinland Valley Aerodrome	\$1,610,600	\$1,348,600	\$2,959,200
Belleville	Belleville Municipal	\$64,800	\$46,300	\$111,100
Beloit	Moritz Memorial	\$322,900	\$254,400	\$577,300
Benton	Stearman Field	\$306,800	\$212,800	\$519,600
Bird City	Bressler Field	\$129,300	\$98,200	\$227,500
Burlington	Coffey County	\$263,300	\$170,200	\$433,500
Chanute	Chanute-Martin Johnson	\$614,300	\$463,500	\$1,077,800
Cimarron	Cimarron Municipal	\$14,000	\$9,100	\$23,100
Clay Center	Clay Center Municipal	\$169,900	\$121,200	\$291,100
Coffeyville	Coffeyville Municipal	\$127,300	\$92,700	\$220,000
Colby	Shalz Field	\$336,100	\$259,900	\$596,000
Coldwater	Comanche County	\$11,800	\$7,600	\$19,400
Concordia	Blosser Municipal	\$81,000	\$53,800	\$134,800
Dighton	Dighton	\$18,100	\$12,000	\$30,100
El Dorado	Capt. Jack Thomas	\$277,400	\$219,100	\$496,500
Elkhart	Elkhart-Morton County	\$190,300	\$142,700	\$333,000
Ellinwood	Ellinwood Municipal	\$235,100	\$188,700	\$423,800
Ellsworth	Ellsworth Municipal	\$143,400	\$99,400	\$242,800
Emporia	Emporia Municipal	\$1,203,100	\$957,000	\$2,160,100
Eureka	Eureka Municipal	\$108,200	\$80,800	\$189,000
Fort Scott	Fort Scott Municipal	\$121,700	\$78,400	\$200,100
Fredonia	Fredonia	\$2,800	\$1,600	\$4,400
Gardner	Gardner Municipal	\$162,100	\$120,300	\$282,400
Garnett	Garnett Municipal	\$167,300	\$110,100	\$277,400
Goodland	Renner Field-Goodland Municipal	\$2,148,800	\$1,572,400	\$3,721,200
Greensburg	Paul Windle Municipal	\$31,500	\$24,700	\$56,200
Harper	Harper Municipal	\$96,600	\$76,100	\$172,700
Herington	Herington Regional	\$152,900	\$96,500	\$249,400
Hill City	Hill City Municipal	\$171,900	\$120,800	\$292,700
Hillsboro	Alfred Schroeder Field	\$25,400	\$16,100	\$41,500

Table A-13: Kansas Airport's Total Payroll (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>Total First Round Payroll</i>	<i>Total Second Round Payroll</i>	<i>Total Payroll</i>
Hoxie	Hoxie-Sheridan County	\$252,900	\$199,800	\$452,700
Hugoton	Hugoton Municipal	\$283,200	\$206,800	\$490,000
Hutchinson	Hutchinson Municipal	\$3,024,900	\$2,311,500	\$5,336,400
Independence	Independence Municipal	\$48,039,400	\$40,187,100	\$88,226,500
Ingalls	Ingalls Municipal	\$153,500	\$128,100	\$281,600
Iola	Allen County	\$424,300	\$287,400	\$711,700
Jetmore	Jetmore Municipal	\$1,700	\$1,200	\$2,900
Johnson	Stanton County Municipal	\$583,200	\$416,700	\$999,900
Junction City	Freeman Field	\$1,836,600	\$1,496,600	\$3,333,200
Kingman	Kingman-Clyde Cessna Field	\$133,300	\$95,200	\$228,500
Kinsley	Kinsley Municipal	\$794,400	\$630,100	\$1,424,500
Lakin	Lakin	\$260,200	\$181,200	\$441,400
Larned	Larned-Pawnee County	\$188,500	\$138,400	\$326,900
Lawrence	Lawrence Municipal	\$1,991,300	\$1,567,600	\$3,558,900
Leavenworth	Sherman Army Airfield	\$586,200	\$374,100	\$960,300
Leoti	Mark Hoard Memorial	\$352,800	\$283,000	\$635,800
Lincoln	Lincoln Municipal	\$188,900	\$149,100	\$338,000
Lyndon	Pomona Lake	\$15,900	\$10,500	\$26,400
Lyons	Lyons-Rice County Municipal	\$407,400	\$303,200	\$710,600
Mankato	Mankato	\$96,100	\$71,500	\$167,600
Marion	Marion Municipal	\$35,500	\$26,800	\$62,300
Marysville	Marysville Municipal	\$188,500	\$146,100	\$334,600
McPherson	McPherson	\$520,300	\$336,300	\$856,600
Meade	Meade Municipal	\$103,200	\$75,200	\$178,400
Medicine Lodge	Medicine Lodge	\$17,000	\$10,600	\$27,600
Minneapolis	Minneapolis City-County	\$67,400	\$51,900	\$119,300
Montezuma	Montezuma Municipal	\$116,300	\$85,100	\$201,400
Moundridge	Moundridge Municipal	\$324,600	\$259,100	\$583,700
Neodesha	Neodesha Municipal	\$16,800	\$11,000	\$27,800
Ness City	Ness City Municipal	\$5,500	\$3,400	\$8,900
Newton	Newton City/County	\$9,207,500	\$7,504,500	\$16,712,000
Norton	Norton Municipal	\$167,800	\$131,300	\$299,100
Oakley	Oakley Municipal	\$322,700	\$234,600	\$557,300
Oberlin	Oberlin Municipal	\$108,500	\$69,400	\$177,900
Olathe	Cedar Air Park	\$50,200	\$40,600	\$90,800
Olathe	Johnson County Executive	\$5,518,100	\$4,494,400	\$10,012,500
Olathe	New Century AirCenter	\$14,168,000	\$10,739,400	\$24,907,400
Osage City	Osage City Municipal	\$1,135,300	\$941,800	\$2,077,100
Osborne	Osborne Municipal	\$86,200	\$61,700	\$147,900
Oswego	Oswego Municipal	\$8,500	\$5,500	\$14,000
Ottawa	Ottawa Municipal	\$135,500	\$97,500	\$233,000
Oxford	Oxford Municipal	\$40,200	\$26,200	\$66,400
Paola	Miami County	\$535,000	\$417,500	\$952,500
Parsons	Tri-City	\$240,300	\$167,500	\$407,800
Phillipsburg	Phillipsburg Municipal	\$149,000	\$113,100	\$262,100
Pittsburg	Atkinson Municipal	\$986,700	\$741,200	\$1,727,900
Pleasanton	Gilmore	\$55,000	\$36,000	\$91,000
Pratt	Pratt Regional	\$716,400	\$511,700	\$1,228,100
Rose Hill	Cook Airfield	\$64,600	\$51,300	\$115,900

Table A-13: Kansas Airport's Total Payroll (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>Total First Round Payroll</i>	<i>Total Second Round Payroll</i>	<i>Total Payroll</i>
Russell	Russell Municipal	\$200,300	\$140,600	\$340,900
Sabetha	Sabetha Municipal	\$13,600	\$8,700	\$22,300
Satanta	Satanta Municipal	\$66,700	\$52,300	\$119,000
Scott City	Scott City Municipal	\$234,100	\$160,500	\$394,600
Smith Center	Smith Center Municipal	\$274,300	\$196,300	\$470,600
St. Francis	Cheyenne County Municipal	\$177,800	\$128,900	\$306,700
Stafford	Stafford Municipal	\$11,900	\$7,800	\$19,700
Sublette	Sublette Flying Club	\$24,200	\$17,900	\$42,100
Syracuse	Syracuse-Hamilton County Municipal	\$417,200	\$306,900	\$724,100
Topeka	Forbes Field	\$32,287,400	\$21,847,100	\$54,134,500
Topeka	Philip Billard Municipal	\$4,026,900	\$2,773,800	\$6,800,700
Tribune	Tribune Municipal	\$89,100	\$62,700	\$151,800
Ulysses	Ulysses	\$667,400	\$522,000	\$1,189,400
WaKeeney	Trego WaKeeney	\$69,700	\$54,300	\$124,000
Wamego	Wamego Municipal	\$18,900	\$11,900	\$30,800
Washington	Washington County Memorial	\$160,600	\$117,000	\$277,600
Wellington	Wellington Municipal	\$588,800	\$436,600	\$1,025,400
Wichita	Beech Factory	\$265,041,800	\$221,956,700	\$486,998,500
Wichita	Cessna Aircraft Field	\$72,699,400	\$60,915,300	\$133,614,700
Wichita	Col. James Jabara	\$18,484,000	\$15,108,300	\$33,592,300
Wichita	Riverside	\$108,000	\$69,700	\$177,700
Wichita	Westport	\$169,800	\$140,300	\$310,100
Winfield/Arkansas City	Strother Field	\$85,437,100	\$71,546,200	\$156,983,300
Yates Center	Yates Center	\$300	\$200	\$500
Other General Aviation Airports *		\$32,200	\$20,200	\$52,400
General Aviation Airports Total		\$589,013,000	\$483,033,800	\$1,072,046,800
All Airports Total		\$1,288,788,100	\$1,053,088,100	\$2,341,876,200

* Other General Aviation Airports includes Argonia Municipal, Bucklin, C.E. Grutzmacher Municipal, Caldwell Municipal, Cotton Wood Falls, Council Grove Municipal, Elk County, Fowler, Hiawatha Municipal, Hillside, Horton Municipal, Lucas, Norwich, Patty Field, Plainville Airpark, Rush County, Sedan City, Seneca Municipal, St. Marys Airpark, Stockton Municipal, Van Pak, and Westport Auxiliary. Source: Wilbur Smith Associates and IMPLAN multipliers. Prepared: April 2010.

Table A-14: Kansas On-Airport Output

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round On-Airport Output</i>	<i>Second Round On-Airport Output</i>	<i>Total On-Airport Output</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	\$11,599,000	\$6,594,700	\$18,193,700
Garden City	Garden City Regional	\$14,711,800	\$8,526,800	\$23,238,600
Great Bend	Great Bend Municipal	\$6,827,600	\$4,928,000	\$11,755,600
Hays	Hays Regional	\$13,438,600	\$7,477,200	\$20,915,800
Liberal	Liberal Mid-America Regional	\$16,400,900	\$9,560,000	\$25,960,900
Manhattan	Manhattan Regional	\$10,362,200	\$6,213,700	\$16,575,900
Salina	Salina Municipal	\$92,944,600	\$52,180,900	\$145,125,500
Wichita	Wichita Mid-Continent	\$2,904,275,600	\$1,587,469,800	\$4,491,745,400
Commercial Service Airports Total		\$3,070,560,300	\$1,682,951,100	\$ 4,753,511,400
General Aviation Airports				
Abilene	Abilene Municipal	\$387,200	\$219,500	\$606,700
Anthony	Anthony Municipal	\$291,300	\$198,700	\$490,000
Anthony	Wilcox Field	\$33,900	\$18,600	\$52,500
Ashland	Harold Krier Field	\$552,900	\$301,500	\$854,400
Atchison	Amelia Earhart	\$230,200	\$153,500	\$383,700
Atwood	Atwood-Rawlins County	\$3,726,800	\$2,089,100	\$5,815,900
Augusta	Augusta Municipal	\$15,160,500	\$8,245,600	\$23,406,100
Baldwin City	Vinland Valley Aerodrome	\$2,291,900	\$1,243,600	\$3,535,500
Belleville	Belleville Municipal	\$417,700	\$247,200	\$664,900
Beloit	Moritz Memorial	\$1,405,800	\$786,800	\$2,192,600
Benton	Stearman Field	\$1,620,100	\$1,043,500	\$2,663,600
Bird City	Bressler Field	\$421,100	\$238,600	\$659,700
Burlington	Coffey County	\$1,075,000	\$733,700	\$1,808,700
Chanute	Chanute-Martin Johnson	\$1,867,800	\$1,083,900	\$2,951,700
Cimarron	Cimarron Municipal	\$74,800	\$51,000	\$125,800
Clay Center	Clay Center Municipal	\$612,500	\$378,300	\$990,800
Coffeyville	Coffeyville Municipal	\$673,500	\$412,700	\$1,086,200
Colby	Shalz Field	\$2,563,600	\$1,426,900	\$3,990,500
Coldwater	Comanche County	\$37,300	\$25,400	\$62,700
Concordia	Blosser Municipal	\$182,900	\$111,700	\$294,600
Dighton	Dighton	\$37,000	\$25,300	\$62,300
El Dorado	Capt. Jack Thomas	\$1,087,100	\$610,500	\$1,697,600
Elkhart	Elkhart-Morton County	\$1,508,900	\$871,800	\$2,380,700
Ellinwood	Ellinwood Municipal	\$2,148,400	\$1,163,400	\$3,311,800
Ellsworth	Ellsworth Municipal	\$850,800	\$504,900	\$1,355,700
Emporia	Emporia Municipal	\$3,824,100	\$2,158,800	\$5,982,900
Eureka	Eureka Municipal	\$348,000	\$204,600	\$552,600
Fort Scott	Fort Scott Municipal	\$687,700	\$469,300	\$1,157,000
Fredonia	Fredonia	\$5,500	\$3,800	\$9,300
Gardner	Gardner Municipal	\$581,800	\$356,400	\$938,200
Garnett	Garnett Municipal	\$370,700	\$253,100	\$623,800
Goodland	Renner Field-Goodland Municipal	\$8,668,400	\$4,830,100	\$13,498,500
Greensburg	Paul Windle Municipal	\$266,400	\$144,000	\$410,400
Harper	Harper Municipal	\$863,800	\$475,900	\$1,339,700
Herington	Herington Regional	\$648,900	\$438,200	\$1,087,100
Hill City	Hill City Municipal	\$917,100	\$550,300	\$1,467,400

Table A-14: Kansas On-Airport Output (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round On-Airport Output</i>	<i>Second Round On-Airport Output</i>	<i>Total On-Airport Output</i>
Hillsboro	Alfred Schroeder Field	\$119,500	\$81,500	\$201,000
Hoxie	Hoxie-Sheridan County	\$2,238,400	\$1,224,800	\$3,463,200
Hugoton	Hugoton Municipal	\$1,313,800	\$793,900	\$2,107,700
Hutchinson	Hutchinson Municipal	\$8,984,800	\$5,136,300	\$14,121,100
Independence	Independence Municipal	\$375,028,100	\$202,865,300	\$577,893,400
Ingalls	Ingalls Municipal	\$1,519,500	\$821,600	\$2,341,100
Iola	Allen County	\$1,454,100	\$925,800	\$2,379,900
Jetmore	Jetmore Municipal	\$9,500	\$6,500	\$16,000
Johnson	Stanton County Municipal	\$3,726,700	\$2,214,100	\$5,940,800
Junction City	Freeman Field	\$8,055,900	\$4,425,900	\$12,481,800
Kingman	Kingman-Clyde Cessna Field	\$561,100	\$345,000	\$906,100
Kinsley	Kinsley Municipal	\$8,497,500	\$4,612,900	\$13,110,400
Lakin	Lakin	\$958,600	\$578,600	\$1,537,200
Larned	Larned-Pawnee County	\$1,357,200	\$774,800	\$2,132,000
Lawrence	Lawrence Municipal	\$6,225,200	\$3,465,000	\$9,690,200
Leavenworth	Sherman Army Airfield	\$1,243,700	\$848,800	\$2,092,500
Leoti	Mark Hoard Memorial	\$3,238,200	\$1,755,700	\$4,993,900
Lincoln	Lincoln Municipal	\$1,636,100	\$889,400	\$2,525,500
Lyndon	Pomona Lake	\$82,500	\$56,300	\$138,800
Lyons	Lyons-Rice County Municipal	\$2,214,800	\$1,313,200	\$3,528,000
Mankato	Mankato	\$588,300	\$325,700	\$914,000
Marion	Marion Municipal	\$108,300	\$60,600	\$168,900
Marysville	Marysville Municipal	\$461,800	\$270,600	\$732,400
McPherson	McPherson	\$711,800	\$428,700	\$1,140,500
Meade	Meade Municipal	\$718,000	\$414,300	\$1,132,300
Medicine Lodge	Medicine Lodge	\$70,500	\$48,100	\$118,600
Minneapolis	Minneapolis City-County	\$532,900	\$287,900	\$820,800
Montezuma	Montezuma Municipal	\$771,900	\$451,100	\$1,223,000
Moundridge	Moundridge Municipal	\$1,572,800	\$859,600	\$2,432,400
Neodesha	Neodesha Municipal	\$73,000	\$49,800	\$122,800
Ness City	Ness City Municipal	\$17,200	\$11,700	\$28,900
Newton	Newton City/County	\$35,688,800	\$19,622,400	\$55,311,200
Norton	Norton Municipal	\$1,468,200	\$812,800	\$2,281,000
Oakley	Oakley Municipal	\$2,409,600	\$1,388,300	\$3,797,900
Oberlin	Oberlin Municipal	\$392,200	\$241,300	\$633,500
Olathe	Cedar Air Park	\$186,100	\$100,600	\$286,700
Olathe	Johnson County Executive	\$23,031,100	\$12,517,400	\$35,548,500
Olathe	New Century AirCenter	\$57,837,900	\$33,040,500	\$90,878,400
Osage City	Osage City Municipal	\$4,573,800	\$2,486,200	\$7,060,000
Osborne	Osborne Municipal	\$765,000	\$444,000	\$1,209,000
Oswego	Oswego Municipal	\$47,400	\$32,400	\$79,800
Ottawa	Ottawa Municipal	\$505,200	\$312,000	\$817,200
Oxford	Oxford Municipal	\$200,000	\$136,500	\$336,500
Paola	Miami County	\$2,130,000	\$1,226,500	\$3,356,500
Parsons	Tri-City	\$1,058,500	\$682,800	\$1,741,300
Phillipsburg	Phillipsburg Municipal	\$1,217,300	\$679,400	\$1,896,700
Pittsburg	Atkinson Municipal	\$4,133,600	\$2,458,400	\$6,592,000
Pleasanton	Gilmore	\$281,200	\$192,000	\$473,200

Table A-14: Kansas On-Airport Output (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round On-Airport Output</i>	<i>Second Round On-Airport Output</i>	<i>Total On-Airport Output</i>
Pratt	Pratt Regional	\$3,180,000	\$1,906,300	\$5,086,300
Rose Hill	Cook Airfield	\$318,300	\$183,500	\$501,800
Russell	Russell Municipal	\$1,083,300	\$634,500	\$1,717,800
Sabetha	Sabetha Municipal	\$41,000	\$28,000	\$69,000
Satanta	Satanta Municipal	\$590,800	\$327,500	\$918,300
Scott City	Scott City Municipal	\$1,107,000	\$735,600	\$1,842,600
Smith Center	Smith Center Municipal	\$1,863,200	\$1,120,200	\$2,983,400
St. Francis	Cheyenne County Municipal	\$796,100	\$500,400	\$1,296,500
Stafford	Stafford Municipal	\$21,000	\$14,300	\$35,300
Sublette	Sublette Flying Club	\$105,500	\$65,400	\$170,900
Syracuse	Syracuse-Hamilton County Municipal	\$2,838,700	\$1,661,100	\$4,499,800
Topeka	Forbes Field	\$59,854,000	\$39,855,500	\$99,709,500
Topeka	Philip Billard Municipal	\$7,425,900	\$4,609,200	\$12,035,100
Tribune	Tribune Municipal	\$553,800	\$340,100	\$893,900
Ulysses	Ulysses	\$3,561,800	\$2,015,800	\$5,577,600
WaKeeney	Trego WaKeeney	\$574,900	\$316,600	\$891,500
Wamego	Wamego Municipal	\$96,000	\$65,500	\$161,500
Washington	Washington County Memorial	\$932,600	\$505,900	\$1,438,500
Wellington	Wellington Municipal	\$2,578,800	\$1,466,900	\$4,045,700
Wichita	Beech Factory	\$1,157,843,400	\$625,876,200	\$1,783,719,600
Wichita	Cessna Aircraft Field	\$578,365,700	\$312,605,900	\$890,971,600
Wichita	Col. James Jabara	\$57,530,200	\$31,225,600	\$88,755,800
Wichita	Riverside	\$291,100	\$198,600	\$489,700
Wichita	Westport	\$753,700	\$415,900	\$1,169,600
Winfield/Arkansas City	Strother Field	\$1,001,302,400	\$541,180,700	\$1,542,483,100
Yates Center	Yates Center	\$5,800	\$4,000	\$9,800
Other General Aviation Airports *		\$60,600	\$41,400	\$102,000
General Aviation Airports Total		\$3,510,134,600	\$1,912,687,800	\$5,422,822,400
All Airports Total		\$6,580,694,900	\$3,595,638,900	\$10,176,333,800

* Other General Aviation Airports includes Argonia Municipal, Bucklin, C.E. Grutzmacher Municipal, Caldwell Municipal, Cotton Wood Falls, Council Grove Municipal, Elk County, Fowler, Hiawatha Municipal, Hillside, Horton Municipal, Lucas, Norwich, Patty Field, Plainville Airpark, Rush County, Sedan City, Seneca Municipal, St. Marys Airpark, Stockton Municipal, Van Pak, and Westport Auxiliary. Source: Wilbur Smith Associates and IMPLAN multipliers. Prepared: April 2010.

Table A-15: Kansas General Aviation Visitor-Related Output

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round GA Visitor Output</i>	<i>Second Round GA Visitor Output</i>	<i>Total GA Visitor Output</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	\$226,700	\$142,100	\$368,800
Garden City	Garden City Regional	\$392,300	\$245,700	\$638,000
Great Bend	Great Bend Municipal	\$131,400	\$82,200	\$213,600
Hays	Hays Regional	\$566,800	\$355,200	\$922,000
Liberal	Liberal Mid-America Regional	\$831,400	\$520,800	\$1,352,200
Manhattan	Manhattan Regional	\$493,100	\$308,900	\$802,000
Salina	Salina Municipal	\$836,700	\$524,200	\$1,360,900
Wichita	Wichita Mid-Continent	\$2,546,300	\$1,595,200	\$4,141,500
Commercial Service Airports Total		\$6,024,700	\$3,774,300	\$9,799,000
General Aviation Airports				
Abilene	Abilene Municipal	\$284,600	\$178,300	\$462,900
Anthony	Anthony Municipal	\$16,700	\$10,500	\$27,200
Anthony	Wilcox Field	\$0	\$0	\$0
Ashland	Harold Krier Field	\$2,800	\$1,700	\$4,500
Atchison	Amelia Earhart	\$71,200	\$44,500	\$115,700
Atwood	Atwood-Rawlins County	\$56,900	\$35,700	\$92,600
Augusta	Augusta Municipal	\$213,500	\$133,700	\$347,200
Baldwin City	Vinland Valley Aerodrome	\$600	\$300	\$900
Belleville	Belleville Municipal	\$16,700	\$10,500	\$27,200
Beloit	Moritz Memorial	\$44,600	\$27,900	\$72,500
Benton	Stearman Field	\$7,100	\$4,500	\$11,600
Bird City	Bressler Field	\$300	\$200	\$500
Burlington	Coffey County	\$113,900	\$71,300	\$185,200
Chanute	Chanute-Martin Johnson	\$128,100	\$80,200	\$208,300
Cimarron	Cimarron Municipal	\$2,800	\$1,700	\$4,500
Clay Center	Clay Center Municipal	\$55,700	\$34,900	\$90,600
Coffeyville	Coffeyville Municipal	\$21,300	\$13,400	\$34,700
Colby	Shalz Field	\$28,500	\$17,800	\$46,300
Coldwater	Comanche County	\$5,700	\$3,600	\$9,300
Concordia	Blosser Municipal	\$87,500	\$54,900	\$142,400
Dighton	Dighton	\$2,800	\$1,700	\$4,500
El Dorado	Capt. Jack Thomas	\$49,800	\$31,200	\$81,000
Elkhart	Elkhart-Morton County	\$37,000	\$23,200	\$60,200
Ellinwood	Ellinwood Municipal	\$400	\$300	\$700
Ellsworth	Ellsworth Municipal	\$85,400	\$53,500	\$138,900
Emporia	Emporia Municipal	\$213,500	\$133,700	\$347,200
Eureka	Eureka Municipal	\$5,600	\$3,500	\$9,100
Fort Scott	Fort Scott Municipal	\$49,800	\$31,200	\$81,000
Fredonia	Fredonia	\$3,600	\$2,300	\$5,900
Gardner	Gardner Municipal	\$43,400	\$27,200	\$70,600
Garnett	Garnett Municipal	\$27,800	\$17,500	\$45,300
Goodland	Renner Field-Goodland Municipal	\$1,209,300	\$757,600	\$1,966,900
Greensburg	Paul Windle Municipal	\$8,400	\$5,200	\$13,600
Harper	Harper Municipal	\$3,100	\$1,900	\$5,000
Herington	Herington Regional	\$33,400	\$20,900	\$54,300
Hill City	Hill City Municipal	\$28,500	\$17,800	\$46,300

Table A-15: Kansas General Aviation Visitor-Related Output (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round GA Visitor Output</i>	<i>Second Round GA Visitor Output</i>	<i>Total GA Visitor Output</i>
Hillsboro	Alfred Schroeder Field	\$13,900	\$8,700	\$22,600
Hoxie	Hoxie-Sheridan County	\$13,900	\$8,700	\$22,600
Hugoton	Hugoton Municipal	\$28,500	\$17,800	\$46,300
Hutchinson	Hutchinson Municipal	\$652,500	\$408,800	\$1,061,300
Independence	Independence Municipal	\$153,000	\$95,900	\$248,900
Ingalls	Ingalls Municipal	\$0	\$0	\$0
Iola	Allen County	\$302,300	\$189,400	\$491,700
Jetmore	Jetmore Municipal	\$600	\$300	\$900
Johnson	Stanton County Municipal	\$123,800	\$77,600	\$201,400
Junction City	Freeman Field	\$78,000	\$48,800	\$126,800
Kingman	Kingman-Clyde Cessna Field	\$54,100	\$33,900	\$88,000
Kinsley	Kinsley Municipal	\$4,500	\$2,700	\$7,200
Lakin	Lakin	\$2,800	\$1,700	\$4,500
Larned	Larned-Pawnee County	\$68,300	\$42,800	\$111,100
Lawrence	Lawrence Municipal	\$634,900	\$397,700	\$1,032,600
Leavenworth	Sherman Army Airfield	\$374,100	\$234,400	\$608,500
Leoti	Mark Hoard Memorial	\$5,600	\$3,500	\$9,100
Lincoln	Lincoln Municipal	\$22,300	\$13,900	\$36,200
Lyndon	Pomona Lake	\$600	\$300	\$900
Lyons	Lyons-Rice County Municipal	\$39,000	\$24,400	\$63,400
Mankato	Mankato	\$16,700	\$10,500	\$27,200
Marion	Marion Municipal	\$16,700	\$10,500	\$27,200
Marysville	Marysville Municipal	\$49,800	\$31,200	\$81,000
McPherson	McPherson	\$755,800	\$473,500	\$1,229,300
Meade	Meade Municipal	\$28,500	\$17,800	\$46,300
Medicine Lodge	Medicine Lodge	\$17,100	\$10,700	\$27,800
Minneapolis	Minneapolis City-County	\$27,800	\$17,500	\$45,300
Montezuma	Montezuma Municipal	\$600	\$300	\$900
Moundridge	Moundridge Municipal	\$78,300	\$49,000	\$127,300
Neodesha	Neodesha Municipal	\$1,100	\$700	\$1,800
Ness City	Ness City Municipal	\$5,600	\$3,500	\$9,100
Newton	Newton City/County	\$970,200	\$607,900	\$1,578,100
Norton	Norton Municipal	\$14,200	\$8,900	\$23,100
Oakley	Oakley Municipal	\$72,600	\$45,500	\$118,100
Oberlin	Oberlin Municipal	\$105,800	\$66,300	\$172,100
Olathe	Cedar Air Park	\$800	\$600	\$1,400
Olathe	Johnson County Executive	\$652,000	\$408,400	\$1,060,400
Olathe	New Century AirCenter	\$1,214,900	\$761,200	\$1,976,100
Osage City	Osage City Municipal	\$7,100	\$4,500	\$11,600
Osborne	Osborne Municipal	\$8,900	\$5,600	\$14,500
Oswego	Oswego Municipal	\$1,000	\$600	\$1,600
Ottawa	Ottawa Municipal	\$35,600	\$22,300	\$57,900
Oxford	Oxford Municipal	\$5,600	\$3,500	\$9,100
Paola	Miami County	\$20,600	\$12,900	\$33,500
Parsons	Tri-City	\$42,700	\$26,700	\$69,400
Phillipsburg	Phillipsburg Municipal	\$49,800	\$31,200	\$81,000
Pittsburg	Atkinson Municipal	\$321,200	\$201,300	\$522,500
Pleasanton	Gilmore	\$2,800	\$1,700	\$4,500

Table A-15: Kansas General Aviation Visitor-Related Output (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round GA Visitor Output</i>	<i>Second Round GA Visitor Output</i>	<i>Total GA Visitor Output</i>
Pratt	Pratt Regional	\$143,600	\$90,000	\$233,600
Rose Hill	Cook Airfield	\$1,100	\$700	\$1,800
Russell	Russell Municipal	\$85,400	\$53,500	\$138,900
Sabetha	Sabetha Municipal	\$8,900	\$5,600	\$14,500
Satanta	Satanta Municipal	\$1,400	\$900	\$2,300
Scott City	Scott City Municipal	\$45,500	\$28,600	\$74,100
Smith Center	Smith Center Municipal	\$21,300	\$13,400	\$34,700
St. Francis	Cheyenne County Municipal	\$4,500	\$2,700	\$7,200
Stafford	Stafford Municipal	\$2,200	\$1,400	\$3,600
Sublette	Sublette Flying Club	\$1,700	\$1,000	\$2,700
Syracuse	Syracuse-Hamilton County Municipal	\$19,900	\$12,500	\$32,400
Topeka	Forbes Field	\$154,000	\$96,500	\$250,500
Topeka	Philip Billard Municipal	\$1,366,800	\$856,400	\$2,223,200
Tribune	Tribune Municipal	\$3,600	\$2,200	\$5,800
Ulysses	Ulysses	\$85,400	\$53,500	\$138,900
WaKeeney	Trego WaKeeney	\$5,000	\$3,200	\$8,200
Wamego	Wamego Municipal	\$13,900	\$8,700	\$22,600
Washington	Washington County Memorial	\$4,500	\$2,700	\$7,200
Wellington	Wellington Municipal	\$377,900	\$236,800	\$614,700
Wichita	Beech Factory	\$24,200	\$15,200	\$39,400
Wichita	Cessna Aircraft Field	\$1,400	\$900	\$2,300
Wichita	Col. James Jabara	\$718,000	\$449,800	\$1,167,800
Wichita	Riverside	\$56,900	\$35,700	\$92,600
Wichita	Westport	\$300	\$200	\$500
Winfield/Arkansas City	Strother Field	\$113,400	\$71,000	\$184,400
Yates Center	Yates Center	\$800	\$600	\$1,400
Other General Aviation Airports *		\$40,300	\$25,400	\$65,700
General Aviation Airports Total		\$13,358,700	\$8,369,000	\$21,727,700
All Airports Total		\$19,383,400	\$12,143,300	\$31,526,700

* Other General Aviation Airports includes Argonia Municipal, Bucklin, C.E. Grutzmacher Municipal, Caldwell Municipal, Cotton Wood Falls, Council Grove Municipal, Elk County, Fowler, Hiawatha Municipal, Hillside, Horton Municipal, Lucas, Norwich, Patty Field, Plainville Airpark, Rush County, Sedan City, Seneca Municipal, St. Marys Airpark, Stockton Municipal, Van Pak, and Westport Auxiliary. Source: Wilbur Smith Associates and IMPLAN multipliers. Prepared: April 2010.

Table A-16: Kansas Commercial Service Visitor-Related Output

<i>Associated City</i>	<i>Airport Name</i>	<i>First Round Commercial Service Visitor Output</i>	<i>Second Round Commercial Service Visitor Output</i>	<i>Total Commercial Service Visitor Output</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	\$619,700	\$400,200	\$1,019,900
Garden City	Garden City Regional	\$863,000	\$557,300	\$1,420,300
Great Bend	Great Bend Municipal	\$139,600	\$90,200	\$229,800
Hays	Hays Regional	\$1,665,700	\$1,075,700	\$2,741,400
Liberal	Liberal Mid-America Regional	\$858,200	\$554,200	\$1,412,400
Manhattan	Manhattan Regional	\$3,348,600	\$2,162,400	\$5,511,000
Salina	Salina Municipal	\$217,200	\$140,200	\$357,400
Wichita	Wichita Mid-Continent	\$115,092,400	\$74,323,900	\$189,416,300
Commercial Service Airports Total		\$122,804,400	\$79,304,100	\$202,108,500

Source: Wilbur Smith Associates and IMPLAN multipliers.
 Prepared: April 2010.

Table A-17: Kansas Airport's Total Output

<i>Associated City</i>	<i>Airport Name</i>	<i>Total First Round Output</i>	<i>Total Second Round Output</i>	<i>Total Output</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	\$12,445,400	\$7,137,000	\$19,582,400
Garden City	Garden City Regional	\$15,967,100	\$9,329,800	\$25,296,900
Great Bend	Great Bend Municipal	\$7,098,600	\$5,100,400	\$12,199,000
Hays	Hays Regional	\$15,671,100	\$8,908,100	\$24,579,200
Liberal	Liberal Mid-America Regional	\$18,090,500	\$10,635,000	\$28,725,500
Manhattan	Manhattan Regional	\$14,203,900	\$8,685,000	\$22,888,900
Salina	Salina Municipal	\$93,998,500	\$52,845,300	\$146,843,800
Wichita	Wichita Mid-Continent	\$3,021,914,300	\$1,663,388,900	\$4,685,303,200
Commercial Service Airports Total		\$3,199,389,400	\$1,766,029,500	\$ 4,965,418,900
General Aviation Airports				
Abilene	Abilene Municipal	\$671,800	\$397,800	\$1,069,600
Anthony	Anthony Municipal	\$308,000	\$209,200	\$517,200
Anthony	Wilcox Field	\$33,900	\$18,600	\$52,500
Ashland	Harold Krier Field	\$555,700	\$303,200	\$858,900
Atchison	Amelia Earhart	\$301,400	\$198,000	\$499,400
Atwood	Atwood-Rawlins County	\$3,783,700	\$2,124,800	\$5,908,500
Augusta	Augusta Municipal	\$15,374,000	\$8,379,300	\$23,753,300
Baldwin City	Vinland Valley Aerodrome	\$2,292,500	\$1,243,900	\$3,536,400
Belleville	Belleville Municipal	\$434,400	\$257,700	\$692,100
Beloit	Moritz Memorial	\$1,450,400	\$814,700	\$2,265,100
Benton	Stearman Field	\$1,627,200	\$1,048,000	\$2,675,200
Bird City	Bressler Field	\$421,400	\$238,800	\$660,200
Burlington	Coffey County	\$1,188,900	\$805,000	\$1,993,900
Chanute	Chanute-Martin Johnson	\$1,995,900	\$1,164,100	\$3,160,000
Cimarron	Cimarron Municipal	\$77,600	\$52,700	\$130,300
Clay Center	Clay Center Municipal	\$668,200	\$413,200	\$1,081,400
Coffeyville	Coffeyville Municipal	\$694,800	\$426,100	\$1,120,900
Colby	Shalz Field	\$2,592,100	\$1,444,700	\$4,036,800
Coldwater	Comanche County	\$43,000	\$29,000	\$72,000
Concordia	Blosser Municipal	\$270,400	\$166,600	\$437,000
Dighton	Dighton	\$39,800	\$27,000	\$66,800
El Dorado	Capt. Jack Thomas	\$1,136,900	\$641,700	\$1,778,600
Elkhart	Elkhart-Morton County	\$1,545,900	\$895,000	\$2,440,900
Ellinwood	Ellinwood Municipal	\$2,148,800	\$1,163,700	\$3,312,500
Ellsworth	Ellsworth Municipal	\$936,200	\$558,400	\$1,494,600
Emporia	Emporia Municipal	\$4,037,600	\$2,292,500	\$6,330,100
Eureka	Eureka Municipal	\$353,600	\$208,100	\$561,700
Fort Scott	Fort Scott Municipal	\$737,500	\$500,500	\$1,238,000
Fredonia	Fredonia	\$9,100	\$6,100	\$15,200
Gardner	Gardner Municipal	\$625,200	\$383,600	\$1,008,800
Garnett	Garnett Municipal	\$398,500	\$270,600	\$669,100
Goodland	Renner Field-Goodland Municipal	\$9,877,700	\$5,587,700	\$15,465,400
Greensburg	Paul Windle Municipal	\$274,800	\$149,200	\$424,000
Harper	Harper Municipal	\$866,900	\$477,800	\$1,344,700
Herington	Herington Regional	\$682,300	\$459,100	\$1,141,400
Hill City	Hill City Municipal	\$945,600	\$568,100	\$1,513,700
Hillsboro	Alfred Schroeder Field	\$133,400	\$90,200	\$223,600

Table A-17: Kansas Airport's Total Output (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>Total First Round Output</i>	<i>Total Second Round Output</i>	<i>Total Output</i>
Hoxie	Hoxie-Sheridan County	\$2,252,300	\$1,233,500	\$3,485,800
Hugoton	Hugoton Municipal	\$1,342,300	\$811,700	\$2,154,000
Hutchinson	Hutchinson Municipal	\$9,637,300	\$5,545,100	\$15,182,400
Independence	Independence Municipal	\$375,181,100	\$202,961,200	\$578,142,300
Ingalls	Ingalls Municipal	\$1,519,500	\$821,600	\$2,341,100
Iola	Allen County	\$1,756,400	\$1,115,200	\$2,871,600
Jetmore	Jetmore Municipal	\$10,100	\$6,800	\$16,900
Johnson	Stanton County Municipal	\$3,850,500	\$2,291,700	\$6,142,200
Junction City	Freeman Field	\$8,133,900	\$4,474,700	\$12,608,600
Kingman	Kingman-Clyde Cessna Field	\$615,200	\$378,900	\$994,100
Kinsley	Kinsley Municipal	\$8,502,000	\$4,615,600	\$13,117,600
Lakin	Lakin	\$961,400	\$580,300	\$1,541,700
Larned	Larned-Pawnee County	\$1,425,500	\$817,600	\$2,243,100
Lawrence	Lawrence Municipal	\$6,860,100	\$3,862,700	\$10,722,800
Leavenworth	Sherman Army Airfield	\$1,617,800	\$1,083,200	\$2,701,000
Leoti	Mark Hoard Memorial	\$3,243,800	\$1,759,200	\$5,003,000
Lincoln	Lincoln Municipal	\$1,658,400	\$903,300	\$2,561,700
Lyndon	Pomona Lake	\$83,100	\$56,600	\$139,700
Lyons	Lyons-Rice County Municipal	\$2,253,800	\$1,337,600	\$3,591,400
Mankato	Mankato	\$605,000	\$336,200	\$941,200
Marion	Marion Municipal	\$125,000	\$71,100	\$196,100
Marysville	Marysville Municipal	\$511,600	\$301,800	\$813,400
McPherson	McPherson	\$1,467,600	\$902,200	\$2,369,800
Meade	Meade Municipal	\$746,500	\$432,100	\$1,178,600
Medicine Lodge	Medicine Lodge	\$87,600	\$58,800	\$146,400
Minneapolis	Minneapolis City-County	\$560,700	\$305,400	\$866,100
Montezuma	Montezuma Municipal	\$772,500	\$451,400	\$1,223,900
Moundridge	Moundridge Municipal	\$1,651,100	\$908,600	\$2,559,700
Neodesha	Neodesha Municipal	\$74,100	\$50,500	\$124,600
Ness City	Ness City Municipal	\$22,800	\$15,200	\$38,000
Newton	Newton City/County	\$36,659,000	\$20,230,300	\$56,889,300
Norton	Norton Municipal	\$1,482,400	\$821,700	\$2,304,100
Oakley	Oakley Municipal	\$2,482,200	\$1,433,800	\$3,916,000
Oberlin	Oberlin Municipal	\$498,000	\$307,600	\$805,600
Olathe	Cedar Air Park	\$186,900	\$101,200	\$288,100
Olathe	Johnson County Executive	\$23,683,100	\$12,925,800	\$36,608,900
Olathe	New Century AirCenter	\$59,052,800	\$33,801,700	\$92,854,500
Osage City	Osage City Municipal	\$4,580,900	\$2,490,700	\$7,071,600
Osborne	Osborne Municipal	\$773,900	\$449,600	\$1,223,500
Oswego	Oswego Municipal	\$48,400	\$33,000	\$81,400
Ottawa	Ottawa Municipal	\$540,800	\$334,300	\$875,100
Oxford	Oxford Municipal	\$205,600	\$140,000	\$345,600
Paola	Miami County	\$2,150,600	\$1,239,400	\$3,390,000
Parsons	Tri-City	\$1,101,200	\$709,500	\$1,810,700
Phillipsburg	Phillipsburg Municipal	\$1,267,100	\$710,600	\$1,977,700
Pittsburg	Atkinson Municipal	\$4,454,800	\$2,659,700	\$7,114,500
Pleasanton	Gilmore	\$284,000	\$193,700	\$477,700
Pratt	Pratt Regional	\$3,323,600	\$1,996,300	\$5,319,900
Rose Hill	Cook Airfield	\$319,400	\$184,200	\$503,600

Table A-17: Kansas Airport's Total Output (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>Total First Round Output</i>	<i>Total Second Round Output</i>	<i>Total Output</i>
Russell	Russell Municipal	\$1,168,700	\$688,000	\$1,856,700
Sabetha	Sabetha Municipal	\$49,900	\$33,600	\$83,500
Satanta	Satanta Municipal	\$592,200	\$328,400	\$920,600
Scott City	Scott City Municipal	\$1,152,500	\$764,200	\$1,916,700
Smith Center	Smith Center Municipal	\$1,884,500	\$1,133,600	\$3,018,100
St. Francis	Cheyenne County Municipal	\$800,600	\$503,100	\$1,303,700
Stafford	Stafford Municipal	\$23,200	\$15,700	\$38,900
Sublette	Sublette Flying Club	\$107,200	\$66,400	\$173,600
Syracuse	Syracuse-Hamilton County Municipal	\$2,858,600	\$1,673,600	\$4,532,200
Topeka	Forbes Field	\$60,008,000	\$39,952,000	\$99,960,000
Topeka	Philip Billard Municipal	\$8,792,700	\$5,465,600	\$14,258,300
Tribune	Tribune Municipal	\$557,400	\$342,300	\$899,700
Ulysses	Ulysses	\$3,647,200	\$2,069,300	\$5,716,500
WaKeeney	Trego WaKeeney	\$579,900	\$319,800	\$899,700
Wamego	Wamego Municipal	\$109,900	\$74,200	\$184,100
Washington	Washington County Memorial	\$937,100	\$508,600	\$1,445,700
Wellington	Wellington Municipal	\$2,956,700	\$1,703,700	\$4,660,400
Wichita	Beech Factory	\$1,157,867,600	\$625,891,400	\$1,783,759,000
Wichita	Cessna Aircraft Field	\$578,367,100	\$312,606,800	\$890,973,900
Wichita	Col. James Jabara	\$58,248,200	\$31,675,400	\$89,923,600
Wichita	Riverside	\$348,000	\$234,300	\$582,300
Wichita	Westport	\$754,000	\$416,100	\$1,170,100
Winfield/Arkansas City	Strother Field	\$1,001,415,800	\$541,251,700	\$1,542,667,500
Yates Center	Yates Center	\$6,600	\$4,600	\$11,200
Other General Aviation Airports		\$100,900	\$66,800	\$167,700
General Aviation Airports Total		\$3,523,493,300	\$1,921,056,800	\$5,444,550,100
All Airports Total		\$6,722,882,700	\$3,687,086,300	\$10,409,969,000

* Other General Aviation Airports includes Argonia Municipal, Bucklin, C.E. Grutzmacher Municipal, Caldwell Municipal, Cotton Wood Falls, Council Grove Municipal, Elk County, Fowler, Hiawatha Municipal, Hillside, Horton Municipal, Lucas, Norwich, Patty Field, Plainville Airpark, Rush County, Sedan City, Seneca Municipal, St. Marys Airpark, Stockton Municipal, Van Pak, and Westport Auxiliary. Source: Wilbur Smith Associates and IMPLAN multipliers. Prepared: April 2010.

Table A-18: Kansas Airport's Total Economic Impacts

<i>Associated City</i>	<i>Airport Name</i>	<i>Total Employment</i>	<i>Total Payroll</i>	<i>Total Output</i>
Commercial Service Airports				
Dodge City	Dodge City Regional	159	\$5,267,500	\$19,582,400
Garden City	Garden City Regional	187	\$5,774,100	\$25,296,900
Great Bend	Great Bend Municipal	119	\$4,482,500	\$12,199,000
Hays	Hays Regional	179	\$5,769,100	\$24,579,200
Liberal	Liberal Mid-America Regional	200	\$6,122,500	\$28,725,500
Manhattan	Manhattan Regional	233	\$6,483,200	\$22,888,900
Salina	Salina Municipal	995	\$39,613,600	\$146,843,800
Wichita	Wichita Mid-Continent	22,313	\$1,196,316,900	\$4,685,303,200
Commercial Service Airports Total		24,385	\$1,269,829,400	\$4,965,418,900
General Aviation Airports				
Abilene	Abilene Municipal	18	\$359,400	\$1,069,600
Anthony	Anthony Municipal	3	\$92,300	\$517,200
Anthony	Wilcox Field	7	\$46,400	\$52,500
Ashland	Harold Krier Field	4	\$120,200	\$858,900
Atchison	Amelia Earhart	7	\$162,900	\$499,400
Atwood	Atwood-Rawlins County	30	\$814,400	\$5,908,500
Augusta	Augusta Municipal	122	\$5,048,700	\$23,753,300
Baldwin City	Vinland Valley Aerodrome	82	\$2,959,200	\$3,536,400
Belleville	Belleville Municipal	4	\$111,100	\$692,100
Beloit	Moritz Memorial	18	\$577,300	\$2,265,100
Benton	Stearman Field	22	\$519,600	\$2,675,200
Bird City	Bressler Field	11	\$227,500	\$660,200
Burlington	Coffey County	15	\$433,500	\$1,993,900
Chanute	Chanute-Martin Johnson	35	\$1,077,800	\$3,160,000
Cimarron	Cimarron Municipal	1	\$23,100	\$130,300
Clay Center	Clay Center Municipal	14	\$291,100	\$1,081,400
Coffeyville	Coffeyville Municipal	15	\$220,000	\$1,120,900
Colby	Shalz Field	20	\$596,000	\$4,036,800
Coldwater	Comanche County	1	\$19,400	\$72,000
Concordia	Blosser Municipal	8	\$134,800	\$437,000
Dighton	Dighton	0	\$30,100	\$66,800
El Dorado	Capt. Jack Thomas	13	\$496,500	\$1,778,600
Elkhart	Elkhart-Morton County	11	\$333,000	\$2,440,900
Ellinwood	Ellinwood Municipal	11	\$423,800	\$3,312,500
Ellsworth	Ellsworth Municipal	8	\$242,800	\$1,494,600
Emporia	Emporia Municipal	53	\$2,160,100	\$6,330,100
Eureka	Eureka Municipal	5	\$189,000	\$561,700
Fort Scott	Fort Scott Municipal	8	\$200,100	\$1,238,000
Fredonia	Fredonia	1	\$4,400	\$15,200
Gardner	Gardner Municipal	15	\$282,400	\$1,008,800
Garnett	Garnett Municipal	8	\$277,400	\$669,100
Goodland	Renner Field-Goodland Municipal	125	\$3,721,200	\$15,465,400
Greensburg	Paul Windle Municipal	1	\$56,200	\$424,000
Harper	Harper Municipal	5	\$172,700	\$1,344,700
Herington	Herington Regional	12	\$249,400	\$1,141,400
Hill City	Hill City Municipal	13	\$292,700	\$1,513,700
Hillsboro	Alfred Schroeder Field	1	\$41,500	\$223,600

Table A-18: Kansas Airport's Total Economic Impacts (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>Total Employment</i>	<i>Total Payroll</i>	<i>Total Output</i>
Hoxie	Hoxie-Sheridan County	13	\$452,700	\$3,485,800
Hugoton	Hugoton Municipal	16	\$490,000	\$2,154,000
Hutchinson	Hutchinson Municipal	169	\$5,336,400	\$15,182,400
Independence	Independence Municipal	2,066	\$88,226,500	\$578,142,300
Ingalls	Ingalls Municipal	7	\$281,600	\$2,341,100
Iola	Allen County	31	\$711,700	\$2,871,600
Jetmore	Jetmore Municipal	0	\$2,900	\$16,900
Johnson	Stanton County Municipal	41	\$999,900	\$6,142,200
Junction City	Freeman Field	91	\$3,333,200	\$12,608,600
Kingman	Kingman-Clyde Cessna Field	13	\$228,500	\$994,100
Kinsley	Kinsley Municipal	35	\$1,424,500	\$13,117,600
Lakin	Lakin	11	\$441,400	\$1,541,700
Larned	Larned-Pawnee County	11	\$326,900	\$2,243,100
Lawrence	Lawrence Municipal	96	\$3,558,900	\$10,722,800
Leavenworth	Sherman Army Airfield	30	\$960,300	\$2,701,000
Leoti	Mark Hoard Memorial	18	\$635,800	\$5,003,000
Lincoln	Lincoln Municipal	11	\$338,000	\$2,561,700
Lyndon	Pomona Lake	1	\$26,400	\$139,700
Lyons	Lyons-Rice County Municipal	28	\$710,600	\$3,591,400
Mankato	Mankato	5	\$167,600	\$941,200
Marion	Marion Municipal	3	\$62,300	\$196,100
Marysville	Marysville Municipal	7	\$334,600	\$813,400
McPherson	McPherson	34	\$856,600	\$2,369,800
Meade	Meade Municipal	7	\$178,400	\$1,178,600
Medicine Lodge	Medicine Lodge	0	\$27,600	\$146,400
Minneapolis	Minneapolis City-County	6	\$119,300	\$866,100
Montezuma	Montezuma Municipal	10	\$201,400	\$1,223,900
Moundridge	Moundridge Municipal	16	\$583,700	\$2,559,700
Neodesha	Neodesha Municipal	1	\$27,800	\$124,600
Ness City	Ness City Municipal	0	\$8,900	\$38,000
Newton	Newton City/County	440	\$16,712,000	\$56,889,300
Norton	Norton Municipal	10	\$299,100	\$2,304,100
Oakley	Oakley Municipal	26	\$557,300	\$3,916,000
Oberlin	Oberlin Municipal	12	\$177,900	\$805,600
Olathe	Cedar Air Park	10	\$90,800	\$288,100
Olathe	Johnson County Executive	377	\$10,012,500	\$36,608,900
Olathe	New Century AirCenter	478	\$24,907,400	\$92,854,500
Osage City	Osage City Municipal	45	\$2,077,100	\$7,071,600
Osborne	Osborne Municipal	9	\$147,900	\$1,223,500
Oswego	Oswego Municipal	2	\$14,000	\$81,400
Ottawa	Ottawa Municipal	10	\$233,000	\$875,100
Oxford	Oxford Municipal	3	\$66,400	\$345,600
Paola	Miami County	29	\$952,500	\$3,390,000
Parsons	Tri-City	19	\$407,800	\$1,810,700
Phillipsburg	Phillipsburg Municipal	8	\$262,100	\$1,977,700
Pittsburg	Atkinson Municipal	54	\$1,727,900	\$7,114,500
Pleasanton	Gilmore	4	\$91,000	\$477,700
Pratt	Pratt Regional	47	\$1,228,100	\$5,319,900
Rose Hill	Cook Airfield	6	\$115,900	\$503,600

Table A-18: Kansas Airport's Total Economic Impacts (cont.)

<i>Associated City</i>	<i>Airport Name</i>	<i>Total Employment</i>	<i>Total Payroll</i>	<i>Total Output</i>
Russell	Russell Municipal	13	\$340,900	\$1,856,700
Sabetha	Sabetha Municipal	0	\$22,300	\$83,500
Satanta	Satanta Municipal	3	\$119,000	\$920,600
Scott City	Scott City Municipal	17	\$394,600	\$1,916,700
Smith Center	Smith Center Municipal	17	\$470,600	\$3,018,100
St. Francis	Cheyenne County Municipal	17	\$306,700	\$1,303,700
Stafford	Stafford Municipal	0	\$19,700	\$38,900
Sublette	Sublette Flying Club	3	\$42,100	\$173,600
Syracuse	Syracuse-Hamilton County Municipal	29	\$724,100	\$4,532,200
Topeka	Forbes Field	1,303	\$54,134,500	\$99,960,000
Topeka	Philip Billard Municipal	199	\$6,800,700	\$14,258,300
Tribune	Tribune Municipal	5	\$151,800	\$899,700
Ulysses	Ulysses	39	\$1,189,400	\$5,716,500
WaKeeney	Trego WaKeeney	6	\$124,000	\$899,700
Wamego	Wamego Municipal	1	\$30,800	\$184,100
Washington	Washington County Memorial	13	\$277,600	\$1,445,700
Wellington	Wellington Municipal	35	\$1,025,400	\$4,660,400
Wichita	Beech Factory	11,014	\$486,998,500	\$1,783,759,000
Wichita	Cessna Aircraft Field	3,020	\$133,614,700	\$890,973,900
Wichita	Col. James Jabara	738	\$33,592,300	\$89,923,600
Wichita	Riverside	8	\$177,700	\$582,300
Wichita	Westport	11	\$310,100	\$1,170,100
Winfield/Arkansas City	Strother Field	1,669	\$156,983,300	\$1,542,667,500
Yates Center	Yates Center	0	\$500	\$11,200
Other General Aviation Airports		13	\$52,400	\$167,700
General Aviation Airports Total		23,266	\$1,072,046,800	\$5,444,550,100
All Airports Total		47,651	\$2,341,876,200	\$10,409,969,000

* Other General Aviation Airports includes Argonia Municipal, Bucklin, C.E. Grutzmacher Municipal, Caldwell Municipal, Cotton Wood Falls, Council Grove Municipal, Elk County, Fowler, Hiawatha Municipal, Hillside, Horton Municipal, Lucas, Norwich, Patty Field, Plainville Airpark, Rush County, Sedan City, Seneca Municipal, St. Marys Airpark, Stockton Municipal, Van Pak, and Westport Auxiliary. Source: Wilbur Smith Associates and IMPLAN multipliers. Prepared: April 2010.

Table A-19: Qualitative Benefits of Kansas Airports

Associated City	Airport Name	Personal flying	Agricultural spraying	Other corporate/business activity	Aerial inspections	Air cargo	Flight training	Gateway for resort visitors	Staging area for community events	Police/law enforcement	Prisoner transport	Military exercises/training	Career training/education	Search & rescue/Civil Air Patrol	Environmental patrol	Emergency medical evacuation/patient transfer	Medical doctor transport	Forest/rangeland firefighting	Aerial photography/surveying	Real estate tours	Aerial advertising/banner towing	Youth outreach (Young Eagles, scouting, etc.)	Air shows
Commercial Service Airports																							
	Dodge City	D	S	D	S	D	D	S	-	M	-	M	D	-	S	D	M	-	S	S	-	-	-
	Garden City	W	S	W	M	D	M	-	-	D	M	W	M	-	S	D	D	-	S	-	-	S	-
	Great Bend	D	S	D	S	D	W	S	S	M	-	-	-	-	-	D	W	-	-	-	-	S	S
	Hays	D	-	D	W	D	M	S	S	D	-	S	M	M	-	D	M	M	S	S	-	-	-
	Liberal	D	S	D	S	D	W	-	-	W	-	-	-	-	D	W	-	-	S	-	-	-	S
	Manhattan	D	-	D	-	-	W	-	S	S	-	M	M	-	S	W	-	-	M	-	S	M	-
	Salina	D	M	D	W	D	D	W	M	D	S	D	D	W	S	W	W	S	S	-	-	M	-
	Wichita	D	-	D	M	D	D	D	M	-	W	D	D	W	-	D	M	-	M	-	-	-	-
General Aviation Airports																							
	Abilene	W	S	M	W	-	D	-	M	M	-	M	M	M	M	M	S	-	S	S	-	S	S
	Anthony	W	S	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Anthony	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Argonia	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ashland	D	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-
	Atchison	W	S	W	M	-	D	-	S	S	-	M	-	S	S	M	M	-	S	M	-	S	S
	Atwood	M	S	-	-	-	-	S	S	D	-	-	-	-	-	W	W	-	S	-	-	-	-
	Augusta	D	S	D	M	-	W	-	-	-	-	-	-	-	M	M	-	-	M	-	-	S	S
	Baldwin City	D	-	D	-	-	D	-	S	-	-	M	D	S	-	S	S	-	S	S	-	S	-
	Belleville	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

D = Daily
W = Weekly
M = Monthly
S = Seasonal
- = No activity

Associated City	Airport Name	Personal flying	Agricultural spraying	Other corporate/business activity	Aerial inspections	Air cargo	Flight training	Gateway for resort visitors	Staging area for community events	Police/law enforcement	Prisoner transport	Military exercises/training	Career training/education	Search & rescue/Civil Air Patrol	Environmental patrol	Emergency medical evacuation/patient transfer	Medical doctor transport	Forest/rangeland firefighting	Aerial photography/surveying	Real estate tours	Aerial advertising/banner towing	Youth outreach (Young Eagles, scouting, etc.)	Air shows
Beloit	Moritz Memorial	D	M	W	-	-	M	S	-	S	-	M	-	-	-	M	S	-	M	-	S	-	-
Benton	Stearman Field	D	-	D	D	-	D	S	W	-	-	-	S	-	-	M	S	-	S	-	S	M	S
Bird City	Bressler Field	M	D	M	-	-	S	S	-	-	-	-	S	S	-	-	-	-	S	-	-	-	-
Bucklin	Bucklin	S	S	-	-	-	S	-	-	-	-	-	-	S	-	-	-	-	S	-	-	-	-
Burlington	Coffey County	D	S	M	D	S	D	-	S	M	-	M	W	S	S	M	W	-	S	S	-	-	-
Caldwell	Caldwell Municipal	S	S	-	-	-	D	-	-	W	-	-	-	S	-	-	-	-	-	-	-	-	-
Chanute	Chanute-Martin Johnson	W	S	-	S	S	D	-	S	W	-	-	D	-	S	-	-	-	-	-	-	-	-
Cimarron	Cimarron Municipal	W	S	S	-	-	D	-	-	-	-	-	-	-	-	-	-	-	S	-	-	-	-
Clay Center	Clay Center Municipal	D	S	D	W	-	D	-	-	-	-	D	-	-	-	W	-	-	M	-	-	S	-
Coffeyville	Coffeyville Municipal	D	S	W	S	S	-	-	S	S	S	-	-	S	-	W	W	-	S	S	-	-	-
Colby	Shalz Field	W	S	M	W	S	D	-	S	M	-	S	S	-	D	D	W	-	S	-	-	S	S
Coldwater	Comanche County	W	S	W	-	-	-	S	S	-	-	-	-	-	-	W	M	-	-	-	-	S	-
Concordia	Blosser Municipal	D	D	W	W	-	S	S	S	M	-	S	S	S	M	W	W	-	S	-	-	S	S
Cottonwood Falls	Cottonwood Falls	W	S	S	-	-	-	S	-	-	-	-	-	-	-	S	-	S	-	-	-	-	-
Council Grove	Council Grove Municipal	M	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	-	-	-	-	-	-
Dighton	Dighton	M	S	-	-	-	-	-	-	-	-	-	-	-	-	M	-	-	-	-	-	-	-
El Dorado	Capt. Jack Thomas	D	S	M	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
El Dorado	Patty Field	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eikhart	Eikhart-Morton County	S	S	M	M	S	-	S	-	-	-	-	-	S	M	M	-	S	-	-	-	-	S
Ellinwood	Ellinwood Municipal	M	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ellsworth	Ellsworth Municipal	W	S	-	-	-	-	S	-	-	-	-	-	-	-	-	M	-	-	-	-	-	-
Emporia	Emporia Municipal	D	S	D	W	S	W	M	S	S	S	W	M	S	M	W	W	-	M	S	-	S	S
Eureka	Eureka Municipal	W	S	M	W	-	-	M	S	M	-	S	S	-	-	M	M	-	S	-	-	-	-

Associated City	Airport Name	Personal flying	Agricultural spraying	Other corporate/business activity	Aerial inspections	Air cargo	Fight training	Gateway for resort visitors	Staging area for community events	Police/law enforcement	Prisoner transport	Military exercises/training	Career training/education	Search & rescue/Civil Air Patrol	Environmental patrol	Emergency medical evacuation/patient transfer	Medical doctor transport	Forest/rangeland firefighting	Aerial photography/surveying	Real estate tours	Aerial advertising/banner towing	Youth outreach (Young Eagles, scouting, etc.)	Air shows
Fort Scott	Fort Scott Municipal	D	S	D	-	-	M	-	S	M	-	M	M	-	S	W	-	-	S	-	-	-	-
Fowler	Fowler	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fredonia	Fredonia	W	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gardner	Gardner Municipal	D	S	W	W	-	D	-	M	M	-	-	-	-	-	-	-	-	-	-	-	-	S
Garnett	Garnett Municipal	W	-	-	-	-	-	-	-	M	-	-	-	-	-	M	-	-	-	-	-	S	-
Goodland	Renner Field-Goodland Municipal	D	S	D	M	D	W	S	S	M	S	S	-	S	D	D	D	-	S	-	-	S	-
Greensburg	Paul Windle Municipal	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Harper	Harper Municipal	S	W	M	-	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Herington	Herington Regional	W	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hiawatha	Hiawatha Municipal	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hill City	Hill City Municipal	D	D	M	S	-	S	-	-	S	S	S	S	-	S	W	-	-	S	-	-	-	-
Hillsboro	Alfred Schroeder Field	D	-	M	-	-	S	-	S	-	-	M	-	-	-	W	-	-	S	-	-	S	-
Horton	Horton Municipal	S	S	-	-	-	S	-	S	-	-	-	-	-	-	S	S	-	S	-	-	-	-
Hoxie	Hoxie-Sheridan County	W	S	M	-	-	M	-	S	-	-	-	-	M	S	W	W	-	S	M	-	-	-
Hugoton	Hugoton Municipal	D	S	-	-	-	-	-	-	-	-	-	-	-	-	W	W	-	-	-	-	-	-
Hutchinson	Hutchinson Municipal	D	S	W	W	-	D	M	-	M	M	W	-	-	-	W	M	-	S	-	-	-	-
Independence	Independence Municipal	W	S	W	-	-	D	-	S	-	-	M	-	-	-	W	-	-	S	-	-	S	-
Ingalls	Ingalls Municipal	W	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iola	Allen County	W	S	D	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jetmore	Jetmore Municipal	S	-	-	-	-	-	-	-	-	-	-	-	-	-	M	-	-	-	-	-	-	-
Johnson	Stanton County Municipal	W	S	M	-	-	W	-	S	-	-	-	-	-	-	W	-	-	S	-	-	S	-
Junction City	Freeman Field	D	S	W	-	-	W	S	S	M	-	-	S	W	S	D	M	-	-	-	S	S	-
Kingman	Kingman-Clyde Cessna Field	D	-	D	M	-	D	-	S	M	-	-	-	S	S	M	-	-	S	-	-	S	-

Associated City	Airport Name	Personal flying	Agricultural spraying	Other corporate/business activity	Aerial inspections	Air cargo	Flight training	Gateway for resort visitors	Staging area for community events	Police/law enforcement	Prisoner transport	Military exercises/training	Career training/education	Search & rescue/Civil Air Patrol	Environmental patrol	Emergency medical evacuation/patient transfer	Medical doctor transport	Forest/rangeland firefighting	Aerial photography/surveying	Real estate tours	Aerial advertising/banner towing	Youth outreach (Young Eagles, scouting, etc.)	Air shows
Kinsley	Kinsley Municipal	W	D	M	-	-	-	S	-	-	-	-	-	-	-	W	M	-	-	-	-	-	-
La Crosse	Rush County	M	S	-	-	-	-	-	-	-	-	-	-	-	-	S	M	-	-	-	-	-	-
Lakin	Lakin	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M	-	-	-	-	-	-
Larned	Larned-Pawnee County	D	D	W	W	W	W	-	S	D	M	W	S	-	-	W	S	-	S	-	-	S	-
Lawrence	Lawrence Municipal	D	S	D	W	W	D	-	S	M	-	W	-	S	-	D	W	-	M	S	-	S	-
Leavenworth	Sherman Army Airfield	W	-	-	-	-	D	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-
Leoti	Mark Hoard Memorial	W	S	M	-	-	S	-	-	S	-	-	-	S	-	M	M	-	-	-	-	-	-
Lincoln	Lincoln Municipal	W	D	M	S	-	S	S	S	S	S	M	S	S	M	M	M	S	S	S	-	S	-
Lucas	Lucas	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lyndon	Pomona Lake	S	S	-	-	-	-	-	-	-	-	-	-	-	S	-	-	-	-	-	-	-	-
Lyons	Lyons-Rice County Municipal	W	S	W	W	W	M	-	-	-	-	-	-	-	-	M	-	-	-	-	-	-	-
Mankato	Mankato	W	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marion	Marion Municipal	M	-	-	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marysville	Marysville Municipal	M	S	M	-	-	S	-	S	-	-	M	-	-	-	W	W	-	-	-	-	S	S
McPherson	McPherson	D	-	D	D	D	D	S	S	M	-	M	D	-	S	M	M	-	S	-	-	S	S
Meade	Meade Municipal	W	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medicine Lodge	Medicine Lodge	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	-	-	-	-	-
Minneapolis	Minneapolis City-County	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Moline	Elk County	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montezuma	Montezuma Municipal	D	S	W	-	-	-	-	-	M	-	-	-	-	-	-	-	-	-	-	-	S	-
Moundridge	Moundridge Municipal	W	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neodesha	Neodesha Municipal	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ness City	Ness City Municipal	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

D = Daily
W = Weekly
M = Monthly
S = Seasonal
- = No activity

Associated City	Airport Name	Personal flying	Agricultural spraying	Other corporate/business activity	Aerial inspections	Air cargo	Flight training	Gateway for resort visitors	Staging area for community events	Police/law enforcement	Prisoner transport	Military exercises/training	Career training/education	Search & rescue/Civil Air Patrol	Environmental patrol	Emergency medical evacuation/patient transfer	Medical doctor transport	Forest/rangeland firefighting	Aerial photography/surveying	Real estate tours	Aerial advertising/banner towing	Youth outreach (Young Eagles, scouting, etc.)	Air shows
Newton	Newton City/County	D	S	D	D	-	D	W	M	W	-	W	S	S	S	D	W	W	M	-	M	M	S
Norton	Norton Municipal	W	D	W	-	-	M	S	-	-	-	-	-	S	-	W	M	-	M	-	M	M	-
Norwich	Norwich	W	S	-	-	-	W	S	-	-	-	-	-	S	-	S	M	-	S	-	M	M	-
Oakley	Oakley Municipal	W	D	W	M	-	-	-	S	S	-	-	-	S	-	M	W	-	S	-	M	M	-
Oberlin	Oberlin Municipal	D	S	W	-	-	S	S	S	S	-	-	-	S	-	W	W	-	S	-	M	M	-
Olathe	Cedar Air Park	W	-	W	M	-	W	-	S	S	-	S	M	-	-	-	W	-	-	-	M	M	-
Olathe	Johnson County Executive	D	-	D	S	M	W	S	M	M	-	M	M	M	S	W	W	S	S	M	M	M	-
Olathe	New Century AirCenter	D	-	D	M	W	W	-	S	M	M	D	D	M	S	M	M	S	S	S	-	W	S
Onaga	C.E. Grutzmacher Municipal	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Osage City	Osage City Municipal	D	S	W	D	-	S	S	-	M	-	-	-	M	S	D	-	S	-	-	-	-	-
Osborne	Osborne Municipal	W	D	W	M	-	M	-	S	D	-	-	S	M	M	M	-	-	S	-	-	S	-
Oswego	Oswego Municipal	D	S	-	M	-	-	S	-	S	S	-	-	-	S	-	-	-	S	-	-	S	-
Ottawa	Ottawa Municipal	W	S	M	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxford	Oxford Municipal	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paola	Miami County	D	S	D	M	-	M	S	S	M	S	-	D	S	-	S	-	-	S	-	-	S	S
Parsons	Tri-City	W	-	M	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phillipsburg	Phillipsburg Municipal	W	D	M	M	-	-	-	-	-	-	-	-	-	-	W	M	-	S	-	-	S	-
Pittsburg	Atkinson Municipal	W	S	D	M	M	D	-	M	M	S	M	W	S	S	M	M	-	S	-	-	S	-
Plainville	Plainville Airpark	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pleasanton	Gilmore	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prairie View	Van Pak	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pratt	Pratt Regional	D	S	W	W	M	S	S	S	M	-	S	-	S	M	M	M	-	S	-	-	S	-
Rose Hill	Cook Airfield	-	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

D = Daily
W = Weekly
M = Monthly
S = Seasonal
- = No activity

Associated City	Airport Name	Personal flying	Agricultural spraying	Other corporate/business activity	Aerial inspections	Air cargo	Flight training	Gateway for resort visitors	Staging area for community events	Police/law enforcement	Prisoner transport	Military exercises/training	Career training/education	Search & rescue/Civil Air Patrol	Environmental patrol	Emergency medical evacuation/patient transfer	Medical doctor transport	Forest/rangeland firefighting	Aerial photography/surveying	Real estate tours	Aerial advertising/banner towing	Youth outreach (Young Eagles, scouting, etc.)	Air shows
Russell	Russell Municipal	D	W	M	-	S	M	S	-	S	-	S	M	-	S	M	W	S	S	S	-	-	S
Sabetha	Sabetha Municipal	D	M	-	S	-	S	-	-	S	-	-	-	S	-	S	-	S	S	-	-	-	-
Satanta	Satanta Municipal	D	S	M	-	-	M	S	-	S	-	-	-	S	-	M	M	-	S	-	-	M	-
Scott City	Scott City Municipal	D	D	D	W	-	D	S	-	-	-	-	-	S	D	D	D	-	-	-	S	-	-
Sedan	Sedan City	W	S	-	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Seneca	Seneca Municipal	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	M	-	-	-	-	-	-
Smith Center	Smith Center Municipal	W	S	M	-	-	-	-	-	-	-	-	-	-	-	-	M	-	-	-	-	-	-
St. Francis	Cheyenne County Municipal	D	S	W	M	-	M	S	-	-	-	-	-	-	-	D	D	-	-	-	-	-	S
St. Marys	St. Marys Airpark	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stafford	Stafford Municipal	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stilwell	Hillside	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stockton	Stockton Municipal	W	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sublette	Sublette Flying Club	W	-	D	S	-	S	S	-	S	-	-	S	S	-	S	S	-	M	S	-	S	-
Syracuse	Syracuse-Hamilton County Municipal	D	D	W	S	-	W	S	S	S	S	S	S	S	S	M	W	S	S	-	-	S	S
Topeka	Forbes Field	D	S	D	-	-	W	W	-	D	-	D	-	-	S	-	-	-	-	-	S	-	-
Topeka	Philip Billard Municipal	D	S	D	-	-	D	-	-	D	-	D	-	-	-	-	-	-	S	-	S	-	-
Tribune	Tribune Municipal	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ulysses	Ulysses	D	D	W	W	-	M	M	-	S	-	S	S	S	-	W	M	S	S	-	-	S	S
WaKeeney	Trego WaKeeney	W	S	M	S	-	S	S	-	S	-	-	-	S	-	W	M	S	S	S	-	-	-
Wamego	Wamego Municipal	D	S	W	-	-	-	-	-	-	-	M	-	-	-	S	-	-	-	-	-	-	-
Washington	Washington County Memorial	M	S	-	-	-	W	-	-	-	-	M	-	-	-	-	-	-	-	-	-	-	-
Wellington	Wellington Municipal	D	S	W	D	-	D	-	S	M	M	-	-	M	-	M	-	-	M	-	-	M	S

D = Daily
W = Weekly
M = Monthly
S = Seasonal
- = No activity

D = Daily
W = Weekly
M = Monthly
S = Seasonal
- = No activity

Associated City	Airport Name	Personal flying	Agricultural spraying	Other corporate/business activity	Aerial inspections	Air cargo	Flight training	Gateway for resort visitors	Staging area for community events	Police/law enforcement	Prisoner transport	Military exercises/training	Career training/education	Search & rescue/Civil Air Patrol	Environmental patrol	Emergency medical evacuation/patient transfer	Medical doctor transport	Forest/rangeland firefighting	Aerial photography/surveying	Real estate tours	Aerial advertising/banner towing	Youth outreach (Young Eagles, scouting, etc.)	Air shows
Wichita	Beech Factory	D	-	-	-	-	D	-	S	-	-	W	-	-	-	M	M	-	-	-	-	-	-
Wichita	Cessna Aircraft Field	-	-	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	-
Wichita	Col. James Jabara	D	S	D	W	-	D	D	S	D	-	-	-	W	-	D	-	-	-	-	S	-	S
Wichita	Riverside	M	-	-	-	-	M	-	-	-	-	-	-	-	-	-	-	-	M	-	-	-	-
Wichita	Westport	W	-	-	-	-	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wichita	Westport Auxiliary	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Winfield/ Arkansas City	Strother Field	W	S	W	S	-	W	S	S	M	S	S	-	-	M	M	-	-	-	S	-	S	S
Yates Center	Yates Center	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: Wilbur Smith Associates.

Prepared: April 2010.

KANSAS
DEPARTMENT OF TRANSPORTATION

For more information contact:
Kansas Department of Transportation
700 SW Harrison
Topeka, KS 66603-3754
785.296.2553
www.ksdot.org/divaviation/

Prepared by:

WilburSmith
ASSOCIATES

