

STATEWIDE IMPACTS

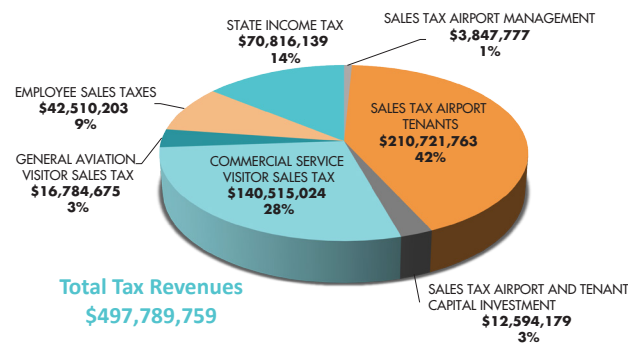
Total Annual Impacts from All Study Airports

OAC's research project estimated annual economic impacts for 109 study airports. As noted previously when total impacts (direct and indirect/induced) are considered, all airports are responsible for the following annual economic impacts.

- » Total Statewide Jobs – 74,002
- » Total Statewide Annual Payroll - \$3.6 Billion
- » Total Annual Spending - \$7 Billion
- » Total Statewide Economic Activity - \$10.6 B

Total Annual State Tax Revenues from Study Airports

Airport related jobs and spending, along with visitor spending are responsible for a variety of tax revenues. On a statewide basis, the study airports and activities they support contribute the following annual tax revenues. Airport related tax revenues estimated in this study considered only direct employment, payroll, and spending.



Total Annual Economic Impacts from Military Aviation

In addition to Oklahoma's 109 civilian airports, the state also has three major military airfields. These include: Altus Air Force Base, Tinker Air Force Base, and Vance Air Force Base. Similar to the civilian airports, the military airfields have annual economic impacts that can be measured in terms of spending and total annual economic activity. Economic impacts shown here are for all three bases and consider impacts related to operations and capital investment. In addition to the three air force bases, the Oklahoma Army Air Guard has various activities in Oklahoma at non-airport locations that also contribute to military related economic impacts. Total statewide economic impacts from military aviation are shown below.

- » Total Statewide Jobs – 72,648
- » Total Statewide Annual Payroll - \$4.7 Billion
- » Total Annual Spending - \$14.6 Billion
- » Total Statewide Economic Activity - \$19.3 Billion

Additional Economic Impacts from Off-Airport Aviation and Aerospace Companies

Aside from aviation businesses located at study airports, there are other companies involved in activities that support the aviation or aerospace industries in Oklahoma. As part of the OAC project, these businesses were identified and researched to determine additional economic impacts associated with their operations. Examples of businesses included in this category include Nordam, Boeing, L-3, and Flight Safety International.

Additional economic impacts identified in this category are as follows:

- » Total Statewide Jobs – 58,958
- » Total Statewide Annual Payroll - \$3.4 Billion
- » Total Annual Spending - \$10.5 Billion
- » Total Statewide Economic Activity - \$13.9 Billion

Jobs in Oklahoma that Gain Efficiency from Using Aviation

Many employers in Oklahoma use aviation to transport their employees, ship and receive goods and supplies, and facilitate convenient visits from their customers and suppliers. Additional research conducted as part of the OAC study estimates that there are approximately 34,800 jobs statewide that have improved efficiency through support provided by various facets of aviation. These jobs are in addition to those supported by the airports, the military, and off-airport aviation related employers.

Total Oklahoma Economic Impacts from Aviation and Aerospace

Aviation and aerospace are significant contributors to Oklahoma's economy. Total annual statewide economic impacts from the public airports, aviation related military activities, and off-airport aviation and aerospace employers are shown below:



Annually, aviation and aerospace contribute \$43.7 billion to the Oklahoma economy. Employers in Oklahoma use commercial and general aviation airports as important tools to improve their efficiency. Military aviation units are some of the largest single site employers in the state, and there are over 800 off-airport businesses in Oklahoma that are engaged in aviation and aerospace activities.

When all aviation and aerospace activities are considered, this study has estimated that all direct, indirect, and induced jobs represent about 14.5% of all non-farm employment in Oklahoma. Clearly, the OAC study has shown that aviation and aerospace are significant contributors to Oklahoma's economy.

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THE ECONOMIC IMPACT OF

CHATTANOOGA SKY HARBOR AIRPORT

CHATTANOOGA, OKLAHOMA



The Oklahoma Aeronautics Commission (OAC) has completed research to document how aviation and aerospace benefit the economies of the state and communities throughout Oklahoma. Economic impacts measured in the state study include those for Chattanooga Sky Harbor Airport. This report provides a high-level overview of the airport's specific annual economic impacts, as well as total statewide aviation-related economic impacts. More information on the full study is available by contacting OAC.

Oklahoma
AVIATION & AEROSPACE
ECONOMIC IMPACT STUDY
— 2 0 1 7 —

OKLAHOMA

Statewide Economic Benefits from Airports

As part of OAC's research project, annual economic impacts for 109 study airports were estimated. Economic impacts reported in the OAC study reflect a snapshot of conditions that characterized the airports in 2016. Each airport was investigated, as applicable, to identify potential economic impacts related to:

- » Airport Management
- » Airport Tenants
- » Investment in Capital Projects
- » Spending from Visitors Arriving on General Aviation Aircraft
- » Spending from Visitors Arriving on Commercial Airlines

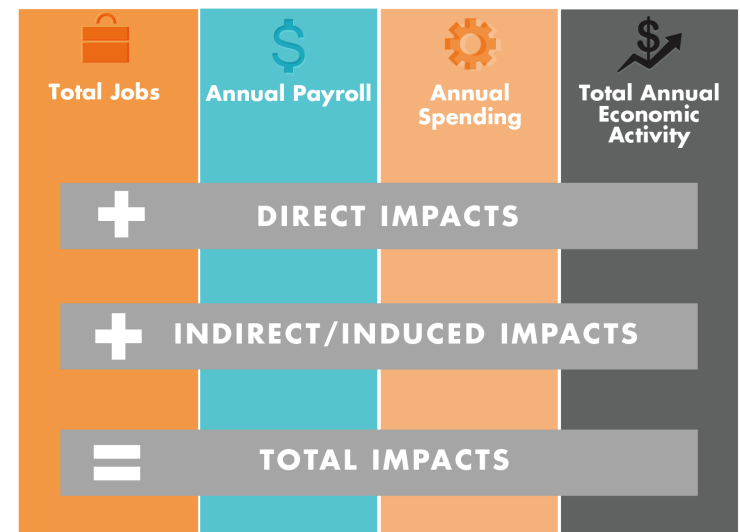
The OAC study used four primary measures to express both statewide and airport specific annual economic impacts:

- » Employment/Jobs
- » Annual Payroll
- » Annual Spending
- » Total Annual Economic Activity (Payroll plus Spending)

Economic impacts reported in the study reflect not only direct impacts but also indirect/induced impacts that result from a multiplier effect. Together, direct and indirect/induced impacts equal total statewide and airport specific annual economic impacts. A state model, specific to Oklahoma, was used by the Oklahoma Department of Commerce to estimate total economic impacts.

For all study airports, OAC's statewide economic impact study estimated total annual economic impacts as shown below.

ANNUAL ECONOMIC IMPACTS ALL STUDY AIRPORTS



CHATTANOOGA SKY HARBOR AIRPORT

Total Annual Economic Impact on Oklahoma's Economy



Estimating the Airport's Annual Economic Impact

Surveys, interviews, and on-site visits were used to collect direct impacts for the airport management function and for any aviation-related airport tenants who are engaged in the provision of aviation services or customer support. In some instances, jobs in the airport management category are not physically located at the airport. This is particularly true when the airport is owned by a city or county. Also, for both the airport management and airport tenant categories, not all jobs are full-time. There are also part-time as well as seasonal jobs. For this study, all less-than-full-time positions were converted to full-time equivalent (FTE) jobs using hours worked or salary paid.

Many airports in Oklahoma have investments to complete capital projects. Funds for capital investment come from the FAA, the state, the airport owner, and/or other third-party sources. While money is being spent to implement a project, this spending helps to support jobs and the payroll associated with these jobs. For this study, average annual capital investment for the airport, from all sources, over a five-year period was considered to estimate economic impacts in the capital investment category.

Each year, an estimated 440,000 visitors arrive in Oklahoma on general aviation aircraft; 437 of these visitors arrive via Chattanooga Sky Harbor Airport. While in the state, these visitors often have expenditures for lodging, food, retail, ground transportation, entertainment, and/or retail purchases. Annual visitor spending helps to support other jobs and payroll, primarily in the hospitality industry.

The accompanying table shows direct, indirect/induced, and total economic impacts for the airport for airport management, airport tenants, capital investment, and visitor spending. Additional airport related benefits come in the form of state tax revenues that the airport contributes related to the following:

- Sales tax paid by visitors on hotels, meals, rental cars, and retail spending
- Sales tax paid on goods and materials purchased to support capital projects
- Sales tax paid on supplies needed to operate the airport or tenant businesses
- Sales and income tax paid by employees whose direct jobs are airport supported

From these sources, the study estimated that the airport contributes approximately \$14,870 in annual state and local tax revenues.

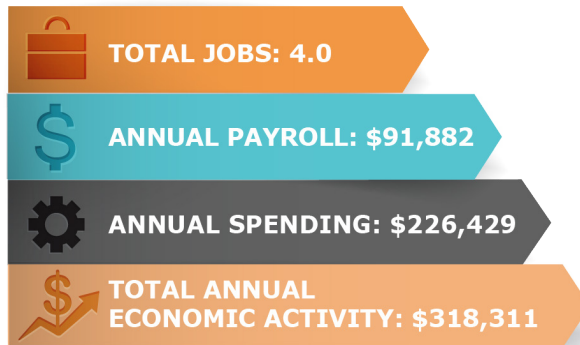
Annual Economic Impacts from Chattanooga Sky Harbor Airport

This table reports the direct, indirect/induced, and total economic impacts for the airport as estimated in OAC's study.

	EMPLOYMENT			TOTAL PAYROLL			ANNUAL SPENDING			ANNUAL ECONOMIC ACTIVITY		
	Direct	Indirect/Induced	Total	Direct	Indirect/Induced	Total	Direct	Indirect/Induced	Total	Direct	Indirect/Induced	Total
Airport Management	0.5	0.5	1	\$10,500	\$6,316	\$16,816	\$17,500	\$21,940	\$39,440	\$28,000	\$28,256	\$56,256
Airport Tenants	0.5	0.5	1	\$15,000	\$12,947	\$27,947	\$26,000	\$20,773	\$46,773	\$41,000	\$33,719	\$74,719
Capital Investment	0.5	0.5	1	\$16,072	\$16,280	\$32,352	\$51,628	\$42,332	\$93,960	\$67,700	\$58,612	\$126,312
General Aviation Visitor Spending	0.5	0.5	1	\$8,628	\$6,139	\$14,767	\$28,491	\$17,765	\$46,256	\$37,119	\$23,904	\$61,023
Total Impacts	2	2	4	\$50,200	\$41,682	\$91,882	\$123,619	\$102,810	\$226,429	\$173,819	\$144,492	\$318,311

Annual Economic Activity = Payroll + Spending

Total Annual Economic Impact for Chattanooga Sky Harbor Airport



The Airport Helps Connect the Community

When businesses decide to relocate or expand, there are many factors they consider. Frequently, having access to a general aviation airport is a highly-rated decision-making factor. A mile of road can take you one mile, and a mile of runway can take you pretty much anywhere. Limited information is available from FAA sources on originations and destinations for the airport's flights. The map below shows a very small snapshot of the airport's non-stop flights. Despite the small sample size, the map helps to show how the airport helps to conveniently connect the community to destinations across the United States and beyond.



✈ 92F
 — Departures & Arrivals

Available FAA IFR Flight Data:
 21 arrivals/departures*

*This FAA data represents only a small fraction of actual operations

Other Benefits of Chattanooga Sky Harbor Airport

The airport's economic and tax revenue benefits have been previously reported. But these are not the only benefits the community receives from the airport. Airports such as Chattanooga Sky Harbor Airport support many unnoticed health, welfare, environmental, safety, and other business benefits. Some of the other benefits supported by the airport are discussed here.

Chattanooga Sky Harbor Airport Provides More Than Just Economic Benefits

Oklahoma is a leader in aviation education and training; statewide, it is estimated that there are about 1,570 jobs devoted to this endeavor. Chattanooga Sky Harbor Airport plays an important role in training tomorrow's pilots and aviation professionals. More than 50 airports support aviation training. Flight instructors often use the airport, and their students perform training flights.

Mechanics who provide aircraft maintenance are highly qualified and provide specialized services that are often not available at each local airport. Chattanooga Sky Harbor Airport has a certified mechanic that provides aircraft maintenance. As a result, many visiting aircraft use the airport for these services. While in the area, these visitors may have spending for hotels, food, and other which helps support the local economy.

Crop and livestock production are staples for Oklahoma's economy. There are over 34 million acres in the state dedicated to agricultural. When all facets of the industry are considered, it is estimated that agriculture contributes \$40 billion to the state's economy. Aerial applicators treat both ranch lands and crops, helping to increase yields in this important economic sector. The airport is home to a based aerial applicator whose spraying services help to increase yields for area farmers and ranchers.

The airport also hosts visiting or transient aerial applicators. These companies travel to the area for several weeks during the year, helping to provide additional treatments for crops and ranch lands. When these transient aerial applicators visit the area, they often have spending for items such as food, lodging, and retail. This spending helps support the local economy.

