STATEWIDE IMPACTS

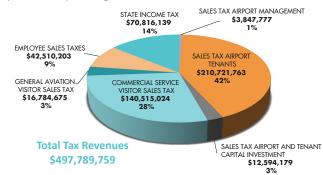
Total Annual Impacts from All Study Airports

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 offairport 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.

For More Information:



Oklahoma Aeronautics Commission 110 N Robinson Avenue Suite 200 Oklahoma City, Oklahoma 73102 ph. 405.604.6900 | oac.ok.gov **Prepared by: JVIATION**

— THE ECONOMIC IMPACT OF —

TAHLEQUAH MUNICIPAL AIRPORT

TAHLEQUAH, 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 Tahlequah Municipal 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

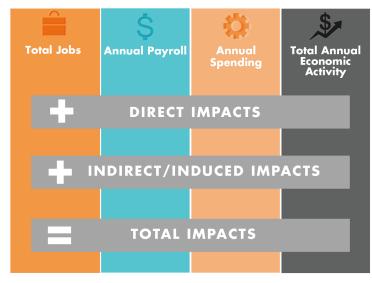
The OAC study used four primary measures to express both statewide and airport specific annual economic impacts:

- » 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



TAHLEQUAH MUNICIPAL 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; 2,184 of these visitors arrive via Tahlequah Municipal 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 \$255,174 in annual state and local tax revenues.

Annual Economic Impacts from Tahlequah Municipal 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	\$7,087	\$17,588	\$308,698	\$254,629	\$563,327	\$319,198	\$261,716	\$580,915
Airport Tenants	8	8.2	16.2	\$782,947	\$877,773	\$1,660,720	\$1,223,226	\$1,156,177	\$2,379,403	\$2,006,173	\$2,033,951	\$4,040,123
Capital Investment	2	1	3	\$68,871	\$69,767	\$138,638	\$221,241	\$181,403	\$402,644	\$290,112	\$251,170	\$541,282
General Aviation Visitor Spending	4	2	6	\$91,442	\$65,653	\$157,095	\$245,706	\$144,095	\$389,801	\$337,148	\$209,748	\$546,896
Total Impacts	14.5	11.65	26.15	\$953,760	\$1,020,280	\$1,974,041	\$1,998,871	\$1,736,305	\$3,735,176	\$2,952,631	\$2,756,585	\$5,709,217

Annual Economic Activity = Payroll + Spending

Total Annual Economic Impact for Tahleguah Municipal Airport



OREGON

CALIFORNIA

TQH

NEVADA

Departures & Arrivals

Available FAA IFR Flight Data:

112 arrivals/departures*

The Airport Helps Connect the Community

NORTH CAROLINA

SOUTH CAROLINA

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 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.

Other Benefits of Tahlequah Municipal 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 Tahlequah Municipal Airport support many unnoticed health, welfare, environmental, safety, and other business benefits. Some of the other benefits supported by the airport are discussed here.

Tahlequah Municipal Airport Provides More Than Just Economic Benefits

Northeastern State University benefits from the airport. Colleges and universities often use general aviation to support various activities. One of these activities is student recruitment. General aviation is often used as an important tool for colleges and universities wishing to expand their catchment area for potential students. Institutions also often fly in guest speakers or prospective hires for department heads and/ or teaching positions. General aviation is also sometimes used to support philanthropic activities associated with the college.

Fixed-wing aircraft are used to support various emergency medical needs. Most often, aircraft are used to transport patients, who have life-threatening medical conditions, from smaller hospitals to larger medical facilities. The airport helps support these types of important activities. When airports in Oklahoma help save a life or to transport a patient in need of more advanced medical care, a dollar value cannot be placed on this benefit.

Recreational activities in Oklahoma attract both residents and visitors. It is not uncommon for residents to fly to take advantage of recreational options in other parts of the state. When residents or visitors fly to recreational attractions, they often have expenditures for the entertainment, food, lodging, and retail. This spending helps to support the local economy. The resorts in around the Illinois River in Tahlequah attract many visitors, and the airport helps to facilitate their travel.

With a population approaching 300,000, the Cherokee Nation is based in Tahlequah. The airport supports the Nation's air travel activities as well as those of visitors who fly to Tahlequah for tribal related business. The tribe bases its own aircraft at the airport. These planes are used to support medical and educational activities. In addition, the Cherokee Nation has a wide range of business endeavors that they use their aircraft to oversee and manage. The airport facilitates convenient, non-stop travel from Tahlequah to Washington DC. Trips from Tahlequah to Washington DC can be accomplished in a day.







COLORADO

NEW MEXICO

NORTH DAKOTA

SOUTH DAKOTA

NEBRASKA

KANSAS

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