

STATEWIDE IMPACTS

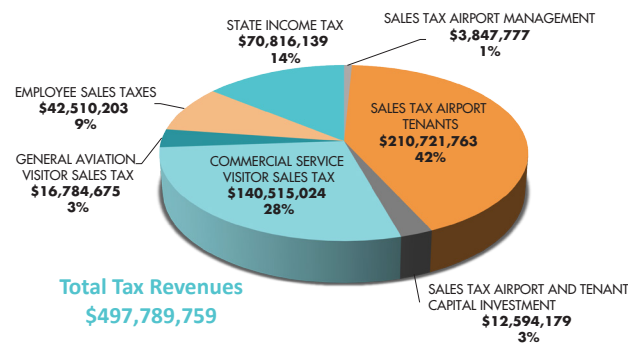
Total Annual Impacts from All Study Airports

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 —

TULSA INTERNATIONAL AIRPORT

TULSA, 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 Tulsa International 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

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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

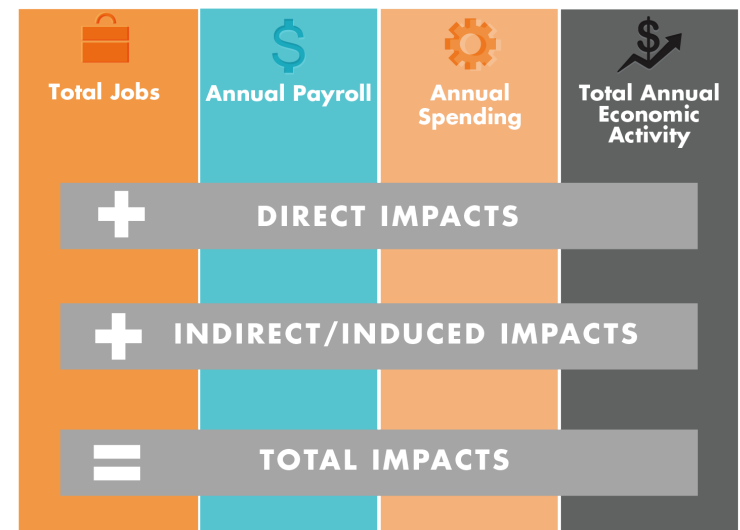
The OAC study used four primary measures to express both statewide and airport specific annual economic impacts:

- » 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



TULSA INTERNATIONAL 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 67,157 visitors arrive at the airport on general aviation aircraft, and 578,047 visitors arrive on a scheduled commercial airline flight. 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 \$259,985,461 in annual state and local tax revenues.

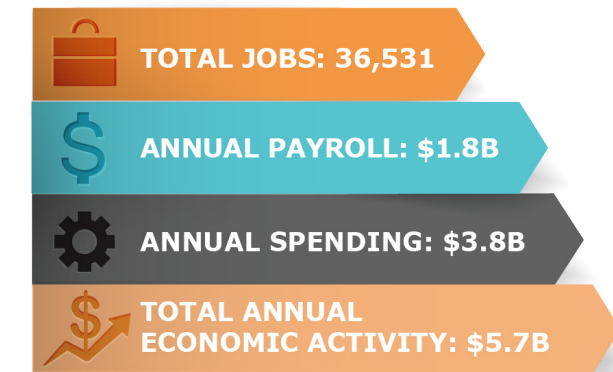
Annual Economic Impacts from Tulsa International Airport

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	133	79	212	\$6,899,840	\$4,104,016	\$11,003,856	\$11,288,960	\$14,249,513	\$25,538,473	\$18,188,800	\$18,353,529	\$36,542,329
Airport Tenants	10,485	15,034	25,519	\$694,358,059	\$825,794,110	\$1,520,152,169	\$1,676,908,513	\$1,387,957,742	\$3,064,866,254	\$2,371,266,572	\$2,213,751,852	\$4,585,018,424
Capital Investment	384	323	707	\$14,825,602	\$15,018,554	\$29,844,156	\$47,625,961	\$39,050,217	\$86,676,178	\$62,451,563	\$54,068,771	\$116,520,334
General Aviation Visitor Spending	364	130	494	\$8,063,947	\$5,759,540	\$13,823,487	\$22,491,259	\$11,367,330	\$33,858,589	\$30,555,206	\$17,126,870	\$47,682,076
Commercial Service Visitor Impacts	7,003	2,596	9,599	\$157,474,090	\$115,506,477	\$272,980,567	\$467,221,048	\$213,311,458	\$680,532,506	\$624,695,138	\$328,817,935	\$953,513,073
Total Impacts	18,369	18,162	36,531	\$881,621,538	\$966,182,697	\$1,847,804,235	\$2,225,535,741	\$1,665,936,259	\$3,891,472,001	\$3,107,157,279	\$2,632,118,957	\$5,739,276,236

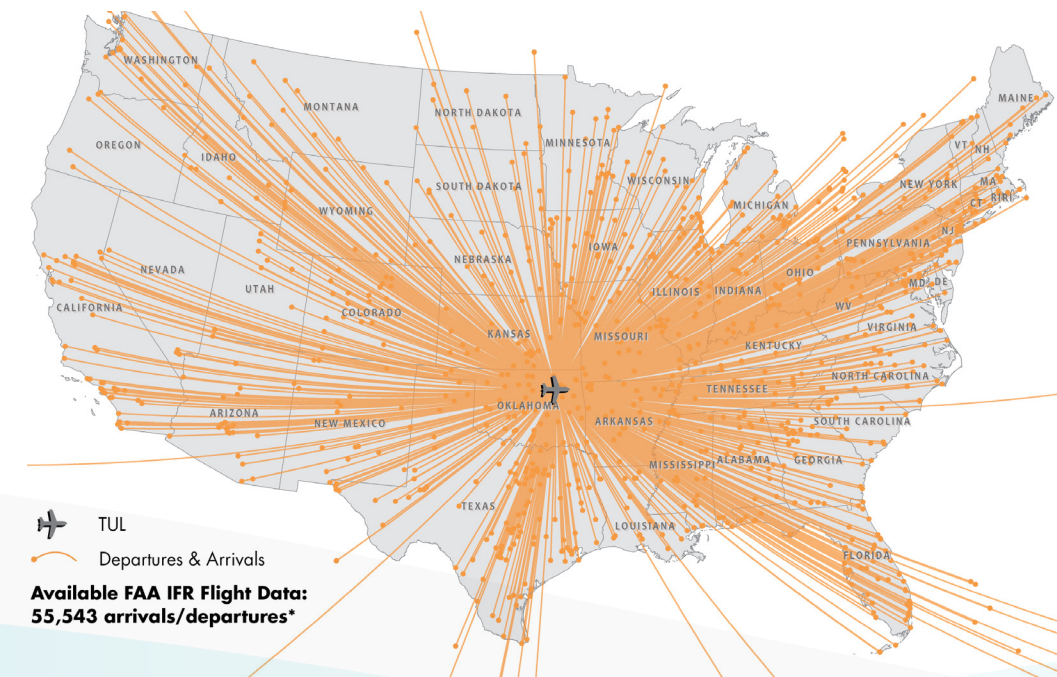
Annual Economic Activity = Payroll + Spending

Total Annual Economic Impact for Tulsa International 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 commercial 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. Information from FAA is available on a snapshot of non-stop general aviation and commercial airline flights that depart from the airport. This is not a full accounting for all flights, but the map below demonstrates how the airport helps to conveniently connect the community to destinations across the United States and beyond.



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

The Airport Has Helped to Attract Many Aviation/Aerospace Employers

The airport has helped to attract many aviation and aerospace businesses to the Tulsa Metropolitan Statistical Area (MSA). As part of OAC's state study, these off-airport aviation and aerospace employers were identified. Similar to other impact categories, the employment, payroll, spending, and annual economic activity were identified. The IMPLAN model was also used to estimate indirect and induced impacts for these off-airport employers.

Economic Impacts from Off-Airport Aviation & Aerospace Employers in Oklahoma City Metropolitan Statistical Area (MSA)

Following World War II, Oklahoma emerged as a center for aviation activity. Ever since that time, Oklahoma has continued its upward trajectory, attracting the nation's most sophisticated aviation/aerospace developers, maintainers, and suppliers. As part of the OAC study, additional research was undertaken to identify other aviation and aerospace employers in Oklahoma who are not located at an airport.

Impacts presented in this section are those associated with aviation and aerospace companies that operate in the Tulsa MSA but are not located at the Airport. These impacts are in addition to those identified previously. Research conducted as part of this study indicates that there are 286 businesses in the MSA engaged in some facet of aviation or aerospace as their core or primary business. These aviation and aerospace businesses have a significant economic impact on the Tulsa MSA. Annual economic impacts from these off-airport employers are summarized here.

Total Tulsa MSA Annual Economic Impacts Off-Airport Aviation/Aerospace

	Direct	Indirect/Induced	Total
Airport Management	10,110	12,276	22,386
Airport Tenants	\$603,895,947	\$646,697,462	\$1,250,593,409
Capital Investment	\$3,279,756,947	\$1,341,732,110	\$4,621,489,057
General Aviation Visitor Spending	\$3,883,652,894	\$1,988,429,572	\$5,872,082,466

Summary of On- and Off-Airport Annual Economic Impacts

The OAC study concluded that when the Airport's impacts from airport management, airport tenants, CIP investment, general aviation visitor spending, commercial visitor spending, and off-airport aviation and aerospace employers in the MSA are combined, total annual economic impacts for the Tulsa International Airport are as follows:

- » 58,917 Jobs
- » \$3.0 billion in annual payroll
- » \$8.5 billion in annual spending
- » \$11.6 billion in economic activity

These estimates include all direct, indirect, and induced economic impacts identified in the OAC study. The OAC study has clearly shown that all facets of aviation and aerospace supported by Tulsa International Airport are significant contributors to Oklahoma's economy. Combined, all categories examined in this study are contributing \$11.6 billion each year to the state and local economy.