

# ARIZONA AVIATION ECONOMIC IMPACT STUDY

**Executive Summary** 

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# **Airports, Aerospace, and Defense**

Driving Arizona's Growth, Culture of Innovation, and Economic Prosperity

# **STATEWIDE 2019 ECONOMIC IMPACT** \$121.4B



# Arizona Airports<sup>3</sup> \$59.4B

#### The 2021 Arizona Aviation Economic Impact Study (2021 Arizona AEIS) revealed that Arizona's airports, aerospace, and defense industries contributed over \$121.4 billion (B) to the Arizona economy in 2019.

Arizona's 67 publicly owned, public-use airports are fundamental to the state's economy while supporting the safety, security, and resiliency of the state's 7.28 million (M) residents and 46.7M annual visitors.<sup>4</sup> Eleven commercial service and 56 general aviation [GA] airports offer global connectivity for the state's 150,000 business establishments, which together employ 2.6M workers with a total annual payroll of \$169.7B. Many of Arizona's aerospace manufacturing and research firms have locations at or adjacent to airports. Industry giants like Honeywell Aerospace; Raytheon; The Boeing Company; and Textron-owner of the Beechcraft, Cessna, and Hawker aircraft and Bell helicopter brands-are several examples of major companies with long-established relationships with airports in the state. In addition to Arizona's unique climate and business-friendly environment, many of these companies are drawn by the presence of six major U.S. military bases and four Arizona Air and Army National Guard units. Together, Arizona's airports, principal military installations, and aerospace manufacturing and research industries serve as the basis for one of the state's most vibrant economic engines.

The 2021 Arizona AEIS commissioned by the Arizona Department of Transportation (ADOT) Aeronautics Group quantified the size and scope of the impacts generated by airports, the aerospace manufacturing and research industry, and principal military installations on the Arizona economy (2019 study year). This analysis found that these three study components contributed \$121.4B in economic activity (output) and supported 575,826 jobs for Arizona workers in 2019-demonstrating that continued investment into aviation is vital for the ongoing strength, diversity, and vitality of our state.

Notes and Sources: (1) Impacts modeled by IHS Markit using IMPLAN [2019]. (2) Impacts obtained from the Economic Impacts of Arizona's Principal Military Operations commissioned by the Military Affairs Commission. Prepared by The Maguire Company [2017]. (3) Impacts modeled by IHS Markit using IMPLAN for 59 study airports. Eight airports requested that their independently conducted studies be incorporated into the 2021 Arizona AEIS study results [2019]. (4) 2019 out-of-state overnight visitors obtained from the Arizona Office of Tourism [2019].

## **Arizona Airports and Principal Military Installations**

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60)

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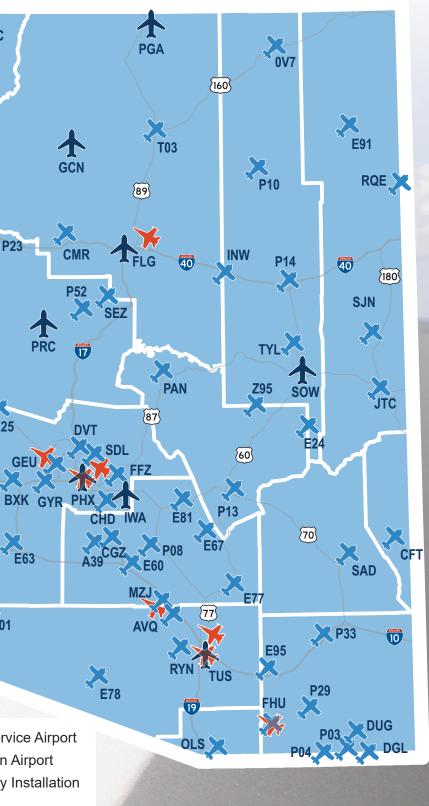
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### **TECHNICAL REPORT**

For additional study details including the full technical report and methodology, visit azdot.gov/planning/airport-development/links-and-resources-airport-development



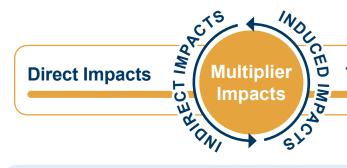
## What is Economic Impact?

Economic impact quantitatively estimates the specific contribution of an industry or organization on a broader economy. The 2021 Arizona AEIS measured the contributions of Arizona's airport system, aerospace manufacturing and research industry, and principal military installations in terms of jobs, earnings, and economic activity or output in 2019. Economic activity also triggered the generation of taxes used to fund other government functions, including aviation-related development.



# Methodology

Economic impacts are calculated by first quantifying the *direct impacts* that an industry has on the economy as a function of its operations. Successive waves of economic activity are generated when money is spent buying goods and services from other industries (*indirect impacts*) and workers spend their earnings on household purchases (*induced impacts*) within the same study area (e.g., in Arizona). Indirect and induced impacts are collectively known as multiplier impacts. *Total impacts* represent the sum of direct, indirect, and induced impacts flowing through the economy as a result of the industry or organization being studied.



## **Study Approach by Component**

The 2021 Arizona AEIS approached the study components in three unique ways:

### **Study Components**

The economic impacts reported by the 2021 Arizona AEIS represent the direct, indirect, and induced economic impacts generated by 67 publicly owned, public-use Arizona airports, as well as the off-airport impacts of aerospace manufacturing and research and principal military installations with an aviation-related mission component. The study components, as well as additional details about the elements examined within each, are highlighted below. Notably, the economic impact of airports are generated by **on-airport business activities**, encompassing airport administration, on-airport business tenants, and capital improvements, as well as **visitor spending**. The study also took an in-depth look at the current and projected future economic and quality-of-life benefits provided by aviation activities. Forecasts were also applied to the relevant accounts within the State Aviation Fund, the primary state mechanism for funding the preservation and expansion of Arizona's state system airports.

#### Arizona Airports

#### **On-airport Business Activities** Airport **Business** Capital Administration Tenants Improvements Airport staff responsible Four-year average (2016 On-airport for the management businesses with - 2019) of local, state, and operations of employees working and federal investment the airport on-airport property into airport development

#### **Off-airport Aviation-related Industries**

Aerospace Manufacturing and Research Firms with off-airport establishments in the aerospace and defense supply chain including aviation support industries such as airplane parts manufacturing

#### Principal Military Installations

**Visitor Spending** 

Money spent by out-of-state

visitors who travel to Arizona

through a commercial service or

GA airport, who generally spend

money in hospitality-related

industries such as lodging,

restaurants, and entertainment

Including six major U.S. military installations and four Arizona Air and Army National Guard units, all of which have an aviation- or aerospace-related component

### **ARIZONA AIRPORTS**

The economic impacts of 59 Arizona airports were developed following a comprehensive data collection and validation process. Data were threaded through a nationally recognized input/output model (IMPLAN), with results generated at airport-specific, county, and statewide levels. Eight airports requested that the results of independently conducted AEISs be incorporated into this ADOT study. To ensure a consistent study year (2019), results of these independently conducted studies were updated as necessary based on aviation-specific and macroeconomic trends. These airports are denoted with an asterisk in the individual airport results later in this document.

### **AEROSPACE MANUFACTURING AND RESEARCH**

Arizona employees working in this industry in 2019 were identified in IHS Markit's Business Market Insight (BMI) database leveraging information published by the U.S. Bureau of Labor Statistics (BLS). IHS Markit generated direct and total impacts using IMPLAN following the same approach as described under the Arizona Airports component.

### **PRINCIPAL MILITARY INSTALLATIONS**

The economic impacts of Arizona's principal military installations were obtained from the *Economic Impacts of Arizona's Principal Military Operations* commissioned by the Military Affairs Commission and prepared by The Maguire Company. Because military-related employment is driven by federal spending and military employment in Arizona has remained stable over the past several decades, the 2021 Arizona AEIS incorporated the 2017 results into the study without updating to reflect the same 2019 baseline year as the other study components.

The economic impacts of military activity occurring on airport property, specifically the Arizona Air National Guard 161st and 162nd units based at Phoenix Sky Harbor International Airport (PHX) and Tucson International Airport (TUS), were removed from this study component. The economic activity associated with these units is reported under the Arizona Airports component and thus excluded here to avoid duplication. The economic impacts of military retirees were removed from the 2021 Arizona AEIS, as this activity by itself is not sufficiently aviation-related to warrant inclusion.

### Earnings

Jobs

### **Total Impacts**

**Economic Activity (Output)** 

Taxes

#### Arizona Airport Data Sources and Validation

The 2021 Arizona AEIS used numerous sources to obtain data and employed multiple quality control techniques to ensure the data modeled were accurate and comprehensive.

Primary sources included airport manager and business tenant surveys distributed and validated during airport site visits conducted in late 2020. Supplemental data sources included ADOT, the Federal Aviation Administration (FAA), U.S. Bureau of Economic Analysis, U.S. BLS, Dun & Bradstreet, Airline Data Inc., the Maricopa Association of Governments (MAG) Arizona Employer Viewer, and the Arizona Office of Tourism.

All direct data inputs, as well as modeled direct and total impacts, were distributed to airports for approval prior to publishing the final results. This validation process provided for the highest level of confidence in the results of the 2021 Arizona AEIS.

# **Economic Impact of Arizona Airports**

The aviation industry plays an essential role in Arizona's economy by meeting the vital transportation and logistics services needs of the state's diverse commercial/industrial base, rapidly growing population, and thriving tourism industry.

Based on an analysis of **on-airport business activities** including airport administration, on-airport tenant businesses, and capital improvements, as well as **visitor spending**, the Arizona aviation system contributed \$59.4B to the state's economy in 2019 and supported 386,057 jobs generating \$20.4B in earnings.

Arizona airports contributed \$33.0B in value added to the state, equaling 10.2% of the 2019 gross state product (GSP).

Direct and Total Economic Impacts of Arizona Airports, 2019

ECONOMIC INDICATORS	ON-AIRPORT BUSINESS ACTIVITIES	VISITOR SPENDING	TOTAL				
Direct Economic Impacts							
Jobs	91,906	92,257	184,163				
Earnings (\$)	\$6.6B	\$3.0B	\$9.6B				
Economic Activity (\$)	\$22.1B	\$8.1B	\$30.2B				
Total Economic Impacts							
Jobs	221,529	164,528	386,057				
Earnings (\$)	\$13.6B	\$6.7B	\$20.4B				
Economic Activity (\$)	\$41.0B	\$18.4B	\$59.4B				

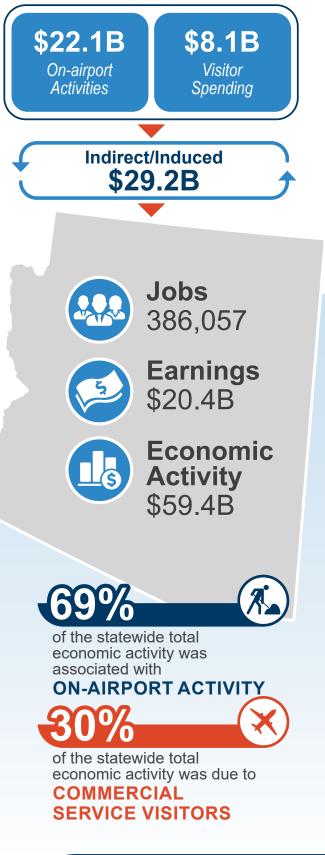
Sources: IHS Markit 2021, IMPLAN 2019

#### **Tax Impacts**

Airports' total economic activity also generated \$3.5B in state and local tax revenues attributable to taxes on households and production, including sales, property, severance, and other taxes in 2019. Airport activities in Maricopa County produced the highest amount of state and local tax revenues at \$2.8B, followed by Pima County at \$571.8M.



### Arizona Airports Economic Impact, 2019



### In 2019, Arizona Airports Contributed:





**13%** " of all Arizona employment

\$59.4B in economic activity



**10M** out-of-state visitors traveled to Arizona by air

26.0M enplaned passengers

451.1M pounds of enplaned air cargo, 92.3% of which was shipped via PHX

Arizona airports provide non-stop service to **134 domestic** and **24 international** destinations in **5 countries** 

# Economic Impacts of Off-airport Aviation-related Industries

### Aerospace Manufacturing and Research

Arizona is at the forefront of aerospace manufacturing and research industries and home to many of the most cutting-edge companies in the world including industry leaders like Raytheon, Northrop Grumman, Honeywell Aerospace, The Boeing Company, MD Helicopters, and General Dynamics. Arizona's skilled workforce, world-class institutions of higher education, business-friendly environment, and strong military presence continue to fuel growth in this important sector of the state's economy.



For every 100 direct jobs in aerospace manufacturing, an additional 178 jobs are supported in Arizona.

## **Principal Military Installations**

Arizona's uncongested airspace; flying-friendly climate; remote, unique, and expansive landscapes; and other factors have long fostered Arizona's robust military presence. In fact, all of Arizona's six major U.S. military installations and four Arizona Air and Army National Guard units have an aviation- or aerospace-related mission component. This includes extensive military flight training for fixed-wing and rotorcrafts; maintenance, repair, and overhaul (MRO) services; and aircraft decommissioning and storage. Arizona is also emerging as a hub for unmanned aerial systems (UAS) operations and training.

Davis-Monthan Air Force Base (AFB), Fort Huachuca, and Luke AFB each contribute more than \$2.5B in total economic activity to the Arizona economy every year.

#### Total Economic Impacts of Off-airport Aviation-related Industries

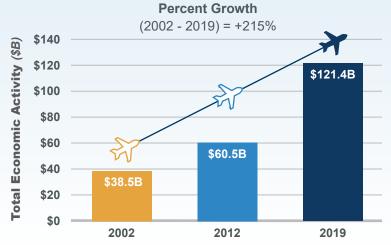
INDICATOR, YEAR	JOBS (\$)	EARNINGS (\$)	ECONOMIC ACTIVITY (\$)
Aerospace Manufacturing and Research, 2019	116,477	\$10.0B	\$51.5B
Principal Military Installations, 2017*	73,291	\$3.8B	\$10.5B

\*Note: See the Study Approach section on page 5 for details about the military impacts incorporated into the 2021 Arizona AEIS. Sources: IHS Markit 2021, IMPLAN 2019, The Maguire Company 2017

### **Comparison with Previous Studies**

The economic impact of Arizona airports and aviationrelated industries has grown by over 215% since the 2002 AEIS was published. This includes the addition of 105,225 new jobs to the Arizona economy paying an additional \$19.5B in employee earnings. Since the last Arizona AEIS in 2012, economic activity (output) has doubled, far outpacing the statewide growth rate during this same time period.

It is important to note specific study assumptions likely differ over time, and details about the data used in previous study years are not available. The number of airports included in the studies also differs. As such, this comparison provides a general indication of growth considering that the specific differences are unknown.



Sources: IHS Markit 2021, Elliott D. Pollack & Company 2012, Simat Helliesen & Eichner, Inc. (now part of ICF International) 2002

### **Total Economic Impacts of Arizona Airports, Aerospace Manufacturing, and Principal Military Installations, 2019**

Arizona airports, aerospace, and defense industries are vital components in the state's economic engine.



JOBS



### TOTAL ARIZONA ECONOMIC ACTIVITY

- Commercial Service Airports
- Aerospace Manufacturing and Research
- Principal Military Installations
- General Aviation Airports



The **\$121.4B** in total economic activity stimulated by Arizona airports and off-airport aviation-related industries supported nearly **576 thousand jobs** and over **\$34.2B** in earnings across many industries in Arizona—meaning that *investment in aviation is an investment in Arizona's future.* 

### **Business Reliance on Aviation**

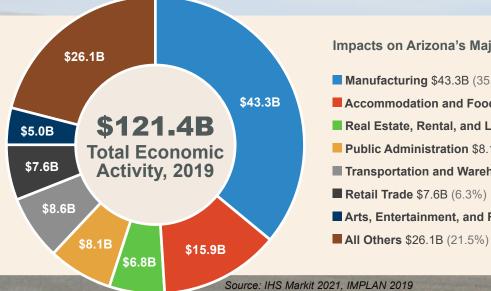
Air travel is essential to an increasingly globalized world. The aviation industry provides the means for goods and people to move rapidly between markets, with domestic and international borders serving to delineate political territories more than economic divides. Because air travel is foundational to global trade, access to airports and the services they provide is critical to ensuring Arizona businesses remain competitive and connected with developed and emerging markets worldwide.

The 2021 Arizona AEIS examined the connections between airports and aerospace-related industries and the broader economies in which they operate. This included the identification of the major industries that compose the total economic impacts calculated by the study, an assessment of the industry types that most significantly rely on aviation, and a survey that asked these "air-reliant" businesses about the importance of airports/air transportation in conducting commercial activities. These evaluations provide a more holistic view of the roles and functions of airports within the Arizona economy and offer insight into another layer of benefits not fully captured in other types of analyses. Key findings include:

- Arizona's Manufacturing sector is the top industry supported by aviation. Over one-third of the total economic activity stimulated by Arizona airports and aerospace-related industries (\$43.3B) accrues to this sector. Manufacturing has a particularly important role in Arizona's aerospace industry-one of the state's most important economic engines.
- Airports are a cornerstone of the state's tourism industry. \$15.9B in total annual economic activity is contributed to the Accommodation and Food Services sector by out-of-state visitors traveling by air.
- Arizona businesses rely on Arizona airports. Surveyed air-reliant businesses reported that they would have to reduce their workforce by half and revenues would decrease by over 60% without access to an airport.
- Access to a commercial service airport is among the top four factors that businesses consider when evaluating where to locate their establishment(s). Forty percent of survey respondents indicated that commercial service airport access is "important" or "very important" when making decisions about where to locate.

#### Impacts on Arizona's Major Industries

The economic activity generated by Arizona's airports, aerospace, and defense industries impacts other major industries depending on their relative importance to and spending patterns associated with each study component. The figure illustrates how total economic impacts are dispersed to other major industries in the state.



Impacts on Arizona's Major Industries

- **Manufacturing** \$43.3B (35.6%)
- Accommodation and Food Services \$15.9B (13.1%)
- **Real Estate, Rental, and Leasing \$6.8B** (5.6%)
- **Public Administration** \$8.1B (6.7%)
- **Transportation and Warehousing** \$8.6B (7.1%)
- **Retail Trade** \$7.6B (6.3%)
- Arts, Entertainment, and Recreation \$5.0B (4.1%)

Source: IHS Markit 2021. IMPLAN 2019

# **World-Class Aviation Businesses**

For nearly 100 years, Arizona's sunny skies and expansive landscape have attracted pilots, corporations, and military personnel to fly and do business in the Grand Canyon State. The state's natural, cultural, and business-friendly economic environments make Arizona an exceptional place to conduct unique aviation activities. These activities generate economic growth while promoting the safety, accessibility, and security of the communities they serve; attracting visitors from around the world; and preparing future professionals for careers in aviation and aerospace industries.

Arizona's world-class aviation businesses supported 4,746 jobs earning \$317.7M in 2019. These businesses contributed \$797.5M in total economic activity to the state, including \$426.0M in value added to the Arizona GSP.

#### SKYDIVE ARIZONA AT ELOY MUNICIPAL AIRPORT (E60)

Established in 1991, Skydive Arizona at Eloy Municipal Airport is one of the premier skydiving destinations in the world. Professional skydivers and new thrill-seekers conduct over 135,000 jumps each year, and the company's 15-aircraft fleet is capable of carrying 240 jumpers simultaneously. Skydive Arizona also operates SkyVenture Arizona, a vertical wind tunnel for indoor skydiving; Square 2, a skydiving pro shop; and Desert Sky Rigging, offering FAA-certified parachute rigging, inspection, maintenance, and repair. Skydive Arizona and other related business tenants generate substantial economic activity at the Eloy Municipal Airport and surrounding community.

### ARIZONA SOARING, INC. AT ESTRELLA SAILPORT (E68)

Nestled south of the Estrella Mountains and a 15-minute drive west of Maricopa is Estrella Sailport, home of Arizona Soaring. Arizona Soaring is one of the premier glider and sailplane operators in the nation. The business attracts aspiring students, veteran gliding/soaring pilots, and visitors from around the globe and provides glider training for novice and experienced pilots, as well as rides to visiting guests.

### AERIAL HELICOPTER TOURS AT GRAND CANYON NATIONAL PARK AIRPORT (GCN)

Located less than seven miles from the south rim of the Grand Canyon, Grand Canyon National Park Airport is ideally situated to offer guests an unparalleled view of one of the natural wonders of the world. In a typical year, helicopters and aircraft operated by Papillon Grand Canyon Helicopters, Grand Canyon Scenic Airlines, Maverick Aviation Group, and Westwind Air Service fly 10 hours a day nearly 365 days a year. GCN recorded over 250,000 passenger enplanements in 2019, nearly all of which were attributed to aerial tours. Page Municipal Airport (PGA) and Grand Canyon West (1G4) are also popular points of origin for aerial tours and provide a new perspective on iconic Arizona attractions including the Grand Canyon, Horseshoe Bend, Canyon de Chelly, the Vermilion Cliffs, Lake Powell, and Lake Mead.

#### AVIATION-RELATED EDUCATION AND FLIGHT TRAINING AT PRESCOTT **REGIONAL AIRPORT (PRC) AND FALCON FIELD (FFZ)**

Embry-Riddle Aeronautical University (ERAU) at Prescott Regional Airport and CAE Phoenix Aviation Academy (CAE) at Falcon Field are two of the largest aviation training programs in the country, both of which provide career-oriented education for future pilots and other aviation professionals. ERAU is home to nearly 3,000 students who participate in courses offered by four colleges, including the College of Aviation's Flight Department at PRC. In 2019, more than 730 students were enrolled in the Fixed Wing Aeronautical Science Program utilizing a fleet of 47 based aircraft. CAE draws prospective pilots from around the globe to prepare for careers as professional pilots. Six hundred cadets utilizing a fleet of nearly 80 based aircraft complete all necessary training to obtain a commercial pilot's license in 12 to 18 months. ERAU and CAE both maintain partnerships with domestic and international airlines to provide students with a streamlined pathway to employment after graduation.

### **MAJOR ECONOMIC TRENDS**

Like all businesses, airports and other aviation-related activities are subject not only to changes with the industry itself, but also outside trends and influences that affect demand for scheduled commercial service, GA activities, and air cargo. The 2021 Arizona AEIS assessed macroeconomic trends with the potential to impact the future of aviation in Arizona, including revenues into the State Aviation Fund over the next 20 years.

- Arizona's strong growth in population and households is expected to be a driving force of economic expansion. By 2040, the state's population is expected to rise 1.1% annually-just over twice the rate of the United States as a whole.
- Population growth will be bolstered by further domestic and international in-migration. These new residents will create strong demands in servicerelated sectors and new housing, and retirees will fuel growth in Health Care Services.
- Employment in Professional & Business Services, an industry sector strongly associated with air reliance, is expected to grow by an average of 2.1% each year over the next decade.

#### Strengths

Strong population growth driven by affordable housing and warm climate

Proximity to international markets makes Arizona a strategic choice for companies seeking expansion

#### **Weaknesses**

- The Manufacturing sector is heavily Ô dependent on military and aerospace work, which is vulnerable to cuts in federal spendina
- Silicon chip manufacturing has been Ö volatile as the popularity of mobile devices surpasses traditional desktop and laptop computers

Lack of economic diversification, with Ö housing and associated services driving a significant portion of labor market gains

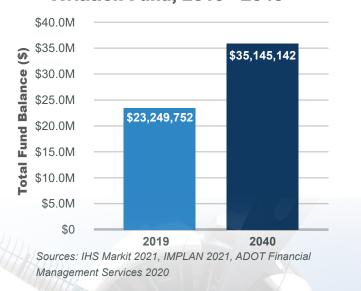
Lower annual rainfall, rising average annual Č temperatures, and falling groundwater levels may limit future water supplies, which could threaten future population and economic growth

### **State Aviation Fund**

As a forward-looking plan, the 2021 Arizona AEIS also assessed future revenues into the State Aviation Fund, the primary state mechanism for funding the preservation and expansion of Arizona's airports. The fund is primarily supported by aviation users including commercial airlines and their passengers as well as other commercial and private aircraft owners and operators. Based on forecasts of various drivers of aviation activity in Arizona, the 2021 Arizona AEIS revealed that the balance of the State Aviation Fund could grow by nearly 50% over the next two decades-from \$23.2M today (2019) to over \$35.1M by 2040.

Because the State Aviation Fund provides significant support for the construction and maintenance of Arizona airports, continued investment into the fund will be critical to ensure Arizona state system airports remain safe; advanced; and responsive to the needs of Arizona residents, visitors, and businesses. Capital investment over prior decades enabled the contribution of \$121.4B in total economic activity to the state in 2019. Airports generate jobs and earnings for Arizona workers while enhancing the state's economic strength, resiliency, and diversification. Going forward, the full extent of these economic gains and other benefits will continue to be supported by the state investment into airports through the State Aviation Fund.

> **Forecast Summary of the State** Aviation Fund, 2019 - 2040



# **Key Aviation Activities**

The 2021 Arizona AEIS guantified the economic impacts of six key aviation activities and forecasted future economic contributions based on state and national trends impacting the economy and aviation industry.

#### **COMMERCIAL SERVICE AIRPORTS**

Arizona is home to 11 commercial service airports that offer non-stop service to 134 domestic and 24 international destinations (as of June 2021). Each year, these airports welcome nearly 10M out-of-state visitors to Arizona. Prior to the impacts caused by the COVID-19 pandemic, nearly all commercial service airports witnessed year-over-year enplanement growth, rising from 21.9M passengers in 2010 to 26.0M in 2019. This upward growth pattern is anticipated to continue over the forecast horizon, driving future economic contributions to state and local economies.

### **GENERAL AVIATION AIRPORTS**

Arizona's 56 GA airports hosted an estimated 2.5M operations in 2019 and supported a wide variety of recreational, commercial, and non-military government activities. GA airports provide critical connectivity for remote communities and access for emergency responders. GA activity is forecasted to grow faster than the national average as reported in the FAA 2020-2040 Aerospace Forecasts due to the state's rapid population growth and robust flight training industry.

#### **AVIATION-RELATED EDUCATION**

The sunshine of southern and central Arizona has cultivated a robust flight training industry that draws prospective pilots from around the world. Airports host aviation training programs that range from small private flight schools to large universities that employ thousands of employees. ERAU, CAE, Arizona State University's Polytechnic Campus, and Cochise College offer careeroriented training for future aviation professionals. The global pilot shortage and planned expansion at ERAU are anticipated to drive growth in this important component of the aviation industry.

### **MILITARY INSTALLATIONS**

Arizona is home to approximately 21,000 active duty military personnel (2019) and several thousand members of the Arizona Army and Air National Guards. Over the past several decades, military employment in Arizona has remained stable and military spending is generally not associated with commercial market trends. As such, the economic impact of military installations in terms of employment is projected using a no-growth scenario, with earning and wages increasing with inflation.

### **AEROSPACE MANUFACTURING AND RESEARCH**

Arizona is one of the country's premier locations for aerospace manufacturing and technological research, with industry-leading companies including Raytheon, Honeywell, The Boeing Company, and others having a large presence in the state. Worldwide demand for aerospace products, U.S. aerospace exports, and Arizona's projected economic position within the United States will drive manufacturing employment in the aerospace sector over the forecast period.

#### TOURISM

Visitors from around the globe travel to Arizona by air to experience the state's unique natural, cultural, and historic destinations or attend events such as the Fiesta Bowl, Waste Management Phoenix Open, or Major League Baseball's Spring Training. The Arizona Office of Tourism estimated that 40.6M domestic overnight and 6.1M international visitors traveled to Arizona in 2019, approximately one-quarter of whom traveled by air. Tourism growth in Arizona is anticipated to follow national patterns.

#### reant (2040) and Earoacated (2040) Total Economic Activity (Output) of Key Aviation Activities

Current (2019) and Forecasted (2040) Total Economic Activity (Output) of Key Aviation Activities							
YEAR / CAGR	COMMERCIAL AIRPORTS	GA AIRPORTS	AVIATION EDUCATION	MILITARY INSTALLATIONS	AEROSPACE MANUFACTURING	TOURISM	
2019	\$20.5B	\$1.6B	\$316.2M	\$5.9B	\$37.2B	\$8.1B	
2040	\$46.4B	\$3.6B	\$1.4B	\$10.9B	\$76.4B	\$17.8B	
CAGR	4.0%	4.0%	7.3%	3.0%	3.5%	3.8%	

CAGR = Compound Annual Growth Rate. Sources: IHS Markit 2021, IMPLAN 2019, The Maguire Company 2017

# **Total Economic Impacts by Airport**

The total economic impacts listed by Arizona airport are in the table below for 2019. Additional information, including tax impacts, are available in the Technical Report online at azdot.gov/planning/airport-development/links-and-resources-airport-development.

ASSOCIATED CITY	AIRPORT NAME	FAA ID	JOBS	EARNINGS (\$)	ECONOMIC ACTIVITY (\$)		
	COMMERCIAL SERVICE AIRPORTS						
Bullhead City	Laughlin/Bullhead International	IFP	930	\$41,535,000	\$111,509,000		
Flagstaff	Flagstaff Pulliam	FLG	971	\$45,140,000	\$128,520,000		
Grand Canyon	Grand Canyon National Park	GCN	1,658	\$73,775,000	\$210,906,000		
Page	Page Municipal	PGA	512	\$24,954,000	\$71,456,000		
Peach Springs	Grand Canyon West	1G4	797	\$32,052,000	\$91,793,000		
Phoenix	Phoenix Sky Harbor International*	PHX	303,699	\$15,860,822,000	\$45,092,146,000		
Phoenix	Phoenix-Mesa Gateway	IWA	10,224	\$524,192,000	\$1,761,781,000		
Prescott	Ernest A. Love Field	PRC	1,220	\$71,482,000	\$194,309,000		
Show Low	Show Low Regional	SOW	118	\$7,243,000	\$18,809,000		
Tucson	Tucson International*	TUS	45,785	\$2,546,095,000	\$8,288,988,000		
Yuma	Yuma International	NYL	1,150	\$60,016,000	\$159,660,000		
	GENER	AL AVIA	<b>ATION AIRPO</b>	RTS			
Ajo	Eric Marcus Municipal	P01	1	\$31,000	\$87,000		
Bagdad	Bagdad	E51	6	\$354,000	\$1,005,000		
Benson	Benson Municipal	E95	24	\$1,043,000	\$3,181,000		
Bisbee	Bisbee Municipal	P04	3	\$171,000	\$557,000		
Buckeye	Buckeye Municipal	BXK	196	\$13,274,000	\$77,434,000		
Casa Grande	Casa Grande Municipal	CGZ	196	\$8,653,000	\$24,221,000		
Chandler	Chandler Municipal	CHD	479	\$20,699,000	\$55,803,000		
Chinle	Chinle Municipal	E91	6	\$283,000	\$872,000		
Cibecue	Cibecue	Z95	2	\$140,000	\$473,000		
Clifton	Greenlee County	CFT	3	\$184,000	\$593,000		
Colorado City	Colorado City Municipal	AZC	10	\$567,000	\$1,849,000		
Coolidge	Coolidge Municipal	P08	146	\$6,663,000	\$15,904,000		
Cottonwood	Cottonwood Municipal	P52	107	\$5,119,000	\$13,664,000		
Douglas	Douglas Municipal	DGL	38	\$2,178,000	\$5,194,000		
Douglas	Bisbee-Douglas International	DUG	100	\$5,855,000	\$11,363,000		
Douglas	Cochise College	P03	91	\$3,706,000	\$8,554,000		
Eloy	Eloy Municipal*	E60	247	\$13,262,000	\$25,903,000		
Gila Bend	Gila Bend Municipal	E63	6	\$267,000	\$823,000		
Glendale	Glendale Municipal	GEU	404	\$21,271,000	\$54,800,000		
Globe	San Carlos Apache	P13	2	\$102,000	\$332,000		
Goodyear	Phoenix Goodyear*	GYR	1,008	\$59,007,000	\$156,651,000		

ASSOCIATED CITY	AIRPORT NAME	FAA ID	JOBS	EARNINGS (\$)	ECONOMIC ACTIVITY (\$)		
GENERAL AVIATION AIRPORTS, CONTINUED							
Holbrook	Holbrook Municipal	P14	1	\$60,000	\$230,000		
Kayenta	Kayenta	0V7	26	\$1,513,000	\$3,375,000		
Kearny	Kearny	E67	5	\$320,000	\$805,000		
Kingman	Kingman	IGM	599	\$40,293,000	\$137,319,000		
Lake Havasu City	Lake Havasu City*	HII	202	\$10,395,000	\$30,545,000		
Marana	Pinal Airpark	MZJ	382	\$24,403,000	\$61,479,000		
Marana	Marana Regional	AVQ	363	\$17,283,000	\$43,773,000		
Maricopa	Ak-Chin Regional	A39	25	\$1,035,000	\$3,115,000		
Mesa	Falcon Field	FFZ	4,207	\$249,412,000	\$868,442,000		
Nogales	Nogales International	OLS	57	\$3,197,000	\$8,207,000		
Parker	Avi Suquilla	P20	45	\$2,323,000	\$7,048,000		
Payson	Payson	PAN	84	\$3,862,000	\$10,994,000		
Phoenix	Phoenix Deer Valley*	DVT	3,097	\$182,330,000	\$508,277,000		
Polacca	Polacca	P10	1	\$95,000	\$319,000		
Safford	Safford Regional	SAD	106	\$6,909,000	\$15,165,000		
San Luis	Rolle Airfield	44A	<1	\$3,000	\$6,000		
San Manuel	San Manuel	E77	8	\$416,000	\$1,238,000		
Scottsdale	Scottsdale	SDL	5,970	\$320,160,000	\$1,000,728,000		
Sedona	Sedona	SEZ	230	\$10,536,000	\$32,148,000		
Seligman	Seligman	P23	5	\$319,000	\$1,037,000		
Sells	Sells	E78	1	\$84,000	\$280,000		
Sierra Vista	Sierra Vista Municipal-Libby Army Airfield	FHU	55	\$2,684,000	\$7,857,000		
Springerville	Springerville Municipal	JTC	34	\$1,969,000	\$5,063,000		
St. Johns	St. Johns Industrial Air Park	SJN	22	\$969,000	\$2,988,000		
Superior	Superior	E81	<1	\$4,000	\$10,000		
Taylor	Taylor	TYL	3	\$218,000	\$722,000		
Tombstone	Tombstone Municipal	P29	<1	\$12,000	\$34,000		
Tuba City	Tuba City	Т03	1	\$84,000	\$282,000		
Tucson	Ryan Field*	RYN	216	\$9,761,000	\$34,912,000		
Whiteriver	Whiteriver	E24	31	\$2,553,000	\$4,786,000		
Wickenburg	Wickenburg Municipal	E25	62	\$3,215,000	\$8,610,000		
Willcox	Cochise County	P33	15	\$684,000	\$1,893,000		
Williams	H.A. Clark Memorial Field	CMR	25	\$1,555,000	\$3,865,000		
Window Rock	Window Rock	RQE	3	\$164,000	\$536,000		
Winslow	Winslow-Lindbergh Regional	INW	34	\$1,608,000	\$3,725,000		
	Statewide Total		386,057	\$20.4B	\$59.4B		

\*The economic impacts of airports indicated by an asterisk were obtained from an independently conducted AEIS and incorporated into the 2021 Arizona AEIS. In some cases, previous study year results were moved forward to obtain a consistent 2019 baseline year. See Appendix D of the Technical Report for additional details about these airports. Sources: IHS Markit 2021, IMPLAN 2019, Independently conducted AEISs as denoted with an asterisk



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