

NOTES & HIGHLIGHTS
ECONOMIC IMPACT OF THE PHOENIX AIRPORT SYSTEM

The Phoenix Airport System

The Phoenix Airport System consists of Sky Harbor International Airport, Deer Valley Airport, and Goodyear Airport. The direct economic impact of the Airport System is measured by the output, employment, and labor income related to aviation operations at the three system airports. In addition, the economic contribution of the airport system includes activity at the Sky Harbor Center complex, the value of direct flight international exports originating at the Phoenix port, and spending by commercial air service visitors (domestic and international). In a regional economy, the initial direct impacts of economic activity are followed by indirect impacts (payments to suppliers) and induced impacts (as workers spend wages in their home communities) that create additional output, jobs and incomes through multiplier or “ripple” effects. The calendar year 2022 total economic impact of the Phoenix Airport System is the combined sum of direct, indirect, and induced impacts:

- 245,373 total jobs supported in the region,
- \$14.8 billion total income (wages and benefits) to workers and proprietors
- \$44.3 billion total economic output
- \$121.5 million daily total economic impact for the Phoenix Airport System
- \$7.7 million daily total state and local tax revenues generated

Phoenix Airport System Summary Of Regional Economic Impacts: 2022			
Impact Category	Employment	Labor Income	Output
Sky Harbor Airport	47,919	\$3,888,685,000	\$13,325,398,000
Sky Harbor Center	8,502	\$945,353,000	\$2,423,230,000
International Exports	1,356	\$175,745,000	\$774,393,000
Airline Visitor Spending	81,313	\$2,963,531,000	\$7,032,225,000
Deer Valley Airport	789	\$65,297,000	\$151,571,000
Goodyear Airport	667	\$67,384,000	\$241,887,000
Direct Impact	140,546	\$8,105,995,000	\$23,948,704,000
Indirect (Supplier) Impact	46,221	\$3,134,214,000	\$9,135,042,000
Induced (Worker) Impact	58,606	\$3,551,491,000	\$11,266,237,000
TOTAL IMPACT	245,373	\$14,791,700,000	\$44,349,983,000

Sky Harbor International Airport

Sky Harbor International Airport provides outbound access to the nation and the globe for metro Phoenix residents and businesses while enabling travel of inbound visitors and transit of goods and services that enhance the economy. The Airport is an “engine of growth” for the entire region. Moreover, the Airport itself is a major locus of commercial activity, with a significant economic footprint:

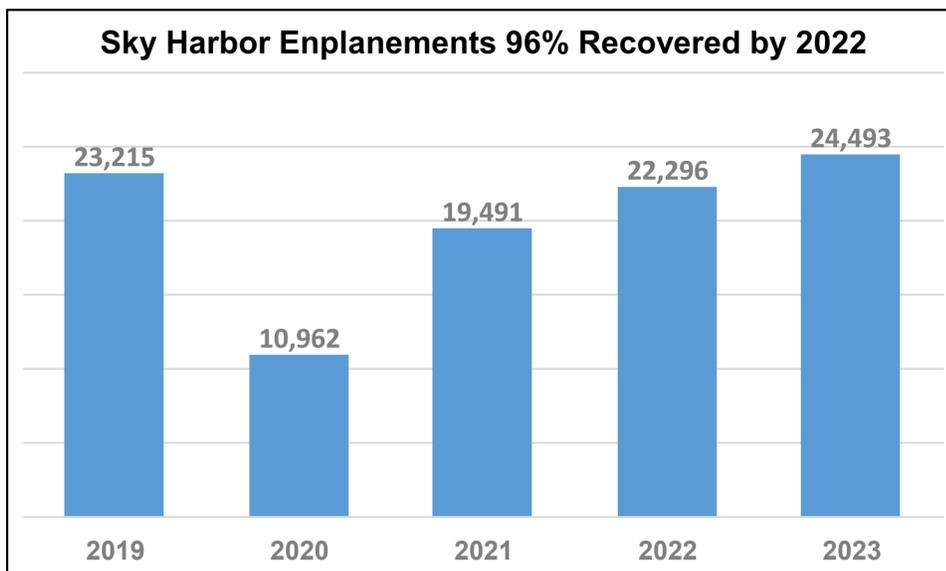
- 47,919 direct jobs supported by Sky Harbor International Airport
- \$3.9 billion direct labor income to Airport workers and proprietors
- \$13.3 billion direct output of aviation services

If combined in a single tally, the jobs at Sky Harbor International Airport would make the airport the state’s largest employer in 2022:

- Sky Harbor Airport (47,919)
- Banner Health (45,837)
- Walmart (36,995)
- Amazon (32,000)
- Kroger/Frys (20,323)

Enplanements at Sky Harbor Airport declined in 2020 during the pandemic-induced recession, but steadily recovered in 2021, 2022 and 2023:

- Enplanements were 23,215,000 in pre-pandemic year 2019
- Enplanements declined to 10,962,000 in 2020, a drop of 53%
- Enplanements were 96% recovered (22,296,000) by 2022
- Enplanements rose to a record 24,493,000 in 2023



Source: City of Phoenix Aviation Department statistics

Statistics from the Rental Car Center show the economic effects of (a) the pandemic period of 2020 and (b) the inflationary price surge that began in 2021:

Year	Rentals	Revenues	Rate/Day	Rent Days	Avg Rental
2019	1,975,942	\$439,525,000	\$52	4.3	\$222
2020	993,618	\$250,318,000	\$53	4.8	\$252
2021	1,388,535	\$480,001,000	\$74	4.7	\$346
2022	1,660,267	\$576,310,000	\$76	4.6	\$347

- There were nearly 1 million fewer rentals in 2020 compared to 2019
- Car rentals increased by 40% in 2021 but revenues rose by 92%
- Average daily rental rates climbed from \$53 in 2020 to \$74 in 2021

A similar pattern of adjustments to the pandemic can be seen from data on Sky Harbor Airport revenue producing ground trip activity, as rideshare service recovered quickly and continued to grow in the post pandemic period.

Year	Rideshare	Taxi	Total Trips
2019	2,363,278	397,072	3,400,817
2020	1,426,032	154,096	1,907,852
2021	2,941,055	255,725	3,874,224
2022	4,213,070	372,058	5,490,394

- Total ground trips decreased by 1.5 million (40%) in 2020
- Rideshare trips decreased by 40% and taxi trips decreased by 65%
- By 2021, ground trips fully recovered and exceeded 2019 levels
- Rideshare accounted for more than 75% of the 2021 growth, adding 1.5 million trips followed by additional growth of 1.3 million trips in 2022

Sky Harbor Airport operates 24 hours per day, 7 days per week. On a typical day:

- 1,077 commercial aircraft arrive and depart (45 per hour)
- 121,638 passengers move through the terminals
- 1,067 tons of air freight handled
- \$576,000 purchases of food & beverages in the terminals
- 15,400 revenue producing ground trips via rideshare, taxi, vans and busses
- 4,550 contracts issued at the Rental Car Center
- \$19.3 million spending by air visitors in the region

Sky Harbor Center

The Sky Harbor Center office and facility complex west of Sky Harbor Airport provides employment for an additional 8,502 workers:

- Financial sector jobs (6,024)
- Aerospace & electronics jobs (1,470)
- All other private sector jobs (802)
- Public sector jobs (206)
- Sky Harbor Airport plus Sky Harbor Center support 56,421 direct jobs

Sky Harbor Airport/Sky Harbor Center workers live in all parts of the Valley and beyond:

- 41 percent (23,000) live in Phoenix
- 38 percent (21,300) live in the East Valley or Scottsdale
- 14 percent (7,900) live in the West Valley
- 7 percent (4,200) live outside the Valley

International Direct Flight Exports

The U. S. Census Bureau is the official source of information on the value of international exports by port of exit. According to Census Bureau documentation, “air exports at the port level” include only export cargo loaded on nonstop direct flights to international destinations, with no intermediate handling or processing

- Direct flight air exports from the Phoenix port in 2022 were \$774.4 million
- Air exports in the region supported 1,356 local jobs
- Labor income from air exports was \$175.5 million
- The average wage of air exports workers was \$129,500
- The total economic impact of output related to air exports was \$1.4 billion.

Airline Visitor Spending

According to Origin and Destination data from the U. S. Department of Transportation, visitors accounted for 54 percent of enplaning passengers at Sky Harbor International Airport in 2022:

- 7.8 million domestic visitors spent a total of \$6.5 billion during their stay
- Domestic visitors spent \$831 per person per trip
- 558,000 international visitors spent \$559.0 million during their stay
- International visitors spent \$1,002 per person per trip
- Combined commercial airline visitor spending was \$7.0 billion
- Combined visitor spending supported 81,313 hospitality jobs in the region

Phoenix Deer Valley Airport

With more than 275,000 operations in 2022, Phoenix Deer Valley Airport ranks among the busiest general aviation airports in the nation. The direct economic impact of the airport includes:

- 705 private sector jobs at the airport, including a major industrial park
- 84 public sector jobs, including FAA, City of Phoenix, and State of Arizona
- \$151.6 million direct economic impact and \$309 million total economic impact

Phoenix Goodyear Airport

Phoenix Goodyear Airport is a center for aviation education and flight training, with more than 250 resident students on site. GYR is also known for its major large aircraft overhaul facilities and quality FBO services. The 2022 direct economic impact of the airport includes:

- 667 direct public and private sector jobs on the airport
- \$241.9 million direct economic impact
- \$369.4 million total economic impact

Projections of Future Growth

Analysts project that the Phoenix region will rank among the fastest growing metro areas in the nation in the decade ahead. According to the latest FAA Terminal Area Forecast, enplanements will rise even more rapidly between 2022 and 2032. Current metro Phoenix/Sky Harbor 2022 – 2032 growth projections are shown below.

Metro Phoenix/Sky Harbor Growth Projections: 2022 - 2032				
Indicator	2022	2032	Increase	% Change
Employment	2,466,674	2,871,176	404,502	16.4
Population	5,040,355	5,946,927	906,572	18.0
Enplanements	22,296,300	31,237,116	8,940,816	40.1

Sources: Employment and population (medium series) from Arizona Office of Economic Opportunity. Enplanements from FAA *Terminal Area Forecast*, January 2023.

- Non-farm employment in the Phoenix MSA will grow by 16.4% in the next decade
- Population will increase by 18%, largely driven by in-migration from other states
- Sky Harbor International Airport enplanements will increase by 8.9 million
- The 40.1% projected enplanement growth rate will require continued investments in aviation operational infrastructure, facilities, and employment in coming years

Phoenix Airport System Tax Revenues

The economic activity associated with the Phoenix Aviation System contributes to tax revenue collections at the local, state and federal levels. The direct tax revenue impact results when aviation businesses pay taxes on property, profits, and purchases of supplies and materials, while aviation workers likewise pay income taxes, sales taxes, and local property taxes. Suppliers to the aviation industry also pay business and personal taxes, as indirect impacts are triggered by the initial direct impacts. And, as workers buy goods and services in their home communities, yet another round of state, local and federal taxation occurs.

Phoenix Airport System Summary Of Regional Tax Impacts				
Impact Category	City/County/ Districts	State	Federal	Tax Revenues
Direct Impact	\$754,702,000	\$1,066,147,000	\$2,009,203,000	\$3,830,052,000
Indirect (Supplier) Impact	\$130,445,000	\$216,918,000	\$717,796,000	\$1,065,159,000
Induced (Worker) Impact	\$258,078,000	\$385,150,000	\$891,652,000	\$1,534,880,000
TOTAL IMPACT	\$1,143,225,000	\$1,668,215,000	\$3,618,651,000	\$6,430,091,000

- Direct state and local tax revenues from Phoenix Airport System economic activity sum to \$1.8 billion
- Combined direct state, local and federal tax system revenues sum to \$3.8 billion
- The \$3.8 billion direct revenues are equal to 16.8% of direct Phoenix Airport System economic output
- Total tax revenues created by the system sum to \$6.4 billion
- Total state and local tax revenues sum to \$2.8 billion
- State and local taxes account for 44% of total tax revenues and federal taxes account for 56%

Comparison of Economic Impacts: Phoenix Airport System 2022 & 2016

Economic impact studies have been completed for the Phoenix Airport System periodically since an initial project was envisioned and commissioned by Aviation Director Dutch Bertholf in 1982. The current study is the 13th in the series. Today all major airports regularly produce economic impact reports. An important aspect of economic impact reports is the ability to compare results over time to analyze and evaluate growth and changes in key indicators. However, analysts recognize that technological and social changes can alter the types and activities of businesses, government agencies, and passengers. An example is ground transportation employment, which has increased significantly with the introduction of rideshare services. Moreover, comparison of 2022

with 2016 is problematic since the overall 2022 economy was still in post-pandemic recovery mode. Supply chains were interrupted and labor markets were affected by worker shortages and wage pressures. Meanwhile, inflation caused rapid increases in prices to businesses and consumers.

The most notable items in the 2022/2016 comparison table below are (a) Sky Harbor Center, (b) Deer Valley Airport and (c) Goodyear Airport. Employment at Sky Harbor Center decreased by some 2,000 workers, as several employers downsized. Flight training activity transferred from Deer Valley Airport to Goodyear Airport causing an employment shift and output increases benefitting Goodyear.

The table does not include a comparison of international direct flight exports, which were reported in a separate study in 2016. Further it should be noted that total impacts are derived from specific annual versions of the IMPLAN model for the Phoenix MSA. Each IMPLAN model has unique coefficients and multipliers that vary from year to year due to changes in technology and industry composition. Comparison of total economic impact must be undertaken with the knowledge that the economy in 2016 differed from 2022.

Comparison of Economic Impacts: 2022 and 2016				
Year	Impact Category	Employment	Labor Income	Output
2022	Sky Harbor Airport	47,919	\$3,888,685,000	\$13,325,398,000
2016	Sky Harbor Airport	46,928	\$3,073,148,000	\$10,262,912,000
2022	Sky Harbor Center	8,502	\$945,353,000	\$2,423,230,000
2016	Sky Harbor Center	10,504	\$653,504,000	\$2,057,558,000
2022	Airline Visitor Spending	81,313	\$2,963,531,000	\$7,032,225,000
2016	Airline Visitor Spending	77,259	\$2,433,967,000	\$6,467,616,000
2022	Deer Valley Airport	789	\$65,297,000	\$151,571,000
2016	Deer Valley Airport	965	\$72,325,000	\$196,189,000
2022	Goodyear Airport	667	\$67,384,000	\$241,887,000
2016	Goodyear Airport	363	\$26,875,000	\$67,345,000
2022	Direct Impact	140,546	\$8,105,995,000	\$23,948,704,000
2016	Direct Impact	126,203	\$5,949,711,000	\$18,341,880,000
2022	TOTAL IMPACT	245,373	\$14,791,700,000	\$44,349,983,000
2016	TOTAL IMPACT	269,580	\$13,534,238,000	\$38,660,865,000

Methodological Note

The economic contribution of the Phoenix Airport System is measured by three main indicators: jobs supported (employment), payments to workers and proprietors (labor income) and the dollar volume of sales/revenues (output) produced. The time period for the current study is calendar year 2022.

The initial revenues or output associated with the airport system, along with the jobs to produce that output and the payments to labor, are known as direct effects. Direct effects are based on actual available data on jobs, earnings, and output by firms and agencies providing aviation services. For this study, a geographic information system database on employment by location and industry classification in the region was obtained under a license from the Maricopa Association of Governments (MAG). The MAG employment database for 2022 was released in October 2023. This data set provided the initial information on direct employment related to the Phoenix Airport System.

In addition to direct effects, there are ripple (or multiplier) effects on the regional economy created when employers pay for supplies and services in business-to-business transactions to support production of output (“indirect effects”). Moreover, further economic benefits result when workers return to their home communities to spend their earnings to buy consumer goods and services such as food, shelter, transportation, and medical care (“induced effects”). The indirect (supplier) and induced (consumer) spending creates successive rounds of economic activity. The combined direct, indirect and induced effects make up the total economic impact of the Phoenix Airport System. The indirect and induced effects were calculated through an input-output model for the greater Phoenix region that incorporated supply/demand relationships for production along the entire supply chain. The model used was the latest version (2022) of IMPLAN, widely applied in regional economic impact analysis across the nation.

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