

**Economic Impact of
International Flights
At
Phoenix Sky Harbor
International Airport**

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Economic Impact

Nonstop international flights at Phoenix Sky Harbor International Airport created a total economic impact of \$3.4 billion within the metropolitan area in fiscal year (FY) 2016 (Table 1). Nonstop international flights have no additional domestic stops after departure from Phoenix Sky Harbor International airport. Destinations for nonstop international flights from Phoenix during FY 2016 included Canada (served by Air Canada, American Airlines, and WestJet), Mexico (served by Volaris, Mesa Airlines, and American Airlines), the United Kingdom (served by British Airways) and Costa Rica (served by American Airlines).

The \$3.4 billion **total** economic impact figure is the sum of (a) **primary** (or initial) impacts of economic activity (including spending by international visitors, value of Arizona-produced exports, and activity of Sky Harbor airlines and air cargo firms due to international flights) plus (b) **secondary** impacts or multiplier effects created when dollars related to international flights recirculate in the regional economy.

The primary impact of nonstop international flights was \$1.9 billion in FY 2016 (Table 1). Foreign visitors arriving on nonstop international flights spent \$709.7 million on food, lodging, ground transport, retail, and entertainment in the Greater Phoenix area. The value of Arizona exports transported on nonstop international air routes originating at Sky Harbor Airport was \$908.0 million. Airlines and air cargo firms serving nonstop flights had economic activity estimated as \$281.7 million.

The primary economic activity associated with nonstop international flights created 12,806 jobs in the regional economy in FY 2016. Airline and air cargo firms provided jobs for 933 workers. Spending by international visitors created 9,816 jobs in the tourism sector. International air exports created 2,057 jobs in the economy. The secondary economic impact of nonstop international flights was \$1.5 billion of spending and 9,810 additional jobs created. Secondary impacts flow from two sources: spending by producers for intermediate inputs used in the production of output, and spending of wages by workers as consumers. For example, when an international visitor pays for lodging, that payment is a primary impact. Moreover, wages paid to hotel employees create additional jobs and income when workers spend their paychecks on goods and services. Overall, the \$3.4 billion total economic impact of nonstop flights supported 22,616 jobs.

Tax Revenues

Tax revenues created by the total economic impact of \$3.4 billion were calculated to be \$416.4 million, based on current federal, state and local tax rates. Federal taxes were \$244.9 million, consisting mostly of income tax and social security taxes. State and local taxes, including property taxes, sales taxes, state income taxes, and estimates of fees and licenses were calculated to be \$171.5 million.

Table 1

Economic Impact Summary

Phoenix Sky Harbor International Airport

**Economic Impact and Tax Revenues
From Nonstop International Flights: FY 2016**

	Economic Activity
Airline & Air Cargo Firms	\$281,680,000
Visitor Expenditures	709,740,000
Air Export Producers	908,043,000
Primary Impact	1,899,463,000
Secondary Impact	1,527,581,000
Total Economic Activity	\$3,427,044,000

	<u>Employment</u>
Airline & Air Cargo Firms	933
Visitor Expenditures	9,816
Air Export Producers	2,057
Primary Impact	12,806
Secondary Impact	9,810
Total Employment	22,616

	<u>Tax Revenues</u>
Federal Taxes	\$244,943,000
State & Local Taxes	171,496,000
Total Tax Revenues	\$416,439,000

Sources:

- (A) Airline and air cargo activity estimated by Arizona State University
- (B) International visitor spending from Statistics Canada, University of Arizona (Mexico) and International Trade Administration, U. S. Dept. of Commerce (UK and Costa Rica).
- (C) Nonstop Flight Air Exports from Phoenix port, U. S. Dept. of Commerce
- (D) Secondary impact calculated from IMPLAN model and coefficients from U. S. Dept. of Commerce
- (E) Employment derived from IMPLAN model for Maricopa Co.
- (F) Federal, Arizona and Greater Phoenix tax revenues based on CY 2016 tax rates

Airline Operations

Flight operations by air carriers with international nonstop flights originating in Phoenix supported 933 workers during FY 2016 (Table 2). Additional jobs were created on the airport for support workers related to international flights, including fuel suppliers and various other firms. Air cargo firms employed workers both on and off the airport. Payroll for airline and air cargo workers associated with nonstop international flights was \$71.4 million.

The primary economic activity (proportion of sales/revenues attributable to international flights) for airlines and air cargo firms was \$281.7 million in FY 2016. The total economic impact from airline and air cargo activity was \$488.4 million. Overall, 2,347 jobs were supported within the local economy by this activity, with a payroll of \$144.7 million.

Table 2

Impact Of Airline & Air Cargo Activity Related To Nonstop International Flights: FY 2016

	Employment	Payroll (thousands)	Economic Activity (thousands)
Airlines	642	\$59,040	\$252,023
Air Cargo & Couriers	291	12,403	29,657
Primary Impact	933	71,443	281,680
Secondary Impact	1,414	73,207	206,745
Total Economic Impact	2,347	\$144,650	\$488,425

Sources: Sky Harbor International Airport, Arizona Department of Commerce, U. S. Department of Commerce, and IMPLAN Input-Output Model

International Visitors

Airlines with nonstop international routes combined for 9,390 departures from Phoenix Sky Harbor International Airport in FY 2016. Air carriers transported 1.1 million outbound nonstop passengers to 21 international destinations in Canada, Cost Rica, Mexico, and the United Kingdom (Table 3). The figures shown in Table 3 were drawn from two air traffic data bases maintained by the U. S. Bureau of Transportation Statistics: the Origin and Destination (O&D) data file and the T-100 all carriers air traffic data base.

The nonstop flight routes in the table are ranked by number of departures during the year. "Visitors" are defined as international passengers with a round trip travel itinerary that originated at an airport outside the United States, with Phoenix Sky Harbor International Airport as the final destination. After spending time in Arizona, these visitors departed on a nonstop return flight to the airport of origin. The count of these travelers is shown in the "Visitors" column of

Table 3. International visitors on nonstop international flights contribute to the regional economy when they spend for lodging, food, retail goods and services, entertainment and events, and ground transportation such as auto rental and shuttle service during their stay in Arizona.

The “Passenger” column in the table includes all persons that departed on nonstop international flights from Phoenix Sky Harbor International Airport in FY 2016, ***including not only international visitors but connecting passengers from other cities, as well as Arizona residents embarking on foreign travel.*** The column showing the “% Visitors” is computed as the ratio of visitors to all departing passengers outbound for each destination, expressed as a percentage value.

Of the 1.1 million passengers departing Phoenix Sky Harbor International Airport in FY 2016 on nonstop international flights, 444,708 or 41% were international visitors to the area, outbound back to the origin of their travel in their home nations. Canada accounted for the greatest number (293,958) of visitors. Two out of every three visitors to the region via nonstop international flights were from Canada (66.1%). An additional 94,761 passengers (21.3%) were visitors from Mexico, followed by 53,323 (12.0%) visitors from the United Kingdom and less than one percent from Costa Rica.

The Canadian airline WestJet carried the greatest number of departing passengers to Canada (222,457), followed by American Airlines (148,213) and Air Canada (102,011). Nonstop flights to Calgary, Canada, had the greatest number of departures (1,171) and passengers (137,665) in FY 2016. The highest percentage of visitors to Arizona on any route (68%) were from Victoria, Canada.

Mexico accounted for the most overall outbound passengers (Arizona residents plus Arizona visitors plus connecting passengers) on nonstop international flights (493,344). The relatively smaller proportion of visitors on flights to Mexico compared to Canada indicates that a greater number of passengers on international flights to Mexico were connecting from other parts of the country or were local residents traveling to Mexico. Economic impacts are created when visitors bring outside dollars into the region. Passengers on flights to Cancun, Mexico, for example, often have as many as 90% of passengers who are leaving Arizona to visit (and spend U.S. dollars) in Mexico. While international nonstop flights offer benefits for exporters and those residents who wish to travel abroad, the greatest Arizona tourism impacts are created by flights that bring a high proportion of visitors and external dollars into the state’s economy, creating jobs and incomes.

Table 3

Nonstop International Flight Destinations and Departures from Phoenix Sky Harbor International Airport: FY 2016

	Destination	Departures	Passengers	Visitors	%Visitors
1	Calgary, Canada	1,171	137,665	87,710	63.7
2	San Jose del Cabo, Mexico	1158	137,350	9,463	6.9
3	Vancouver Canada	1033	126,687	74,999	59.2
4	Guadalajara, Mexico	914	78,391	33,551	42.8
5	Toronto, Canada	800	97,438	59,052	60.6
6	Puerto Vallarta, Mexico	747	77,942	6,157	7.9
7	Edmonton, Canada	637	74,836	49,358	66.0
8	Mexico City, Mexico	610	63,668	27,377	43.0
9	Cancun, Mexico	572	80,460	5,230	6.5
10	Hermosillo, Mexico	482	15,713	6,207	39.5
11	Mazatlán, Mexico	405	32,243	5,449	16.9
12	London, UK	363	105,173	53,323	50.7
13	Winnipeg, Canada	108	12,233	7,836	64.1
14	San Jose, Costa Rica	103	11,592	2,666	23.0
15	Regina, Canada	81	9,447	5,660	59.9
16	Ixtapa, Mexico	60	5,912	562	9.5
17	Saskatoon, Canada	54	8,241	5,004	60.7
18	Kelowna, Canada	43	4,693	2,898	61.8
19	Victoria, Canada	25	2,119	1,440	68.0
20	Manzanillo, Mexico	13	562	403	71.7
21	Culiacan, Mexico	11	1,103	362	32.8
Totals		9,390	1,083,468	444,708	41.0

Sources: U.S. Bureau of Transportation Statistics, T-100 International Segment data, Origin & Destination data, 2016; Phoenix Sky Harbor International Airport passenger data; departing passengers include connecting passengers, originating passengers and visitors to Arizona returning to their home country; percent visitors is calculated as percentage of all departing passengers

Visitor Spending

International visitors traveling on nonstop air trips to the Greater Phoenix area spent \$709.7 million in FY 2016 (Table 4). Figures on spending per trip were based on data from the U. S. Department of Commerce for the United Kingdom and Costa Rica, Statistics Canada for Canada, and University of Arizona and Arizona Office of Tourism for Mexico. Visitors from the UK had the largest spending per person per trip (\$2,637). The average spending per person per trip for 444,708 international nonstop flight visitors was \$1,597.

Since Canadian visitors accounted for two thirds of international nonstop flight visitors in FY 2016, they also accounted for the largest amount of expenditures in the regional economy, at \$393.9 million, followed by expenditures by visitors from Mexico of \$171.4 million.

Table 4

Nonstop International Flight Visitor Spending: FY 2016

Origination	Visitors	Spending/Trip	Expenditures (thousands)
Canada	293,958	\$1,340	\$393,904
United Kingdom	53,323	2,637	140,598
Mexico	94,761	1,809	171,423
Costa Rica	2,667	1,431	3,815
Totals	444,708	\$1,597	\$709,740

Sources: Sky Harbor International Airport, Arizona Office of Tourism, International Trade Administration, U. S. Department of Commerce and U.S. DOT Bureau of Transportation Statistics

Spending by visitors arriving on nonstop international air routes created 9,816 jobs in the Greater Phoenix labor market in FY 2016 (Table 5). Spending on lodging was the largest category of visitor outlays (\$220.2 million). The expenditures on lodging supported 2,104 jobs in regional hotels and resorts. Spending of \$177.4 million for food and drink created the greatest number of jobs (2,862), providing employment in restaurants, bars, fast food outlets, and other eating and drinking places. International visitors had estimated spending of \$127.8 million for retail goods and services, creating 2,460 jobs in malls, shops and service establishments in the local economy. Employment estimates reported here follow the methodology of the U.S. Bureau of labor Statistics for nonfarm payroll employment, measuring headcount employment, which consists of combined fulltime and part time jobs. It is likely that a high proportion of tourism related jobs are part time.

The total economic impact created by nonstop international route air visitor spending was **\$1.3 billion in FY 2016**, with 14,202 jobs supported in the region, including all multiplier effects. This figure includes the 9,816 jobs from the primary impact and an additional 4,386 jobs associated with secondary spending. Payroll for workers in tourism sector jobs due to spending by international visitors was \$310.1 million. Total payroll from visitor spending, including all multiplier effects, was \$528.9 million.

Table 5

Economic Impact of Nonstop International Flight Visitor Spending: FY 2016

	Employment	Payroll (thousands)	Economic Activity (thousands)
Lodging	2,104	\$77,936	\$220,020
Food & Beverages	2,862	70,093	177,435
Retail & Services	2,460	88,079	127,753
Entertainment	1,240	30,827	85,168
Ground Transport	1,150	43,173	99,364
Primary Impact	9,816	310,108	709,740
Secondary Impact	4,386	218,777	642,827
Total Economic Impact	14,202	\$528,885	\$1,352,567

Sources: Arizona Office of Tourism, International Trade Administration, U. S. Department of Commerce, and IMPLAN Input-Output Model

Export Cargo

The U. S. Bureau of the Census is the official source of information on the value of exports by state and port of exit. According to Census figures, Arizona exports by all modes of export transport (truck, rail, air) in calendar year (CY) 2011 were \$17.9 billion. By CY 2015, Arizona exports reached an all-time high of \$22.6 billion and subsequently declined slightly to \$22.0 billion in CY 2016. Including all modes of export transport, the leading destination for Arizona exports in CY 2016 was Mexico (\$8.3 billion), followed by Canada (\$2.1 billion), South Korea (\$1.3 billion), China (\$1.2 billion) and the United Kingdom (\$0.9 billion).

The U. S. Bureau of the Census maintains international air export transport records, at the state level and for port of exit, for air cargo bound to international destinations. Arizona air exports were \$9.4 billion in CY 2016, or 42.6% of the value of all exports. An estimated 85% of this international bound air cargo traffic departs from Phoenix Sky Harbor International Airport. However, much of this cargo is destined for other domestic locations for further handling and processing before arriving at an international destination. Much international cargo shipped by Federal Express, for example, would move from Phoenix to another United States airport for consolidation and eventual transport out of the country.

The Census Bureau also measures a separate category of air exports at the port level. Census Bureau documentation states that air export value and weight as recorded at the port level includes only export cargo that is loaded on an aircraft “which takes the merchandise directly out of the country.” These nonstop flights include regularly scheduled passenger routes as well as air cargo flights by major firms such as United Parcel Service and other international charter and cargo airline flights. The value of these nonstop international flight air exports from Phoenix Sky Harbor International Airport was \$908.0 million in FY 2016 (Table 6), according to U. S. Census Bureau records for the Phoenix exit port.

Table 6

**Top Twenty Destinations of Nonstop International Flight Exports
at Phoenix Sky Harbor International Airport: FY 2016**

Rank	Destination	Value (thousands)	Pounds	\$ Per Pound
	World Total	\$908,043	8,728,090	\$104
1	United Kingdom	391,948	3,234,744	121
2	United Arab Emirates	61,166	1,009,879	61
3	Afghanistan	42,235	18,942	2,230
4	Ireland	37,383	517,920	72
5	China	36,662	146,129	251
6	France	34,705	195,032	178
7	Canada	26,959	165,765	163
8	Mexico	26,436	399,290	66
9	Germany	23,451	206,024	114
10	Italy	18,187	124,367	146
11	Netherlands	18,061	305,895	59
12	Hong Kong	16,061	258,591	62
13	Singapore	15,817	69,110	229
14	Belgium	12,913	339,743	38
15	Costa Rica	12,092	54,586	222
16	Malaysia	11,689	118,165	99
17	Vietnam	11,546	288,823	40
18	Dominican Republic	9,344	51,440	182
19	Taiwan	8,291	75,777	109
20	Poland	7,858	63,178	124
	Top 20 Total	\$822,804	7,643,402	\$108
	All Other Destinations	\$85,239	1,084,688	\$79

Source: U.S. Census Bureau, U.S. Import and Export Merchandise Trade Statistics for Phoenix Port of Exit at Phoenix Sky Harbor International Airport

Ranked by value or weight, the United Kingdom was the number one air destination for export products departing from the Phoenix port of exit in FY 2016. Second in value was United Arab Emirates, followed by Afghanistan, Ireland and China in the top five destinations. Canada ranked 7th according to value and Mexico was 8th.

There were 8.7 million pounds of air cargo carried on nonstop international flights departing from the Phoenix port of exit in FY 2016, compared to 8.0 million pounds reported by the Census Bureau for CY 2011. Value of cargo per pound can be computed from the value and weight data reported by the U. S. Census Bureau for Phoenix Sky Harbor International Airport nonstop flights. Overall, the value per pound was \$104 in FY 2016, an increase of 26.8% over the value per pound (\$82) in CY 2011.

Value per pound was largest for exports to Afghanistan (\$2,230). The Census export data show that nonstop air exports to Afghanistan were almost entirely aircraft, aircraft parts, electronics, and other technology supporting military activity in that region. The leading air export to United Arab Emirates was arms and ammunition (\$50.3 million of the total \$61.2 million value), at \$61 per pound. The value per pound was lowest to Belgium (\$38). Two heavy products, organic chemicals and copper products, account for one half of the weight of nonstop air shipments to Belgium.

According to the U. S. Bureau of the Census, the leading commodity by value produced for export in Arizona in FY 2016 was aircraft engines and parts (\$224.5 million) followed by pharmaceuticals and medications (\$222.6 million). Of the \$908.0 million of air exports on nonstop flights in FY 2016, some one half of all value was accounted for by these two product categories (Table 7). Over three quarters of export value (78.5%) is accounted for by the top five export categories of aircraft engines and parts, pharmaceuticals and medicines, electronics and equipment, integrated circuits and assemblies, and arms and ammunition. The top fifteen air export categories set out in the table are dominated by advanced machinery, technology, electronics, instruments, and other highly engineered products.

Exports create well-paying jobs and contribute to personal income in Arizona. The U. S. International Trade Administration (ITA) estimates that in CY 2016 there were 11.5 million jobs supported in the nation by exports, a slight decline from 2014's total of 11.6 million jobs. The ITA estimated the corresponding figure in Arizona for CY 2015 was 101,579 jobs supported by exports. The International Trade Administration points out that increases in labor productivity and in export prices from year to year contribute to a decreasing trend in the number of jobs supported by each \$1 million of exports. In CY 2005, that figure was 7.9 jobs per \$1 million of U.S. exports. In CY 2015, the ITA found 5.9 jobs per \$1 million of exports.

However, in Arizona, the number of jobs per \$1 million of exports was smaller, 4.5 jobs per \$1 million in CY 2015. This is due to the high technology nature of Arizona exports, which tend to be high value products that depend on knowledge workers rather than mass production.

The average wage in 2016 at mid-year in the Phoenix metropolitan area for workers in all industries was \$51,220, according to the U. S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages. The average annual manufacturing wage was 47% greater, at \$75,224. Phoenix wages in the major air export industries were higher. For example, the average wage in aircraft, engines and parts was \$132,659, well more than double the average Phoenix wage.

Table 7

**Nonstop International Flight Exports by Major Product Type
At Phoenix Sky Harbor International Airport: FY 2016**

Product Type	Value (thousands)	Percent of Total	Cumulative Percentage
<i>Total All Air Exports</i>	<i>\$908,043</i>	<i>100.0</i>	
Aircraft Engines & Parts	224,513	24.7	24.7
Pharmaceuticals & Medications	222,602	24.5	49.2
Electronics & Equipment	112,740	12.4	61.7
Integrated Circuits & Assemblies	95,945	10.6	72.2
Arms & Ammunition	57,366	6.3	78.5
Data Processing Machines & Parts	50,975	5.6	84.2
Medical & Surgical Instruments	27,976	3.1	87.2
Tap, Cocks, Valves for Pipes & Tanks	14,888	1.6	88.9
Turbines & Motors	14,787	1.6	90.5
Office Machinery & Parts	10,201	1.1	91.6
Chemicals & Products	8,461	0.9	92.6
Military Equipment for Export	7,941	0.9	93.4
Plastic Articles	7,140	0.8	94.2
Copper Articles	6,848	0.8	95.0
Semiconductor Machinery	4,947	0.5	95.5
All other Products	40,709	4.5	100.0

Source: U.S. Census Bureau, U.S. Import and Export Merchandise Trade Statistics for Phoenix Port of Exit at Phoenix Sky Harbor International Airport, 2016

Employment estimates associated with the \$908.0 million of exports transported by nonstop flights can be calculated using output-per-worker data for each export product from the IMPLAN Input-Output Model for Maricopa County. Aircraft engines and parts production for nonstop flight export created 270 jobs in FY 2016. Employment in all leading export industries related to air exports on nonstop flights was 2,057 jobs (Table 8). After incorporating multiplier effects of secondary spending, the total output from air exports on nonstop international flights was \$1.6 billion in FY 2016, with 6,067 jobs created in the overall economy.

Table 8

**Economic Impact By Products of Nonstop International Flight Exports
Originating at Phoenix Sky Harbor International Airport: FY 2016**

Product Type	Employment	Payroll (thousands)	Economic Activity (thousands)
Aircraft Engines & Parts	270	\$35,818	\$224,513
Pharmaceuticals & Medications	171	13,361	222,602
Electronics & Equipment	475	38,568	112,740
Integrated Circuits & Assemblies	312	22,051	95,945
Arms & Ammunition	256	12,517	57,366
Data Processing Machines & Parts	57	7,233	50,975
Medical & Surgical Instruments	65	6,058	27,976
Tap, Cocks, Valves for Pipes & Tanks	46	3,834	14,888
Turbines & Motors	30	2,081	15,057
Office Machinery & Parts	63	2,498	10,201
Chemicals & Products	9	922	8,461
Military Equipment for Export	16	2,081	7,941
Plastic Articles	5	286	7,140
Copper Articles	28	1,642	6,848
Semiconductor Machinery	6	908	4,947
All other Products	249	9,968	40,709
Primary Impact	2,057	159,827	908,043
Secondary Impact	4,010	241,295	678,009
Total Economic Impact	6,067	\$401,122	\$1,586,052

Sources: U.S. Census Bureau, U.S. Import and Export Merchandise Trade Statistics, and IMPLAN Input-Output Model for Maricopa County

By destination, exports to the United Kingdom were the largest source of export economic impact from nonstop international flights originating at Phoenix Sky Harbor International Airport in FY 2016, creating an estimated 888 primary jobs in export industries with payroll of \$69.0 million injected into the regional economy (Table 9). The estimates for employment, payroll and primary economic activity by country of destination are based on value - weighted shares of the overall primary impact.

Table 9

**Economic Impact By Destination of Nonstop International Flight Exports
Originating at Phoenix Sky Harbor International Airport: FY 2016**

Destination	Employment	Payroll (thousands)	Economic Activity (thousands)
United Kingdom	888	\$68,988	\$391,948
United Arab Emirates	139	10,766	61,166
Dominican Republic	96	7,434	42,235
Afghanistan	85	6,580	37,383
France	83	6,453	36,662
Ireland	79	6,109	34,705
Italy	61	4,745	26,959
Mexico	60	4,653	26,436
Germany	53	4,128	23,451
Netherlands	41	3,201	18,187
Canada	41	3,179	18,061
Costa Rica	36	2,827	16,061
Singapore	36	2,784	15,817
Vietnam	29	2,273	12,913
Japan	27	2,128	12,092
Belgium	26	2,057	11,689
Hong Kong	26	2,032	11,546
Israel	21	1,645	9,344
China	19	1,459	8,291
Malaysia	18	1,383	7,858
All Other Destinations	193	15,003	85,239
Primary Impact	2,057	159,827	908,043
Secondary Impact	4,010	241,295	678,009
Total Economic Impact	6,067	\$401,122	\$1,586,052

A Brief Case Study: British Airways Nonstop Route FY 2016

The significant economic contribution of a single nonstop air route to a major international destination can be seen by examination of the case of the British Airways nonstop flight from Phoenix Sky Harbor International Airport to London Heathrow Airport. The airline was the only carrier offering a nonstop international route to Europe in FY 2016, with daily departures to London from Phoenix outbound and a similar schedule for inbound flights. Equipment on this flight typically is a Boeing 747-400 aircraft, with economy, premium economy and business class accommodations.

In FY 2016, the BA nonstop route transported 105,173 departing passengers on flights from Phoenix Sky Harbor International Airport. British Airways served a combined 218,814 enplaned and deplaned passengers, contributing 10% of international passengers moving through Sky Harbor International Airport. Arizona residents originating travel to London accounted for 51,850 passengers in the fiscal year, and there were 53,323 visitors boarding the flight in Phoenix for return to the United Kingdom. Those enplaning British Airways visitors spent \$140.6 million on lodging, food, auto rental, and related outlays, creating an estimated 1,945 local jobs in the hospitality industry.

According to U.S. Census Bureau data for the Phoenix port of exit (Table 6), the weight of export cargo bound for the United Kingdom was 3.2 million pounds. Based on statistics from the U.S. Department of Transportation, the British Airways flight transported 2.8 million pounds of cargo during the year, and the remaining 400,000 pounds enplaned for the UK was on cargo or nonscheduled carriers. The value of the export cargo outbound on British Airways during the year was \$339.9 million, or 37% of the value of all air cargo on nonstop flights from the Phoenix Port.

The production of goods for export creates jobs and income. Export products carried on the British Airways Phoenix to London route supported 770 jobs in the regional economy, with a payroll of \$60.7 million. The average wage of these export sector jobs was \$78,827, some 50% greater than the average wage in the Phoenix metro area.

Not including British Airways outlays for employees, fuel, food and other operating expenses, the primary economic impact of the nonstop flight to London was \$480 million, creating 2,715 jobs in the regional economy in the hospitality and export sectors. Including the BA share of secondary impacts, the total economic impact of the London route was \$849.1 million, and 5,040 jobs supported. Based on 365 departures per year, each outbound flight carried visitors and exports with an economic value of \$2.3 million injected into the Greater Phoenix economy, including all multiplier effects.

Projections: FY 2021 & FY 2026

The International Trade administration of the U. S. Department of Commerce projects international visits to the United States will increase by 21% over the next five-year period, and again in the following five years. Based on these projections, nonstop flight international visitors arriving at Phoenix Sky Harbor International Airport will increase from 444,708 in FY 2016 to 530,096 in 2021. In constant 2016 dollars, visitor spending is expected to increase to \$858.8 million in 2021 and to \$1.0 billion in 2026 (Table 10).

According to the IHS Global Insight forecasting group, the value of exports to the four nations served by Phoenix Sky Harbor International Airport nonstop flights will rise by 17% by 2021 and increase by an additional 23% by 2026 (in constant 2016 dollars).

Table 10

Economic Impact Projections

Phoenix Sky Harbor International Airport

Economic Impact and Tax Revenues From Nonstop International Flights
(Thousands of 2016 Dollars)

<u>Economic Activity</u>	<u>FY 2021</u>	<u>FY 2026</u>
Airlines & Air Cargo Firms	\$313,791	\$366,030
International Visitor Spending	858,786	1,039,131
Air Export Producers	1,062,410	1,306,764
Primary Impact	2,234,987	2,711,925
Secondary Impact	1,801,405	2,185,541
	\$4,036,392	\$4,897,466
 <u>Employment</u>		
Airlines & Air Cargo Firms	1,039	1,228
International Visitors	11,877	14,371
Air Export Producers	2,407	2,960
Primary Impact	15,323	18,559
Secondary Impact	11,574	14,053
Total Employment	26,897	32,612
 <u>Tax Revenues</u>	 \$495,274	 \$600,507

Sources:

- (A) Airline and cargo activity based on FAA projections
- (B) International visitor projections from International Trade Administration, U. S. Dept. of Commerce
- (C) International export projections from IHS Global Insight
- (D) Secondary impact calculated from IMPLAN model and coefficients from U. S. Dept. of Commerce
- (E) Employment growth based on passenger and export projections
- (F) Combined federal, Arizona and Greater Phoenix tax revenues based on constant 2016 tax rates

Airline and air cargo employment will increase in proportion to meet the demand of increased passenger travel and exports. As a result, the total economic impact of international nonstop flights will reach \$4.0 billion by FY 2021 and rise to \$4.9 billion by FY 2026. Total jobs supported by international nonstop flights will be 26,897 in 2021 and rise to 32,612 by FY 2026.

International Destinations Not Served by Nonstop Flights

Many international destinations currently are not served by nonstop flights from Phoenix Sky Harbor International Airport. Passengers (residents and visitors) reach these destinations by traveling on domestic carriers to hubs such as Los Angeles, New York, Philadelphia, and Atlanta, from where they transfer onward. Analysis of the Origin and Destination air traffic data from the U. S. Department of Transportation offers insight into the most popular international destinations not served by nonstop flights. Some of these could be a source of additional visitors to the region in the future, especially if nonstop service became available.

Table 11

Top 10 Destinations of International Visitors on Connecting Flights: FY 2016

Destination	Departing Passengers	Residents	Visitors	Percent Residents	Percent Visitors
London	79,673	38,898	40,417	48.8%	50.7%
Tokyo	14,182	4,708	9,354	33.2%	66.0%
Amsterdam	10,494	4,425	5,987	42.2%	57.0%
Frankfurt	10,109	4,599	5,379	45.5%	53.2%
Paris	13,078	8,161	4,751	62.4%	36.3%
Seoul	7,314	3,095	4,141	42.3%	56.6%
Ottawa	4,994	1,451	3,521	29.1%	70.9%
Munich	5,992	3,110	2,777	51.9%	46.3%
Shanghai	7,488	4,898	2,533	65.4%	33.8%
Beijing	6,840	4,361	2,427	63.8%	35.5%

Source: Passengers departing Phoenix Sky Harbor International Airport, not on direct flights, FY 2016, International O&D Data File from U. S. Bureau of Travel Statistics

The destinations in the table are ranked by number of visitors boarding U.S. carriers departing from Phoenix Sky Harbor International Airport. It is the spending of such visitors that creates jobs and revenue for local businesses and contributes to the economic impact of air travel. London is the source of the largest number of visitors, followed by Tokyo. Destinations in Europe account for six of the top ten, suggesting there could be important economic benefits to the region from an additional nonstop flight to Europe from Phoenix Sky Harbor International Airport. There were 3,521 visitors from Ottawa. Asian destinations (Seoul, Shanghai and Beijing) make up the remainder of the top ten.