

Economic Impact
of
Nonstop International Flights
from
Phoenix Sky Harbor
International Airport

W. P. Carey School of Business

Arizona State University

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Economic Impact of Nonstop International Flights: 2011

Economic Impact

Nonstop international flights from Phoenix Sky Harbor International Airport created a total economic impact of about \$3.0 billion within the Greater Phoenix metropolitan area in 2011. Nonstop international flights have no additional domestic stops after departure from Phoenix Sky Harbor International airport. Destinations for nonstop international flights from Phoenix during 2011 included Canada (served by Air Canada, U.S. Airways and WestJet), Mexico (served by Aeromexico and U.S. Airways), the United Kingdom (served by British Airways) and Costa Rica (served by U. S. Airways).

The \$3.0 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. This is described further below.

The primary impact of nonstop international flights was \$1.1 billion in 2011 (Table 1). Foreign visitors arriving on nonstop international flights spent \$388 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 \$654 million. Airlines and air cargo firms serving nonstop flights had economic activity estimated as \$77 million.

The primary economic activity associated with nonstop international flights created 7,765 jobs in the regional economy in 2011. Airline and air cargo firms provided jobs for 307 workers. Spending by international visitors created an additional 5,259 jobs. International air exports created 2,199 jobs in the economy.

The secondary economic impact of nonstop international flights was \$1.9 billion of spending and 7,315 additional jobs created. Secondary impacts flow from two sources: spending by producers for intermediate inputs and spending of wages by workers. For example, when an international visitor pays for lodging, that payment is a primary impact. Those dollars are then used by the hotel to pay for goods and services from suppliers, creating more jobs and income. Moreover, wages paid to hotel employees create additional jobs and income when workers spend their paychecks in their home communities. Overall, the \$3.0 billion total economic impact of nonstop flights supported 15,080 jobs in the regional economy.

Secondary impacts (multiplier effects) and total economic impacts were calculated for this report using the IMPLAN input-output model, with specific coefficients for Maricopa County. Developed by the University of Minnesota and the U. S. Forest Service, the IMPLAN model is based on input and output relationships among producers, intermediate suppliers, and consumers for more than 500 industries, updated annually. IMPLAN is widely used and recognized as a standard for regional economic impact studies by private analysts and public agencies at the local, state, and national level.

Table 1

Summary of Phoenix Sky Harbor International Airport

**Economic Impact, Employment and Payroll
From Nonstop International Flights: 2011
(Thousands of Dollars)**

<u>Economic Activity</u>	
Airline & Air Cargo Firms	\$77,045
Visitor Expenditures	388,320
Air Export Producers	654,399
Primary Impact	= \$1,119,764
<i>Secondary Impact</i>	+ 1,912,143
Total Economic Activity	= \$3,031,907
<u>Employment</u>	
Jobs with Airline & Air Cargo Firms	307
Jobs related to Visitor Expenditures	5,259
Jobs with Air Export Producers	2,199
Primary Impact	= 7,765
<i>Secondary Impact</i>	+ 7,315
Total Employment	= 15,080
<u>Payroll</u>	
Airline & Air Cargo Firms	\$18,857
Visitor Expenditures	130,542
Air Export Producers	173,458
Primary Impact	= \$322,857
<i>Secondary Impact</i>	+ 344,464
Total Employment	= \$667,321

Each of the above areas are explained in detail on the following pages

Sources:

- (A) Airline and air cargo activity from surveys and estimates by Arizona State University
- (B) International visitor spending from Arizona Office of Tourism, air terminal survey, and International Trade Administration, U. S. Dept. of Commerce
- (C) Phoenix Sky Harbor exports from U. S. Dept. of Commerce and air carriers
- (D) Secondary impact calculated from IMPLAN model and coefficients from U. S. Dept. of Commerce
- (E) Employment derived from surveys and IMPLAN model for Maricopa Co.

Tax Revenues

Tax revenues created by the total economic impact of \$3.0 billion were calculated to be \$330 million, based on current federal, state and local tax rates. Federal taxes were \$195 million, consisting mostly of income tax and social security taxes. State and local taxes were calculated to be \$135 million.

	<u>Tax Revenues</u>
Federal Taxes	\$195,387
State & Local Taxes	134,818
Total Resulting Tax Revenues	\$330,205

Source: Federal, Arizona and Greater Phoenix tax revenues based on 2011 tax rates

Airline Operations

Air carriers with international nonstop flights originating in Phoenix employed 307 workers during 2011 to provide international nonstop flight air transport services (Table 2). Some carriers utilized sharing arrangements with other airlines for ramp and various operations workers. Additional jobs were created on the airport for support workers related to international flights, such as fuel suppliers. Air cargo firms employed workers both on and off the airport. Payroll for airline and air cargo workers associated with nonstop international flights was \$18 million.

The primary economic activity (proportion of sales/revenues attributable to international flights) for airlines and air cargo firms was \$77 million in 2011. The total economic impact from airline and air cargo activity was \$142 million. In all, 1,000 jobs were supported in the local economy by this activity, with a payroll of \$39 million.

Table 2

Impact of Airline & Air Cargo Activity Related to Nonstop International Flights: 2011

	Employment	Payroll (thousands)	Economic Activity (thousands)
Airlines	258	\$16,842	\$73,237
Air Cargo & Couriers	49	2,015	3,808
Primary Impact	307	18,857	77,045
<i>Secondary Impact</i>	<i>693</i>	<i>20,387</i>	<i>65,003</i>
Total Economic Impact	1,000	\$39,244	\$142,048

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

International Visitors (Table 3)

Airlines with nonstop international routes totalled 10,522 departures from Phoenix Sky Harbor International Airport in 2011. Air carriers transported 1.1 million outbound nonstop passengers to 23 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 international visitors to the Greater Phoenix area. “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 who departed on nonstop international flights from Phoenix Sky Harbor International Airport in 2011, 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.

Nonstop flights to Calgary, Canada, had the greatest number of departures (1,456) and passengers (159,091) in 2011. By airline, U.S. Airways carried the greatest number of outbound passengers to Calgary (77,585), followed by WestJet (67,079) and Air Canada (14,427). According to the O&D data file, 45.2% of passengers traveling from Phoenix to Calgary were visitors returning home to Canada. The highest percentage of visitors on any route (68.5 percent) were from Edmonton, Canada.

Of the 1.1 million passengers departing Phoenix Sky Harbor International Airport in 2011 on nonstop international flights, 258,263 or 23.3% were international visitors to the area, traveling back to the origin of their travel in their home nations. Canada accounted for the greatest number (191,675) of visitors. Nearly three out of every four visitors to the region via nonstop international flights were from Canada (74.2%). An additional 15.3% of visitors were from the United Kingdom, followed by 9.3% of visitors coming from Mexico and fewer than one percent from Costa Rica.

Mexico accounted for the most passengers on nonstop international flights (581,903), but only 24,713 of these, or 4.2% of passengers to Mexico, were visitors to the region. The relatively small proportion of visitors on flights to Mexico indicates that a large proportion (95.8%) of passengers on international flights to Mexico were connecting from other parts of the country or were local residents traveling to Mexico. In comparison, 45.6% of passengers on flights to Canada were visitors to Arizona returning to their Canadian homeland. The proportion of passengers from the United Kingdom that were visitors was similar to the Canadian figure, at 44.9%. Visitors to Arizona accounted for 13.1% of Costa Rica passengers.

Table 3

**Nonstop International Flight Destinations and Departures from
Phoenix Sky Harbor International Airport: 2011**

	Destination	Departures	Passengers	Visitors	% Visitors
1	Calgary, Canada	1,456	159,091	71,972	45.2%
2	Edmonton, Canada	607	69,717	47,785	68.5
3	London, UK	311	88,118	39,571	44.9
4	Vancouver, Canada	795	91,505	28,827	31.5
5	Toronto, Canada	523	58,807	24,083	41.0
6	Mexico City, Mexico	757	83,105	11,909	14.3
7	Victoria, Canada	176	19,486	9,197	47.2
8	Winnipeg, Canada	104	10,958	5,096	46.5
9	Guadalajara, Mexico	1,044	95,772	4,371	4.6
10	San Jose, Costa Rica	160	17,569	2,304	13.1
11	San Jose del Cabo, Mex.	1,447	150,809	2,254	1.5
12	Puerto Vallarta, Mexico	991	105,061	1,971	1.9
13	Cancun, Mexico	434	67,772	1,816	2.7
14	Montreal, Canada	36	3,393	1,542	45.4
15	Regina, Canada	29	3,316	1,500	45.2
16	Saskatoon, Canada	28	3,047	1,295	42.5
17	Mazatlan, Mexico	565	43,033	1,267	2.9
18	Hermosillo, Mexico	658	20,703	659	3.2
19	Kelowna, Canada	11	935	378	40.4
20	Guaymas, Mexico	267	4,257	165	3.9
21	Ixtapa, Mexico	83	7,787	135	1.7
22	Acapulco, Mexico	19	1,759	125	7.1
23	Manzanillo, Mexico	21	1,845	40	2.2
	Total	10,522	1,107,845	258,263	23.3

Sources: U.S. Bureau of Transportation Statistics, T-100 International Segment data, Origin & Destination data; 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

Spending per trip and total visitor spending by country of origin are shown in Table 4. International visitors traveling on nonstop air trips to the Greater Phoenix area spent \$388.3 million in 2011. Figures on spending per trip were based on data from the U. S. Department of Commerce and the Arizona Office of Tourism, supplemented by a survey of international visitors in the terminal waiting area. The average spending per person per trip for 258,263 international nonstop flight visitors was \$1,454.

Since Canadian visitors accounted for nearly three fourths of international nonstop flight visitors in 2011, they also accounted for the largest amount of expenditures in the regional economy, at \$241 million, followed by expenditures by visitors from the United Kingdom of \$101 million. Visitors from the United Kingdom spent the greatest amount per person per trip (\$2,561).

Table 4

Nonstop International Flight Visitors to Greater Phoenix Area: 2011

Origination	Visitors	Spending/Trip	Expenditures
Canada	191,675	\$1,256	\$240,743,631
United Kingdom	39,571	2,561	101,341,331
Mexico	24,713	1,697	41,937,701
Costa Rica	2,304	1,865	4,297,380
Totals	258,263		\$388,320,043

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 5,259 jobs in the Greater Phoenix labor market in 2011 (Table 5). Spending on lodging was the largest category of visitor outlays (\$120 million). The expenditures on lodging supported 1,137 jobs in regional hotels and resorts. Expenditures for food and drink, the second largest outlay, created the greatest number of jobs (1,692), providing employment in restaurants, bars, fast food outlets, and other eating and drinking places. International visitors reported spending \$70 million for retail goods and services, creating 1,286 jobs, the second largest number of visitor related jobs, in malls, shops and service establishments in the local economy.

The total economic impact created by nonstop international route air visitor spending was \$824 million in 2011, with 9,089 jobs supported in the region. This figure includes the 5,259 jobs from the primary impact and an additional 3,829 jobs associated with secondary spending. Payroll for workers in jobs due to spending by international visitors was \$130 million. Total payroll from visitor spending, including all multiplier effects, was \$302 million.

Table 5

Economic Impact of Nonstop International Flight Visitor Spending: 2011

	Employment	Payroll (thousands)	Economic Activity (thousands)
Lodging	1,137	\$35,740	\$120,379
Food & Drink	1,692	31,858	97,080
Retail & Services	1,286	34,466	69,898
Entertainment	885	16,736	46,598
Ground Transport	260	11,740	54,365
Primary Impact	5,259	\$130,542	\$388,320
<i>Secondary Impact</i>	<i>3,830</i>	<i>171,285</i>	<i>435,768</i>
Total Economic Impact	9,089	\$301,827	\$824,088

Sources: Sky Harbor International Airport Surveys, 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 primary source of information on the value of exports by state and port of exit. According to Census figures, Arizona exports increased from 2010 by nearly \$2 billion to \$17.5 billion in 2011. However, Arizona exports are still below the \$19.8 billion recorded in 2008. The leading destination for Arizona exports is Mexico, followed by Canada, including all modes of export transport (truck, rail, air).

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 \$7.8 billion in 2011. An estimated 75 percent of this international bound 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. Most 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 specially arranged international charter and cargo flights. The value of these nonstop international flight air exports from Phoenix Sky Harbor International Airport was \$654 million in 2011 (Table 6), according to U. S. Census Bureau records for the Phoenix exit port.

Ranked by value, the United Kingdom was the number one air destination for manufactured export products departing from the Phoenix port of exit in 2011. Second in value was China, followed by France, then Singapore and Germany. Mexico ranked 12th according to value and Canada was 8th.

There were 7.9 million pounds of air cargo carried on nonstop international flights departing from the Phoenix port of exit in 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 \$82 in 2011.

Value per pound was largest for exports to China (\$440), reflecting a heavy emphasis on advanced technology products. Electronic products and equipment account for 85 percent of the value of air exports to China from the port of Phoenix, but only 57 percent of the weight.

Switzerland also had a value per pound (\$280) much greater than the average. U. S. Bureau of the Census data for the Phoenix port show electronic parts and components account for more than 75 percent of value of air exports to Switzerland in 2011. The value per pound was lowest to Belgium (\$15). 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 produced for export in Arizona is electronic goods and components, followed by aircraft and parts. It is not surprising that these two categories also appear as the two most important nonstop flight exports from the Phoenix port of exit, although the order is reversed, with aircraft and parts ranked first by value. Of the \$654 million of air exports on nonstop flights in 2011, forty percent of value was accounted for by one product category: aircraft engines and parts (Table 7). Electronics products of various types account for an additional one third of value. The top twenty export categories are dominated by 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 estimates that in 2011 there were 9.7 million jobs supported in the nation by exports. The International Trade Administration points out that increases in labor productivity and in export prices in recent years have contributed to a decrease in the number of jobs supported by each \$1 million of exports. In 2002, that figure was 8.5 jobs per \$1 million of exports. In 2011, the ITA finds 5.1 jobs per \$1 million of exports. However, in Arizona, the number of jobs per \$1 million of air exports was greater, at 7.6 jobs per \$1 million. The ITA study also found that earnings premiums to the “middle class” (blue collar workers) were 20% higher than to white collar workers in export industries. Further, the ITA study showed earnings premiums highest in electrical equipment and transportation goods, products that dominate port of Phoenix air exports.

The average wage in 2011 in the Phoenix metropolitan area for workers in all industries was \$46,951, according to the U. S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages. The average annual manufacturing wage was 50 percent greater, at \$70,180. Phoenix wages in the major export industries were even higher. For example, the average wage in aircraft, engines and parts was \$87,343, some 85 percent higher than the average Phoenix wage. Pay for workers in electronics, another leading export product, was higher still, at \$114,441.

Table 6

**Top Twenty Destinations for Nonstop International Flight Exports
from Phoenix Sky Harbor International Airport: 2011**

Rank	Destination	Value	Pounds	\$ Per Pound
	<i>World Total</i>	<i>\$654,398,877</i>	<i>7,964,787</i>	<i>\$82</i>
1	United Kingdom	235,553,859	2,489,990	95
2	China	72,371,628	164,568	440
3	France	39,913,636	432,511	92
4	Singapore	26,537,221	418,113	63
5	Germany	24,745,810	241,545	102
6	Hungary	20,766,814	438,774	47
7	Ireland	18,101,440	230,883	78
8	Canada	16,658,934	161,420	103
9	Taiwan	16,092,502	99,805	161
10	Hong Kong	13,970,693	434,830	32
11	Japan	13,369,490	244,607	55
12	Mexico	13,201,283	275,333	48
13	Italy	12,494,868	377,912	33
14	Israel	11,807,479	100,722	117
15	Czech Republic	11,555,426	135,443	85
16	Malaysia	10,678,907	93,258	115
17	India	9,235,385	98,170	94
18	Belgium	9,049,876	607,719	15
19	Korea, South	8,076,233	73,487	110
20	Switzerland	7,712,044	27,578	280
	Top 20 Total	591,893,528	7,146,668	83
	Other Destinations	62,505,349	371,093	76

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

Table 7

**Nonstop International Flight Exports by Major Product Type
from Phoenix Sky Harbor International Airport: 2011**

Product Type	Value (thousands)	Percent of Total	Cumulative Percentage
<i>Total All Air Exports</i>	<i>\$654,399</i>	<i>100.0</i>	
Aircraft, Engines, & Parts	261,181	39.9	39.9
Electronic Integrated Circuits & Assemblies	94,879	14.5	54.4
Electronic Data Processing Equipment	66,456	10.2	64.6
Instruments (Optical, Medical)	39,440	6.0	70.6
Industrial Chemical Products	22,932	3.5	74.1
Electric Apparatus Telecommunication	22,361	3.4	77.5
Semiconductor Devices & Components	13,115	2.0	79.5
Semiconductor Manufacturing Equipment	12,350	1.9	81.4
Other Office Machine Components	9,851	1.5	82.9
Sound Or Visual Signaling Apparatus	9,358	1.4	84.3
Screws, Bolts, Nuts, Washers	6,060	0.9	85.3
Boards, Panels & Electronic Switches	5,942	0.9	86.2
Communication & Radar Apparatus	4,901	0.7	86.9
Metals & Metal Articles	4,739	0.7	87.6
Electric Transmission Equipment	4,638	0.7	88.4
Taps, Cocks, Valves for Pipes & Tanks	4,637	0.7	89.1
Unrecorded Media For Sound or Other	4,507	0.7	89.8
All other Products	67,053	10.2	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

Table 8

Economic Impact of Nonstop International Flight Exports Originating at Phoenix Sky Harbor International Airport: 2011

Product Type	Employment	Payroll (thousands)	Economic Activity (thousands)
Aircraft, Engines, & Parts	918	74,761	261,181
Electronic Integrated Circuits & Assemblies	266	25,610	94,879
Electronic Data Processing Equipment	331	20,210	66,456
Instruments (Optical, Medical)	159	9,462	39,440
Industrial Chemical Products	45	2,065	22,932
Electric Apparatus Telecommunication	46	4,109	22,361
Semiconductor Devices & Components	17	2,490	13,115
Semiconductor Manufacturing Equipment	31	4,110	12,350
Other Office Machine Components	38	3,789	9,851
Sound Or Visual Signaling Apparatus	19	1,720	9,358
Screws, Bolts, Nuts, Washers	30	1,911	6,060
Boards, Panels & Electronic Switches	30	1,895	5,942
Communication & Radar Apparatus	12	1,400	4,901
Metals & Metal Articles	23	1,436	4,739
Electric Transmission Equipment	14	799	4,638
Taps, Cocks, Valves for Pipes & Tanks	14	1,217	4,637
Unrecorded Media For Sound or Other	15	746	4,507
All other Products	191	15,728	67,053
Primary Impact	2,199	173,458	654,399
<i>Secondary Impact</i>	<i>2,792</i>	<i>152,792</i>	<i>1,411,372</i>
Total Economic Impact	4,991	\$326,250	\$2,065,771

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

Using the IMPLAN Input-Output Model for Maricopa County, employment estimates associated with the \$654 million of exports transported by nonstop flights can be calculated. Employment in leading export industries related to air exports on nonstop flights was 2,199 jobs (Table 8). Because export industry jobs are higher paying than average Arizona jobs, the resulting secondary impacts are significant. Secondary output and jobs are created when export workers spend payrolls and export industries buy equipment, supplies, materials and services. After incorporating multiplier effects of secondary spending, the total output from air exports on nonstop international flights was \$2 billion in 2011, with 4,991 jobs created in the overall economy.

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 2011 (Table 9). According to statistics from the U.S. Department of Transportation, the British Airways flight transported 3.8 million pounds of cargo during the year. According to U.S. Census Bureau data for the Phoenix port of exit (Table 6), cargo for the United Kingdom was 2.5 million pounds, and the additional 1.3 million pounds was subsequently forwarded to other destinations in Europe such as France, Germany, and Italy.

Table 9

Primary Impact by Destination	Employment	Payroll (thousands)	Economic Activity (thousands)
UK (and connections)	1,054	80,021	332,327
Canada	60	4,690	16,659
Mexico	49	3,296	13,201
All Other Destinations	1,037	85,451	292,211
Primary Impact	2,199	173,458	654,399
<i>Secondary Impact</i>	2,792	152,792	1,411,372
Total Impact By Destination			
UK (and connections)	2,427	151,354	970,798
Canada	134	8,951	51,502
Mexico	112	6,091	40,415
All Other Destinations	2,318	159,854	1,003,056
Total Economic Impact	4,991	\$326,250	\$2,065,771

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

A Brief Case Study: British Airways Nonstop Flight

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. During 2011, there were six departures per week to London from Phoenix outbound and a similar number of inbound flights. Equipment on this flight typically is a Boeing 747-400 aircraft, with occasional use of a 747-200/300.

In 2011, this nonstop route had 82,242 departing passengers on 311 flights from Phoenix Sky Harbor International Airport. Residents originating travel to London accounted for 42,671 passengers, and there were 39,571 visitors boarding the flight in Phoenix for return to the United Kingdom. Those visitors spent \$101 million on lodging, food, auto rental, and related outlays, creating an estimated 1,372 local jobs in the hospitality industry.

In 2011, the British Airways nonstop flight transported 3.8 million pounds of freight from the Phoenix Port of Exit. Exports traveling out of the country were valued at \$332 million, and were associated with 1,054 jobs in industries producing export goods. The average wage of these export sector jobs was \$75,920.

Not including British Airways outlays for employees, fuel, food and other operating expenses, the primary economic impact of the nonstop flight to London was \$433 million, creating 2,426 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 \$1.19 billion, and 4,825 jobs supported. Based on 311 departures per year, each outbound flight carried visitors and exports with an economic value of \$3.8 million injected into the economy, including all multiplier effects.

If the BA flight schedule was expanded to 365 outbound flights per year, the total economic effect would be an increase of 838 additional jobs (raising the total employment impact to 5,663 jobs), and an increase in value of economic activity (output) for the regional economy of \$206.6 million (raising the value of total economic activity to \$1.4 billion). The BA flight schedule was expanded to seven days a week as of December 2012.

Projections: 2016 & 2021

Considerable uncertainty exists in the global economy. The Euro zone is expected to experience very slow growth while facing financial and fiscal risks of indeterminate duration. Barring a global recession, international visitors and exports from Phoenix will both continue to rise, although the pace may be weak.

The U. S. Department of Commerce projects international visits from Canada will increase by 21 percent by 2016, while air visits from Mexico are expected to rise by 11 percent. U.K. visits will increase by only 9 percent by 2016. Visits from Costa Rica are forecast to increase by 15 percent. Based on these projections, nonstop flight international visitors arriving at Phoenix Sky Harbor International Airport will increase from 258,263 in 2011 to 305,229 in 2016. In constant 2011 dollars, visitor spending is expected to increase to \$441 million in 2016. At the forecast growth rate of 15.4 percent, visitor spending will rise to \$506 million in 2021 (Table 10).

Table 10

Economic Impact Projections

Phoenix Sky Harbor International Airport

**Economic Impact and Tax Revenues
from Nonstop International Flights**

(Thousands of 2011 Dollars)

	<u>2016</u>	<u>2021</u>
<u>Economic Activity</u>		
Airlines & Air Cargo Firms	\$86,074	\$101,262
International Visitors	441,256	506,620
Air Export Producers	929,503	1,333,837
Primary Impact	\$1,456,833	\$1,941,718
Secondary Impact	2,572,496	3,530,705
Total Economic Activity	\$4,029,329	\$5,472,423
<u>Employment</u>		
Airlines & Air Cargo Firms	354	429
International Visitors	6,217	7,162
Air Export Producers	3,142	4,509
Primary Impact	9,713	12,100
Secondary Impact	9,316	11,909
Total Employment	19,029	24,009
<u>Tax Revenues</u>	\$416,661	\$525,714

Sources:

- (A) Airline and cargo activity based on passenger and export growth projections
- (B) International visitor projections from International Trade Administration, U. S. Dept. of Commerce
- (C) International export projections by country from Economist Intelligence Unit
- (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 2011 tax rates

According to the Economist Intelligence Unit global forecasting group, the value of exports to the three nations served by Phoenix Sky Harbor International Airport nonstop flights will rise by 40 percent by 2016 and increase by an additional 43 percent by 2021 (in constant 2011 dollars).

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 2016 and rise to \$5.5 billion by 2021. Jobs supported by international nonstop flights will be 19,029 in 2016 and rise to 24,009 by 2021.

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

Destination	Departing Passengers	Residents	Visitors	Percent Residents	Percent Visitors
London	20,120	11,375	8,320	56.5%	41.4%
Tokyo	10,435	2,995	7,255	28.7%	69.5%
Frankfurt	13,475	6,895	6,405	51.2%	47.5%
Paris	13,695	8,115	5,455	59.3%	39.8%
Amsterdam	8,880	3,790	5,010	42.7%	56.4%
Ottawa	6,805	1,770	4,970	26.0%	73.0%
Tel Aviv	6,505	3,285	3,175	50.5%	48.8%
Munich	6,875	3,730	3,010	54.3%	43.8%
Seoul	6,590	3,535	3,005	53.6%	45.6%
Brussels	4,310	1,505	2,755	34.9%	63.9%

Source: 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 that departed on connecting flights to return home, 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.