



Los Angeles World Airports



LAX SPECIFIC PLAN AVIATION ACTIVITY ANALYSIS REPORT CY 2016

Prepared April 2017

**Los Angeles International Airport (LAX)
LAX Specific Plan Compliance Review
Aviation Activity Analysis
January - December 2016**

Purpose of This Report

Per Section 7 Subsection G.1 (b), Monitoring and Reporting, of the Los Angeles International Specific Plan¹. Los Angeles World Airports (LAWA) is required to prepare and submit an annual Aviation Activity Analysis Report to the Board of Commissioners, the Department of City Planning, Los Angeles Department of Transportation, and the City Council. This report is to include an “analysis that identifies the current number of passengers, volume of air cargo and aircraft operations served at LAX.” The report is also to “compile aviation activity statistics for other airports in the Los Angeles region for monitoring and reporting purposes.” This Aviation Activity Analysis Report has been updated for the calendar year 2016.

Summary and Conclusions

An analysis of LAX and regional air traffic activity for January through December 2016 led to the following conclusions:

- Passenger volume at LAX totaled 80.92 Million Annual Passengers (MAP) in 2016, a 7.40% increase compared to the previous year.
- Cargo volume at LAX totaled 2.205 million tons in 2016, a 2.98% increase over 2015, with 2.141 million tons.
- Commercial aircraft operations (landings and takeoffs) at LAX increased by 6.34% in 2016 to 697,138 from 655,564 operations in 2015.
- LAX handled 77.3% of regional air passenger traffic in 2015, a 0.4% increase over 2015.
- Preliminary data reported by individual airports indicate LAX is the fourth busiest airport in the world by passenger volume and second busiest U.S. airport. See table, next page.



¹ City of Los Angeles, Department of City Planning, LAX Specific Plan, adopted January 20, 2005, last amended June 16, 2016.

Top 25 World Airports Ranked by Passenger Volume

(preliminary rankings as reported by individual airports, April 17, 2017)

U.S. Rank	Global Rank	Airport	Location	Total Passengers
1	1	Hartsfield–Jackson Atlanta International	Atlanta, Georgia	104,171,935
	2	Beijing Capital International	Chaoyang-Shunyi, Beijing	94,393,454
	3	Dubai International	Garhoud, Dubai	83,654,250
2	4	Los Angeles International	Los Angeles, California	80,921,527
	5	Tokyo Haneda Airport	Ōta, Tokyo	79,520,000
3	6	O'Hare International Airport	Chicago, Illinois	77,960,588
	7	London Heathrow airport	London, England	75,711,130
	8	Hong Kong International	Chek Lap Kok, Hong Kong	70,516,000
	9	Shanghai Pudong International	Pudong, Shanghai	66,002,414
	10	Paris-Charles de Gaulle Airport	Roissy-en-France, France	65,933,145
4	11	Dallas/Fort Worth International	Dallas-Fort Worth, Texas	65,670,697
	12	Amsterdam Schiphol Airport	Amsterdam, Holland	63,625,664
	13	Frankfurt Airport	Frankfurt, Germany	60,786,937
	14	Istanbul Atatürk Airport	Yeşilköy, Istanbul	60,119,215
	15	Guangzhou Baiyun International	Baiyun-Huadu, Guangzhou, China	59,732,147
5	16	John F. Kennedy International	Queens, New York, New York	58,956,288
	17	Singapore Changi Airport	Changi, Singapore	58,698,039
6	18	Denver International	Denver, Colorado	58,266,515
	19	Seoul Incheon International	Incheon, South Korea	57,765,397
	20	Suvarnabhumi Airport	Bang Phli, Thailand	55,892,428

Top 15 U.S. Airports Ranked by Passenger Volume

(preliminary rankings as reported by individual airports, April 17, 2017)

U.S. Rank	Global Rank	Airport	Location	Total Passengers
1	1	Hartsfield–Jackson Atlanta International	Atlanta, Georgia	104,171,935
2	4	Los Angeles International	Los Angeles, California	80,921,527
3	6	O'Hare International Airport	Chicago, Illinois	77,960,588
4	11	Dallas/Fort Worth International	Dallas-Fort Worth, Texas	65,670,697
5	16	John F. Kennedy International	Queens, New York, New York	58,956,288
6	18	Denver International	Denver, Colorado	58,266,515
7	23	San Francisco International	San Mateo County, California	53,106,505
8	26	McCarran International	Las Vegas, Nevada	47,435,640
9	28	Seattle-Tacoma International	SeaTac, Washington	45,736,700
10	30	Miami International	Miami-Dade County, Florida	44,584,603
11	31	Charlotte Douglas International	Charlotte, North Carolina	44,422,022
12	34	Phoenix Sky Harbor International	Phoenix, Arizona	43,383,528
13	40	Orlando International airport	Orlando, Florida	41,923,399
14	44	George Bush Intercontinental	Houston, Texas	41,615,689
15	46	Newark Liberty International	Newark, New Jersey	40,351,331

LAX Air Traffic Activity

Los Angeles World Airports (LAWA) reports air traffic activity on a monthly basis, and keeps an archive of activity online. The reports titled “Traffic Comparison Report (TCOM)” and the report titled “Volume of Air Traffic (VOAT)” provide air passenger, air cargo and aircraft operations activity statistics for Los Angeles International Airport for the Calendar Year 2016.

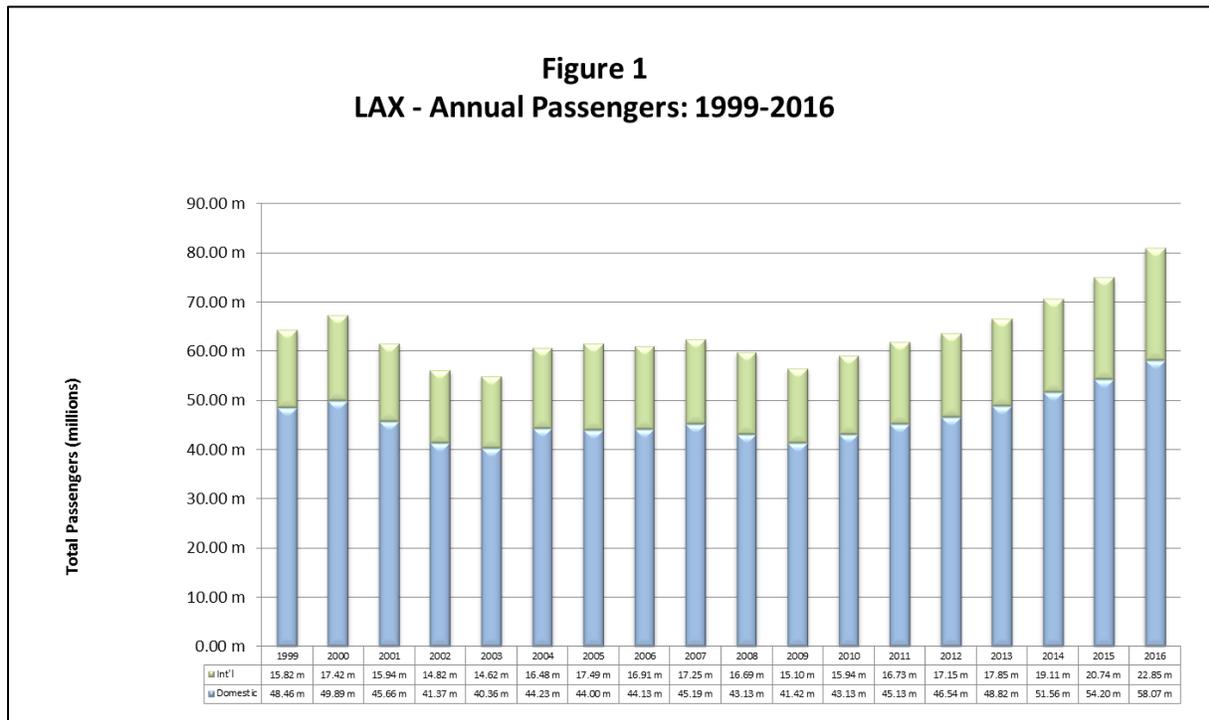
These reports are available on the LAWA website:

http://www.lawa.org/welcome_lax.aspx?id=798

LAX Passenger Volume

As shown in Figure 1, LAX passenger volume totaled approximately 80.921 Million Annual Passengers (MAP) in 2016, a 7.40% increase over 2015.

In 2016, international passenger volume was 22,850,164 MAP. A 10.17% increase over the previous record high of 20,740,075 MAP in 2015. Domestic passenger volume is up 6.67% over calendar year 2015, from 54,196,181 air passengers in CY 2015 to 58,071,363 in CY2016.



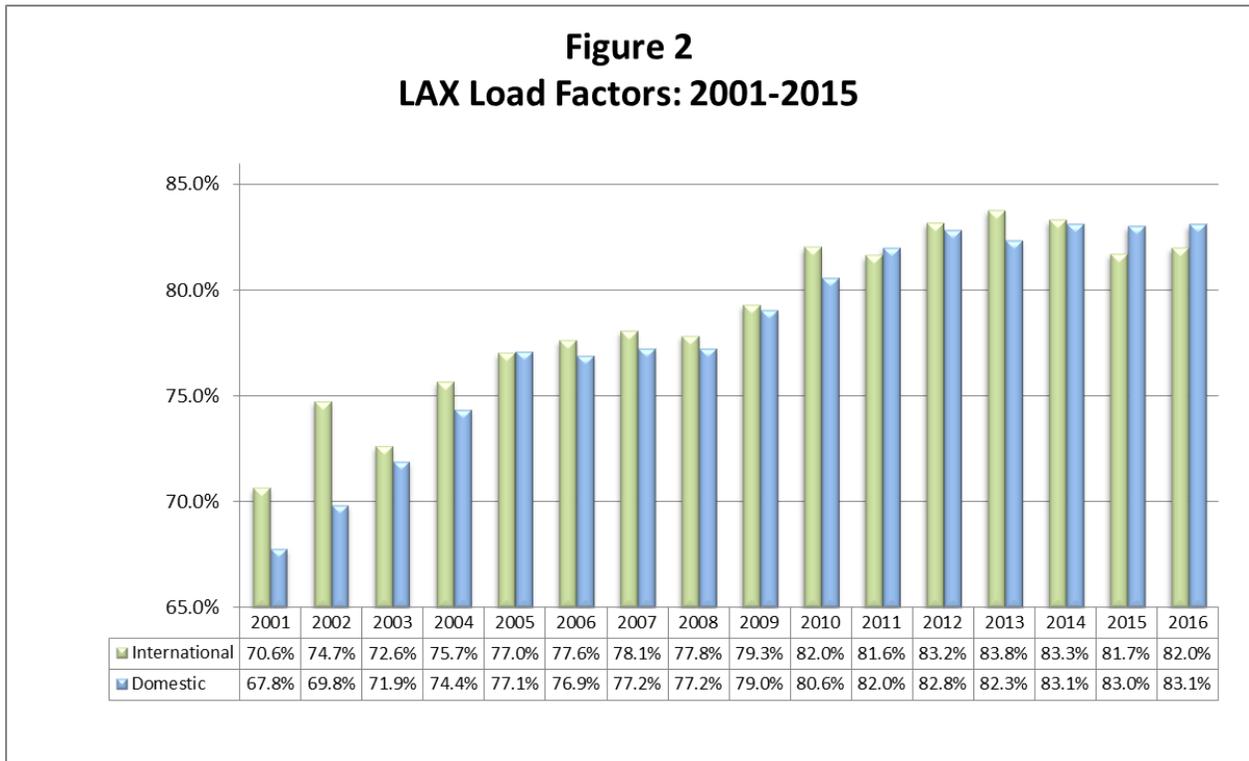
Data Source: LAWA, Financial Management Systems, *Revenue Agreement Management System* (aka PROPworks™).



LAX Average Load Factor

Load factor is the percentage of seats filled per aircraft. Average Load Factor is a calculation of the total number of air passengers at LAX divided by the total number of seats provided for all aircraft operations at LAX for the calendar year.

Below, Figure 2 - “LAX Average Load Factor 2001-2016,” shows the change in Average Load Factor at LAX since 2001.

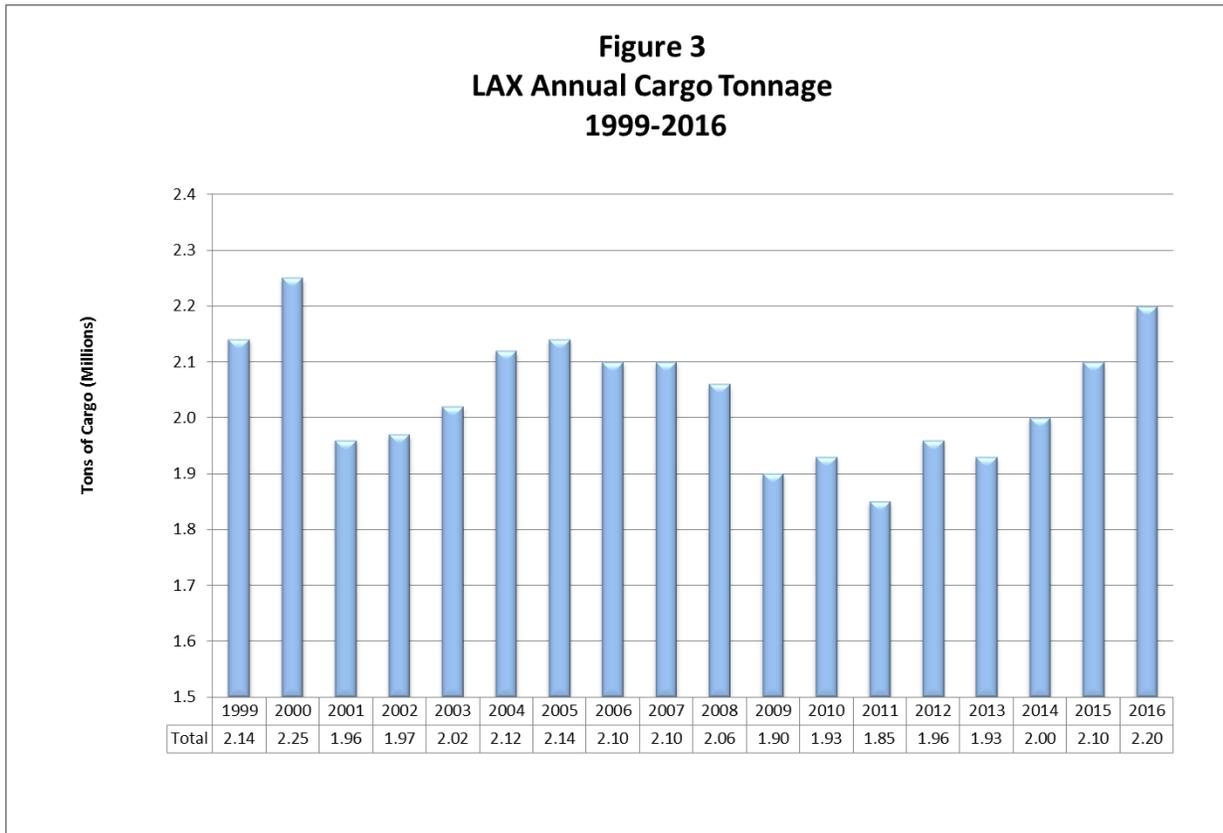


*Percentages are rounded up. Domestic passenger load factor based on available data through 9/2016 only.
Data Source: USDOT T-100 Reports

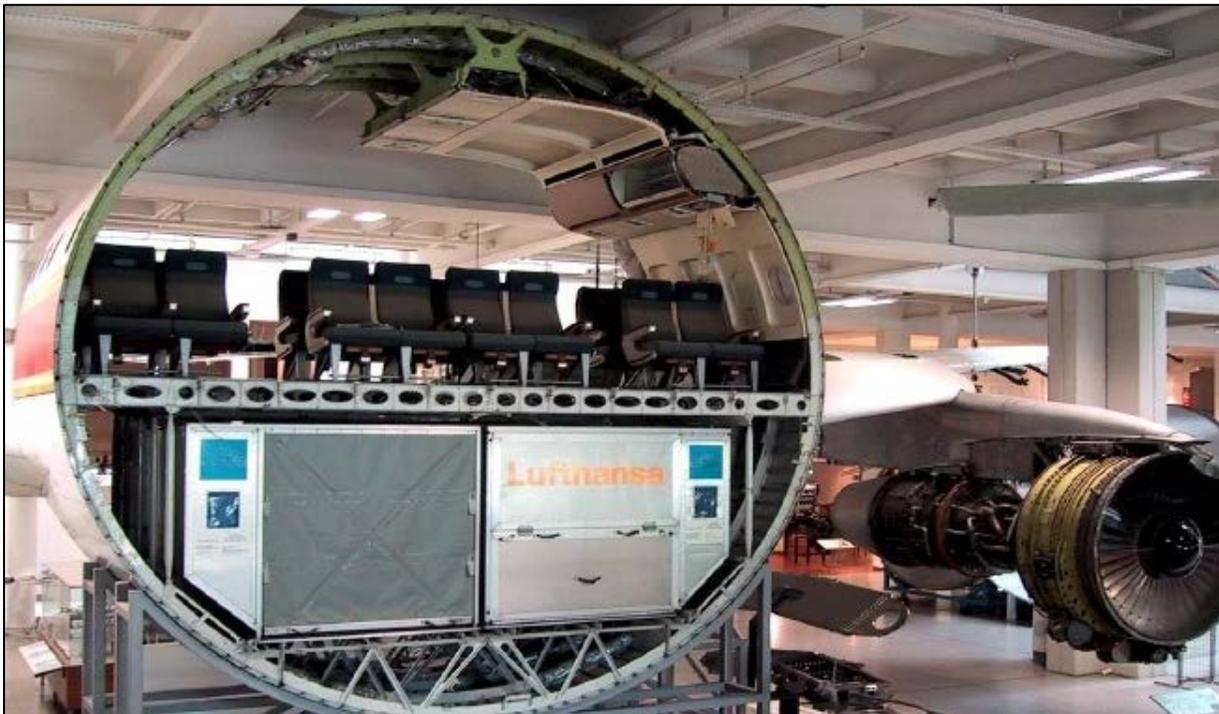


LAX Cargo Volume

Total cargo volume in Calendar Year 2016 totaled 2,205,335 Million Annual Tons, a 2.98% increase over 2015. Figure 3 – “LAX Annual Cargo Tonnage 1999-2016” shows historical cargo volumes for LAX between 1999 and 2016.

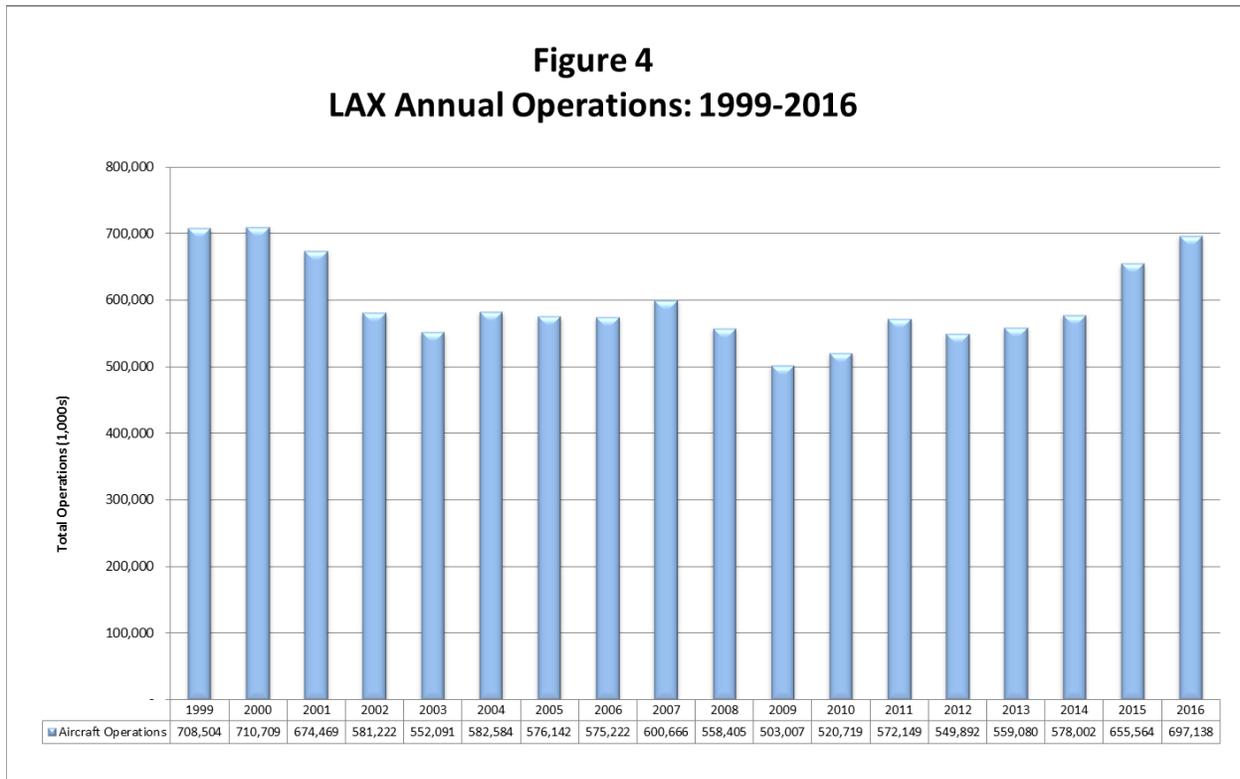


Data Source: LAWA, Financial Management Systems, Revenue Agreement Management System (aka PROPworks™).



LAX Commercial Aircraft Operations

Figure 4 - "LAX Annual Operations 1999-2016" shows the change in operations at LAX between 1999 and 2016. The number of aircraft operations (landings and takeoffs) totaled 697,138 in 2016, up from 655,564 commercial operations in 2015. A 6.34% increase.



Data Source: LAWA, Financial Management Systems, Revenue Agreement Management System (aka PROPworks™).



Aviation Activity in the Los Angeles Region

There are six primary commercial airports² in the Southern California region³. These airports in total served approximately 104,663,384 air passengers in 2016 (up 6.67% from the total of 97,681,797 air passengers in 2015) and approximately 2.8 million tons of air cargo in 2016. The six Southern California airports generated about 1.21 million commercial and private aircraft operations in 2016. In 2016, LAX handled 77.3% of the 2016 regional passenger volume at these six airports.

The tables below, "Aviation Activity, SCAG Region Air Carriers" summarizes 2015 and 2016 air passengers, cargo tonnage shipped, and aircraft operations totals by airport in absolute numbers (Table 1) and percentage of total (Table 2). An aircraft operation is an arrival or departure of one aircraft at the airport.

**Table 1: 2015 and 2016 Aviation Activity
SCAG Region Air Carriers**

Airport	2016			2015		
	Passengers	Cargo/Mail (Tons)	Total Operations	Passengers	Cargo/Mail (Tons)	Total Operations
BUR	4,142,943	5,330	132,407	3,943,629	5,475	127,987
SNA	10,496,511	18,109	284,246	10,180,258	17,679	260,689
LAX	80,921,527	2,205,335	697,138	74,936,256	2,132,486	655,564
LGB	2,852,294	18,840	274,694	2,523,686	24,983	24,983
ONT	4,251,903	509,810	91,712	4,217,366	509,810	88,074
PSP	1,998,206	482	51,091	1,888,657	328	55,924
Total	104,663,384	2,757,906	1,531,288	97,681,797	2,741,483	1,213,274

Data Source: Individual airport's statistical reports

**Table 2: 2015 and 2016 Aviation Activity
SCAG Region Air Carriers (by percentage of total)**

Airport	2016			2015		
	Passengers	Cargo/Mail (Tons)	Total Operations	Passengers	Cargo/Mail (Tons)	Total Operations
BUR	4.0%	0.19%	8.6%	4.0%	0.20%	10.5%
SNA	10.0%	0.66%	18.6%	10.4%	0.64%	21.5%
LAX	77.3%	79.96%	45.5%	76.7%	77.79%	54.0%
LGB	2.7%	0.68%	17.9%	2.6%	0.91%	2.1%
ONT	4.1%	18.49%	6.0%	4.3%	18.60%	7.3%
PSP	1.9%	0.02%	3.3%	1.9%	0.01%	4.6%
Total	100.0%	100.0%	100.0%	100.0%	98.1%	100.0%

² Los Angeles International Airport (LAX), Ontario International Airport (ONT), Long Beach Airport (LGB), Hollywood Burbank Airport (BUR), John Wayne Airport/Orange County (SNA), and Palm Springs International Airport (PSP).

³ Los Angeles, Orange, Ventura, San Bernardino, Riverside, and Imperial Counties.

Table 3 - “Airport Share of Regional Passenger Traffic, SCAG Region Air Carriers 1996-2016” shows each airport’s percentage share of regional air passenger traffic.

Table 3: SCAG Region Air Carriers Passenger Activity: 2014 – 2016 (percentage of total)							
YEAR	Los Angeles (LAX)	Ontario (ONT)	Long Beach (LGB)	John Wayne (SNA)	Burbank (BUR)	Palm Springs (PSP)	Regional Total
1996	74.4%	8.0%	0.6%	9.4%	6.2%	1.4%	100%
1997	74.6%	7.8%	0.8%	9.6%	5.8%	1.5%	100%
1998	74.9%	7.9%	0.8%	9.1%	5.8%	1.5%	100%
1999	75.4%	7.7%	1.0%	8.8%	5.6%	1.5%	100%
2000	76.1%	7.6%	0.7%	8.8%	5.3%	1.4%	100%
2001	75.2%	8.2%	0.7%	8.9%	5.5%	1.4%	100%
2002	72.2%	8.4%	1.9%	10.2%	5.9%	1.4%	100%
2003	69.7%	8.3%	3.6%	10.8%	6.0%	1.6%	100%
2004	70.5%	8.1%	3.4%	10.8%	5.7%	1.6%	100%
2005	69.6%	8.2%	3.4%	10.9%	6.2%	1.6%	100%
2006	69.6%	8.0%	3.1%	11.0%	6.5%	1.7%	100%
2007	69.3%	8.0%	3.2%	11.1%	6.6%	1.8%	100%
2008	70.5%	7.3%	3.4%	10.6%	6.3%	1.8%	100%
2009	71.5%	6.2%	3.7%	11.0%	5.8%	1.9%	100%
2010	72.5%	5.9%	3.7%	10.6%	5.5%	1.8%	100%
2011	73.7%	5.4%	3.7%	10.3%	5.1%	1.8%	100%
2012	74.2%	5.0%	3.7%	10.3%	4.7%	2.0%	100%
2013	75.4%	4.5%	3.3%	10.4%	4.3%	2.0%	100%
2014	76.2%	4.4%	3.0%	10.1%	4.2%	2.1%	100%
2015	76.7%	4.3%	2.6%	10.4%	4.0%	1.9%	100%
2016	77.3%	4.1%	2.7%	10.0%	4.0%	1.9%	100%

Data Source: Individual airport’s statistical reports

