JACOBS
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SUPPLEMENTAL TECHNICAL REPORT 1
FAR PART 161 APPLICATION

AVIATION DEMAND FORECASTS

Bob Hope Airport

Prepared for

Burbank-Glendale-Pasadena Airport Authority
Burbank, California

Prepared by

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in association with

Conklin & de Decker Aviation Information

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BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY
ORGANIZED JUNE 21, 1977

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PREFACE

The aviation demand forecasts for Bob Hope Airport, presented in this technical report, were originally prepared in the last quarter of 2006. This Preface presents recent airport activity data and compares it with the trends originally forecasted in 2006. The recent data show that enplaned passengers and commercial aircraft are closely matching the forecast.

Enplaned Passengers

As shown in Table A, enplaned passengers at the Airport have increased between 2005 and 2007, at the rate of 2.8%.

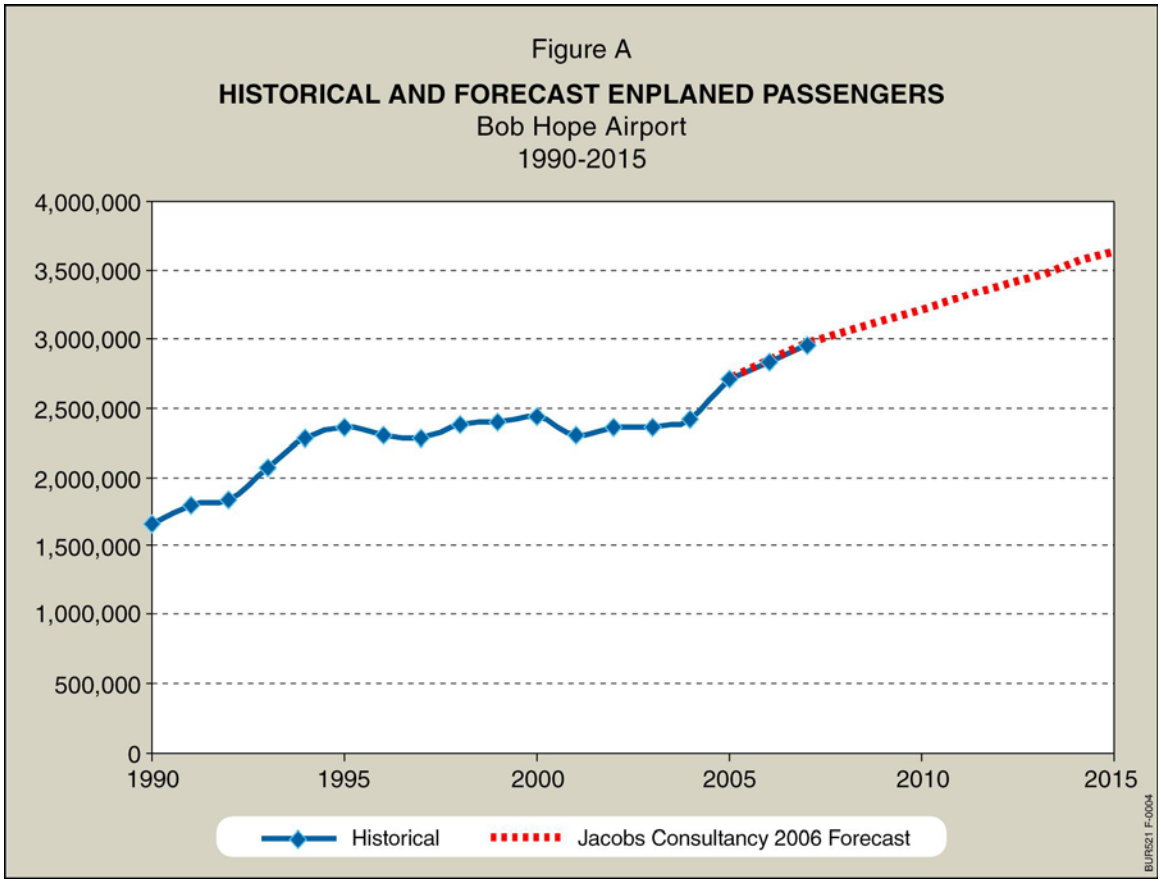
Table A

HISTORICAL AND FORECAST ENPLANED PASSENGERS
Bob Hope Airport

	Historical			Forecast	
	2005	2006	2007	2008	2015
Enplaned passengers	2,759,984	2,843,281	2,960,294	3,037,000	3,635,000

Sources:
Historical: Bob Hope Airport, 2008.
Forecast: Jacobs Consultancy, December 2006. See Table 11 on page 23.

Figure 1 shows historical and forecast enplaned passengers at the Airport from 1990 to 2015. The actual passenger totals in 2006 and 2007 closely track with the forecast.



Scheduled Airline Departures

Table B compares the daily scheduled departures in October 2006 with the current scheduled departures in March 2008. Six flights have been added in the past year-and-a-half.

Southwest remains the dominant carrier at the Airport, with a 58% market share of total scheduled airline operations. It added two flights during the period but has announced that it will be dropping four flights in May 2008. Alaska, American, and Delta also added flights. JetBlue, which started service at the Airport in mid-2006, is now serving the Airport with two fewer flights. United and US Airways have not made any changes in their number of daily operations.

Table B

HISTORICAL AND CURRENT AVERAGE DAILY DEPARTURES
Bob Hope Airport

Flight Breakdown	Baseline October, 2006	Current March, 2008
Alaska	8	9
American	4	5
Delta	3	5
JetBlue	6	4
Skybus	--	2
Southwest	56	58
United	11	11
US Airways	6	6
Total	94	100

Source: Bob Hope Airport (Current), Official Airline Guides (Baseline)

Air Freight Tonnage

Table C shows that total air cargo increased 3.9% annually from 2000 to 2007, with all-cargo aircraft tonnage increasing 6.2% annually and passenger airline cargo (or belly cargo) decreasing 6.7% annually. Mail, carried by passenger airlines, decreased 42.5% annually over this period.

All-cargo carriers—FedEx and UPS—carried about 85% of all-cargo tonnage at the Airport in 2007. The other significant cargo operator is Ameriflight, which carried about 11% of all-cargo tonnage at the Airport in 2007. Ameriflight focuses on high priority overnight packages for the banking industry, including shuttling checks to Federal Reserve offices, and has experienced a decrease in tonnage of 5.7% annually between 2000 and 2007.

Table C

HISTORICAL AIR FREIGHT TONNAGE
Bob Hope Airport

	2000	2005	2006	2007
Air cargo				
Passenger	2,930	4,312	2,530	1,803
All-cargo				
Air carrier				
Federal Express	15,784	34,456	39,178	32,912
United Parcel Service	9,291	6,895	8,539	12,753
Subtotal air carrier	25,075	41,350	50,247	47,468
Commuter/air taxi				
AirNet Express	-	753	310	286
Ameriflight	9,031	7,205	7,020	5,981
Subtotal commuter/air taxi	9,031	7,959	7,330	6,267
Subtotal air cargo	37,036	52,867	57,577	53,735
Mail				
Passenger	4,195	355	75	87
Total air freight	41,231	53,223	57,652	53,822

Source: Bob Hope Airport, 2008.

Table D summarizes forecast cargo tonnage carried by all-cargo aircraft. It is forecast to increase from 49,300 short tons in 2005 to 71,100 short tons in 2015, an annual increase of 3.7%. Total freight tonnage for all-cargo airlines in 2007 has decreased, relative to 2006, largely due to reductions seen on FedEx, Ameriflight and AirNet Express.

Table D

FORECAST TONNAGE FOR ALL-CARGO AIRLINES
Bob Hope Airport

	Historical			Forecast	
	2005	2006	2007	2008	2015
Mainline	41,350	47,717	45,665	51,900	63,800
Regional/commuter	7,959	7,330	6,267	7,300	7,300
Total	49,309	55,047	51,933	59,200	71,100

Sources:
Historical: Bob Hope Airport, 2008.
Forecast: Jacobs Consultancy, 2006.

Historical and Forecast Operations

Table E presents historical and forecast operations on an annual and average daily basis. It shows that air carrier operations in 2006 and 2007 are in line with the trend forecast from 2005 through 2015. Commuter/air taxi operations declined over the period from 2005 to 2007, as did general aviation. The decline in general aviation operations is being driven by a drop in activity by light piston-engine aircraft.

Table E

SUMMARY OF FORECAST AIRCRAFT OPERATIONS
Bob Hope Airport

	Annual					Compound annual growth rate	Daily				
	Historical			Forecast			Historical			Forecast	
	2005	2006	2007	2008	2015	2005 - 2015	2005	2006	2007	2008	2015
By FAA category											
Air carrier	65,541	68,642	71,949	71,763	81,002	2.1%	179.6	188.1	197.1	196.6	221.9
Commuter/air taxi	25,846	21,275	17,623	20,935	21,850	(1.7)	70.8	58.3	48.3	57.4	59.9
General aviation	44,007	40,960	33,678	39,950	42,840	(0.3)	120.6	112.2	92.3	109.5	117.4
Military	236	337	271	330	330	3.4	0.6	0.9	0.7	0.9	0.9
Total	135,630	131,214	123,521	132,978	146,022	0.7%	371.6	359.5	338.4	364.3	400.1

Note: Military aircraft operations at the Airport have historically been negligible. They are anticipated to remains relatively constant, near 300 operations per year, throughout the future.

(a) Compound annual growth rate for Very Light Jets is from 2008 to 2015.

Sources: Historical: Bob Hope Airport, 2008.
Forecast: Jacobs Consultancy, December 2006.

Comparison of Forecasts to FAA Terminal Area Forecast

Table F compares the enplanements and operations forecast developed in this Technical Report with the latest FAA Terminal Area Forecast (TAF). It shows that the Airport's enplanements forecast and commercial operations forecasts are closely tracking the TAF. General aviation operations are well below the TAF. This reflects the continued decline in activity by light piston aircraft.

Table F

COMPARISON OF FAA TAF TO JACOBS CONSULTANCY FORECAST
Bob Hope Airport

	JC Forecast	TAF *(a)*	Percent Difference
Passenger Enplanements			
2005 (Base Year)	2,759,984	2,664,267	3.5%
2008	3,037,000	2,954,812	2.7%
2015	3,635,000	3,419,943	5.9%
Commercial Operations *(a)*			
2005 (Base Year)	91,387	95,092	-4.1%
2008	92,698	91,616	1.2%
2015	102,852	104,139	-1.3%
GA Operations			
2005 (Base Year)	55,568	79,189	-42.5%
2008	46,310	100,601	-117.2%
2015	50,100	115,938	-131.4%
Military Operations			
2005 (Base Year)	236	460	-94.9%
2008	330	478	-44.8%
2015	330	478	-44.8%
Total Operations			
2005 (Base Year)	135,630	174,741	-28.8%
2008	132,978	192,695	-44.9%
2015	146,022	220,555	-51.0%

(a) Includes air carrier and commuter/air taxi categories.

Source: *(a)* 2007 TAF, Federal Aviation Administration.

Section 1

INTRODUCTION

This report presents the baseline forecasts of aviation demand at Bob Hope Airport in Burbank, California (the Airport) in support of the Federal Aviation Regulations (FAR) Part 161 Study. The forecasts presented in the main body of this report assume that no additional operating restrictions are enacted. Thus, they are considered "unrestricted forecasts." These unrestricted forecasts provide the basis for the development of forecasts reflecting the effects of the proposed restriction and two alternatives that are under study (the full curfew departure-only nighttime curfew, and a nighttime curfew on aircraft with certificated noise levels of 253 effective perceived noise level in decibels [EPNdB] and higher). Appendices AA, BB, and CC include the activity forecasts for general aviation and air taxi, air carriers, and all-cargo airlines, respectively, with the curfew alternatives.

This report includes a discussion of the region served by the Airport, historical airline traffic at the Airport and for the Los Angeles Region, the economic basis for aviation activity at the Airport, key factors affecting airline traffic, and forecasts of enplaned passengers, air cargo volumes, and aircraft operations for air carrier, all-cargo, air taxi, general aviation, and military operators at the Airport for 2008 and 2015. The forecasts also provide detailed breakdowns of operations by aircraft type and time-of-day to support the noise analysis required for the FAR Part 161 Study.

The aviation demand forecasts are "unconstrained," insofar as the current configuration of the Airport has sufficient capacity to accommodate the forecast traffic through the end of the forecast period (2015). Specific facility constraints, including the limited aircraft parking space at the passenger terminal, are taken into account in the projections of the future types of aircraft expected to use the Airport.

All years discussed in the text, tables, and figures are calendar years unless otherwise stated.

Section 2

AIRPORT SERVICE REGION

As shown on Figure 1, the Airport is one of six air carrier airports serving the Los Angeles Region, defined here as the Los Angeles Primary Metropolitan Statistical Area (PMSA), which includes Los Angeles and Orange counties. The other airports are Los Angeles International, Long Beach, LA/Ontario International, John Wayne, and LA/Palmdale Regional airports. While the specific role of each airport varies, there is significant overlap in the service of regional demand. Passengers and shippers have a choice of multiple airports to serve any particular air transportation requirement. The demand analysis presented in this report considers the geographical location of each airport, the historical trend in share of demand served at each airport, and airline service developments at each airport. LA/Palmdale Regional Airport has a negligible share of regional demand and is therefore not included in the subsequent comparisons and analyses.

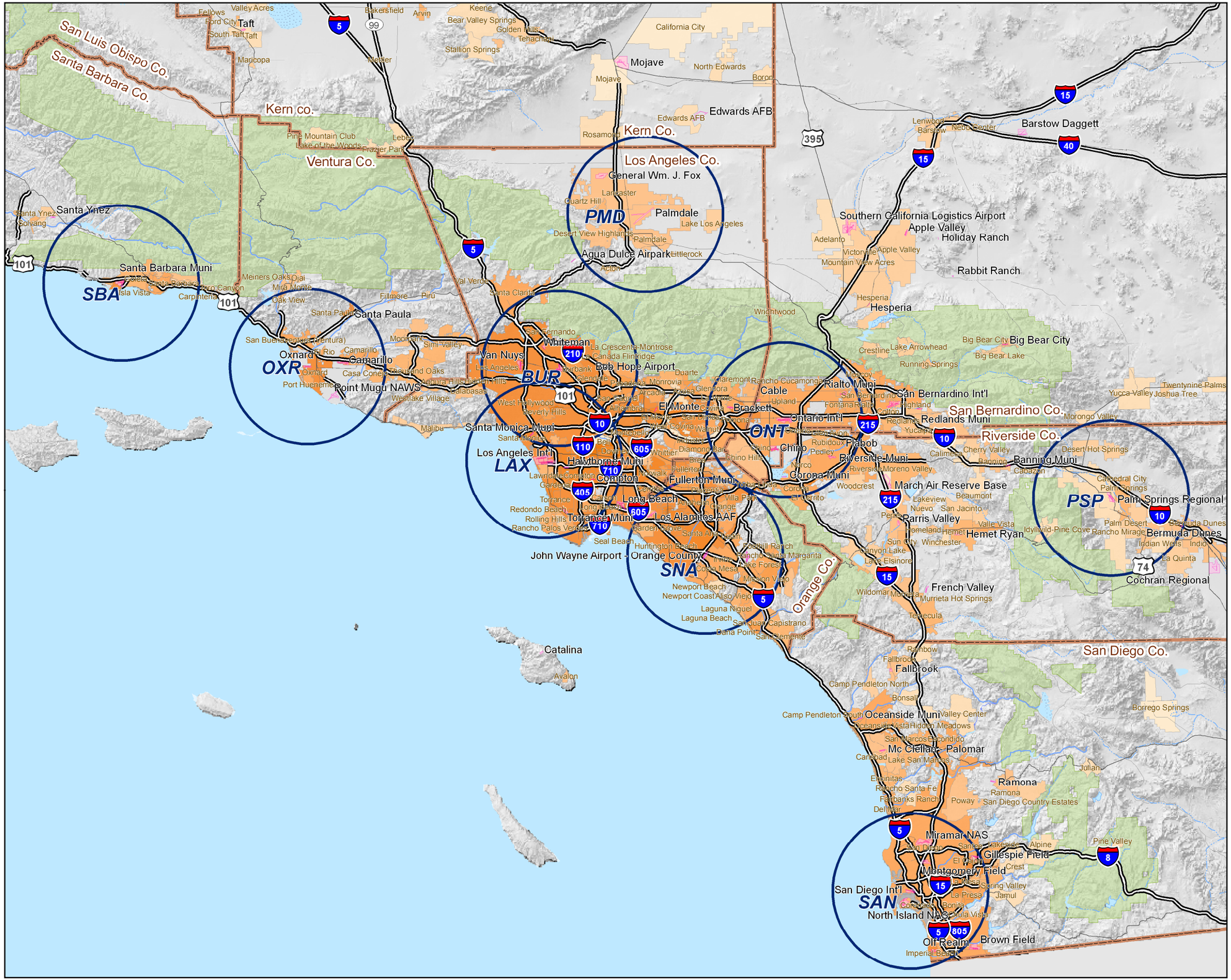


Figure 1
POPULATION DENSITY AND AIR CARRIER AIRPORTS IN SOUTHERN CALIFORNIA
FAR Part 161 Study for Bob Hope Airport
Technical Report 1
January 2009

JACOBS CONSULTANCY
Airport Management Consulting

Section 3

ANALYSIS OF HISTORICAL AIRLINE ACTIVITY

The analysis of airline activity in the Los Angeles Region and at Bob Hope Airport shows that although the Airport ranks fourth among the five major air carrier airports in the region, it serves an important role for short-haul and shuttle service in the western United States. Compared with the other airports serving the Region, the Airport has a large low-fare airline presence. At least two indicators suggest that the Airport will likely see additional service development by one or more air carriers.

- Average yields achieved by air carriers at the Airport are substantially higher than at the other airports in the Region.
- At least three major markets for Los Angeles Region passengers are underserved from the Airport: New York, Chicago, and Washington, D.C.

Another factor supporting long-term service development at the Airport, as suggested by Figure 1, is its convenient location with respect to two major business centers—downtown Los Angeles and the Burbank-Hollywood entertainment industry center.

ORIGINATING ENPLANED PASSENGERS AT LOS ANGELES REGION AIRPORTS

Table 1 and Figure 2 summarize historical originating enplaned passengers at the five key regional airports between 1990 and 2005. Transit and connecting passengers are excluded from this comparative analysis because they (1) are not part of the regional passenger market and (2) constitute only a small percentage of total enplaned passengers at the Airport.

The Airport has ranked fourth among the five airports in terms of domestic originating passengers since 1990. The Airport's share of total domestic originating passengers has ranged between about 8.6% and 10.3%, and most recently has been just below 10%.

The Airport's share of international originating enplaned passengers has been roughly constant at approximately 0.5% since 1990, and it is limited to general aviation only. International service at the Airport will remain insignificant in the future because of numerous facility constraints.

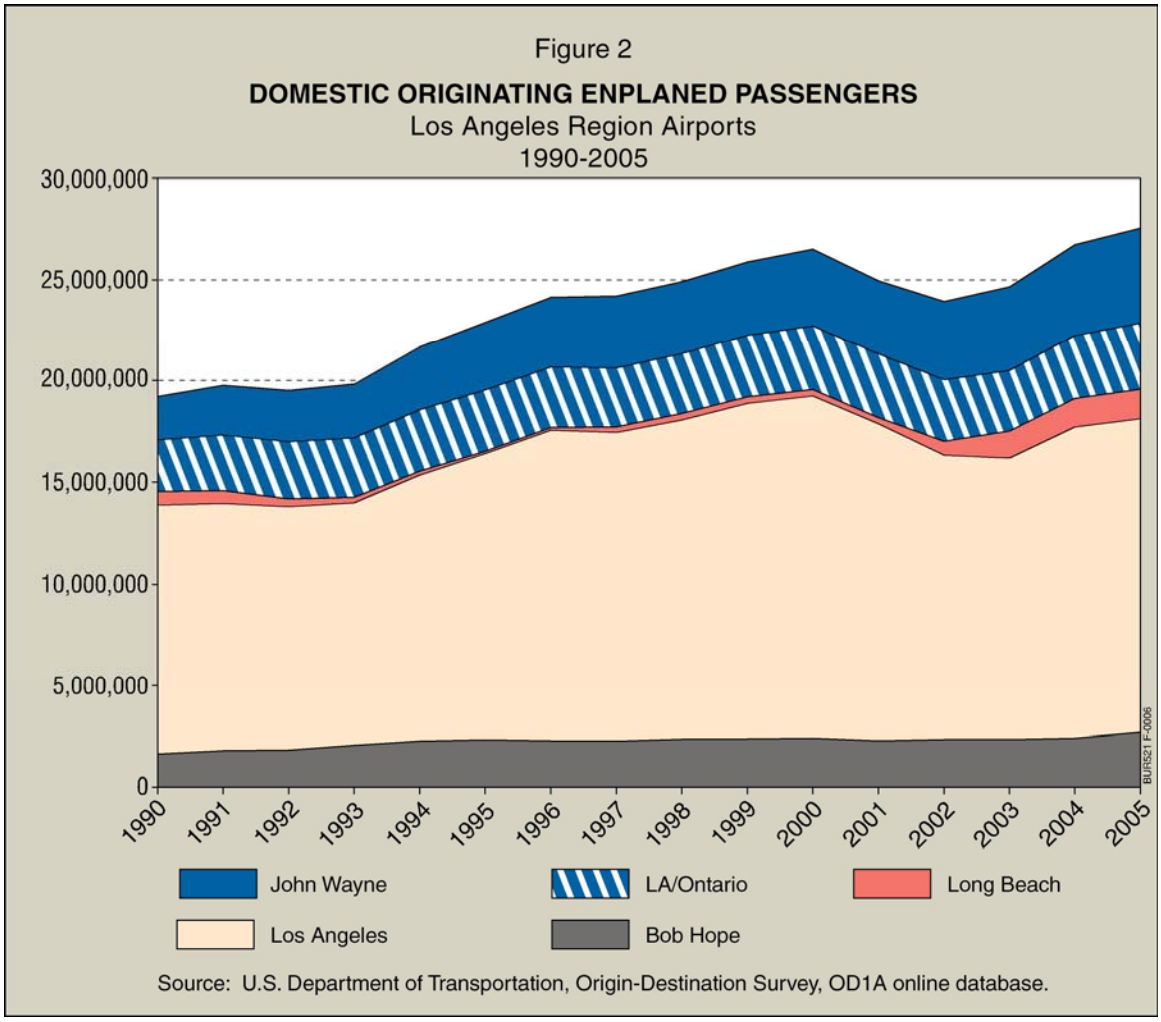
Table 1

HISTORICAL ANNUAL ENPLANED ORIGINATING PASSENGERS

Los Angeles Region Airports

	1990	1995	2000	2001	2002	2003	2004	2005
Domestic								
Bob Hope (Burbank)	1,658,420	2,349,160	2,430,000	2,301,200	2,361,650	2,358,540	2,418,470	2,700,530
Los Angeles	12,219,100	14,069,110	16,812,260	15,577,390	13,974,560	13,833,940	15,302,090	15,438,700
Long Beach	659,680	106,700	327,360	294,040	684,460	1,332,640	1,397,930	1,441,180
LA/Ontario	2,554,300	3,019,960	3,156,300	3,156,660	3,038,580	2,980,420	3,135,910	3,297,000
John Wayne (Orange County)	2,121,860	3,359,860	3,800,630	3,632,700	3,884,030	4,152,030	4,481,850	4,678,630
Total	19,213,360	22,904,790	26,526,550	24,961,990	23,943,280	24,657,570	26,736,250	27,556,040
Burbank percentage of total	8.6%	10.3%	9.2%	9.2%	9.9%	9.6%	9.0%	9.8%
International								
Bob Hope (Burbank)	7,660	6,540	10,170	9,800	12,780	11,760	12,300	13,950
Los Angeles International	1,787,980	1,725,850	2,105,110	1,933,880	1,792,990	1,788,940	2,075,930	2,288,820
Long Beach	7,880	770	3,490	2,850	5,690	4,200	6,060	5,670
LA/Ontario	28,000	28,870	47,640	46,340	48,140	46,430	62,420	70,400
John Wayne (Orange County)	31,910	50,670	85,530	81,490	97,470	96,570	104,960	108,010
Total	1,863,430	1,812,700	2,251,940	2,074,360	1,957,070	1,947,900	2,261,670	2,486,850
Burbank percentage of total	0.4%	0.4%	0.5%	0.5%	0.7%	0.6%	0.5%	0.6%
Total								
Bob Hope (Burbank)	1,666,080	2,355,700	2,440,170	2,311,000	2,374,430	2,370,300	2,430,770	2,714,480
Los Angeles	14,007,080	15,794,960	18,917,370	17,511,270	15,767,550	15,622,880	17,378,020	17,727,520
Long Beach	667,560	107,470	330,850	296,890	690,150	1,336,840	1,403,990	1,446,850
LA/Ontario	2,582,300	3,048,830	3,203,940	3,203,000	3,086,720	3,026,850	3,198,330	3,367,400
John Wayne (Orange County)	2,153,770	3,410,530	3,886,160	3,714,190	3,981,500	4,248,600	4,586,810	4,786,640
Grand Total	21,076,790	24,717,490	28,778,490	27,036,350	25,900,350	26,605,470	28,997,920	30,042,890
Burbank percentage of total	7.9%	9.5%	8.5%	8.5%	9.2%	8.9%	8.4%	9.0%

Source: U.S. Department of Transportation, Origin-Destination Survey, OD1A online database.



Los Angeles International Airport has had by far the largest share of domestic passengers and the overwhelming majority of international passengers throughout the period. John Wayne Airport (Orange County, California) has ranked a distant second since 1995, in terms of domestic enplaned passengers, followed by LA/Ontario International Airport.

ENPLANED PASSENGERS AND AIRLINE MARKET SHARES AT THE AIRPORT

Table 2 summarizes recent enplaned passenger data and market shares by airline serving the Airport. Total enplaned passengers increased from about 4.7 million in 2000 to about 5.5 million in 2005, an average annual rate of 3.0%. Total enplaned passengers for the first three quarters of 2006 (January – September) increased about 4.4% over the same period in 2005. The continuing development of low-fare airline service at the Airport is the major reason for the growth in enplanements. Low-fare airlines have a high market share at the Airport, increasing from about 76% in 2000 to about 79% for the year-to-date 2006.

Table 2

TOTAL PASSENGERS AND MARKET SHARE BY AIRLINE
Bob Hope Airports

	Annual		January-September		Percentage share: Annual		Percentage share: January-September	
	2000	2005	2005	2006	2000	2005	2005	2006
Southwest	3,244,789	3,522,950	2,642,531	2,639,454	68.3%	63.9%	64.7%	61.9%
United Airlines	734,389	170,419	118,148	162,907	15.5%	3.1%	2.9%	3.8%
SkyWest (United Express)	--	234,559	181,230	164,257	0.0	4.3	4.4	3.9
Subtotal United Airlines Group	734,389	404,978	299,378	327,164	15.5%	7.3%	7.3%	7.7%
American Airlines	111,216	326,692	243,359	238,967	2.3%	5.9%	6.0%	5.6%
Alaska Airlines	362,700	322,696	245,585	242,726	7.6%	5.9%	6.0%	5.7%
Horizon Air	--	125,118	88,319	117,516	0.0	2.3	2.2	2.8
Subtotal Alaska Airlines Group	362,700	447,814	333,904	360,242	7.6%	8.1%	8.2%	8.5%
US Airways/America West	294,560	240,463	174,344	133,478	6.2%	4.4%	4.3%	3.1%
Freedom Airlines (America West Express)	--	--	--	--	0.0	0.0	0.0	0.0
Mesa Airlines (American West Express)	--	140,027	110,754	91,028	0.0	2.5	2.7	2.1
Subtotal US Airways/America West Group	294,560	380,490	285,098	224,506	6.2%	6.9%	7.0%	5.3%
jetBlue	--	227,713	129,429	364,554	0.0%	4.1%	3.2%	8.6%
Delta Air Lines	--	89,887	65,611	28,775	0.0%	1.6%	1.6%	0.7%
SkyWest (Delta Connection)	--	98,488	70,963	79,427	0.0	1.8	1.7	1.9
Subtotal Delta Air Lines Group	--	188,375	136,574	108,202	0.0%	3.4%	3.3%	2.5%
Other air carriers	1,088	13,607	13,607	--	0.0%	0.2%	0.3%	0.0%
Total air carriers	4,748,742	5,512,619	4,083,880	4,263,089	100.0%	100.0%	100.0%	100.0%
		3.(		4.				
Total percentage low fare airlines *(a)*	76.(	76.2	76.	78.				
Total percentage regional airlines *(b)*	0.(	10.9	11.(	10.				

(a) Southwest Airlines, Alaska Airlines Group, and jetBlue.
(b) SkyWest, Horizon Air, Freedom Airlines, Mesa Airlines, and Delta Connection.

Source: Bob Hope Airport, 2006.

Low-fare service was introduced at the Airport in 1990 by Southwest Airlines. As shown in Table 1, the Airport's share of regional domestic enplanements jumped from 8.6% in 1990 to 10.3% in 1995, largely in response to the low-fare service offered by Southwest. When a low-cost carrier enters a market, it tends to cause an increase in passenger activity by offering lower airfares than were previously available and by stimulating price competition with the incumbent carriers. The Airport's increased regional share of passengers since 1990 has been principally as a result of this low-fare airline service. As is shown in Table 6 (on page 14), average airline fares at the Airport have been substantially lower than at other airports in the region, partly because of shorter journey stage lengths, but also because of the low-fare airline service offered at the Airport. An important influence on the increase in enplaned passengers has the initiation of new service by low-fare airline jetBlue in 2006 and by Skybus in 2007.

Table 2 shows that Southwest Airlines has had the highest enplaned passenger market share at the Airport from 2000 to 2005, but has seen its market share decline from about 68% in 2000 to about 62% through September 2006. While the number of passengers flying on Southwest has increased substantially over this period, the total number of passengers using all airlines increased at an even greater rate. The most notable change since 2000 has been the initiation of service by jetBlue in 2005, which had an almost 9% market share through September 2006.

Other airlines with significant market shares at the Airport include Alaska Airlines (which is considered a low-fare airline), American Airlines, United Airlines, and US Airways (which includes America West Airlines). Regional airlines, which tend to operate as commuter affiliates of the larger network carriers, have a low market share at the Airport—about 11% in 2005. This is primarily because the low-fare airlines with the greatest market shares at the Airport, namely Southwest and jetBlue, do not have affiliated regional carriers.

AIRLINE SERVICE

Table 3 compares domestic scheduled airline departures among the major air carrier airports in the Region. It shows that low-fare airlines have a substantial presence at all airports. The percentage at Bob Hope Airport is second only to Long Beach Airport and is several points higher than the airport with the next highest percentage (LA/Ontario International Airport).

Table 3 also shows that, in 2005, the Airport's share of total scheduled domestic airline departures in Los Angeles Region was at 9%, somewhat lower than its share of domestic originating enplaned passengers (9.8%), reported in Table 1.

Table 3

DOMESTIC SCHEDULED PASSENGER AIRLINE DEPARTURES
Los Angeles Region
2005

Airline	Bob Hope	Los Angeles	Long Beach	Ontario	John Wayne	Total
Alaska	2,746	10,852	1,073	3,077	5,966	23,714
AirTran	--	1710	--	--	--	1,710
Aloha	143	--	--	--	1872	2,015
American	1,427	52,592	1,645	1,849	10,099	67,612
Continental	--	7,052	--	1,113	2,666	10,831
Delta	1,532	14,703	--	3,338	4,241	23,814
Frontier	--	2206	--		1082	3,288
jetBlue	834	--	8,435	607	--	9,876
Northwest	--	6,492	--	730	1,419	8,641
Southwest	18,618	41,991	--	19,773	11,043	91,425
United	3,868	83,933	--	4,509	7,715	100,025
US Airways/America West	2,777	12,425	1,902	3,692	5,261	26,057
Other	6	4,360	2	--	119	4,487
Total	31,951	238,316	13,057	38,688	51,483	373,495
Airport share of Total	9%	64%	3%	10%	14%	100%
Percentage Low-Fare *(a)*	69%	24%	73%	61%	35%	35%

(a) Alaska Airlines Group, AirTran Airways, Frontier Airlines, jetBlue, and Southwest Airlines.

Source: *Official Airline Guide*, online database, September 2006.

Table 4 provides more detail on scheduled passenger service at Bob Hope Airport. All but 9 of the 94 daily departures are to destinations in the western United States (Arizona, California, Nevada, Oregon, Utah, and Washington), and of these departures, almost half are to other California destinations.

Table 4

DAILY SCHEDULED AIRLINE DEPARTURES
Bob Hope Airport
October 2006

		Miles	Narrowbody jet	Regional Jet	Total
American Airlines	Dallas/Fort Worth	1,244	4	--	4
Alaska Airlines	Portland	817	--	4	4
	Seattle	937	4	--	4
Delta Air Lines	Salt Lake City	573	--	3	3
jetBlue	Las Vegas	222	1	--	1
	New York (JFK)	2,457	4	--	4
	Orlando	2,207	1	--	1
US Airways	Las Vegas	222	--	1	1
	Phoenix	366	3	2	5
Southwest Airlines	Las Vegas	222	13	--	13
	Oakland	325	16	--	16
	Phoenix	366	9	--	9
	San Jose	296	9	--	9
	Sacramento	360	9	--	9
United Airlines	Denver	848	2	2	4
	San Francisco	326	3	4	7
	Total		78	16	94
			Total by region		
Total	California		37	4	41
	Other Western U.S.		32	12	44
	East/Central U.S.		9	--	9

Source: *Official Airline Guide*, online database, September 2006.

DEPARTURE STAGE LENGTHS

Table 5 summarizes Los Angeles Region scheduled domestic passenger departures by stage length. As shown, Bob Hope Airport has the highest percentage of departures in the 0-to 500-nautical-mile stage length, consistent with Southwest Airline's role as a short-haul carrier to destinations within California and the western U.S. The longest stage length at the Airport is 2,460 miles (New York).

Additional frequencies to other domestic East Coast destinations are likely in the future.

In the near term, service to more distant points in the United States, specifically Alaska and Hawaii, is considered unlikely. Twin-aisle (or wide-body) aircraft cannot effectively use the Airport given the limited parking space at the terminal and the limited passenger accommodations in the terminal. Although Aloha Airlines has attempted to serve Hawaii from the Airport with narrowbody aircraft in the past, it was unable to sustain the service.

Table 5

ANNUAL SCHEDULED DOMESTIC PASSENGER AIRLINE DEPARTURES
By Stage Length
Los Angeles Region
2005

	Bob Hope	Los Angeles	Long Beach	Ontario	John Wayne	Total
Departures						
0 – 500	24,206	119,450	4,824	26,156	27,894	202,530
501 – 1000	5,033	29,308	1,438	6,628	9,784	52,191
1001 – 2000	1,768	44,612	1,647	5,297	11,514	64,838
2001+	944	44,946	5,148	607	2,291	53,936
Total	31,951	238,316	13,057	38,688	51,483	373,495
Percentage of total						
0 – 500	75.8%	50.1%	36.9%	67.6%	54.2%	54.2%
501 – 1000	15.8	12.3	11.0	17.1	19.0	14.0
1001 – 2000	5.5	18.7	12.6	13.7	22.4	17.4
2001+	3.0	18.9	39.4	1.6	4.5	14.4
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: Totals may not add due to rounding.

Source: *Official Airline Guide*, online database, September 2006.

As shown earlier in Table 4, much of the airline service from Bob Hope Airport to points outside California and Nevada is either to major origin-destination markets (Orlando and New York) or to airline hubs (Dallas-Fort Worth, Denver, Salt Lake City, and Seattle). During the forecast period, it is possible that additional service could be added to other hubs, such as Atlanta (Delta Air Lines), Chicago (American Airlines, Southwest Airlines, and United Airlines), New York (American Airlines and Delta Air Lines) and Washington D.C. (jetBlue, Southwest Airlines, and United Airlines). Many of these hubs are also significant origin-destination markets, as

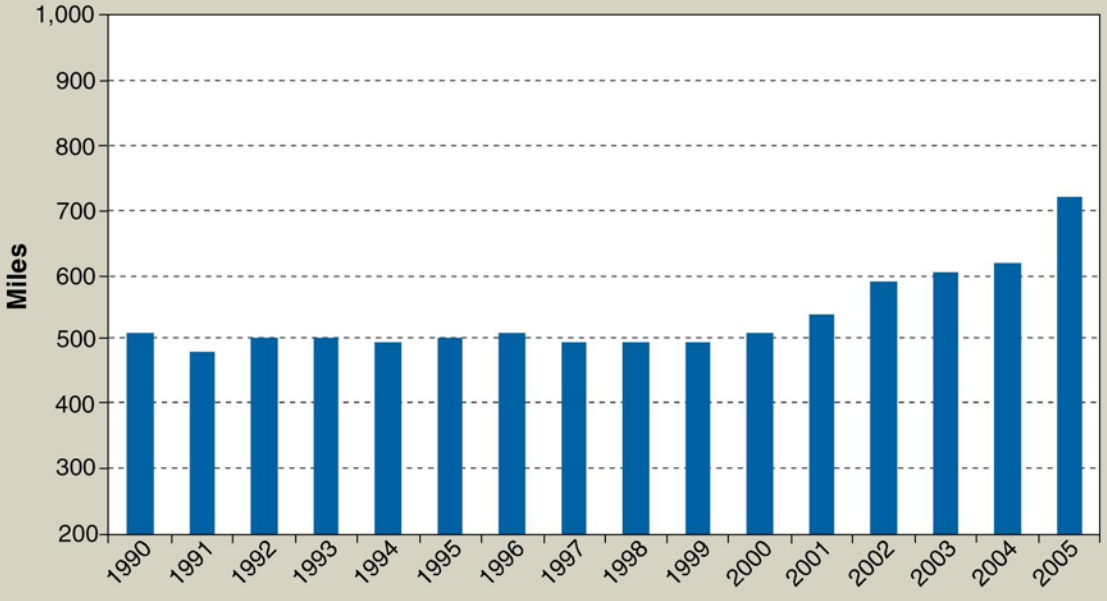
shown in Table 8 (on page 16). Given the ability of airlines to serve East Coast destinations from the Airport with a variety of narrow-body aircraft, Airport facilities are not a constraint to continued development of long-haul domestic airline service.

While the average stage length at Bob Hope Airport is the lowest of the Los Angeles Region airports, it has been increasing since 1999 because of long-haul airline service development. From 2000 to 2005, the average distance flown by origin-destination passengers has increased faster at the Airport, an average annual growth rate of 6.9% per year, than at the other Los Angeles Region airports, 1.5% per year. Figure 3 shows the average distance flown by origin-destination passengers at the Airport from 1990 to 2005, and Figure 4 shows the same metric for the Los Angeles Region airports, excluding the Airport. The average stage length began to increase earlier, in 1997, at the other Los Angeles Region airports than at Bob Hope Airport, which began increasing in 2000 and has continued to increase at a faster rate. Data from the *Official Airline Guide* Schedules Database confirms that the average stage length at the Airport continued to increase in 2006 with 12% more scheduled flights with stage lengths over 500 miles than in 2005.

Figure 3

AVERAGE DISTANCE FLOWN BY DOMESTIC O&D PASSENGERS

Bob Hope Airport

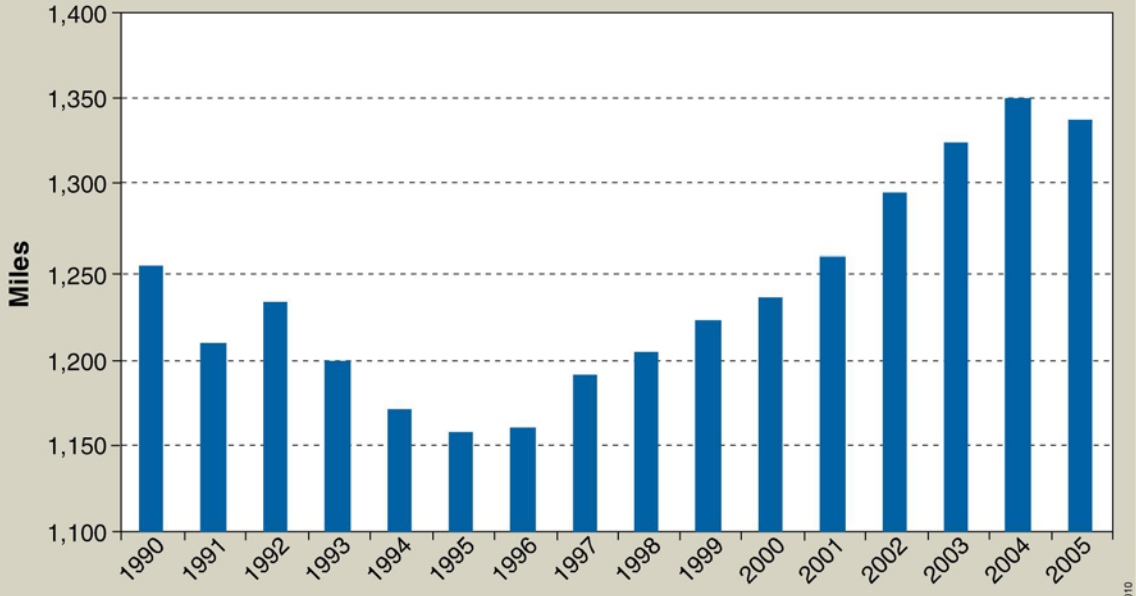


Source: U.S. Department of Transportation, Origin-Destination Survey, OD1A online database.

Figure 4

AVERAGE DISTANCE FLOWN BY DOMESTIC O&D PASSENGERS

Five Largest Los Angeles Area Airports



Source: U.S. Department of Transportation, Origin-Destination Survey, OD1A online database.

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AIRLINE FARES AND YIELDS

Since 1990, average fares at the Airport have been lower than at the other airports in the region. This reflects the combined effects of the relatively short haul lengths and the large low-fare airline market share at the Airport. At the same time, yields (average fare per revenue passenger mile) have been substantially higher at the Airport than at the other airports in the region. The high yields suggest that continued air service development at the Airport is likely in the future.

Table 6 reports average fares and average yields for all airlines serving each airport in the region. Because yield reflects revenue adjusted by stage length, it is a better indicator than airline fares of the relative economic value of an airport to the airlines serving it. As such, it is likely that the Airport is considered a valuable point of service by airlines serving the Los Angeles regional market. The higher yields at the Airport have persisted since 1990, suggesting that airlines are able to extract a premium from passengers using the Airport. This may reflect the convenient location of the Airport relative to important passenger markets, including downtown Los Angeles and the film and television studios in the Hollywood and Burbank areas.

Table 6

HISTORICAL DOMESTIC ONE-WAY AIRLINE FARES AND YIELDS
Los Angeles Region

	1990	2000	2001	2002	2003	2004	2005
Average Fare							
Bob Hope	$90.37	$92.35	$90.26	$93.17	$98.68	$101.52	$112.87
Los Angeles International	158.34	170.43	157.99	157.14	157.41	150.92	162.30
Long Beach	127.30	148.91	147.14	142.91	127.72	123.88	130.00
Ontario	121.05	122.02	114.28	115.01	118.58	119.51	129.26
John Wayne	154.49	166.46	152.45	138.80	138.61	135.80	144.21
Average	$146.02	$156.68	$145.28	$142.10	$142.33	$138.82	$148.74
BUR ratio to average	0.62	0.59	0.62	0.66	0.69	0.73	0.76
Average Yield (cents)							
Bob Hope	17.06	17.47	16.15	15.32	15.74	15.91	15.22
Los Angeles International	10.30	11.50	10.44	10.00	9.80	9.25	10.01
Long Beach	14.01	13.07	10.97	8.48	8.07	7.56	8.13
Ontario	12.08	12.56	11.44	11.05	11.29	11.26	11.89
John Wayne	14.54	14.89	13.37	12.20	11.79	11.75	12.77
Average	11.72	12.68	11.53	10.97	10.79	10.42	11.12
BUR ratio to average	1.46	1.38	1.40	1.40	1.46	1.53	1.37

Source: U.S. Department of Transportation, Origin-Destination Survey, OD1A online database.

Long Beach Airport also has a large low-fare airline market share, principally from service development by jetBlue, which offers a higher level of longer stage length service than does Southwest at Bob Hope Airport. While average fares are higher at Long Beach, principally because of the longer stage lengths, average yield is substantially lower than at Bob Hope Airport. This may reflect a strategy by jetBlue to keep fares low to compete aggressively with carriers serving East Coast destinations from Los Angeles International Airport.

AIR CARRIER DEPARTURES BY AIRCRAFT CATEGORY

Table 7 summarizes scheduled domestic passenger departures by aircraft category—mainline jet, regional jet, and turboprop—for airports in the Los Angeles Region. Virtually all scheduled passenger airline departures at Bob Hope Airport are mainline or regional jet aircraft. The proportion of regional jets serving the Airport is considerably higher than at the other four airports and is consistent with the relatively short stage lengths flown from the Airport by most carriers.

Table 7

SCHEDULED DOMESTIC PASSENGER AIRLINE DEPARTURES
By Aircraft Category
Los Angeles Region

	Bob Hope	Los Angeles	Long Beach	Ontario	John Wayne
Number					
Mainline jet	25,350	161,039	11,237	31,636	42,708
Regional jet	6,600	22,285	1,820	4,369	6,637
Turboprop	1	54,992	0	2,683	2,138
Total	31,951	238,316	13,057	38,688	51,483
Share					
Mainline jet	79.3%	67.6%	86.1%	81.8%	83.0%
Regional jet	20.7	9.4	13.9	11.3	12.9
Turboprop	0.0	23.1	0.0	6.9	4.2
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Note: Totals may not add due to rounding.

Source: *Official Airline Guide*, online database, September 2006.

TOP 20 ORIGIN-DESTINATION PASSENGER MARKETS

A comparison of the top 20 origin-destination markets for passengers in the Los Angeles Region and the top 20 markets served from Bob Hope Airport indicates that service offered from the Airport is representative of the regional demand in most markets. The comparison reveals, however, that three top markets for Los Angeles Region passengers are underserved from the Airport: New York, Chicago, and Washington, D.C. These three markets may be candidates for additional service from the Airport by airlines serving those metropolitan areas.

Table 8 lists the top 20 origin-destination markets at the Airport. In 2005, the top five markets (accounting for about 70% of originating enplaned passengers) and 10 of the top 20 markets (about 82% of originating enplaned passengers) are in the western United States (California, Colorado, Nevada, Oregon, Utah, and Washington). This reflects the Airport's short-haul service role.

Table 8

TOP 20 ORIGIN-DESTINATION MARKETS
Bob Hope Airport
2000 and 2005

		Enplaned Passengers			Average daily nonstop departures *(a)*
		2000	2005	Average annual change	
1	San Francisco-Oakland-San Jose	38.6%	28.4%	-4.0%	32
2	Las Vegas	13.8	14.0	2.3	15
3	Sacramento	12.7	10.8	(1.2)	9
4	Phoenix	9.3	9.6	2.7	14
5	Seattle	5.6	6.0	3.7	4
6	New York	0.3	4.4	73.7	4
7	Portland	3.4	3.3	1.3	4
8	Dallas/Fort Worth	1.1	3.0	25.3	4
9	Reno	1.5	1.3	(0.1)	-
10	Denver	1.0	1.1	4.5	4
11	Salt Lake City	0.9	0.9	3.5	3
12	Albuquerque	0.8	0.8	2.8	-
13	Washington D.C.	0.6	0.8	8.3	-
14	Atlanta	0.2	0.7	33.4	-
15	Spokane	0.6	0.6	2.6	-
16	Chicago	0.5	0.6	3.9	-
17	Houston	0.7	0.5	(1.9)	-
18	San Antonio	0.4	0.5	7.5	-
19	Austin	0.4	0.5	3.7	-
20	Oklahoma City	0.3	0.4	11.1	-
	Other	7.4	11.8	12.2%	4
	Total	100.0%	100.0%	2.1%	97

(a) For October 2006.

Sources U.S. Department of Transportation, Origin-Destination Survey, OD1A online database.

Because Bob Hope Airport is only one of five airports serving the Los Angeles Region, the origin-destination markets served at the Airport are more directly related to airline decisions about how to distribute their service among the region's airports than to the most popular destinations among the Region's air passengers. Carriers such as Alaska Airlines and Southwest Airlines, for example, use the Airport to provide short-haul service to key destinations in California and other cities in the western United States.

Table 9 summarizes the top 20 markets for origin-destination passengers at all major airports in the Los Angeles Region. Key observations relevant to Bob Hope Airport include:

- Destinations with substantially higher market shares at the Airport than the regional total mainly constitute short-haul destinations, such as the San Francisco area, Las Vegas, Phoenix, Sacramento, Portland, and Seattle.
- Eight out of the top 10 Los Angeles Region markets are among the top 10 markets at Bob Hope Airport, suggesting that airline service at the Airport is reasonably reflective of overall regional demand preferences.
- The two regional top 10 markets that are under-represented at the Airport, New York and Chicago, may be candidates for service development by an airline serving those metropolitan areas. Washington, D.C. is another major destination for regional passengers that may also be ripe for service from the Airport.*

ROLES OF AIRPORTS IN LOS ANGELES REGION

Each of the five major air carrier airports serving the Los Angeles Region plays a certain role within the regional and national aviation system. The varying roles are indicated by the combination of the factors discussed above—the proportions of international versus domestic passengers, the typical stage lengths flown from the airport, and the types of carriers serving the airports.

The roles that each of the region's five major air carrier airports play in the national aviation system are summarized below.

Airport	Principal Roles
Bob Hope Airport	Short-haul and "shuttle" service Low-fare airline service
Long Beach	Limited passenger service Low-fare airline service
Los Angeles International	International gateway National gateway Network carrier hub
LA/Ontario International	Short-haul and "shuttle" service Low-fare airline service
John Wayne Airport	Secondary network carrier airport

*JetBlue started service to New York in May 2006.

Table 9

LOS ANGELES REGION TOP 20 ORIGIN-DESTINATION MARKETS
2005

			BUR		LAX		SNA		ONT		LGB	
		LA Region	OD Passengers	% of total	OD Passengers	% of total	OD Passengers	% of total	OD Passengers	% of total	OD Passengers	% of total
1	San Francisco - Oakland - San Jose	3,735,920	766,020	20.5%	1,332,840	35.7%	868,990	23.3%	536,700	1	231,370	6.2%
2	New York	2,125,180	119,870	5.6	1,411,320	66.4	127,220	6.0	118,310	5.6	348,460	16.4
3	Las Vegas	1,630,840	376,780	23.1	665,370	40.8	266,360	16.3	213,050	13.1	109,280	6.7
4	Phoenix	1,298,430	259,320	20.0	441,390	34.0	330,790	25.5	229,430	17.7	37,500	2.9
5	Sacramento	1,210,940	291,220	24.0	323,010	26.7	261,020	21.6	335,680	27.7	10	0.0
6	Chicago	1,116,320	15,890	1.4	821,810	73.6	211,320	18.9	57,840	5.2	9,460	0.8
7	Seattle	1,105,080	161,780	14.6	453,450	41.0	248,400	22.5	155,010	14.0	86,440	7.8
8	Washington D.C.	1,016,910	21,070	2.1	668,040	65.7	87,030	8.6	64,870	6.4	175,900	17.3
9	Dallas/Fort Worth	810,120	82,130	10.1	365,450	45.1	185,190	22.9	97,440	12.0	79,910	9.9
10	Denver	693,490	29,330	4.2	380,870	54.9	176,120	25.4	103,320	14.9	3,850	0.6
11	Honolulu	648,700	2,560	0.4	598,520	92.3	43,340	6.7	4,260	0.7	20	0.0
12	Portland	618,870	87,800	14.2	257,860	41.7	161,630	26.1	107,560	17.4	4,020	0.6
13	Atlanta	567,840	20,090	3.5	379,130	66.8	97,350	17.1	65,420	11.5	5,850	1.0
14	Salt Lake City	551,030	25,150	4.6	267,060	48.5	145,130	26.3	65,250	11.8	48,440	8.8
15	Boston	525,110	5,540	1.1	358,390	68.3	27,160	5.2	13,320	2.5	120,700	23.0
16	Houston	514,420	14,840	2.9	350,430	68.1	80,170	15.6	62,450	12.1	6,530	1.3
17	Philadelphia	438,430	8,190	1.9	356,800	81.4	43,410	9.9	27,670	6.3	2,360	0.5
18	Orlando	388,670	7,560	1.9	299,850	77.1	37,910	9.8	39,030	10.0	4,320	1.1
19	Minneapolis	378,590	4,300	1.1	285,640	75.4	56,650	15.0	26,870	7.1	5,130	1.4
20	Detroit	377,960	8,290	2.2	286,160	75.7	52,400	13.9	27,860	7.4	3,250	0.9
	Other	7,803,180	392,800	5.0	5,135,300	65.8	1,171,040	15.0	945,660	12.1	158,380	2.0
	Total	27,556,030	2,700,530	9.8%	15,438,690	56.0%	4,678,630	17.0%	3,297,000	12.0%	1,441,180	5.2%

BUR = Bob Hope Airport
LAX = Los Angeles International Airport
LGB = Long Beach Airport
ONT = LA/Ontario International Airport
SNA = John Wayne Airport (Orange County)

Source: U.S. Department of Transportation, Origin-Destination Survey, OD1A online database.

Los Angeles International Airport is by far the largest airport in the region, serving as an international gateway, national gateway, and major hub airport for network carriers. John Wayne Airport (Orange County) is the second-busiest airport in the region. It can be classified as a secondary network carrier airport, although it also shares a short-haul/shuttle service role with the Airport and LA/Ontario International Airport.

Bob Hope Airport's role is most similar to LA/Ontario International Airport, with both airports having large low-fare airline market shares, low average fares, and short stage lengths compared with the other Los Angeles Region airports. While Long Beach Airport has a significant low-fare airline presence, it has substantially less air service than the other airports in the region.

Section 4

FORECAST OF ENPLANED PASSENGERS

The growth of passenger demand in the Los Angeles Region is expected to be driven by the projected growth in the regional economy. A compound annual growth rate of 2.8% is projected for enplaned passengers. Given the strong indicators for continued air service development at Bob Hope Airport, it is expected to maintain its 10% share of the region's total enplaned passengers.

REGIONAL PASSENGER GROWTH AND ECONOMIC GROWTH

Future passenger growth at airports serving the Los Angeles Region will be driven primarily by economic growth in the Region. Given various forecasts of continued economic growth for the Los Angeles Region, it is expected that regional passenger growth will continue at a relatively rapid rate in the future.

Table 10 summarizes socioeconomic metrics related to regional enplaned passenger demand, such as total regional income and the originating passenger trip rate (originating enplaned passengers divided by the Airport Service Region's population).

Historical Regional Passenger Demand

The number of originating enplaned passengers grew about 2.4% annually between 1990 and 2005, slightly faster than the growth rate for total income (2.1%) in the Los Angeles Region over the same period. The historical regional originating passenger trip rate (i.e., the number of originating enplaned passengers at Los Angeles Region airports divided by the population of the Los Angeles Region) increased from about 1.7 to about 2.1 between 1990 and 2005, indicating that originating passengers grew at a faster rate than population over this period. This indicates that the growth in passenger enplanements is more closely correlated with the growth in regional income than with the growth in population. This relationship has been observed in many other domestic markets.

Projected Regional Passenger Demand

Originating domestic enplaned passengers in the Los Angeles Region are projected to grow from about 27.6 million in 2005 to about 36.3 million in 2015, an annual growth rate of 2.8%. This is based on the projected growth rate in total regional income from 2005 to 2015.

NPA Data Services, Inc., a nationally respected economic analysis firm, project total regional income in the Los Angeles Region to grow about 2.8% annually between 2005 and 2015, higher than the 2.1% rate between 1990 and 2005. The rate of growth in passenger enplanements in the Los Angeles Region and in the entire United States air travel market has been closely correlated with the growth in income for many years. Between 1990 and 2005, passenger enplanements in the Region and in the United States market increased at slightly higher rates than the growth in incomes. This is most likely because of the aggressive price competition among airlines that effectively reduced the real price of air travel. Given the continuing consolidation in the airline industry and the substantial cost-cutting and fare reductions achieved by the legacy carriers since 2001, it is reasonable to assume that the era of dramatic reductions in air fares is over. Thus, the future rate of growth in passenger enplanements is expected to closely follow the projected rate of growth in total income. This is the assumption implicit in the FAA's national Terminal Area Forecast (TAF) of enplaned passengers for 2015, presented in Table 10.

Table 10 shows that the passenger trip rate for the Los Angeles Region would increase from 2.1 in 2005 to a forecast level 2.3 in 2015. This generally parallels the increase in the national passenger trip rate projected by the FAA in its TAF forecast, which is projected to increase from 1.7 in 2005 to 2.0 in 2015.

ENPLANED PASSENGER FORECAST FOR THE AIRPORT

Bob Hope Airport is expected to maintain its 10.0% share of regional originating enplaned passengers through 2015. Thus, originating enplaned passengers are projected to grow from about 2.8 million in 2005 to about 3.6 million in 2015, an annual growth rate of 2.8%, just as projected for enplanements throughout the Los Angeles Region.

Table 11 and Figure 5 show the enplaned passenger forecast for the Airport. The passenger growth rate is expected to be somewhat higher from 2005 to 2008, reflecting a strong increase in 2006. It is expected to taper off slightly through 2015. In developing the forecasts, enplanement data for the first nine months of 2006 were incorporated into the projection model. Those data reflect a growth rate over 2005 enplanements that is higher than projected through the entire 10-year period.

Table 10

REGIONAL PASSENGER DEMAND ANALYSIS

Originating Enplaned Passengers
Los Angeles Region Airports

	Historical		Forecast	Compound annual growth rate	
	1990	2005	2015	1990 - 2005	2005 - 2015
LOS ANGELES AREA AIRPORTS					
Response to income growth					
Total income (million $) - Los Angeles PMSA *(a)*	321,694	441,708	584,552	2.1%	2.8%
Total originating domestic enplaned passengers *(b)*	19,213,360	27,556,040	36,320,000	2.4	2.8
Originating passenger response to income growth				1.1	1.0
Trip rate					
Population - Los Angeles PMSA (a)	11,297,150	13,096,080	15,905,110	1.0	2.0
Total originating domestic enplaned passengers *(b)*	19,213,360	27,556,040	36,320,000	2.4	2.8
Trip rate	1.7	2.1	2.3		
UNITED STATES					
Response to income growth					
Total income (million $) - United States *(a)*	6,098,760	9,547,862	12,889,001	3.0	3.0
Total originating enplaned passengers *(c)*	306,650,300	492,811,260	655,895,000	3.2	2.9
Originating passenger response to income growth				1.1	1.0
Trip rate					
Population - United States *(a)*	249,622,810	296,937,776	328,859,092	1.2	1.0
Total originating enplaned passengers *(c)*	306,650,300	492,811,260	655,895,000	3.2	2.9
Trip rate	1.2	1.7	2.0		

Sources:
(a) NPA Data Services, 2006. Los Angeles Primary Metropolitan Statistical Area comprises Los Angeles and Orange counties
(b) Historical: U.S. Department of Transportation, Origin-Destination Survey, OD1A online database.
Forecast: Jacobs Consultancy, December 2006.
(c) Historical: U.S. Department of Transportation, Origin-Destination Survey, OD1A online database.
Forecast: Uses Federal Aviation Administration Office of Aviation Policy and Plans Terminal Area Forecast total enplaned passenger growth rate, 2006.

Table 11

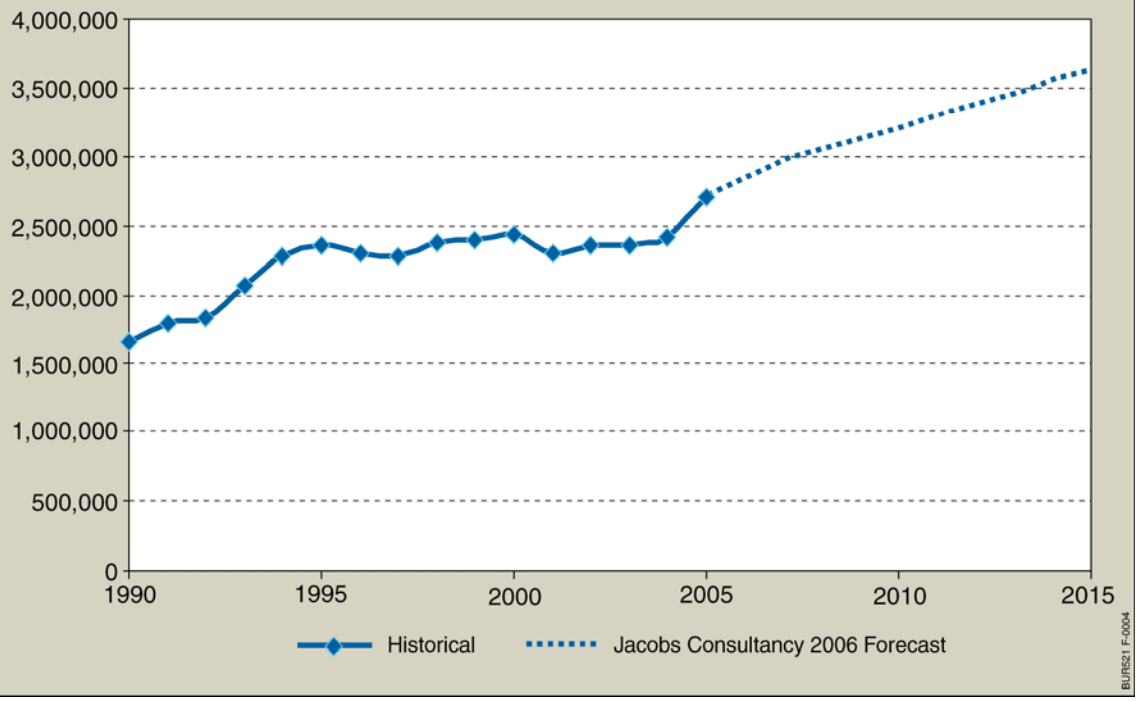
ENPLANED PASSENGER FORECAST
Bob Hope Airport

	Historical	Forecast		Compound annual growth rate		
	2005	2008	2015	2005 - 2008	2008 - 2015	2005 - 2015
Bob Hope Airport *(a)*	2,759,984	3,037,000	3,635,000	3.2%	2.6%	2.8%
Los Angeles Region airports *(b)*	27,556,040	29,936,000	36,320,000	2.8%	2.8%	2.8%
Bob Hope Airport percentage of LA Region airports	10.0%	10.1%	10.0%			

Sources:
(a) Historical: Bob Hope Airport, 2006.
Forecast: Jacobs Consultancy, December 2006.
(b) Historical: U.S. Department of Transportation, Origin-Destination Survey, OD1A online database, for domestic originating enplaned passengers.
Forecast: Jacobs Consultancy, December 2006.

Figure 5

HISTORICAL AND FORECAST ENPLANED PASSENGERS
Bob Hope Airport
1990-2015



The assumptions underlying the enplaned passenger forecasts for the Airport include the following:

1. The Airport will maintain a 10% share of total Los Angeles Region domestic originating passengers throughout the forecast period. Indeed, this is the primary driver in the forecast methodology.

2. Airlines serving the Airport will continue to develop air service through additional frequencies and destinations. The majority of this service will continue to be low-fare airline service.

3. Additional long-haul destinations will be served at the Airport, although the majority of airline service will continue to be short- and medium-haul.

4. The relative roles of the Los Angeles Region airports, shown earlier, will not change significantly, and the Airport will continue to provide principally short-haul and shuttle activity, with a significant low-fare airline presence.

Section 5

FORECAST OF OPERATIONS

Total operations (takeoffs and landings) at the Airport are projected to increase at a small rate, approximately 0.7% per year, through the 10-year forecast period. The rates of increase will vary among the different categories of Airport users.

- Air carrier operations are projected to increase at an annual compound growth rate of 2.1%, somewhat lower than the projected increase in enplaned passengers (2.8%). This is because of the expected small increase in the average seating capacity of aircraft serving the Airport.

- Cargo operations are anticipated to increase by approximately 0.9% annually.

- Air taxi and general aviation operations are anticipated to decrease by approximately 1.0% annually, if measured from 2005 to 2015. This decline, however, masks divergent trends within this user category. Corporate and business aviation operations are anticipated to increase substantially during the period—from about 26,000 in 2005 to about 42,000 in 2015. Private general aviation operations by owners of small single- and twin-engine piston aircraft are projected to decline significantly during the period—from approximately 29,000 in 2005 to approximately 6,000 in 2015.

HISTORICAL AIRCRAFT OPERATIONS

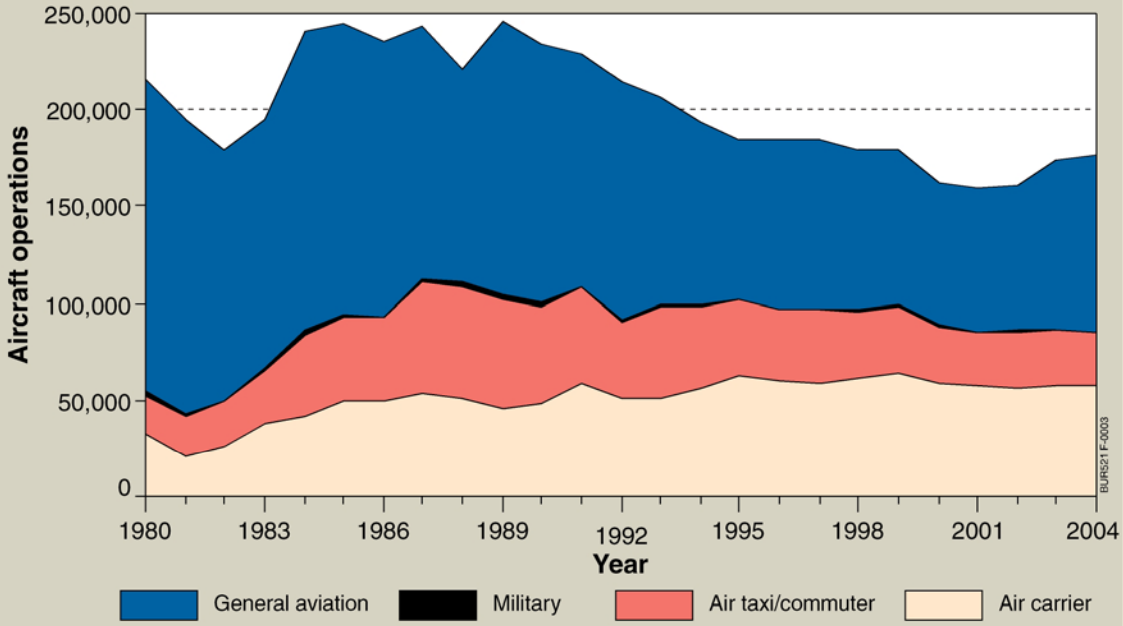
Total operations decreased from about 216,000 in 1980 to about 177,000 in 2004, with air carrier and air taxi/commuter operations increasing their share of total operations from about 25% in 1980 to about 50% in 2004 and general aviation operations constituting nearly all of the remainder.

Figure 6 summarizes historical aircraft operations at the Airport between 1980 and 2004, based upon FAA data. These include takeoffs, landings, and flights transiting the Airport's airspace. These data are organized into the four categories reported by the FAA: (1) air carrier (primarily the jet operations of passenger and cargo airlines); (2) air taxi/commuter (the commuter operations of passenger and cargo airlines as well as other nonscheduled air taxi activity); (3) general aviation (private business jet and small-plane activity); and (4) military.

Figure 6

HISTORICAL AIRCRAFT OPERATIONS

Bob Hope Airport



Note: These data include takeoffs and landings in addition to operations that only transit Airport airspace. They differ from operations data presented elsewhere in this report, which summarize only takeoffs and landings.

Source: Federal Aviation Administration, *Terminal Area Forecast*, 2006.

Because these data include overflights of Airport airspace, in addition to takeoffs and landings, the numbers are higher than operations data presented elsewhere in this report. Nevertheless, the numbers are considered a valid portrayal of the historical trends. The key trends include:

- The combination of air carrier and air taxi/commuter operations has declined since the peak in 1987. Air carrier operations have remained relatively stable since 1996, and air taxi/commuter operations have decreased somewhat since about 1992. The decline in these operations during a period of growth in enplaned passengers indicates that the number of passengers per flight has been increasing through this period.

- General aviation operations have decreased markedly since the peak in the mid-1980s. This reflects a well documented national trend. The decrease in general aviation operations has been driven by a marked decline in the fleet of small, single-engine and light twin-engine piston aircraft. Many of these aircraft are used for personal and recreational flying. The increasing costs of insurance and fuel are important causes of the decrease in personal and recreational flying. Many of the small aircraft in the fleet are quite old, and the steadily increasing maintenance costs, coupled with the very high cost of new replacement aircraft, are forcing many people to reduce their flying.

- Operations by military aircraft consistently have been very few.

RECENT AIRCRAFT OPERATIONS

Total operations at the Airport declined from 2005 to 2006 by about 4.6%, from 135,630 to 129,330. General aviation operations declined almost 11.0% during the year, and commuter/air taxi operations declined by nearly 20%. On the other hand, air carrier operations increased by 5.4% during the year.

Table 12 summarizes actual 2005 and estimated 2006 operations at the Airport, organized into the four categories reported by the FAA. Operations for 2006 were estimated based upon comparison of year-to-date monthly aircraft operations (through September 2006) as compared with the corresponding months in 2005. The relationships observed between the monthly operations for the first nine months of each year were extrapolated to October, November, and December 2006 to yield an annual estimate for 2006.

Table 12

HISTORICAL AND ESTIMATED AIRCRAFT OPERATIONS
Bob Hope Airport

	Historical 2005	Estimated 2006	Percentage change
Air Carrier			
Passenger	64,034	67,200	4.9%
Cargo	1,507	1,900	26.1
Total	65,541	69,100	5.4%
Commuter/Air Taxi			
Passenger	167	100	(40.1%)
Cargo	14,354	14,800	3.1
Air Taxi	11,325	5,800	(48.8)
Total	25,846	20,700	(19.9%)
General Aviation	44,007	39,200	(10.9%)
Military	236	330	40.0%
Total	135,630	129,330	(4.6%)
Percentage change			

Sources:
Historical: Bob Hope Airport, Total Airport Management Information System and Jacobs Consultancy, 2006.
Estimated: Jacobs Consultancy, December 2006.

The different categories of aircraft operations are as follows.

Air Carrier

Air carrier operations are those performed in revenue and nonrevenue service by the scheduled airlines serving the Airport using aircraft with 50 or more seats. This category also includes operations by all-cargo carriers using aircraft of similar size. Operations include scheduled flights, charter flights, diverted flights, and ferry operations (empty flights). Based on Airport categorization, this category also includes regional jet aircraft with 50 or more seats, such as the Avro RJ85; the Canadair CRJ-200, CRJ-700, and CRJ-900; and Embraer ERJ-145, ERJ-170, and ERJ-190.

Air Taxi and Regional/Commuter

Regional/commuter operations are those performed in revenue and nonrevenue service by scheduled regional/commuter airlines using aircraft with fewer than 50 seats. This category also includes a significant number of for-hire air taxi operations where passengers are carried on unscheduled service. Additionally, air cargo operations conducted by Ameriflight and Air Net Express are also included in this category.

General Aviation

General aviation operations include all civil aircraft operations not classified as air carrier or air taxi and regional/commuter operations. As discussed earlier and shown on Figure 6, the number of general aviation operations at the Airport has decreased significantly since 1980. General aviation operations are categorized by aircraft type, which include:

- Single-engine aircraft (piston and turboprop), used principally for personal purposes and some air taxi and charter operations.
- Multi-engine piston aircraft, used principally for personal purposes and some corporate, air taxi, and charter operations.
- Multi-engine turboprop aircraft, used principally for corporate, air taxi, and charter operations.
- Helicopter, used principally for corporate and charter operations.
- Multi-engine business jet aircraft, used principally for corporate and charter operations.

- Very Light Jet (VLJ) aircraft, which are just entering production, are expected to be used principally for corporate, air charter, and personal uses.

Military

Military operations include takeoffs and landings by Air Force, Army, Navy, Coast Guard, and National Guard aircraft. Since no military units are based at the Airport, military operations are rare, with only 236 in 2005.

FORECAST PASSENGER AIRLINE OPERATIONS

The assumptions underlying the forecast of passenger carrier operations are presented below.

- Significant aircraft models in the passenger airline fleet will continue to be "narrowbody" aircraft, such as the Boeing B-737 and the Airbus A319 and A320, and regional jet aircraft, such as the Canadair CRJ-200, CRJ-700, and CRJ-900.

- The average aircraft size for passenger carrier service will increase, consistent with aircraft acquisition plans of the carriers. Very little scheduled passenger service is expected in the air taxi/commuter category, since the acquisition plans of most carriers call for aircraft above the 50-seat maximum in the commuter category.

- Average passenger load factors will increase slightly, reflecting the continuation of historic trends. Airlines are becoming more proficient at "yield management" and the tailoring of their service to more closely match the demand in any given market.

The assumptions regarding the passenger and cargo airline aircraft fleet mix were translated into seats and cargo weight per departure, respectively. In addition, assumptions were also developed on future boarding load factors to generate forecast passengers per departure.

Table 13 presents the components of the forecast of passenger airline departures. Table 14 summarizes forecast passenger airline operations by aircraft category. Mainline and regional jet aircraft are expected to continue to be the principal aircraft category at the Airport. Regional jet operations are expected to grow at a faster rate than mainline jet operations, principally as a result of larger 70- and 90-seat regional jets increasing their share of the fleet.

Table 13

FORECAST PASSENGER AIRLINE OPERATIONS
Bob Hope Airport

	Historical	Forecast		CAGR
	2005	2008	2015	2005 - 2015
Enplaned passengers	2,759,984	3,037,000	3,635,000	2.8%
Seats per departure	119	119	124	0.4
Load factor	72.5%	73.0%	75.0%	0.3
Passengers per departure	86	87	93	0.7
Airline departures	32,101	34,907	39,296	2.0
Airline operations	64,202	69,813	78,592	2.0

CAGR = Compound annual growth rate.

Note: Total enplaned passengers as reported to Burbank-Glendale-Pasadena Airport Authority by airlines serving Bob Hope Airport; this varies slightly (1.7%) from the data shown on Table 1, which is derived from a 10% ticket sample conducted by the U.S. Department of Transportation.

Sources:
Historical: Bob Hope Airport, 2006.
Forecast: Jacobs Consultancy, December 2006.

Table 14

FORECAST PASSENGER AIRLINE OPERATIONS BY AIRCRAFT CATEGORY
Bob Hope Airport

	Historical	Forecast		CAGR
	2005	2008	2015	2005 – 2015
Number of annual operations				
Mainline jet	50,885	55,069	60,110	1.7%
Regional jet	13,149	14,639	18,362	3.4
Commuter turboprop/other	167	105	120	(3.3)
Total	64,202	69,813	78,592	2.0%
Percent share				
Mainline jet	79.3%	78.9%	76.5%	
Regional jet	20.5	21.0	23.4	
Commuter turboprop/other	0.3	0.2	0.2	

CAGR = Compound annual growth rate.

Note: Totals may not add due to rounding.

Sources:
Historical: Bob Hope Airport, 2006, using Total Airport Management Information System data.
Forecast: Jacobs Consultancy, December 2006.

FORECAST AIR CARGO AIRCRAFT OPERATIONS

It is expected that FedEx and UPS will continue to be the primary all-cargo carriers at the Airport in the future, although it is possible that other carriers could enter the market. The major air cargo carriers are expected to serve the Airport with aircraft such as the A-300-600, the A-310, and the B-757. It is assumed that Ameriflight will continue to account for most cargo operations by lighter, commuter-type aircraft.

Operations by all-cargo aircraft are projected to increase in the future. Most of the increase will be by larger aircraft in the "air carrier" category, which will increase from about 1,500 operations in 2005 to about 2,500 in 2015. Operations by smaller cargo aircraft in the "commuter" category, including business jets, turboprops, and piston-engine aircraft, are projected to increase from about 14,400 in 2005 to 14,800 in 2015.

Recent Historical Activity

Table 15 summarizes historical air freight tonnage at the Airport between 2000 and 2005. As shown, total air cargo increased 5.2% annually over this period, with all-cargo aircraft tonnage increasing 10.5% annually and passenger airline cargo (or belly cargo) increasing 8.0% annually. Mail, carried by passenger airlines, decreased 39.0% annually over this period.

All-cargo carriers—FedEx and UPS—carried about 78% of all-cargo tonnage at the Airport in 2005. They use the Airport principally because of its proximity to major business centers in the Los Angeles Region. The other significant cargo operator is Ameriflight, which carried about 14% of all-cargo tonnage at the Airport in 2005. Ameriflight focuses on high priority overnight packages for the banking industry, including shuttling checks to Federal Reserve offices, and has experienced a decrease in tonnage of 1.0% annually between 2000 and 2005. A likely factor in this decline is the reduction in their check-shuttling services as the Federal Reserve shifts to electronic check-clearing processes. This has been at least partially offset by Ameriflight's continued development of other high priority shipping services, primarily for the banking industry.

Table 15

HISTORICAL AIR FREIGHT TONNAGE
Los Angeles Region Airports
Short Tons

			January - September		Compound annual growth rate	
	2000	2005	2005	2006	2000 - 2005	Jan - Sept 2005 - 2006
Air cargo						
Passenger	2,930	4,312	3,408	2,129	8.0%	-37.5%
All-cargo						
Air carrier						
Federal Express	15,784	34,456	24,771	28,896	16.9%	16.7%
United Parcel Service	9,291	6,895	4,731	5,548	(5.8)	17.3
Subtotal air carrier	25,075	41,350	29,502	34,444	10.5%	16.8%
Commuter/air taxi						
AirNet Express	-	753	693	235	--	-66.1%
Ameriflight	9,031	7,205	5,440	5,385	-4.4%	-1.0
Subtotal commuter/air taxi	9,031	7,959	6,133	5,620	-2.5%	-8.4%
Subtotal air cargo	37,036	52,867	38,350	41,957	7.4%	9.4%
Mail						
Passenger	4,195	355	332	5	-39.0%	-98.5%
Total air freight	41,231	53,223	6,465	5,625	5.2%	-13.0%

Source: Bob Hope Airport, 2006.

Assumptions and Forecast

Table 16 summarizes forecast cargo tonnage carried by all-cargo aircraft. It is forecast to increase from about 49,300 short tons in 2005 to about 71,100 short tons in 2015, an annual increase of 3.7%. This growth rate reflects continued demand for air cargo service at a higher rate than the projected growth in annual income for the Los Angeles Region over the same period (2.8%). At the same time, the forecast growth rate is lower than the annual growth rate of 7.4% between 2000 and 2005, reflecting the expected maturation of the local air cargo market.

The forecast reflects continued moderate growth in mainline jet air cargo service to principal air cargo hubs (Memphis for FedEx and Louisville for UPS), consistent with regional economic growth and continued demand originating from the local area. It is expected that FedEx and UPS, the two largest domestic integrated cargo airlines, will continue to serve the Airport, with an annual growth rate in cargo tonnage of 4.4% per year through 2015.

Table 16

FORECAST ALL-CARGO AIRLINE AIRCRAFT OPERATIONS
Bob Hope Airport

	Historical	Forecast		Compound annual growth rate
	2005	2008	2015	2005 – 2015
Air carrier				
Cargo tonnage	41,350	51,900	63,800	4.4%
Tonnage per operation	27.4	25.3	25.2	-0.8
Airline operations	1,507	2,055	2,530	5.3
Regional/commuter				
Cargo tonnage	7,959	7,300	7,300	-0.9%
Tonnage per operation	0.6	0.5	0.5	-1.2
Airline operations	14,354	14,800	14,800	0.3
Total				
Cargo tonnage (short tons)	49,309	59,200	71,100	3.7%
Tonnage per operation	3.1	3.5	4.1	2.8
Airline operations	15,861	16,855	17,330	0.9

Sources:
Historical: Bob Hope Airport, 2006.
Forecast: Jacobs Consultancy, December 2006.

Cargo tonnage carried by regional/commuter aircraft—principally Ameriflight—is anticipated to decline slightly until 2008 and then remain level through 2015. This is based on the following factors:

- Ameriflight is developing service at LA/Ontario International Airport and regards that airport as its principal regional hub.
- Ameriflight's chief source of business at Bob Hope Airport has been bank shuttle services and check hauling. As discussed earlier, the check-hauling business has been steadily declining and is expected to be discontinued in the very near future. While Ameriflight is attempting to develop other markets for cargo services from the Airport, it is unclear if any significant net growth would occur.

Tonnage per operation for air carrier cargo aircraft is assumed to remain roughly constant over the forecast period. (The slight reduction shown in Table 16 reflects a small decline from 2005 to 2006.) The assumption of a constant ratio of tonnage per operation implies that the all-cargo carriers will not substantially increase the size of the aircraft serving the Airport, but will, collectively, add flights. Specifically, it is

anticipated that the continued growth in air cargo demand will create sufficiently strong market either to support another all-cargo carrier or to justify flights by UPS or FedEx to one or more of their secondary hubs.

Table 17 summarizes forecast all-cargo operations by aircraft category. As shown, mainline jet, regional jet/business jet, and commuter turboprop aircraft are expected to increase their share of total operations, while the combination of single and multi-engine piston aircraft decline.

Table 17

FORECAST ALL-CARGO AIRLINE OPERATIONS BY AIRCRAFT CATEGORY
Bob Hope Airport

	Historical	Forecast		Compound annual growth rate
	2005	2008	2015	2005 – 2015
Number of annual operations				
Mainline jet	1,507	2,055	2,530	5.3%
Regional jet/business jet	1,335	1,480	2,220	5.2
Commuter turboprop	7,687	9,620	11,100	3.7
Multi-engine piston	2	3,700	1,480	94.6
Single-engine	5,320	0	0	(100.0)
Helicopter	10	0	0	(100.0)
Total	15,861	16,855	17,330	0.9%
Percent share				
Mainline jet	9.5%	12.2%	14.6%	
Regional jet/business jet	8.4	8.8	12.8	
Commuter turboprop	48.5	57.1	64.1	
Multi-engine piston	0.0	22.0	8.5	
Single-engine	33.5	--	--	
Helicopter	0.1	--	--	
	100.0%	100.0%	100.0%	

Note: Totals may not add due to rounding.

Sources:
Historical: Bob Hope Airport, 2006.
Forecast: Jacobs Consultancy, December 2006.

The replacement of single-engine piston aircraft by multi-engine piston aircraft reflects the shift occurring in Ameriflight's fleet at the end of 2005. Although Ameriflight is known to be planning to remove its business jets from cargo service at the Airport, the forecast anticipates that by 2008 and 2015, business jets will be in cargo service, whether or not they are operated by Ameriflight. Commuter turboprops are projected to dominate the cargo fleet (about 64%) by 2015. This is generally consistent with national fleet mix trends, summarized later in Table 21, which show continued strong growth in use of business jet and turboprop aircraft.

AIR TAXI AND GENERAL AVIATION AIRCRAFT OPERATIONS FORECAST

Before presenting forecasts of General Aviation (GA) and Air Taxi (AT) operations, the nature the air taxi and general aviation market is discussed, and national and local trends are reviewed.

Key General Aviation and Air Taxi Operators

Different groups of GA/AT operators vary widely in the aircraft they operate, their expectations, and their motivations in owning and operating aircraft.

GA and AT operators generally operate the same kinds of aircraft and, in the case of passengers, deal with the same groups of users. The primary difference between GA and AT operations is that the GA aircraft owner/operator does not receive direct compensation for each flight from the user, while the AT owner/operator receives direct compensation from the user for each individual flight (either per mile, per hour, per passenger or per pound of cargo).

The operations of GA and AT operators are governed by different Federal Aviation Regulation (FAR) parts. GA is governed by FAR Part 91 and Part 125 (for airline-type aircraft). AT is governed by FAR Part 135.

This section looks at the seven different types of operators that compose the GA and AT fleet, identifies them as GA, AT or both, and highlights the differences among them.

Corporate Flight Departments

The traditional corporate flight department is an integral part of a corporation's retinue that staffs, operates and maintains the aircraft owned by the organization. (In comparatively few cases, such aircraft are owned by wealthy individuals for their personal use.) All costs are borne by the organization, few attempts are made to economize, no attempt is made to recover any costs from outside users and the aircraft are all operated as GA (FAR Part 91) aircraft. The pilots, maintenance technicians, flight attendants, administrative personnel and management are all

employees of the corporation. Typically, the aviation department manager is at the corporate director or vice president level.

The focus of these flight departments is service to the travel needs of senior management or the owner, wherever their high-value business (and sometimes personal) interests take them. The service provided is distinct from the service an airline provides—it is focused entirely on the passengers' schedule and travel needs, not on mass market demand or the aviation department's convenience. This means that departures and arrivals can occur any time of day or night. Aviation managers who thrive in this world are focused on meeting these needs and finding solutions to problems—including problems posed by airport curfews. The aircraft they fly are almost all turbine-powered, with a strong preponderance of jets.

There are a substantial number of such flight departments at the Airport. Many are in the entertainment business (studios and celebrities). Experience has shown this group may be more demanding than the typical corporate senior manager and less tolerant of conservative pilot decisions regarding flight safety.

The consultant team interviewed the seven operators listed in Table 18. Collectively, they own 14 aircraft ranging in size from a $5 million Citation V to a $50 million Boeing Business Jet.

Table 18

CORPORATE FLIGHT DEPARTMENTS INTERVIEWED
Bob Hope Airport

Operator	Business	Aircraft at Airport
Chartwell Partners	Investments	1
JG Boswell	Agriculture	1
Sierra Land	Investments	2
Occidental Petroleum	Oil and gas	3
Disney/Earthstar	Studio	3
Dreamworks	Studio	2
Warner/GTC	Studio	2

Source: Interviews conducted July 2006 by Bill de Decker, Conklin & de Decker Aviation Information.

Managed Aircraft Operations

There are many individuals and companies who want to own a private or corporate aircraft but who find that setting up and supervising a flight department (including

hiring an aviation manager, pilots, and other personnel as well as arranging for hangar space, insurance, etc.) is a daunting task due to lack of time and expertise. For those organizations and individuals, the concept of the "managed aircraft" was developed in the 1970s. Management companies provide, in essence, a turnkey service for the owners of business aircraft, providing all required personnel, maintenance, and insurance in return for a fixed monthly fee plus all costs as incurred. These aircraft are usually operated as GA aircraft when flown for their owners.

This concept has become very popular and, as discussed in the next section, has been one of the major growth areas in business aviation. Aircraft managed by these companies tend to be almost exclusively jets. As with in-house corporate flight departments, there is a very heavy emphasis on service and meeting the customer's needs. In fact the pressure on aircraft management companies to provide outstanding service is perhaps even greater than on the traditional corporate flight departments because management contracts can be (and are) terminated on very short notice if the owner of the aircraft is dissatisfied with the service provided.

The consultant team interviewed the two major management companies based at the Airport. These companies are listed in Table 19.

Table 19

AIRCRAFT MANAGEMENT COMPANIES INTERVIEWED
Bob Hope Airport

Management company	Focus	Aircraft at Airport
Avjet	Talent	25
TWC Aviation	Business	8

Source: Interviews conducted July 2006 by Bill de Decker, Conklin & de Decker Aviation Information.

Avjet is headquartered at the Airport since their primary focus is the entertainment industry. TWC Aviation is headquartered in Las Vegas and recently expanded its presence in the LA basin by building another facility at VNY.

The aircraft managed by these two organizations range from small $5 million Citations to $35 – $45 million Gulfstream 450 and 550 aircraft and a $50 million Boeing Business Jet (BBJ).

Fractional Aircraft Owners

Many people and organizations that desire the flexibility afforded by their own aircraft do not need the use of an aircraft on an exclusive, full-time basis. To cater to this group, the concept of the fractional aircraft share was developed in the mid-1990s. Under this concept, an individual or an organization buys a share of a particular make and model of aircraft, entitling them to fly a specified number of hours per year. The company from whom the share is bought manages the aircraft for the organization or individual just as do the management companies described above. All fractional aircraft are operated as GA aircraft under a special subsection of FAR Part 91.

After the initial purchase price, the owner pays a fixed monthly fee plus a fixed hourly fee for every hour they are on board. The advantages of this type of program are two-fold. First, it allows a large group of people and corporations to use private aviation who do not have either the financial strength or the travel needs for their own aircraft. Second, the monthly and hourly fees are known in advance, eliminating the risk of cost surprises.

This concept has proven to be extremely popular both with organizations and wealthy individuals. One reason is that the fractional ownership companies have developed their service to a very high level. The fleet of aircraft that provides this service has gone from a few to almost 900 aircraft in less than 10 years. These companies have a current backlog of orders for over 440 aircraft.

Four major fractional service providers and several minor ones operate in the U.S., as listed in Table 20.

Table 20

U.S. FRACTIONAL JET PROVIDERS

Fractional provider	Aircraft in fleet	
	Number of aircraft	Percentage
NetJets	517	59%
Flight Options	160	18
FlexJet	82	9
Citation Shares	73	8
Others (T-prop)	46	5
Total	878	100%

Note: Percentages may not sum as indicated due to rounding.

Source: Business Jet Monthly (May 2006), UBS Investment Research.

The aircraft they use are nearly all jets (94%), ranging from $4 million Citations to $50 million BBJs. The most popular aircraft are mid-size jets in the $8 million to $15 million range. The fractional providers do not base any aircraft at Bob Hope Airport, but the Airport is a common destination or pick-up point for many fractional owners. As with the other types of operators, a substantial percentage of the flights are for people in the entertainment business.

The consultant team contacted the largest fractional operator (NetJets) to determine their current and projected activity level at the Airport. Their historical movements into and out of the Airport are as follows:

2003	1,775
2004	2,521
2005	2,808
2006	2,914 (estimated)

Charter Operators (Passenger)

For those organizations and individuals that do not have the need for even a fractional share, there is the charter market. What distinguishes this market from the corporate owners, managed aircraft owners, and the fractional share owners is that the service is sold one flight at a time. There is no long term financial commitment. At the same time, this market uses the same types of jets (and some turboprops) as do the corporate owners, management companies, and fractional providers, and the prices are reasonable (relatively speaking), making the service very popular.

Charter services are provided by two types of organizations. One is the traditional charter operators. Originally, these organizations were the major providers of charter service. These companies typically own older jets, turboprops and some twin engine piston aircraft. The other type of charter provider is the aircraft management company. Today, the management companies are by far the largest provider of charter services. The aircraft used by the management companies for charter service come from two sources. One set are aircraft owned by the management companies. These aircraft tend to be fairly old jets which are relatively inexpensive to buy and are a small part of the overall charter fleet. For example, Avjet owns three old Westwind aircraft, each worth perhaps $2 to $3 million. The other set are the aircraft owned by others and managed by the management company. These aircraft tend to be the late-model, high-end, long-range aircraft such as the $20 million Challenger 604 or $40 million Gulfstream 550.

When they operate their own or other people's aircraft as charter aircraft, the traditional charter operators and management companies operate as air taxis, mostly under the rules of FAR Part 135. Thus, aircraft owned by others and managed by the management companies can be flown as GA aircraft when the owners are on board or as AT aircraft when they are on charter flights.

Management companies are able to charter their managed aircraft through agreements with owners who do not use their aircraft very much (perhaps a little as 100 or 200 hours per year). The management companies sell excess aircraft time to charter customers. This helps to offset the owner's costs. It also provides the aircraft management company with an additional income stream, typically amounting to about 10% to 20% of the charter revenue. Charter fees range from $1,500 per flight hour for a Learjet to over $8,000 per hour for Gulfstream 550. As one of the principals of Avjet put it "management fees pay the bills, but charter fees provide the profit margin."

The two major providers of jet charter services at the Airport are Avjet and TWC—the two major management companies. Their charter activities have expanded at the same rate as their managed aircraft activities. They cater to the same demanding groups of people in the business world, the entertainment industry, and high-net-worth circles. Typical customers will charter aircraft several times per year and provide several hundred thousand dollars worth of charter revenue. As is the case with the managed aircraft, this is a brutally competitive business. Since the customer has no financial commitment beyond the single flight, it is very easy for a company to lose a customer if the customer has only a single bad experience. The charter business is very focused on service since, in the words of an interviewee, "the people who use the service do not like to be told 'no.'"

Charter Operators (Freight)

The freight charter market is very different from the passenger charter market in two important respects. First, the aircraft are all owned by the charter operator, and, second, they tend to be old jets, turboprops, piston twins and some piston singles. These operators are all AT operators operating under the rules of FAR Part 135.

In one important aspect, the passenger and freight charter businesses are the same—both cater to users who demand very high levels of service. In the case of freight charter operators, the ability to deliver freight quickly and on time, whatever the schedule may be, is the essential demand of the shipper. Given the cost of the service, this is to be expected since the only advantage an airplane has over a truck is speed.

There is one major freight charter operator at the Airport. Ameriflight is a large organization with a large fleet of mostly turboprop and piston aircraft operating from 10 locations throughout the U.S, in addition to the Airport, the corporate headquarters. The company has about 200 employees and a major heavy maintenance facility at the Airport. Ameriflight conducts three kinds of freight charter business out of the Airport:

- ***Feeder service for UPS and FedEx***. This is a daylight-only operation that uses turboprop aircraft.

- ***Check-carrying service for the Federal Reserve System and the banks***. This service operates at night using Learjet 35 aircraft. This service used to employ four or five LJ 35s but is now down to two LJ 35s and is scheduled to disappear entirely in 2007 as the Federal Reserve completes the switch to electronic transfers. As the LJ 35s are withdrawn from the check-carrying service, they are reconfigured for the passenger charter market. As Ameriflight is not a passenger charter operator, it is not clear how passenger charter service fits into the overall Ameriflight business plan.

- ***Courier service for financial institutions in California***. This is a business that has been developed by Ameriflight and seems to be unique to them. It employs about 50 persons and numerous piston and turboprop aircraft. Operations occur around the clock, seven days a week, with a heavy emphasis on late night operations.

Personal/Pleasure Aircraft Operators

The last major group of operators includes the owners and operators of the single-engine and twin-engine piston aircraft. These aircraft are largely piloted by the owners, who are seldom professional pilots. They also fly relatively few hours per year when compared with the other groups of operators (50 to 150 hours versus 150 to 1,000 hours per year).

Most of the single-engine aircraft and some of the twin-engine aircraft are used only for pleasure. On the other hand, many of the twins and some of the singles are used for both business and pleasure. The twins, in particular, are effective business aircraft over a radius of perhaps 500 miles. These aircraft are all flown as GA aircraft.

Single-engine piston aircraft are relatively slow, and many pilots of these aircraft do not have the same level of proficiency as the professional airline and business jet pilots. As a result, many of these aircraft operators are finding that the operating environment at the Airport is becoming much less inviting as the Airport has transitioned to becoming more and more an airline and business jet airport. In addition, these operators tend to be much more cost-sensitive to the rising cost of flying than the business jet operators.

Training Schools

Training schools use small piston-powered aircraft (fixed and rotary wing) to provide the flight training required for students to get various pilot licenses. In years past, there was a fair amount of training activity at Bob Hope Airport, particularly from two helicopter operators based at Van Nuys Airport that used the Airport as a practice field. However, for a variety of reasons they appear to have ceased their operations at Bob Hope Airport. At present there is little or no training

activity at the Airport. Any training aircraft operations are governed by the AT regulations (FAR Part 135).

NATIONAL OUTLOOK FOR GENERAL AVIATION

This section reviews trends on the national level as they relate to the different classes of aircraft serving the GA market.

Business Jets And Turboprops

Business jet and turboprop aircraft categories are expected to significantly increase their share of aircraft operations, principally driven by continued strong corporate aviation demand and the resultant increase in the number of jet and turboprop aircraft owned by businesses and individuals. Among the turbine-powered aircraft operators, the two groups that are growing fastest are the managed aircraft companies and the major fractional operators (NetJets, FlexJet, Flight Options and Citation Shares). The traditional corporate operators are growing very slowly, if at all.

Piston-Engine Aircraft

The growth trends in the piston market are all negative. Multi-engine and single-engine piston aircraft are expected to significantly decrease their share of aircraft operations. These aircraft tend to be more for personal use, and the increasing costliness of general aviation (principally owing to fuel prices) is a negative. Additionally, many of these aircraft are aging, with expensive maintenance and replacement costs, and it is expected that many operators will retire their aircraft, without replacing them in the future. Many twin-engine piston operators are likely to move up to small turboprop aircraft or small jets. A number are waiting for the arrival of the Very Light Jet (VLJ) aircraft.

Very Light Jets (VLJs)

Much has been written about the impact of the new Very Light Jets (VLJ) on the general aviation fleet. At least eight VLJ models from different manufacturers have been announced. As of early 2007, two had received FAA certification (the Eclipse 500 and the Cessna Mustang), and deliveries of the first of these aircraft took place in November (Mustang) and December (Eclipse 500) of 2006. The other six VLJ models are in various stages of design, flight testing, or certification. Several of these are expected to reach certification and make initial deliveries in the 2008/2010 timeframe, since they are being produced by manufacturers with a strong track record and substantial financial strength. The published VLJ order backlog for all manufacturers combined is over 3,000 aircraft.

Forecasts for the VLJ fleet in the U.S. in the 2015 timeframe are widely divergent. The primary reason is that these aircraft represent in many ways a new category of business and personal aircraft. The closest aircraft to the VLJs, in terms of cabin size, are the twin-engine piston aircraft such as the Beech Baron and Cessna 421. Most of these aircraft have been out of production since about 1985. At present, the U.S. fleet of this class of aircraft is about 19,500, and new twin-engine piston aircraft are being produced at a rate of about 200 per year. In the hey-day of these aircraft (1969 to 1979), about 2,500 per year were produced. The closest aircraft to the VLJs in terms of design are the small jets such as the Cessna Citation CJ1 and CJ2 and Raytheon Premier 1. The current fleet of these aircraft is about 1,000, and they are being produced at the rate of about 100 per year. Although there is much speculation, at this stage no one knows to what extent the new VLJs will become a valid replacement for aging twin-engine piston aircraft, whether they will draw sales away from current small jets (such as the CJ1), or whether they will create new demand. What has made the demand picture even more confusing is that a number of start-up organizations are touting a new class of on-demand air taxi service using the VLJ. They have placed numerous orders for these aircraft. As a result, the projected demand is highly speculative.

Summary of National Trends

Table 21 shows FAA forecasts of U.S.-based general aviation aircraft between 2005 and 2015. While turbine aircraft comprised a relatively small percentage of total based aircraft (5.1%) in 1995, this category is projected to increase to over 13% by 2017, a compound annual growth rate (CAGR) of 4.3%. In contrast, piston-engine aircraft categories are forecast by the FAA to grow only 0.3% between 2005 and 2015 in the United States.

Table 21

HISTORICAL AND PROJECTED BASED GENERAL AVIATION AIRCRAFT
United States

	Piston			Turbine					
	Single engine	Multi-engine	Total	Turboprop	Jet	Total	Helicopter	Other	Total
Based aircraft									
1995	137,049	15,739	152,788	4,995	4,559	9,554	5,830	19,917	188,089
2000	149,422	21,091	170,513	5,762	7,001	12,763	2,680	4,470	190,426
2005	144,530	17,481	162,011	8,030	8,628	16,658	7,595	28,327	214,591
2010	147,150	17,575	164,725	9,030	11,575	20,605	9,915	38,785	234,030
2015	149,075	17,660	166,735	10,030	15,605	25,635	11,945	43,805	248,120
CAGR									
1995-2005	0.5%	1.1%	0.6%	4.9%	6.6%	5.7%	2.7%	3.6%	1.3%
2005-2010	0.4	0.1	0.4	2.8	7.5	5.3	6.4	7.1	2.0
2010-2015	0.2	0.1	0.3	1.8	4.9	3.6	(7.5)	(22.6)	(1.9)
2005-2015	0.3	0.1	0.3	2.2	6.0	4.3	(1.9)	(11.4)	(0.3)
Percent of total based aircraft									
1995	72.9%	8.4%	81.2%	2.7%	2.4%	5.1%	3.1%	10.6%	100.0%
2000	78.5	11.1	89.5	3.0	3.7	6.7	1.4	2.3	100.0
2005	67.4	8.1	75.5	3.7	4.0	7.8	3.5	13.2	100.0
2010	62.3	7.4	69.7	3.9	5.2	9.1	4.4	16.9	100.0
2015	72.0	8.5	80.6	5.0	8.3	13.3	2.9	3.2	100.0

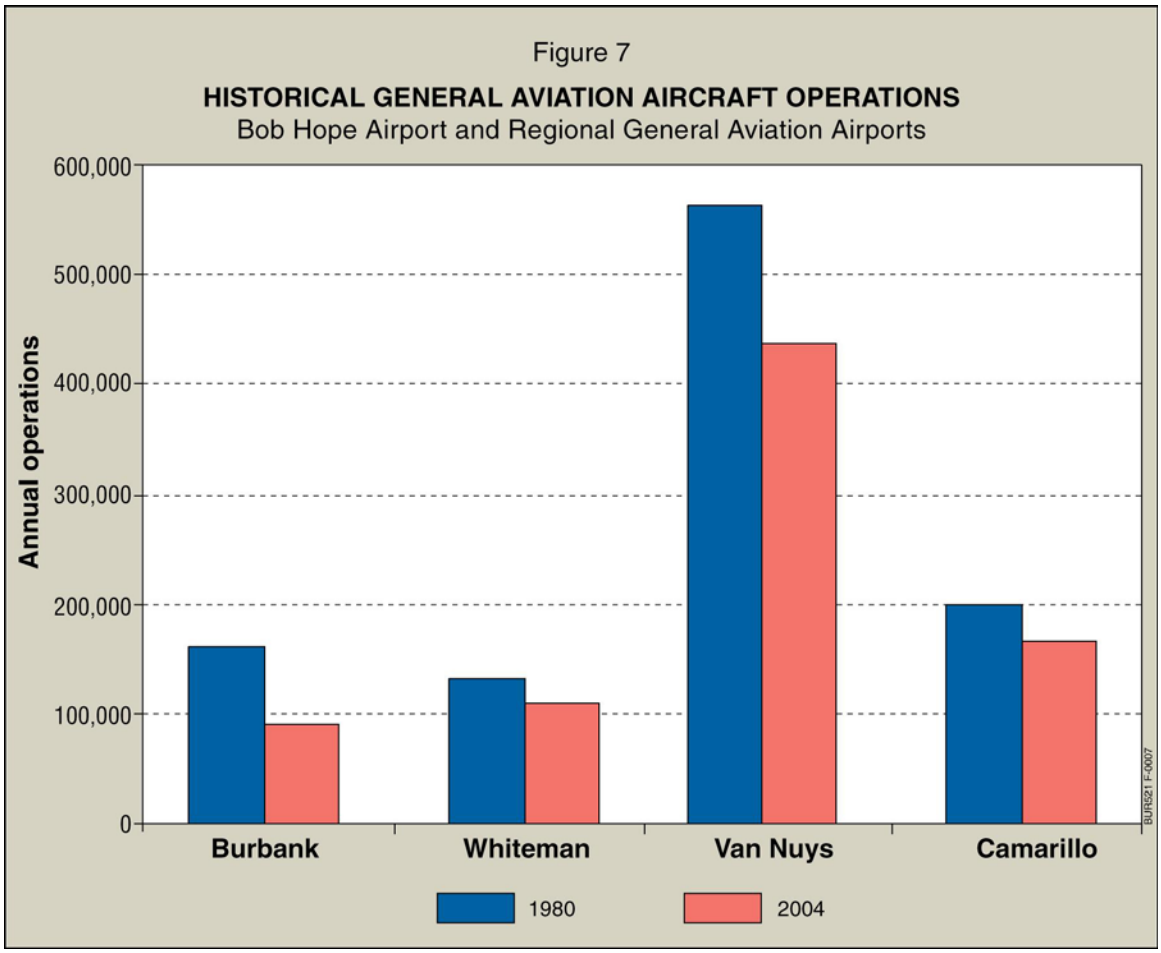
Source: Federal Aviation Administration Aerospace Forecasts Fiscal Years 2006 - 2017, March 2006.

FACTORS DRIVING GENERAL AVIATION DEMAND AT BOB HOPE AIRPORT

There is great variation in the outlook for different classes of general aviation users and the different types of aircraft. This section summarizes the dominant trends that are expected to influence future general aviation activity at the Airport.

Interviews with representatives of the Aircraft Owners and Pilots Association and an evaluation of available data indicate that the growing presence of high performance jet aircraft at the Airport appear to be encouraging operators of small, piston engine aircraft to move to smaller and less heavily used airports in the Region. Figure 7 summarizes historical general aviation aircraft operations at Bob Hope Airport, Camarillo, Van Nuys, and Whiteman airports, for 1980 and 2004. While general aviation operations decreased at all airports, the proportional decrease was highest at Bob Hope Airport and lowest at the two less heavily used general aviation airports—Camarillo and Whiteman airports. These data do not provide detail on individual aircraft operations categories; it is likely that while there have been decreases in smaller aircraft, larger corporate aviation make/

models—particularly multi-engine business jet and turboprops, have increased. A similar transition is likely to have occurred at Van Nuys.



Overall, the GA market is divided into four groups. These are:

- Operators of turbine aircraft (jet and turboprop)
- Operators of piston aircraft
- Operators of VLJ aircraft
- All other operators

The demand from each group is analyzed in the following sections.

Operators of Turbine Aircraft (Jet and Turboprop)

Turbine aircraft operators are the largest group at the Airport. While not all operate at night, many do, and this group is growing rapidly. A cross-section of 10 jet and turboprop aircraft operators was interviewed during the week of July 10, 2006, as shown in Table 22.

Table 22

JET AND TURBOPROP AIRCRAFT OPERATORS INTERVIEWED
Bob Hope Airport
July 2006

Operator	Type of operation	Aircraft based at BUR (2006)
Chartwell Partners	Investments	1
JG Boswell	Agricultural	1
Sierra Land	Investments	2
TWC Aviation	Management Co.	8
Occidental Petroleum	Oil and gas	3
Avjet	Management Co.	25
Disney/Earthstar	Entertainment	3
Ameriflight	Cargo charter Op.	10
Dreamworks	Entertainment	2
Warner/GTC	Entertainment	2
Total		57

These operators account for 57 of the 83 turbine-powered aircraft based at the Airport as of mid-2006. This represents 68% of the fleet and includes the two major aircraft management companies, all three major entertainment company flight departments, and the major cargo charter operator. The conclusions drawn from these interviews were applied to the entire turbine-powered fleet based at the Airport.

In addition, discussions with the two fixed base operators (FBOs) at the Airport (Mercury and Million Air) indicate that the transient turbine-powered traffic has much the same characteristics as the locally based operators. Therefore, the conclusions drawn from the interviews were applied to the transient turbine-powered traffic as well.

NetJets, the largest fractional operator in the country, was also interviewed. While they do not base aircraft at the Airport, they do have significant operations at the Airport. NetJets commands about 59% of the U.S. fractional market and appears to have a similar market share at Bob Hope Airport. The results of the analysis of NetJets' growth at the Airport were applied to the other fractional providers, as well.

Each of the 10 interviews focused on the following questions:

- What is the current composition and primary focus of your fleet and operations?

- How frequently do you depart/arrive during the 10:00 p.m. – 7:00 a.m. period?
- How does this compare with 5 years ago?
- How is this expected to change over the next 5 years?
- What impact will the various curfew alternatives have on your operation?
- If any of these curfews would cause you to move to another airport, where would you go?

A copy of the interview form is in Attachment 1 of Appendix A. The results of the interviews are contained in a separate report entitled "BUR Part 161 Study – General Aviation/Corporate Operator Interviews – July 2006."

The interviews found that among the turbojet aircraft operators, the two groups that are growing fastest are the managed aircraft companies (Avjet and TWC) and the major fractional operators (NetJets, FlexJet, Flight Options and Citation Shares). The traditional corporate operators are growing very slowly, if at all. The cargo operator (Ameriflight) is shifting focus but its growth is taking place at its other locations. These findings are summarized in Table 23.

TWC Aviation reported that it is opening a second base at Van Nuys in 2007. Five of the eight aircraft currently managed by TWC at Bob Hope Airport will move to Van Nuys, reducing the fleet based at the Airport to three. However, due to strong growth at the Airport, TWC is expected to bring its based fleet at the Airport back to eight aircraft by 2011.

The number of turbojet-powered aircraft based at the Airport has increased by over 6% per year from 2001 to 2006, as the economy came out of the 2001 – 2002 recession. Based on trend analysis and interviews, the number of based turbine aircraft is projected to increase by just over 5% per year between 2006 and 2011. This would result in a turbine fleet of 110 aircraft based at the Airport in 2011.

Because of the vitality of the companies now serving Bob Hope Airport, and the anticipated long-term strength of the local economy, it is expected that the growth rate for based turbine-powered aircraft at the Airport will be similar in the five-year period after 2011.

Table 23

ACTUAL AND FORECAST BASED TURBINE-POWERED AIRCRAFT ASSUMING NO ADDITIONAL RESTRICTIONS

Bob Hope Airport

Interviewed operators	Number of Aircraft Actual 2001	Actual 2006	Forecast 2011	CAGR 2001-2006	CAGR 2006-2011
Chartwell Partners	1	1	1		
JG Boswell	1	1	1		
Sierra Land	2	2	2		
TWC Aviation	3	8	8		
Occidental Petroleum	4	3	3		
Avjet	15	25	40		
Disney/Earthstar	3	3	4		
Ameriflight	10	10	10		
Dreamworks	1	2	2		
Warner/GTC	2	2	2		
Total	42	57	73	6.25%	5.07%
Other based operators					
25 operators	n.a.	26	37		5.07%
Total based aircraft	n.a.	83	110		
CAGR 2006 – 2011 (fleet)					5.07%

n.a. = Data not available
CAGR = Compound annual growth rate

Sources: The operators who were interviewed provided their own projections of aircraft in 2011. The forecast fleet for "other based operators" was developed by Conklin & de Decker based on the overall growth rate projected by the interviewed operators.

This projected growth in based aircraft will result in a corresponding increase in operations. The growth in operations will not be exactly the same as the growth in the fleet because the aircraft entering the fleet either as new or replacement aircraft generally have longer range capabilities, and they are used on longer trips. This is a trend in general aviation, most notably the increased use of aircraft for international travel.

NetJets, the largest fractional ownership operator at the Airport, anticipates a growth rate in operations at the Airport of just under 5%, as shown in Table 24. This is similar to the rate of growth projected for the based turbine-powered aircraft fleet at the Airport.

Table 24

ESTIMATED AND FORECAST OPERATIONS BY NETJETS-MANAGED AIRCRAFT AT BOB HOPE AIRPORT
2006 and 2011

	Estimated operations at the Airport			CAGR
Interviewed operators	Actual 2001	Estimated 2006	Forecast 2011	2006-2011
NetJets	n.a.	2,914	3,709	4.94%

n.a. = Data not available
CAGR = Compound annual growth rate

Sources: NetJets was interviewed in July 2006 and provided its own projections of operations at BUR in 2011.

Operators of Piston Aircraft

Piston aircraft fall into two broad categories. The largest group is single-engine aircraft. The vast majority are privately owned and flown largely for pleasure. The second group is twin-engine aircraft. While a few of these are flown only for pleasure, most are flown either for both pleasure and business by individuals and small companies or only for business by small companies and charter operators (some passenger but mostly freight).

Piston aircraft operations have been on a downward trend at the Airport for over 20 years, as shown in Table 25. This trend accelerated in 2005/2006, particularly in the single-engine piston segment, for several reasons:

- As the jet fleet (airlines and general aviation) at the Airport has grown, many single-engine piston operators find the Airport less tenable. The reason is the speed differential between jets and single-engine piston aircraft on approach, as well as the jet blast when taxiing. As a result, many have moved to other airports (mainly Whiteman Field).

- The increase in the cost of Avgas has added substantially to the cost of operating these aircraft. For the recreational user, this added expense may be prohibitive.

- Many of the piston aircraft are old. In fact most were built prior to 1984. This means that the maintenance and reconditioning needs of these aircraft are rapidly increasing, adding to the costs of ownership. This is causing a number of operators to fly less or sell their aircraft.

Table 25

AIR TAXI AND GENERAL AVIATION OPERATIONS BY PISTON-ENGINE AIRCRAFT
Selected Years
Bob Hope Airport

Aircraft type	1982 *(a)*	1990 *(b)*	1996-*97 (c)*	2000 *(d)*	2005	Estimated 2006
Multi-engine piston	30,514	33,506	11,700	n.a.	5,862	5,280
Single-engine piston	91,614	67,014	62,200	n.a.	23,112	12,773
Total	122,128	100,520	73,900	59,644	28,974	18,053

n.a. = not available

(a) PRC Engineering. *Final Environmental Impact Statement/Environmental Impact Report for Replacement Passenger Terminal*. BUR-dbd-97. October 1991, pp. C-7, C-8.
(b) KPMG Peat Marwick. *Final Environmental Impact Statement*. Volume 2 Appendices: Appendix C: Aircraft Noise Analysis BUR-cbd-97 October 1991, p. C-7, C-8.
(c) Coffman Associates. *FAR Part 150 Noise Compatibility Study Update: Noise Exposure Maps*, Burbank-Glendale-Pasadena Airport, July 1998, p. 3-6. Data for 12-month period from May 1996 through April 1997.
(d) SH&E. Unrestricted forecasts (draft report), Burbank-Glendale-Pasadena Airport FAR Part 161 Study, April 2002, p. 68.

At the same time, a significant number of twin engine-piston operators are moving up to small turboprop aircraft or small jets. An unknown number are waiting for the arrival of the VLJs.

As this brief review shows, the growth trends in the piston market are all strongly negative with annual decreases averaging about 9% since 1990. There is nothing that indicates this trend will be reversed.

VLJ Operators

The first VLJ aircraft were delivered to two U.S. customers (a Cessna Mustang in November 2006 and an Eclipse 500 in December 2006). This category of aircraft will have a minor impact on operations at Bob Hope Airport by 2011 but a very significant impact by 2015.

There are numerous forecasts that attempt to predict the future size of the VLJ fleet. In terms of deliveries, these forecasts range from a few hundred per year to several thousand per year. Rather than attempt to analyze each of the forecasts, this study used the one generated by the FAA. The reason for choosing the FAA forecast is that the FAA has a very direct stake in their forecast—they have to provide the ATC services for these aircraft, which will be a challenging task. The FAA forecast

estimates that by 2017 there will be a fleet of 4,950 VLJs in use within the U.S. The FAA also forecasts that deliveries to U.S. operators will go from 100 in 2007 to 500 per year in 2009 and the following several years. It is reasonable to expect that Bob Hope Airport's share of based VLJs will mirror its historical share of based turbine-powered aircraft.

Using this data, a nominal U.S. VLJ fleet was constructed as shown in Table 26. To project the number of VLJ aircraft based at the Airport in the future, the historical ratio of turbine powered aircraft based at the Airport (83 in mid-2006) to the total U.S. turbine powered fleet (16,242 as of December 31, 2005) was used. This yields a based fleet of VLJs as shown in the fourth column of the table. It shows that the based VLJ fleet at Bob Hope Airport in 2015 will be about 22 aircraft.

Table 26

PROJECTED VLJ FLEET
United States and Bob Hope Airport

Year	VLJ US deliveries	Cumulative US VLJ Fleet	VLJ based at the Airport
2007	100	100	1
2008	350	450	2
2009	500	950	5
2010	500	1,450	8
2011	500	1,950	11
2012	500	2,450	13
2013	500	2,950	16
2014	500	3,450	19
2015	500	3,950	22

Source: Data in first two columns from US VLJ Fleet – FAA Aerospace Forecast 2006-2017. Data in third column projected by Conklin & de Decker Aviation Information, December 2006.

This projected fleet is used as the basis on which VLJ operations at the Airport are calculated later in this section.

Other Aircraft Operators

This last group, which includes helicopters and "non-airline air carrier jets," is very small and represents less than 5% of the total GA and Air Taxi operations at the Airport in 2006. Helicopters represent by far the largest share of this group (1,870 operations out of a total of 2,241).

Helicopter operations at the Airport are almost exclusively generated by the two police departments (Glendale and Burbank) that base their three helicopters at the Airport. Discussions with helicopter operators at the Airport indicate that these operations are stable and not likely to change significantly. The remaining helicopter operations are caused by one other helicopter based at the Airport and transient operations associated with the movie industry. Again, there is no indication these operations will change significantly in the coming years. In addition, since Ameriflight's check carrying operation is rapidly decreasing and will be gone no later than the end of 2007, any helicopters that are used in support of that operation will also soon be gone. The detailed forecast for this group of operators is discussed in the next section.

Consistent with incremental growth in helicopter operations, an additional based helicopter is forecast between 2008 and 2015, increasing the locally based helicopter fleet from 4 to 5.

Based Aircraft Forecast Summary

Table 27 summarizes the forecast of based general aviation and air taxi aircraft at the Airport.

Table 27

UNRESTRICTED GENERAL AVIATION AND AIR TAXI BASED AIRCRAFT FORECAST
Bob Hope Airport

Class of aircraft	Actual 2005	Estimated 2006	2008	2015
Mainline jet *(a)*	2	2	2	3
Multi-engine business jet	47	68	75	100
Very light jet (VLJ)	0	0	2	22
Multi-engine turboprop	7	13	14	17
Multi-engine piston	15	6	5	1
Single-engine turboprop	0	0	0	0
Single-engine piston	40	23	19	3
Helicopters	5	4	4	5
Total based aircraft	116	116	121	152

(a) These are privately operated aircraft types that are more commonly seen in commercial service. The two aircraft based at Bob Hope Airport are a B-757 and a Boeing Business Jet (a B-737 variant).

Sources: 2005 data from FAR Part 139 Certification Inspection. 2006 estimate by Jacobs Consultancy, based on based aircraft listed provided by Airport staff. Forecast by Jacobs Consultancy and Conklin & de Decker Aviation Information 2006.

GENERAL AVIATION AND AIR TAXI OPERATIONS FORECASTS

This section reviews the forecast of general aviation and air taxi operations for the different categories of aircraft.

Business Jet Operations

Operations by multi-engine business jets other than VLJs, which are discussed below, are expected to grow substantially faster than the average growth rate for general aviation and air taxi aircraft operations, at almost 4.5% between 2006 and 2015. Reasons include the significant presence of corporate aviation operators of this aircraft category at the Airport who have reported that they expect to have continued strong demand at the Airport. This is consistent with the FAA national forecast of based general aviation aircraft, summarized in Table 21 above, which shows substantial growth in the jet category. Multi-engine business jets comprised about 35% of total general aviation and air taxi operations in 2005, and it is assumed that by 2015 this share would increase to about 60%, growing at a compound annual rate of 6%.

VLJ Forecast

The following assumptions were made in projecting the number of VLJ operations at the Airport:

- Average annual flight hours per VLJ aircraft: 200 Hrs/Yr (assumes similar utilization as current twin-engine piston aircraft operators)
- Average flight length: 1.0 Hour

This means that each based VLJ will generate 200 flights. Assuming that the aircraft typically fly a triangular flight pattern (i.e., flight 1 is from the Airport to City A, flight 2 is City A to City B and flight 3 is City B back to the Airport), every 3 flights would generate 2 operations at the Airport (one takeoff and one landing). This yields a forecast of 2,888 operations in 2015 by VLJ aircraft based at Bob Hope Airport, as shown in Table 28. It was assumed that operations by transient VLJ operators (those not based at the Airport) would be equal to the number of operations by Bob Hope Airport-based VLJs. Thus, total annual VLJ operations at the Airport are forecast to reach about 5,775 in 2015.

Table 28

FORECAST VLJ OPERATIONS
Bob Hope Airport

Year	VLJ US deliveries	Cumulative US VLJ Fleet	VLJ based at the Airport	VLJ operations by based aircraft	VLJ operations total
2007	100	100	1	73	146
2008	350	450	2	329	658
2009	500	950	5	694	1,389
2010	500	1,450	8	1,060	2,120
2011	500	,950	11	1,426	2,851
2012	500	2,450	13	1,791	3,582
2013	500	2,950	16	2,157	4,313
2014	500	3,450	19	2,522	5,044
2015	500	3,950	22	2,888	5,775

Source: US VLJ Fleet – FAA Aerospace Forecast 2006-2017.

Turboprop Operations

Multi-engine turboprops are expected to experience significant growth at the Airport, growing annually at 3.3% between 2006 and 2015, principally as a result of their popularity for corporate aviation operators. Turboprops comprised about 13%

of total general aviation and air taxi operations in 2005, and it is assumed that by 2015 this percentage share would increase to about 18%.

This growth rate is generally consistent with FAA's national forecast for this aircraft category. As shown in Table 21, above, the FAA forecasts a compound annual growth rate of 2.2% for turboprop aircraft during the 2005 to 2015 period.

Multi-Engine Piston Aircraft Operations

Multi-engine piston aircraft are expected to substantially decrease during the forecast period, principally as a result of their retirement and partial replacement by VLJs. Although the FAA projects a very small rate of growth for this class of aircraft through 2015, as shown in Table 21 (0.1%), the presence of these aircraft at BUR is expected to diminish because of the nature of the operators at the Airport and the variety of pressures acting on the operators of piston aircraft in the area. As previously discussed, the high proportion of jet aircraft at Airport make it a challenging environment for slower, relatively low performance aircraft. Many operators are expected to move to other regional airports specialized for service to this lower performance segment of the general aviation market.

Multi-engine piston aircraft comprised about 10% of total general aviation and air taxi operations in 2005, and it is projected that by 2015 this percentage share would decrease to about 2%.

Single-Engine Piston Aircraft Operations

Single-engine piston aircraft are expected to substantially decrease during the forecast period, principally as a result of their retirement and because the Airport is a challenging environment for this type of aircraft, with many other regional airport options available to such users. Single-engine piston aircraft comprised about 35% of total general aviation and air taxi operations in 2005, and it is projected that by 2015 this percentage share would decrease to about 3%.

Helicopter Operations

Helicopters are expected to slightly increase operations during the forecast period, principally as their main users, which include news networks and charter operators, incrementally increase service. Consistent with piston engine aircraft, it is expected that the challenging airport environment and diversion to other regional general aviation airports would limit growth in helicopter operations. Helicopters comprised about 3% of total general aviation and air taxi operations in 2005, and it is projected that by 2015 this percentage share would increase slightly to about 4%.

Non-Airline Air Carrier Jet Operations

These are very expensive jet aircraft, such as the Boeing Business Jet and the Boeing B-757, that are used for corporate aviation purposes. They are likely to remain a minor component of general aviation activity at the Airport and are projected to experience limited additional growth. Non-airline air carrier jets comprised about 1% of total general aviation and air taxi operations in 2005, and it is assumed that this percentage share would remain roughly constant through 2015.

GENERAL AVIATION/AIR TAXI FORECAST SUMMARY

Table 29 summarizes the forecasts of air taxi and general aviation operations by aircraft type. The growth rate for air taxi and general aviation operations is expected to be slightly positive from 2006 through 2015, driven by the forecast increase in operations by corporate and business aircraft—jets and turboprops. An increase in general aviation operations of 0.7% annually is projected from 2006 to 2008, and then an increase of about 1.1% annually between 2008 and 2015.

Piston aircraft are projected to continue declining in importance at the Airport. The great fall-off in operations by single-engine aircraft from 2005 to 2006 indicates the rapid decline in the importance of this class of aircraft at the Airport.

This 1.1% growth rate is higher than the FAA's TAF for the Airport (0.5%) for the period between 2004 and 2015. It is also higher than the FAA's national Aerospace Forecasts for 2005 through 2017 (-0.3%, summarized in Table 21). Reasons for the higher growth rate in this forecast include:

- Corporate/business aviation is a significant component of general aviation activity at the Airport. This is a much stronger growth market than the overall general aviation market, which includes slow or negative growth areas such as single- and multi-engine piston engine aircraft.

- Despite the decreasing importance of recreational flying and single- and multi-engine piston aircraft, the increasing importance of corporate/ business aviation is expected to generate an overall net positive growth rate for general aviation.

Table 29 also includes forecast military operations. These are quite rare at Bob Hope Airport, typically accounting for less than one operation per day in any given year. These are forecast to remain unchanged through the forecast period.

Table 29

FORECAST AIR TAXI, GENERAL AVIATION, AND MILITARY OPERATIONS BY AIRCRAFT TYPE

Bob Hope Airport

	Historical 2005	Estimated 2006	Forecast 2008	Forecast 2015
Number of annual operations				
Mainline jet	413	371	400	490
Multi-engine business jet	19,965	20,713	22,833	30,555
Very light jets	0	0	479	5,141
Multi-engine turboprop	4,144	3,960	4,363	5,311
Multi-engine piston	5,862	5,280	4,677	1,210
Single-engine	23,112	12,773	11,240	4,887
Helicopter	1,836	1,870	1,988	2,177
Military aircraft	236	330	330	330
Total	55,568	45,296	46,310	50,100
Compound annual growth rate		-6.6%	0.7%	1.1%
Percent share				
Mainline jet	0.7%	0.8%	0.9%	1.0%
Multi-engine business jet	35.9	45.7	49.3	61.0
Very light jets	0.0	0.0	1.0	10.3
Multi-engine turboprop	7.5	8.7	9.4	10.6
Multi-engine piston	10.5	11.7	10.1	2.4
Single-engine	41.6	28.2	24.3	9.8
Helicopter	3.3	4.1	4.3	4.3
Military aircraft	0.4	0.7	0.7	0.7
	100.0%	100.0%	100.0%	100.0%

Note: Totals may not add due to rounding.

Sources:
Historical: Bob Hope Airport, 2006.
Estimated: Jacobs Consultancy, November 2006, based on monthly data through September provided by Bob Hope Airport.
Forecast: Jacobs Consultancy, December 2006.

TOTAL FORECAST OPERATIONS BY AIRCRAFT CATEGORY

Table 30 summarizes the forecasts for all categories of activity discussed in the preceding sections. The results are sorted in three different ways: by FAA reporting category; by air service role; and by fleet category. In addition, average daily operations are presented for each forecast year.

Table 30

SUMMARY OF FORECAST AIRCRAFT OPERATIONS
Bob Hope Airport

	Annual			Compound annual growth rate	Daily		
	Historical	Forecast			Historical	Forecast	
	2005	2008	2015	2005 - 2015	2005	2008	2015
By FAA category							
Air carrier	65,541	71,763	81,002	2.1%	179.6	196.6	221.9
Commuter/air taxi	25,846	20,935	21,850	(1.7)	70.8	57.4	59.9
General aviation	44,007	39,950	42,840	(0.3)	120.6	109.5	117.4
Military	236	330	330	3.4	0.6	0.9	0.9
Total	135,630	132,978	146,022	0.7%	371.6	364.3	400.1
By role category							
Passenger	64,202	69,813	78,592	2.0%	175.9	191.3	215.3
Cargo	15,861	16,855	17,330	0.9	43.5	46.2	47.5
General aviation/military	55,568	46,310	50,100	(1.0)	152.2	126.9	137.3
Total	135,630	132,978	146,022	0.7%	371.6	364.3	400.1
By fleet category							
Mainline jet	52,392	57,124	62,640	1.8%	143.5	156.5	171.6
Regional jet	13,159	14,645	18,369	3.4	36.1	40.1	50.3
Commuter turboprop	7,781	9,679	11,167	3.7	21.3	26.5	30.6
Multi-engine business jet	21,732	24,739	33,291	4.4	59.5	67.8	91.2
Very light jet	0	479	5,141	40.3 *(a)*	--	1.3	14.1
Multi-engine turboprop	4,144	4,363	5,311	2.5	11.4	12.0	14.6
Multi-engine piston	5,864	8,377	2,690	(7.5)	16.1	23.0	7.4
Single-engine	28,440	11,245	4,894	(16.1)	77.9	30.8	13.4
Helicopter	1,902	2,023	2,217	1.5	5.2	5.5	6.1
Other	217	304	304	3.4	0.6	0.8	0.8
Total	135,630	132,978	146,022	0.7%	371.6	364.3	400.1

Note: Military aircraft operations at the Airport have historically been negligible. They are anticipated to remains relatively constant, near 300 operations per year, throughout the future.

(a) Compound annual growth rate for Very Light Jets is from 2008 to 2015.

Sources: Historical: Bob Hope Airport, 2006.
Forecast: Jacobs Consultancy, December 2006.

Section 6

COMPARISON WITH PREVIOUS FORECASTS

To help assess the reasonableness of these updated forecasts, previous forecasts for the Airport were reviewed. Forecasts used for this comparison include those prepared by SH&E (2002), under contract to Landrum & Brown, for Phase 1 of the Part 161 Study, the Southern California Council of Governments (SCAG), and the most recent FAA TAF (2006).

The comparison shows that the updated enplanement forecasts are in line with previous enplanement forecasts. Parts of the updated operations and time-of-day forecasts differ from the most recent set of comparable forecasts (the 2002 SH&E forecasts). The differences are accounted for by changes in air service not anticipated in the 2002 forecasts, new developments in airline fleet transition plans, and new and more detailed information provided by major general aviation operators at the Airport.

ENPLANED PASSENGERS

A summary of these forecasts is presented in Table 31. The four forecasts for the Airport are similar for 2015, ranging between about 3.40 million and 3.66 million enplaned passengers, with annual growth rates of between 2.8% and 3.2%. The updated forecasts produced for this study (Jacobs Consultancy, December 2006) are in the same range as the other forecasts, with a 2015 enplanements forecast of approximately 3.64 million and a compound annual growth rate of 2.8%.

Figure 8 also compares results of the enplanement forecasts for the Airport, summarized in Table 31.

Table 31

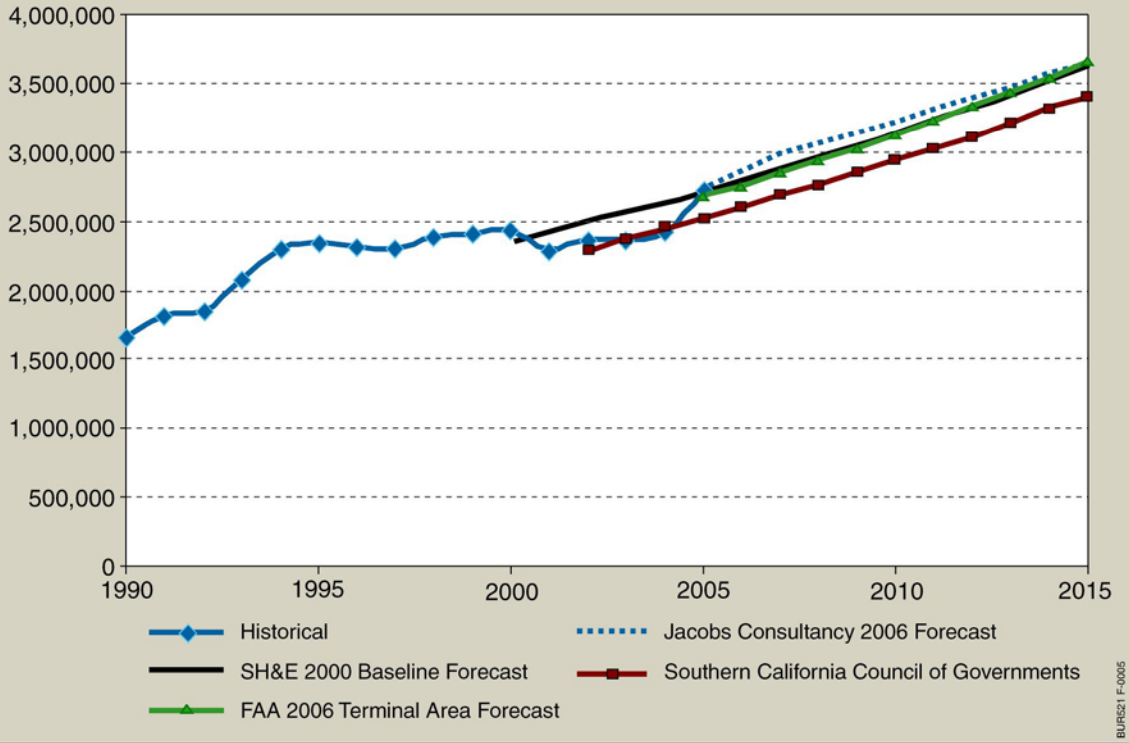
COMPARATIVE ENPLANED PASSENGER FORECASTS
Bob Hope Airport and Los Angeles Region Airports

Forecast	Base year 2000	Base year 2002	Base year 2005	Forecast 2015	CAGR Base year to 2015
Bob Hope Airport					
Jacobs Consultancy 2006 *(a)*	--	--	2,759,984	3,635,000	2.8%
Burbank share of LA Region			10.0%	10.0%	
SCAG 2004 *(b)*	--	2,300,000	--	3,404,000	3.1%
Burbank share of LA Region		6.0%		5.1%	
SH&E 2002 *(a)*	2,350,000	--	--	3,600,000	2.9%
Burbank share of LA Region	8.8%			9.2%	
FAA TAF 2006 *(b)*	--	--	2,664,056	3,656,913	3.2%
Burbank share of LA Region			6.4%	6.4%	
Los Angeles Region Airports					
Jacobs Consultancy 2006 *(a)*	--	--	27,556,040	36,320,000	2.8%
SCAG 2004 *(b)*	--	38,350,000	--	66,650,000	4.3%
SH&E 2002 *(a)*	26,850,000	--	--	39,300,000	2.6%
FAA TAF 2006 *(b)*	--	--	41,573,308	57,176,108	2.5%

CAGR = Compound annual growth rate
FAA TAF = Federal Aviation Administration Terminal Area Forecast
SCAG = Southern California Council of Governments

(a) Domestic originating only.
(b) International plus domestic.

Figure 8
HISTORICAL AND COMPARATIVE FORECAST ENPLANED PASSENGERS
Bob Hope Airport
1990-2015



AIRCRAFT OPERATIONS

The only recent forecast with a detailed fleet mix and time-of-day breakdown is the forecast prepared by SH&E in 2002. Table 32 compares the SH&E forecasts for 2015 with the updated forecast presented here.

Passenger

SH&E forecasted a substantially higher level of air carrier operations in 2015 than in this updated forecast—260 versus 215 per day. The difference is accounted for by the larger average aircraft sizes projected in the updated forecast, which is consistent with the latest aircraft acquisition plans of the major carriers serving the Airport. Thus, fewer aircraft would be required to carry a similar number of passengers over the course of a full year. SH&E projected only 12 nighttime air carrier operations, 4.6% of all air carrier operations. This compares with 16 nighttime operations (7.5%) in the updated forecast. The SH&E analysis did not foresee the onset of long-haul service by low-fare carriers. The continued intent of air carriers to develop the long-haul market from the Airport is anticipated to result in increased nighttime operations.

Table 32

COMPARISON OF AVERAGE DAILY OPERATIONS FORECASTS
Bob Hope Airport
2015

	Day		Night		Total	
	Daily operations	Percentage of total	Daily operations	Percentage of total	Daily operations	Percentage of total
SH&E						
Passenger	248	95.4%	12	4.6%	260	100.0%
Cargo	27	50.7	27	49.3	54	100.0
General aviation	193	96.3	8	3.7	201	100.0
Total	468	91.0%	46	9.0%	515	100.0%
Updated Forecast						
Passenger	199.2	92.5%	16.1	7.5%	215.3	100.0%
Cargo	23.7	50.0	23.7	50.0	47.4	100.0
General aviation	120.8	88.0	16.5	12.0	137.3	100.0
Total	343.7	85.9%	56.3	14.1%	400.0	100.0%

Sources: SH&E, June 2002.
Updated forecast: Jacobs Consultancy, December 2006.

Cargo

Both the SH&E and the updated forecasts assume that approximately 50% of cargo operations will occur at night in 2015. Both forecasts share the same basic assumptions: that daytime cargo activity by the major package carriers (FedEx and UPS) will grow at a moderate rate, while nighttime cargo activity, principally Ameriflight, will remain roughly constant.

Air Taxi and General Aviation

The SH&E forecasts show a substantially greater number of average daily operations in this category than the updated forecasts. The difference is primarily in the piston engine class of aircraft. SH&E forecasted approximately 40,000 annual piston-engine operations in 2015, compared with approximately 7,500 in the updated forecast. Recent data support the updated forecast; piston-engine operations have been decreasing dramatically at the Airport in recent years.

SH&E's forecast of air taxi/general aviation jet activity is nearly the same as the updated forecast—31,146 annual operations in 2015 compared with 32,782 annual operations in the updated forecast. The updated forecast has a higher nighttime use percentage than the SH&E forecast—12% compared with just under 4%. Much of

the difference is accounted for by the higher proportion of piston-engine aircraft in the SH&E forecast, which have very low rates of nighttime use. The updated forecast also assumes a higher proportion of nighttime use by business jets, reflecting the updated information gained from the interviews of business jet operators in 2006.

DIRECT COMPARISON TO TAF

The FAA considers airport planning forecasts consistent with the TAF if the forecasts are within 10% within in the 5-year period and within 15% within the 10-year period.*

Table 33 below shows a direct comparison of the latest TAF to this forecast. The forecasts are consistent in terms of enplanements and commercial operations. The general aviation and military operations are inconsistent. The divergence in military operations is not a concern given the small number. The large difference in general aviation operations, however, merits consideration.

The number of GA operations in 2005, according to Airport Authority data, was 80% less than the TAF operations count in that year. The forecasts show a widening divergence through 2015, where the local forecast is nearly 185% below the TAF. Two factors appear to account for the differences. First, the TAF is using as its baseline GA operations count in 2005 the "unadjusted" Tower activity counts. These include overflights through Tower airspace which do not actually land at or takeoff from Bob Hope Airport. The activity counts used for the local forecast, however, rely on only Airport takeoffs and landings. Second, the FAA's TAF is not accounting for the marked decrease in activity by light single and twin-engine aircraft at the Airport. (See Table 25, above.) This appears to be a permanent trend that is unlikely to be reversed in the near to mid-range future.

*FAA Memorandum – Revision to Guidance on Review and Approval of Aviation Forecasts, 12/23/2004.

Table 33

COMPARISON OF TAF TO BUR FORECAST
Bob Hope Airport

	BUR Forecast	TAF *(a)*	Percent Difference
Passenger Enplanements			
2005 (Base Year)	2,759,984	2,729,617	1.1%
2008	3,037,000	3,141,679	-3.5%
2015	3,635,000	3,638,329	-0.1%
Commercial Operations*			
2005 (Base Year)	91,387	95,092	-4.1%
2008	92,698	92,890	-0.2%
2015	102,852	105,858	-2.9%
GA Operations			
2005 (Base Year)	55,568	79,189	-80.0%
2008	46,310	105,846	-165.0%
2015	50,100	121,990	-184.8%
Military Operations			
2005 (Base Year)	236	460	-94.9%
2008	330	580	-75.8%
2015	330	580	-75.8%
Total Operations			
2005 (Base Year)	135,630	174,741	-28.8%
2008	132,978	199,316	-49.9%
2015	146,022	228,428	-56.4%

*Includes air carrier and commuter/air taxi categories.
Source: *(a)* December 2006 TAF, Federal Aviation Administration.

Section 7

DETAILED DERIVATIVE FORECASTS

This section discusses the detailed forecasts of operations by time-of-day and aircraft type. These detailed, derivative forecasts are required to provide the input data needed for noise modeling and for developing an understanding of the potential economic effects of the proposed nighttime curfew and the less restrictive alternatives.

CURRENT NIGHTTIME OPERATIONS

In the past, nighttime operations at the Airport have been dominated by small cargo and courier operations. Very few air carrier operations have been scheduled during the nighttime hours. Indeed, the proportion of nighttime air carrier operations has been substantially less at the Airport than at other large West Coast airports.

Summary of Nighttime Operations

Table 34 summarizes total monthly operations and nighttime operations at the Airport for 2005. Nighttime operations (between 10:00 p.m. and 6:59 a.m.) ranged from 10.9% to 14.2% of monthly operations in 2005, averaging 12.8% for the year.

Table 34

SUMMARY OF NIGHTTIME OPERATIONS
Bob Hope Airport
2005

Month	Total operations	Night hour operations	
		Number	Percent
January	9,866	1,212	12.3%
February	8,831	1,158	13.1
March	10,185	1,278	12.5
April	10,291	1,336	13.0
May	10,332	1,267	12.3
June	10,584	1,504	14.2
July	10,838	1,449	13.4
August	10,790	1,416	13.1
September	10,142	1,262	12.4
October	10,492	1,144	10.9
November	10,688	1,255	11.7
December	9,480	1,351	14.3
Total	122,519	15,632	12.8%

Note: Nighttime hours are between 10:00 p.m. to 6:59 a.m.
Source: Burbank-Glendale-Pasadena Airport Authority, Total Airport Management Information System airport noise and flight track monitoring system, 2006.

For many years, the Airport has encouraged passenger carriers to avoid scheduling nighttime flights. Carriers desiring to inaugurate service or increase operations are required to apply for Airport Authority permission before starting or increasing service. The Airport Authority must determine that the additional operations will not increase the "noise impact area," based on the 70 CNEL contour for the period ending June 20, 1978, before it can grant permission. Given the large size of the noise contour at that time, and the tremendous reductions in aircraft noise that have been achieved since 1978, a considerable amount of new air service could be accommodated without violating this condition. Nevertheless, the process of reviewing and approving airline applications to provide additional service gives the Airport Authority and the public an opportunity to request that the applicant airlines avoid scheduling flights during the nighttime hours. This appears to have been effective given the low proportion of nighttime operations at the Airport relative to other West Coast airports.

Table 35 summarizes average daily scheduled passenger flights at other West Coast airports. It also shows the average number of scheduled nighttime flights. Bob Hope Airport has the lowest percentage of night operations of the airports listed, likely reflecting the effectiveness of the voluntary nighttime "curfew." The low percentage is also accounted for by the Airport's role providing principally short-haul service, with relatively undeveloped long-haul service. It is reasonable to expect that the percentage of nighttime operations at the Airport will increase in the future in response to growing passenger demand and airline service development.

Projected Daily Total Aircraft Operations by Time Period

While the proportion of cargo, air taxi, and general aviation operations during the nighttime hours are not projected to increase substantially in the future, the proportion of nighttime air carrier operations are expected to increase. This is expected to be caused primarily by an increased number of evening arrivals delayed into the nighttime period. Some of the increase will be caused by the delay of scheduled evening departures until after 10:00 p.m. This phenomenon is already occurring at the Airport. Currently, no air carrier flights are scheduled during the voluntary curfew hours after 10:00 p.m. and before 7:00 a.m. Nevertheless, an average of approximately 4.5 air carrier operations per day occurred during those hours in 2005, according to the Airport's TAMIS data. This is shown in Table 36.* As passenger service demand grows, at least some scheduled flights will be added in evening hours. This is a high demand period for many passengers. As the scheduling of additional flights during this period increases, the potential for more delays into the nighttime hours will increase. As indicated in Table 36, however, the number of nighttime passenger operations is expected to remain well below the number of nighttime cargo, air taxi, and general aviation operations.

*Approximately 70% of the nighttime operations are arrivals. See data for "commercial jet" and "regional commuter" in Table B-3 in Appendix B of the Part 161 Application for greater detail.

Table 35

COMPARISON OF NIGHT OPERATIONS AT WEST COAST AIRPORTS
2005

	Departures			Arrivals			Total		
	Average Daily Night	Average Daily Day	Night %	Average Daily Night	Average Daily Day	Night %	Average Daily Night	Average Daily Day	Night %
LA Region Airports									
Bob Hope	4	84	4%	--	88	0%	4	172	2%
Los Angeles International	134	659	17	87	708	11	221	1,367	14
LA/Ontario	17	91	16	17	91	15	33	183	15
John Wayne (Orange County)	11	130	8	9	132	6	20	262	7
Long Beach	4	32	11	--	36	0	4	68	5
Bay Area Airports									
San Francisco	72	345	17	38	379	9	110	724	13
Oakland	25	180	12	25	180	12	50	360	12
San Jose	18	158	10	13	163	7	30	321	9
Other West Coast Airports									
Seattle-Tacoma	64	380	14	60	384	13	124	764	14
Portland	35	218	14	35	218	14	70	436	14
San Diego	30	230	12	25	235	9	55	465	11
Sacramento	23	126	16	19	130	13	42	255	14

Note: "Night" is defined as 10:00 p.m. to 7:00 a.m. Includes international and domestic scheduled passenger flights.

Source: *Official Airline Guide*, online database, October 2006.

Table 36 summarizes average daily aircraft operations by time period (day and night) and aircraft category (passenger, cargo, and air taxi and general aviation). Total daily operations are forecast to increase from 371.6 in 2005 to 400.1 in 2015, while night operations are forecast to increase from 45.1 in 2005 to 56.4 in 2015. As summarized in Table 30 on page 58, passenger and cargo aircraft operations are forecast to increase, and air taxi and general aviation operations are forecast to decrease between 2005 and 2015. The night percentage of each operations category between 2005 and 2015 is discussed in the following sections.

Passenger. Despite the past effectiveness of the voluntary nighttime "curfew" on air carrier operations, the percentage of night passenger operations is expected to increase from 2.5% to 7.5% of total daily passenger aircraft operations, representing an increase from 4.5 to 16.1 nightly operations from 2005 to 2015. The following factors are expected to cause the increase.

Additional late evening or "red eye" departures to long-haul destinations, such as Boston, New York, Washington D.C., will be scheduled. This has historically occurred at the Airport as jetBlue has provided long-haul low-fare service to New York and Orlando, and could be expected to add other major East Coast destinations, particularly to its other East Coast hub, Washington Dulles International Airport. Evening "red-eye" departures to East Coast destinations, which arrive in the early morning, have proven popular with passengers, and certain airlines, such as jetBlue, are expected to continue to develop this sort of service. Also, while Southwest Airlines does not currently provide long-haul service at the Airport, it has done so at other airports, and could be expected to provide long-haul service in the future as part of its service development. Chicago may be a potentially attractive destination for Southwest given its major presence at Midway Airport and given the popularity of Chicago as a destination for Los Angeles Region passengers. Additionally, other network carriers, as discussed earlier, could be expected to add service to major East Coast destinations and hubs.

It is possible that early morning or late night departures may be scheduled as service at the Airport is expanded to include new destinations and accommodate increasing demand, although carriers may continue to avoid scheduling flights during the voluntary curfew period. As the Airport provides "shuttle" service to short-haul destinations on the West Coast, there is expected to be growth in operations early and late in the day to meet the needs of business customers desiring to maximize their useable hours at their destinations while avoiding the need for overnight stays.

Table 36

HISTORICAL AND FORECAST AVERAGE SCHEDULED DAILY OPERATIONS—DAY AND NIGHT

Bob Hope Airport

	Day		Night		Total	
	Daily operations	Percentage of total	Daily operations	Percentage of total	Daily operations	Percentage of total
2005						
Passenger	171.4	97.5%	4.5	2.5%	175.9	100.0%
Cargo	20.9	48.1	22.5	51.9	43.5	100.0
Air taxi/general aviation	134.2	88.1	18.1	11.9	152.2	100.0
Total	326.5	87.9%	45.1	12.1%	371.6	100.0%
2008						
Passenger	181.7	95.0%	9.6	5.0%	191.3	100.0%
Cargo	23.1	50.0	23.1	50.0	46.2	100.0
Air taxi/general aviation	111.7	88.0	15.2	12.0	126.9	100.0
Total	316.4	86.9%	47.9	13.1%	364.3	100.0%
2015						
Passenger	199.2	92.5%	16.1	7.5%	215.3	100.0%
Cargo	23.7	50.0	23.7	50.0	47.5	100.0
Air taxi/general aviation	120.8	88.0	16.5	12.0	137.3	100.0
Total	343.7	85.9%	56.4	14.1%	400.1	100.0%

Note: "Night" is defined as 10:00 p.m. to 7:00 a.m.
Sources: Historical: Burbank Airport, Total Airport Management Information System and Jacobs Consultancy.
Forecast: Jacobs Consultancy, December 2006.

Additional arrivals after 10:00 p.m. are likely as more flights are scheduled to arrive in the late evening. The Airport's West Coast location, in a time zone 3 hours behind that of East Coast airports, means that late evening arrivals inevitably will be scheduled. For example, an aircraft departing an East Coast airport at noon with a 6-hour journey time will arrive in California at 9:00 p.m. Late arrivals may become more frequent as traffic in the system continues to grow, potentially increasing the risk of traffic-based schedule delays. Schedule delays at any point in an airline's system cascade through the rest of the system for the rest of the day. Airports at the end of the line, including many West Coast airports, experience the net effect of those system delays. In recent years, an increasing number of arrivals have been scheduled at the Airport after 9:00 p.m. Those scheduled to arrive after 9:30 p.m. are especially vulnerable to arrive after 10:00 p.m. because of delays.

Cargo. The percentage of night cargo operations is assumed to decrease slightly from 51.9%% to 50.0% of total daily cargo operations between 2005 and

2015, although the number of operations will increase slightly from 22.5 to 23.7 per night. It is expected that the decrease would be within the regional/commuter component, which is estimated to decrease from 2005 to 2006. Much of these regional/commuter operations would be by Ameriflight, which will be discontinuing its nightly check service operations in the near future. Air carrier cargo operations, which are not conducted at night, are not expected to materially change their operational timings. Their departure schedules are dictated by the need to arrive at their hubs in time for the nightly sort, which requires that they leave the Airport in the evening.

Air Taxi and General Aviation. There is significant variance in the percentage of night operations among the different categories of air taxi and general aviation operators. For example, corporate and air taxi operators have a higher percentage of night operations than recreational users. These varied daily operational patterns are expected to remain essentially unchanged through the forecast period. The varied nighttime use percentages for different air taxi and general aviation operators were projected into the future and applied to the forecast of average daily operations. Average daily air taxi and general aviation operations are forecasted to decrease from 152.2 to 137.3 from 2005 to 2015. The number of nightly operations is projected to decrease slightly from about 18.1 in 2005 to about 16.5 in 2015. The overall percentage of night air taxi and general aviation operations is expected to remain roughly constant at about 12.0% of the total between 2005 and 2015.

Military. For the purposes of this analysis, it is assumed that the relatively small number of military operations in the forecast period occur during daytime hours.

AVERAGE HOURLY OPERATIONS

Table 37 and Figure 9 summarize average daily operations by hour in 2005. The information was based on actual operations data recorded by the Airport's Total Airport Management Information System (TAMIS) noise and flight track monitoring system. There is an even and fairly constant distribution of between 17 and 25 hourly aircraft operations between 7:00 a.m. and 9:59 p.m. Hourly operations drop substantially after 10:00 p.m. to a low of 1.7 in the 4:00 a.m., increasing to 8.6 at 6:00 a.m. This activity reflects a typical pattern of use at a non-hub commercial service airport, but it is also influenced by the current nighttime use restrictions and voluntary air carrier "curfew" at the Airport. Given its location on the west coast, it is likely that at least some airlines would be scheduling more departures in the 06:00 hour to make connections at hubs, especially if they were serving locations in the Mountain or Central time zones. Conversely, more arrivals would be expected from 10:00 a.m. to noon from eastern points of origin.

A total of 54.6 operations occurred during the evening hours (between 7:00 p.m. and 9:59 p.m.) and 45.1 during the nighttime hours (from 10:00 p.m. through 6:59 a.m.). (In the computation of the CNEL cumulative noise metric, operations during the

"evening" are assigned an extra weight of 4.8 decibels, and "nighttime" operations are assigned an extra weight of 10 decibels.)

Table 37

BASE YEAR OPERATIONS BY HOUR
Bob Hope Airport
2005

Hour	Average daily operations	% of Day
Midnight	5.4	1.4%
1:00 a.m.	3.6	1.0
2:00 a.m.	5.0	1.4
3:00 a.m.	4.0	1.1
4:00 a.m.	1.7	0.5
5:00 a.m.	4.5	1.2
6:00 a.m.	8.6	2.3
7:00 a.m.	20.0	5.4
8:00 a.m.	20.1	5.4
9:00 a.m.	24.0	6.5
10:00 a.m.	21.8	5.9
11:00 a.m.	24.2	6.5
Noon	23.5	6.3
1:00 p.m.	22.9	6.2
2:00 p.m.	24.3	6.5
3:00 p.m.	24.0	6.5
4:00 p.m.	24.7	6.6
5:00 p.m.	22.7	6.1
6:00 p.m.	19.9	5.4
7:00 p.m.	19.7	5.3
8:00 p.m.	16.8	4.5
9:00 p.m.	18.0	4.9
10:00 p.m.	7.1	1.9
11:00 p.m.	5.1	1.4
Total	371.6	100.0%

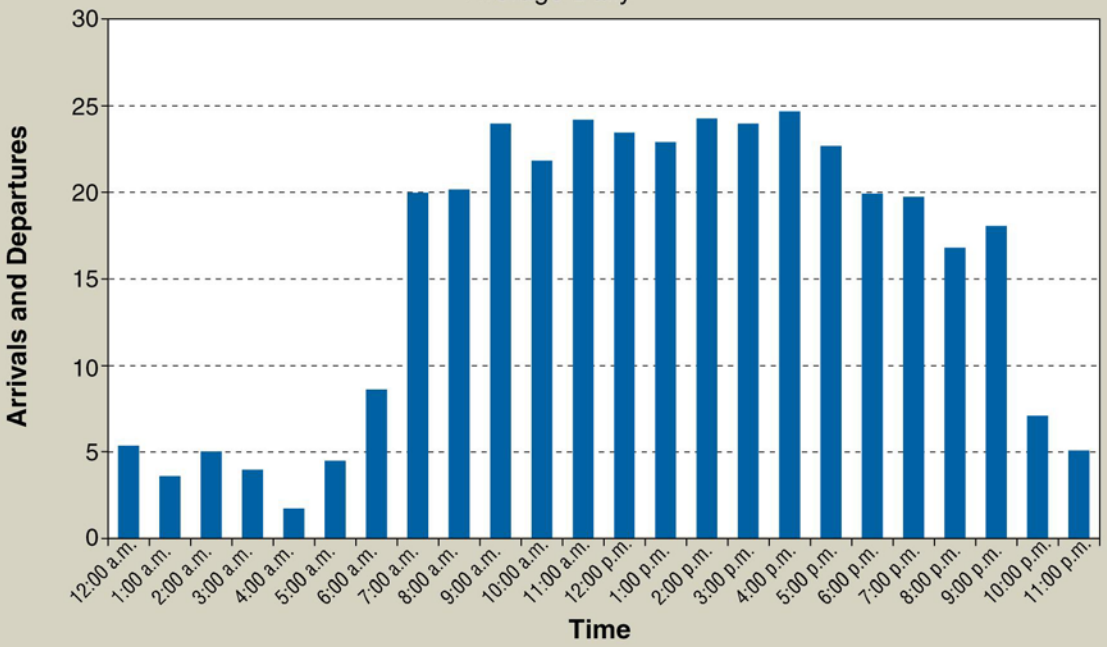
Sources:
Historical: Bob Hope Airport, 2006.

Figure 9

2005 OPERATIONS BY HOUR

Bob Hope Airport

Average Daily



Source: Bob Hope Airport, Total Airport Management Information System data and Jacobs Consultancy, November 2006.

Table 38 breaks down average hourly operations in 2005 by type of operation (passenger, cargo, and air taxi and general aviation). The breakdown shows that cargo operations account for nearly half of all nighttime operations. Only 4.5 average daily air carrier operations occur during the nighttime hours. Approximately 18 air taxi and general aviation operations occur during nighttime hours, with virtually no military operations occurring at night.

Table 38

HISTORICAL HOURLY AIRCRAFT OPERATIONS
Bob Hope Airport
Average Day in 2005

Hour starting	Operations category			Total
	Passenger	Air cargo	Other	
Midnight	0.2	3.4	1.8	5.4
1:00 a.m.	0.1	1.6	2.0	3.6
2:00 a.m.	0.0	3.4	1.6	5.0
3:00 a.m.	0.0	3.5	0.5	4.0
4:00 a.m.	0.0	0.7	1.1	1.7
5:00 a.m.	0.0	2.8	1.7	4.5
6:00 a.m.	1.2	3.4	4.1	8.6
7:00 a.m.	12.1	1.9	5.9	20.0
8:00 a.m.	11.8	0.5	7.8	20.1
9:00 a.m.	12.8	0.8	10.4	24.0
10:00 a.m.	10.1	1.0	10.7	21.8
11:00 a.m.	12.2	0.9	11.1	24.2
Noon	12.5	0.6	10.4	23.5
1:00 p.m.	11.6	0.6	10.6	22.9
2:00 p.m.	12.1	0.7	11.5	24.3
3:00 p.m.	11.3	1.3	11.5	24.0
4:00 p.m.	11.7	1.4	11.6	24.7
5:00 p.m.	11.0	1.3	10.4	22.7
6:00 p.m.	9.8	2.6	7.4	19.9
7:00 p.m.	9.9	3.5	6.3	19.7
8:00 p.m.	10.1	1.6	5.0	16.8
9:00 p.m.	12.1	2.4	3.5	18.0
10:00 p.m.	2.5	1.8	2.8	7.1
11:00 p.m.	0.5	2.1	2.5	5.1
	175.9	43.5	152.2	371.6
Night total	4.5	22.5	18.1	45.1
Night percentage	2.5%	51.9%	11.9%	12.1%

Source: Bob Hope Airport, 2006, Total Airport Management Information System data.

Table 39 summarizes forecast average daily operations by hour in 2008. These projections were developed with reference to the data recorded by the Airport's TAMIS system in 2005 and year-to-date 2006 and by considering the character of the passenger, air cargo, air taxi, and general aviation service at the Airport. The overall percentage of nighttime operations in 2008, at 13.1%, is expected to be one point higher than in 2005, which is accounted for by the projected increase in average nighttime air carrier operations from 4.5 in 2005 to 9.6 in 2008. Most of this increase is

projected between 6:00 a.m. and 10:00 p.m., where the pressures to meet the needs of business travelers while allowing connections to and from hub airports are expected to be greatest.

Table 39

FORECAST HOURLY AIRCRAFT OPERATIONS
Bob Hope Airport
Average day in 2008

Hour starting	Operations category			Total
	Passenger	Air cargo	Other	
Midnight	0.6	3.6	1.6	5.8
1:00 a.m.	0.1	1.8	1.6	3.4
2:00 a.m.	0.0	3.4	1.3	4.8
3:00 a.m.	0.0	3.7	0.4	4.1
4:00 a.m.	0.0	0.7	0.7	1.4
5:00 a.m.	0.0	3.3	1.3	4.6
6:00 a.m.	3.2	2.7	3.5	9.4
7:00 a.m.	12.5	2.2	5.4	20.1
8:00 a.m.	11.1	0.5	6.9	18.5
9:00 a.m.	13.1	0.8	8.8	22.7
10:00 a.m.	10.7	1.0	8.8	20.5
11:00 a.m.	12.6	0.9	8.9	22.4
Noon	12.7	0.6	8.4	21.7
1:00 p.m.	12.3	0.6	8.7	21.6
2:00 p.m.	12.9	0.7	9.3	22.8
3:00 p.m.	11.7	1.2	9.3	22.2
4:00 p.m.	14.0	1.8	9.4	25.3
5:00 p.m.	12.9	1.1	8.4	22.4
6:00 p.m.	11.0	3.7	6.3	21.0
7:00 p.m.	11.3	3.6	5.3	20.3
8:00 p.m.	10.2	1.8	4.6	16.5
9:00 p.m.	12.7	2.5	3.2	18.4
10:00 p.m.	4.7	1.7	2.6	9.0
11:00 p.m.	0.9	2.2	2.3	5.4
	191.3	46.2	126.9	364.3
Night total	9.6	23.1	15.2	47.9
Night percentage	5.0%	50.0%	12.0%	13.1%

Source: Jacobs Consultancy, December 2006.

Table 40 shows projected hourly operations in the year 2015. The percentage of nighttime operations is forecast to increase by one point from 2008 to 14.1%. Here again, the increase is accounted for by the projected increase in nighttime air carrier operations. The increase is anticipated between 6:00 a.m. and 10:00 p.m.

Table 40

FORECAST HOURLY AIRCRAFT OPERATIONS
Bob Hope Airport
Average day in 2015

Hour starting	Operations category			
	Passenger	Air cargo	Other	Total
Midnight	1.6	3.9	1.9	7.4
1:00 a.m.	0.1	1.9	1.5	3.5
2:00 a.m.	0.0	3.8	1.3	5.1
3:00 a.m.	0.0	4.2	0.4	4.6
4:00 a.m.	0.0	0.7	0.6	1.3
5:00 a.m.	0.0	3.5	1.2	4.6
6:00 a.m.	6.2	1.9	3.9	12.0
7:00 a.m.	12.9	2.5	6.2	21.7
8:00 a.m.	12.9	0.6	7.6	21.1
9:00 a.m.	12.5	0.8	9.3	22.6
10:00 a.m.	11.0	0.9	9.4	21.3
11:00 a.m.	12.5	0.9	9.3	22.7
Noon	11.2	0.5	9.0	20.7
1:00 p.m.	15.5	0.4	9.3	25.3
2:00 p.m.	16.5	0.5	9.9	27.0
3:00 p.m.	12.7	1.0	9.9	23.6
4:00 p.m.	17.0	2.1	10.1	29.2
5:00 p.m.	16.2	1.3	8.9	26.4
6:00 p.m.	12.3	4.5	7.0	23.8
7:00 p.m.	13.7	3.9	5.9	23.5
8:00 p.m.	9.6	1.5	5.3	16.4
9:00 p.m.	12.6	2.2	3.6	18.5
10:00 p.m.	6.8	1.6	3.0	11.4
11:00 p.m.	1.4	2.3	2.7	6.4
	215.3	47.5	137.3	400.1
Night total	16.1	23.7	16.5	56.4
Night percentage	7.5%	50.0%	12.0%	14.1%

Source: Jacobs Consultancy, December 2006.

AVERAGE DAILY OPERATIONS BY AIRCRAFT TYPE

Tables 41 through 43 summarize average daily operations by aircraft type for passenger carriers, all-cargo carriers, and air taxi and general aviation operators (including a limited number of military operations).

Table 41 shows passenger operations by aircraft type for 2005, 2008, and 2015. In addition to the straightforward assumption that older aircraft gradually will be replaced by newer aircraft throughout the period, it is also assumed that the average seating capacity of the passenger fleet will increase over time. This is because the aircraft models that most of the airlines are choosing as replacements for aircraft now serving the Airport tend to have somewhat greater seating capacities. The aircraft with the largest share of the passenger air carrier fleet is the Boeing 737-300 operated by Southwest Airlines. This aircraft is projected to decrease from about 35.9% of the air carrier fleet in 2008 to about 15.0% in 2015. It is expected to be replaced by the Boeing 737-700, which will increase from about a 22.3% share in 2008 to an estimated 29.9% in 2015. Southwest Airlines currently has 67 firm orders, 33 options, and 217 purchase rights for Boeing 737-700 aircraft between 2006 and 2012, according to the Airline's 2005 Annual Report. By 2008, newer 737-800 and 900 models are also expected to be serving the Airport and are forecast to have a combined share of the passenger air carrier fleet of 10.8% in 2015. Between 2008 and 2015, the Boeing 737-900ER is expected to begin serving long-haul domestic destinations from the Airport. By 2015, that aircraft will account for about 3.0% of the passenger air carrier fleet

Between 2005 and 2015, it is expected that the older 50-seat CRJ-200 model regional jets will be gradually replaced by the newer CRJ-700 (70-seat) and 900 (90-seat) models. The combined share of all three CRJ models is forecast to increase from about 20.5% in 2005 to about 23.4% of all passenger operations in 2015. The older MD 80, MD 82, and MD 83 aircraft will be phased out of the passenger fleet at the Airport, decreasing from a combined fleet share of about 7.7% in 2005 to about 2.2% in 2008 and phasing out entirely by 2015.

Table 41

PASSENGER OPERATIONS BY AIRCRAFT MODEL OR TYPE
Bob Hope Airport
Average daily

Fleet	2005	2008	2015
A300-600	0.0	0.0	0.0
A310/300	0.0	0.0	0.0
B-737-900ER	0.0	0.0	6.4
B-757-200	1.8	0.0	0.0
A320	8.6	15.3	22.4
A319	2.0	3.8	6.4
B-737-200	0.0	0.0	0.0
B-737-300	69.8	68.8	32.2
B-737-400	0.8	1.0	1.1
B-737-500	4.4	7.6	8.6
B-737-700	38.3	42.6	64.3
B-737-800	0.1	3.8	13.5
B-737-900	0.0	3.8	9.7
B-727	0.0	0.0	0.0
MD80	0.4	0.0	0.0
MD82	7.0	1.3	0.0
MD83	6.1	2.9	0.0
CRJ-200	18.6	19.1	10.7
CRJ-700	13.0	15.3	21.5
CRJ-900	4.5	5.7	18.1
ERJ-135	0.0	0.0	0.0
Multi- engine business jet	0.0	0.0	0.0
Very light jets	0.0	0.0	0.0
Multi-engine turboprop	0.3	0.2	0.2
Multi-engine piston	0.0	0.0	0.0
Single-engine turboprop	0.0	0.0	0.0
Single-engine piston	0.0	0.0	0.0
Helicopter	0.2	0.1	0.1
Military Aircraft	0.0	0.0	0.0
Total	175.9	191.3	215.3

Sources: 2005: Bob Hope Airport, Total Airport Management Information System data, 2006.
2008 and 2015: Jacobs Consultancy, December 2006.

Table 42 shows the forecast air cargo fleet at the Airport in 2005 and forecast for 2008 and 2015. The Airbus A300-600, operated by both FedEx and UPS, represented about 9% of the cargo carrier fleet in 2005 and is assumed to decrease to about a 6.5% share in 2015, with replacement by Airbus A310 aircraft. Multi-engine business jets are forecast to increase from about an 8.5% share of the cargo fleet in 2005 to about a 12.8% share in 2015. Although it is understood that Ameriflight expect to phase out these business jets in the short-term, it is expected that in the longer-term (2008 and 2015), this type of aircraft would continue to constitute a moderate share of the fleet (whether operated by Ameriflight or another operator), with multi-engine turboprops accounting for the majority of the fleet. The multi-engine turboprop aircraft, also principally operated by Ameriflight, are assumed to gradually increase in share of the cargo fleet from about 48.5% in 2005 to about 64% throughout the forecast period. In 2006, Ameriflight replaced most of its single-engine piston aircraft with multi-engine piston aircraft. It is assumed that by 2008 Ameriflight will have completely replaced all single-engine piston aircraft with multi-engine piston and that multi-engine piston aircraft will constitute about 21.9% of the cargo fleet, reducing to about 8.6% by 2015. Ameriflight replaced nearly all their single-engine piston aircraft with multi-engine piston aircraft starting in 2006.

Table 43 shows average daily operations by aircraft type for the air taxi, general aviation, and military category. The multi-engine business jet and the single-engine piston aircraft make up the largest shares of this fleet in 2005, about 35.9% and 36.3%, respectively. Over the forecast years, the multi-engine business jets are expected to increase their share of the fleet to about 61.0% in 2015, while the single-engine piston aircraft are expected to decrease to about 2.6% over that same period. It is expected that VLJs will enter the fleet in small numbers by 2008 and that by 2015, the VLJs will replace some of the multi-engine piston aircraft and make up about 10.3% of the fleet. It is also assumed that the multi-engine turboprop aircraft will gradually replace some of the multi-engine piston aircraft, increasing from 7.5% to 10.6% from 2005 to 2015, while the share of multi-engine piston aircraft will decrease from about 10.5% to 2.4%.

Table 42

CARGO OPERATIONS BY AIRCRAFT MODEL OR TYPE
Bob Hope Airport
Average daily

Fleet	2005	2008	2015
A300-600	3.9	2.6	3.1
A310/300	0.0	2.9	3.8
B-737-900ER	0.0	0.0	0.0
B-757-200	0.1	0.1	0.0
A320	0.0	0.0	0.0
A319	0.0	0.0	0.0
B-737-200	0.0	0.0	0.0
B-737-300	0.0	0.0	0.0
B-737-400	0.0	0.0	0.0
B-737-500	0.0	0.0	0.0
B-737-700	0.0	0.0	0.0
B-737-800	0.0	0.0	0.0
B-737-900	0.0	0.0	0.0
B-727	0.1	0.0	0.0
MD80	0.0	0.0	0.0
MD82	0.0	0.0	0.0
MD83	0.0	0.0	0.0
CRJ-200	0.0	0.0	0.0
CRJ-700	0.0	0.0	0.0
CRJ-900	0.0	0.0	0.0
ERJ-135	0.0	0.0	0.0
Multi-engine business jet	3.7	4.1	6.1
Very light jets	0.0	0.0	0.0
Multi-engine turboprop	21.1	26.4	30.4
Multi-engine piston	0.0	10.1	4.1
Single-engine turboprop	0.0	0.0	0.0
Single-engine piston	14.6	0.0	0.0
Helicopter	0.0	0.0	0.0
Military aircraft	0.0	0.0	0.0
Total	43.5	46.2	47.5

Sources: 2005: Bob Hope Airport, Total Airport Management Information System data, 2006.
2008 and 2015: Jacobs Consultancy, December 2006.

Table 43

AIR TAXI, GENERAL AVIATION, AND MILITARY OPERATIONS BY AIRCRAFT MODEL OR TYPE

Bob Hope Airport
Average Daily

Fleet	2005	2008	2015
A300-600	0.0	0.0	0.0
A310/300	0.0	0.0	0.0
B-737-900ER	0.0	0.0	0.0
B-757-200	0.4	0.4	0.5
A320	0.0	0.0	0.0
A319	0.0	0.0	0.0
B-737-200	0.0	0.0	0.0
B-737-300	0.0	0.0	0.0
B-737-400	0.0	0.0	0.0
B-737-500	0.0	0.0	0.0
B-737-700	0.3	0.3	0.3
B-737-800	0.0	0.0	0.0
B-737-900	0.0	0.0	0.0
B-727	0.0	0.0	0.0
MD80	0.0	0.0	0.0
MD82	0.0	0.0	0.0
MD83	0.1	0.1	0.1
CRJ-200	0.0	0.0	0.0
CRJ-700	0.0	0.0	0.0
CRJ-900	0.0	0.0	0.0
ERJ-135	0.2	0.2	0.3
Multi- engine business jet	54.7	62.6	83.7
Very light jets	0.0	1.3	14.1
Multi-engine turboprop	11.4	12.0	14.6
Multi-engine piston	16.1	12.8	3.3
Single-engine turboprop	8.0	8.5	9.9
Single-engine piston	55.3	22.3	3.5
Helicopter	5.0	5.4	6.0
Military aircraft	0.6	0.9	0.9
Total	152.2	126.9	137.3

Sources: 2005: Bob Hope Airport, Total Airport Management Information System data, 2006.
2008 and 2015: Jacobs Consultancy, December 2006.

HOURLY OPERATIONS BY AIRCRAFT TYPE

Tables 44 through 52 present the number of hourly operations at night (and two hours either side of the nighttime hours) by aircraft type for the different categories of operators – passenger, cargo, and general aviation/air taxi.

Passenger

Nighttime passenger operations are forecast to increase from an average of 4.5 per day in 2005 to 9.6 in 2008 and to 16.1 in 2015. Passenger operations between 6:00 a.m. and 6:59 a.m. are forecast to increase from about 2.5 per day in 2005 to 6.8 in 2015. These early morning operations are the day's first rush of departing flights, reflecting the expected increased demand on passenger airlines to provide early morning service at the Airport as the regional economy expands.

Passenger operations between 10:00 p.m. and 10:59 p.m. are forecast to increase from about 1.2 per day in 2005 to 6.2 in 2015. The late night operations are a mix of both arrivals and "red-eye" departures. Many are projected to be arrivals scheduled before 10:00 p.m. that fall behind schedule and actually arrive after 10:00 p.m. It is expected that airlines will schedule an increasing number of arrivals at night, on either side of the 10:00 p.m., depending on how effective the Airport is in inducing their cooperation with the voluntary "curfew." Even if more arrivals are scheduled in the hour before 10:00 p.m., many of these will actually arrive after 10:00 p.m. because of delays. The risk of late arrivals will increase as the airlines schedule more arrivals between 9:00 p.m. and 10:00 p.m. This has been an increasingly popular flight arrival time. According to the *Official Airlines Guide* Schedules Database, the number of passenger flights scheduled to arrive at the Airport between 9:30 p.m. and 9:59 p.m. has increased at an annual average of 21% per year from 2000 to 2006. As more flights are scheduled to arrive in that 30-minute slot, it is expected that more flights will be delayed, resulting in more arrivals after 10:00 p.m.

Cargo

Nighttime cargo operations, principally operated by Ameriflight, are forecast to increase slightly from an average of about 22.5 per night in 2005 to 23.1 in 2008 and 23.7 in 2015. As discussed earlier, Ameriflight does not anticipate any significant growth at the Airport. Nighttime cargo operations are distributed roughly evenly through the night with three moderate peaks between midnight and 1:00 a.m., between 2:00 a.m. and 3:00 a.m., and between 5:00 a.m. and 6:00 a.m. The distribution of nighttime operations is expected to remain consistent throughout the forecast period.

Air Taxi and General Aviation

Nighttime air taxi and general aviation operations are forecast to decrease from 18.1 to 15.2 nightly operations between 2005 and 2008 and then increase to 16.5 nightly operations between 2008 and 2015. In 2005, slightly over half of the nighttime air taxi and general aviation operations occurred during the four hours between 10:00 p.m. and 1:59 a.m. Nearly a quarter of the nighttime operations occurred between 6:00 and 6:59 a.m. The remaining operations were spread over the remaining four nighttime hours, between 2:00 a.m. and 5:59 a.m. This distribution is expected to remain consistent throughout the forecast period.

Table 44

NIGHT PASSENGER OPERATIONS BY AIRCRAFT MODEL

Bob Hope Airport
Average day in 2005

Time starting	Time category	B-737-900ER	B-757-200	A320	A319	B-737-300	B-737-400	B-737-500	B-737-700	B-737-800	B-737-900	MD80	MD82	MD83	CRJ-200	CRJ-700	CRJ-900	ERJ-135	Non-air carrier	Total
8:00 p.m.	Evening	0.0	0.4	0.4	0.1	5.6	0.1	0.1	1.6	0.0	0.0	0.0	0.3	0.3	1.0	0.1	0.0	0.0	0.0	10.1
9:00 p.m.	Evening	0.0	0.3	1.1	0.5	4.9	0.1	0.5	1.9	0.0	0.0	0.0	0.7	0.6	1.1	0.4	0.0	0.0	0.0	12.1
10:00 p.m.	Night	0.0	0.1	0.2	0.1	0.9	0.1	0.1	0.4	0.0	0.0	0.0	0.2	0.3	0.1	0.2	0.0	0.0	0.0	2.5
11:00 p.m.	Night	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.5
12:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
1:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 a.m.	Night	0.0	0.0	0.2	0.4	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	1.2
7:00 a.m.	Day	0.0	0.0	1.0	0.2	4.4	0.1	0.2	3.6	0.0	0.0	0.0	0.8	0.5	0.8	0.4	0.0	0.0	0.0	12.1
8:00 a.m.	Day	0.0	0.9	0.2	0.3	3.4	0.0	0.4	3.5	0.0	0.0	0.0	0.9	0.5	0.6	0.8	0.4	0.0	0.0	11.8
Night hours total		0.0	0.1	0.4	0.4	1.3	0.1	0.1	0.5	0.0	0.0	0.0	0.2	0.4	0.3	0.5	0.0	0.0	0.0	4.5

Note: Night hours are between 10:00 p.m. and 6:59 a.m.
Source: Bob Hope Airport, 2006.

Table 45

NIGHT CARGO OPERATIONS BY AIRCRAFT TYPE
Bob Hope Airport
Average day in 2005

Time starting	Time category	A300-600	A310/300	B-757-200	Multi-engine business jet	Multi-engine turboprop	Multi-engine piston	Single-engine turboprop	Single-engine piston	Total
8:00 p.m.	Evening	0.0	0.0	0.0	0.0	0.4	--	--	1.2	1.6
9:00 p.m.	Evening	0.0	0.0	0.0	0.4	0.3	--	--	1.8	2.4
10:00 p.m.	Night	--	--	0.0	0.2	0.9	--	--	0.6	1.8
11:00 p.m.	Night	--	--	0.0	0.0	1.8	--	--	0.2	2.0
12:00 a.m.	Night	--	--	--	0.5	2.6	--	--	0.3	3.4
1:00 a.m.	Night	--	--	--	--	1.5	--	--	0.1	1.6
2:00 a.m.	Night	--	--	--	1.1	1.7	0.0	--	0.6	3.4
3:00 a.m.	Night	--	--	--	1.0	2.3	--	--	0.2	3.5
4:00 a.m.	Night	0.0	--	--	0.0	0.6	--	--	0.0	0.7
5:00 a.m.	Night	0.5	0.0	--	--	1.9	--	--	0.4	2.7
6:00 a.m.	Night	0.1	0.0	--	0.0	0.8	--	--	2.4	3.3
7:00 a.m.	Day	0.5	0.0	--	0.3	0.2	--	--	0.9	1.9
8:00 a.m.	Day	0.0	--	--	0.0	0.3	--	--	0.2	0.5
Night hours total		0.6	0.0	0.0	2.8	14.1	0.0	--	4.9	22.5

Note: Night hours are between 10:00 p.m. and 6:59 a.m.

Source: Bob Hope Airport, 2006.

Table 46

NIGHT AIR TAXI AND GENERAL AVIATION OPERATIONS BY AIRCRAFT TYPE
Bob Hope Airport
Average day in 2005

Time starting	Time category	Multi-engine business jet	Very light jet	Multi-engine turboprop	Multi-engine piston	Single-engine turboprop	Single-engine piston	Helicopter	Air carrier	Military aircraft	Total
8:00 p.m.	Evening	2.2	0.0	0.9	0.2	0.2	1.4	0.2	0.0	0.0	5.1
9:00 p.m.	Evening	1.6	0.0	0.4	0.2	0.1	1.0	0.3	0.0	0.0	3.7
10:00 p.m.	Night	1.5	0.0	0.2	0.1	0.1	0.5	0.4	0.0	0.0	2.9
11:00 p.m.	Night	1.2	0.0	0.4	0.2	0.1	0.4	0.2	0.0	0.0	2.6
12:00 a.m.	Night	0.9	0.0	0.1	0.1	0.0	0.3	0.3	0.0	0.0	1.8
1:00 a.m.	Night	0.6	0.0	0.0	0.7	0.0	0.4	0.2	0.0	0.0	2.0
2:00 a.m.	Night	0.4	0.0	0.0	1.0	0.0	0.1	0.0	0.0	0.0	1.6
3:00 a.m.	Night	0.3	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.6
4:00 a.m.	Night	0.2	0.0	0.0	0.3	0.0	0.5	0.0	0.0	0.0	1.1
5:00 a.m.	Night	0.4	0.0	0.1	0.5	0.0	0.6	0.0	0.0	0.0	1.7
6:00 a.m.	Night	1.4	0.0	1.1	0.5	0.1	0.8	0.0	0.0	0.0	4.0
7:00 a.m.	Day	2.3	0.0	1.1	0.7	0.2	1.5	0.1	0.0	0.0	5.9
8:00 a.m.	Day	2.9	0.0	0.4	1.5	0.5	2.1	0.2	0.0	0.0	7.7
Night hours total		7.0	0.0	2.2	3.5	0.4	3.8	1.2	0.1	0.1	18.1

Note: Night hours are between 10:00 p.m. and 6:59 a.m.

Source: Bob Hope Airport, 2006.

Table 47

NIGHT PASSENGER OPERATIONS BY AIRCRAFT MODEL

Bob Hope Airport
Average day in 2008

Time starting	Time category	B-737-900ER	B-757-200	A320	A319	B-737-300	B-737-400	B-737-500	B-737-700	B-737-800	B-737-900	MD80	MD82	MD83	CRJ-200	CRJ-700	CRJ-900	ERJ-135	Non-air carrier	Total
8:00 p.m.	Evening	0.0	0.0	0.6	0.2	5.3	0.2	0.2	1.8	0.5	0.0	0.0	0.1	0.1	1.0	0.1	0.1	0.0	0.0	10.2
9:00 p.m.	Evening	0.0	0.0	1.9	1.0	4.7	0.2	0.8	2.1	0.1	0.0	0.0	0.1	0.3	1.1	0.5	0.0	0.0	0.0	12.7
10:00 p.m.	Night	0.0	0.0	0.7	0.2	1.6	0.1	0.2	0.8	0.0	0.0	0.0	0.1	0.3	0.2	0.5	0.0	0.0	0.0	4.7
11:00 p.m.	Night	0.0	0.0	0.1	0.1	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.9
12:00 a.m.	Night	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 a.m.	Night	0.0	0.0	0.5	1.3	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.0	0.0	0.0	3.3
7:00 a.m.	Day	0.0	0.0	1.8	0.4	4.2	0.1	0.4	3.9	0.0	0.0	0.0	0.2	0.2	0.8	0.5	0.0	0.0	0.0	12.5
8:00 a.m.	Day	0.0	0.0	0.4	0.6	3.2	0.0	0.6	3.8	0.0	0.0	0.0	0.2	0.2	0.6	0.9	0.5	0.0	0.0	11.1
Night hours total		0.0	0.0	1.5	1.6	2.5	0.2	0.5	1.1	0.2	0.0	0.0	0.1	0.4	0.6	1.1	0.0	0.0	0.0	9.6

Note: Night hours are between 10:00 p.m. and 6:59 a.m.

Source: Jacobs Consultancy, December 2006.

Table 48

NIGHT CARGO OPERATIONS BY AIRCRAFT TYPE
Bob Hope Airport
Average day in 2008

Time starting	Time category	A300-600	A310/300	B-757-200	Multi-engine business jet	Multi-engine turboprop	Multi-engine piston	Single-engine turboprop	Single-engine piston	Total
8:00 p.m.	Evening	0.0	0.3	0.0	0.0	0.5	0.9	--	--	1.8
9:00 p.m.	Evening	0.0	0.3	0.0	0.5	0.4	1.4	--	--	2.5
10:00 p.m.	Night	--	--	0.0	0.2	1.1	0.4	--	--	1.7
11:00 p.m.	Night	--	--	0.0	0.0	2.1	0.1	--	--	2.2
12:00 a.m.	Night	--	--	--	0.5	2.9	0.2	--	--	3.6
1:00 a.m.	Night	--	--	--	--	1.7	0.0	--	--	1.8
2:00 a.m.	Night	--	--	--	1.1	1.9	0.4	--	--	3.4
3:00 a.m.	Night	--	--	--	1.0	2.6	0.1	--	--	3.7
4:00 a.m.	Night	0.0	--	--	0.0	0.7	0.0	--	--	0.7
5:00 a.m.	Night	0.3	0.7	--	--	2.1	0.3	--	--	3.3
6:00 a.m.	Night	0.1	0.2	--	0.0	0.9	1.5	--	--	2.7
7:00 a.m.	Day	0.4	0.5	--	0.3	0.3	0.7	--	--	2.2
8:00 a.m.	Day	0.0	--	--	0.1	0.4	0.1	--	--	0.5
Night hours total		0.4	0.9	0.0	2.8	15.9	3.1	--	--	23.1

Note: Night hours are between 10:00 p.m. and 6:59 a.m.

Source: Jacobs Consultancy, December 2006.

Table 49

NIGHT AIR TAXI AND GENERAL AVIATION OPERATIONS BY AIRCRAFT TYPE
Bob Hope Airport
Average day in 2008

Time starting	Time category	Multi-engine business jet	Very light jet	Multi-engine turboprop	Multi-engine piston	Single-engine turboprop	Single-engine piston	Helicopter	Air carrier	Military aircraft	Total
8:00 p.m.	Evening	2.3	0.0	1.0	0.2	0.2	0.6	0.2	0.0	0.0	4.6
9:00 p.m.	Evening	1.6	0.0	0.5	0.1	0.1	0.4	0.4	0.0	0.0	3.2
10:00 p.m.	Night	1.5	0.0	0.2	0.1	0.1	0.2	0.4	0.0	0.0	2.6
11:00 p.m.	Night	1.2	0.0	0.4	0.2	0.1	0.2	0.2	0.0	0.0	2.3
12:00 a.m.	Night	0.9	0.0	0.1	0.1	0.0	0.1	0.3	0.0	0.0	1.6
1:00 a.m.	Night	0.6	0.0	0.1	0.5	0.0	0.2	0.2	0.0	0.0	1.5
2:00 a.m.	Night	0.4	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	1.3
3:00 a.m.	Night	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.4
4:00 a.m.	Night	0.2	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.7
5:00 a.m.	Night	0.4	0.0	0.1	0.4	0.0	0.2	0.0	0.0	0.0	1.3
6:00 a.m.	Night	1.4	0.0	1.2	0.4	0.1	0.3	0.0	0.0	0.0	3.5
7:00 a.m.	Day	2.6	0.1	1.2	0.6	0.2	0.6	0.1	0.0	0.0	5.4
8:00 a.m.	Day	3.3	0.1	0.5	1.3	0.6	0.9	0.2	0.0	0.0	6.9
Night hours total		6.8	0.2	2.2	2.7	0.4	1.5	1.2	0.2	0.1	15.2

Note: Night hours are between 10:00 p.m. and 6:59 a.m.

Source: Jacobs Consultancy, December 2006.

Table 50

NIGHT PASSENGER OPERATIONS BY AIRCRAFT MODEL

Bob Hope Airport
Average day in 2015

Time starting	Time category	B-737-900ER	B-757-200	A320	A319	B-737-300	B-737-400	B-737-500	B-737-700	B-737-800	B-737-900	MD80	MD82	MD83	CRJ-200	CRJ-700	CRJ-900	ERJ-135	Non-air carrier	Total
8:00 p.m.	Evening	0.3	0.0	0.9	0.4	2.4	0.2	0.2	2.6	1.7	0.0	0.0	0.0	0.0	0.6	0.1	0.2	0.0	0.0	9.6
9:00 p.m.	Evening	0.4	0.0	2.7	1.6	2.2	0.2	0.9	3.1	0.3	0.0	0.0	0.0	0.0	0.6	0.7	0.0	0.0	0.0	12.6
10:00 p.m.	Night	0.2	0.0	1.5	0.4	1.1	0.2	0.4	1.8	0.0	0.0	0.0	0.0	0.0	0.2	0.9	0.1	0.0	0.0	6.8
11:00 p.m.	Night	0.0	0.0	0.3	0.2	0.2	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	1.4
12:00 a.m.	Night	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.1	1.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.6
1:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 a.m.	Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 a.m.	Night	0.2	0.0	1.1	3.1	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.0	0.0	0.0	0.0	6.2
7:00 a.m.	Day	0.4	0.0	2.6	0.6	1.9	0.1	0.5	5.7	0.0	0.0	0.0	0.0	0.0	0.4	0.7	0.0	0.0	0.0	12.9
8:00 a.m.	Day	0.4	0.0	0.6	1.0	1.5	0.0	0.7	5.6	0.0	0.0	0.0	0.0	0.0	0.3	1.3	1.6	0.0	0.0	12.9
Night hours total		0.5	0.0	3.1	3.8	1.6	0.3	0.7	2.3	1.0	0.0	0.0	0.0	0.0	0.5	2.2	0.2	0.0	0.0	16.1

Note: Night hours are between 10:00 p.m. and 6:59 a.m.

Source: Jacobs Consultancy, December 2006.

Table 51

NIGHT CARGO OPERATIONS BY AIRCRAFT TYPE
Bob Hope Airport
Average day in 2015

Time starting	Time category	A300-600	A310/300	B-757-200	Multi-engine business jet	Multi-engine turboprop	Multi-engine piston	Single-engine turboprop	Single-engine piston	Total
8:00 p.m.	Evening	0.0	0.4	--	0.0	0.7	0.4	--	--	1.5
9:00 p.m.	Evening	0.0	0.4	--	0.7	0.5	0.6	--	--	2.2
10:00 p.m.	Night	--	--	--	0.3	1.1	0.2	--	--	1.6
11:00 p.m.	Night	--	--	--	0.0	2.2	0.0	--	--	2.3
12:00 a.m.	Night	--	--	--	0.7	3.1	0.1	--	--	3.9
1:00 a.m.	Night	--	--	--	--	1.9	0.0	--	--	1.9
2:00 a.m.	Night	--	--	--	1.6	2.1	0.1	--	--	3.8
3:00 a.m.	Night	--	--	--	1.4	2.8	0.1	--	--	4.2
4:00 a.m.	Night	0.0	--	--	0.0	0.7	0.0	--	--	0.7
5:00 a.m.	Night	0.3	0.8	--	--	2.3	0.1	--	--	3.5
6:00 a.m.	Night	0.1	0.3	--	0.0	1.0	0.6	--	--	1.9
7:00 a.m.	Day	0.5	0.8	--	0.6	0.4	0.3	--	--	2.5
8:00 a.m.	Day	0.0	--	--	0.1	0.4	0.1	--	--	0.6
Night hours total		0.4	1.1	--	3.9	17.1	1.2	--	--	23.7

Note: Night hours are between 10:00 p.m. and 6:59 a.m.

Source: Jacobs Consultancy, December 2006.

Table 52

NIGHT AIR TAXI AND GENERAL AVIATION OPERATIONS BY AIRCRAFT TYPE
Bob Hope Airport
Average day in 2015

Time starting	Time category	Multi-engine business jet	Very light jet	Multi-engine turboprop	Multi-engine piston	Single-engine turboprop	Single-engine piston	Helicopter	Air carrier	Military aircraft	Total
8:00 p.m.	Evening	3.1	0.4	1.2	0.0	0.2	0.1	0.2	0.1	0.0	5.4
9:00 p.m.	Evening	2.1	0.3	0.6	0.0	0.1	0.1	0.4	0.0	0.0	3.7
10:00 p.m.	Night	1.9	0.2	0.3	0.0	0.1	0.0	0.4	0.0	0.0	3.0
11:00 p.m.	Night	1.5	0.2	0.5	0.0	0.1	0.0	0.2	0.0	0.0	2.7
12:00 a.m.	Night	1.1	0.1	0.2	0.0	0.0	0.0	0.3	0.0	0.0	1.9
1:00 a.m.	Night	0.7	0.3	0.1	0.1	0.0	0.0	0.2	0.0	0.0	1.5
2:00 a.m.	Night	0.5	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0	1.3
3:00 a.m.	Night	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
4:00 a.m.	Night	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.6
5:00 a.m.	Night	0.6	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	1.2
6:00 a.m.	Night	1.8	0.4	1.4	0.1	0.1	0.0	0.0	0.0	0.0	3.9
7:00 a.m.	Day	3.5	0.6	1.4	0.2	0.3	0.1	0.1	0.1	0.0	6.3
8:00 a.m.	Day	4.5	1.1	0.6	0.3	0.7	0.1	0.2	0.1	0.0	7.6
Night hours total		8.8	2.2	2.6	0.7	0.4	0.2	1.3	0.2	0.1	16.5

Note: Night hours are between 10:00 p.m. and 6:59 a.m.

Source: Jacobs Consultancy, December 2006.

Technical Report 1

AVIATION DEMAND FORECASTS

Appendix AA

GENERAL AVIATION AND AIR TAXI FORECASTS WITH ALTERNATIVE RESTRICTIONS

Bob Hope Airport

March 2008

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Appendix AA

GENERAL AVIATION AND AIR TAXI FORECASTS WITH ALTERNATIVE RESTRICTIONS

1.0 INTRODUCTION

This Appendix describes the restricted forecasts of general aviation (GA) and air taxi activity for Bob Hope Airport (the Airport). These forecasts have been developed to facilitate the evaluation required for the application to the FAA for a nighttime noise restriction at the Airport, as required by FAR Part 161.

Three alternative curfew rules are being evaluated in the Part 161 Study:

- ***Full Curfew***: Prohibits all departures and arrivals from 10:00 p.m. to 6:59 a.m. Aircraft subject to weather, mechanical, or air traffic control delays would be permitted to land or takeoff after 10:00 p.m. and before 11:00 p.m. The only other exceptions are for military and law enforcement operations, air ambulance (EMS) operations and emergencies.

- ***Departure Curfew***: Prohibits only departures from 10:00 p.m. to 6:59 a.m. Arrivals are not restricted. This curfew would be subject to the same exceptions as the full curfew.

- ***Curfew on Aircraft with Combined Certificated Noise Levels above 253 EPNdB (Noise-Based Curfew)***: Prohibits all departures and arrivals from 10:00 p.m. to 6:59 a.m. by aircraft with noise levels above 253 EPNdB, based on the sum of FAA-certificated levels at the three Part 36 measurement points. Light propeller aircraft certificated at only one measurement point would be prohibited if they exceed the following noise levels: corrected level of 81.1 dBA (for aircraft reported in AC 36-1H, Appendices 7 and 9); or 91.8 dBA (for aircraft reported in AC 36-1H, Appendix 8). This curfew would be subject to the same exceptions as the full curfew.

2.0 IMPACT OF ALTERNATIVE CURFEWS

Each curfew alternative would have distinctly different impacts on the major groups of general aviation operators at the Airport, as discussed below.

2.1 Turbine Powered Aircraft (Jets and Turboprop)

In July 2006, the consultant conducted interviews with the operators of most turbine powered aircraft based at the Airport. The consultant also interviewed NetJets, the

nation's largest fractional jet management company. The operators were asked what the likely impact of the three alternative curfews would be on their operations. They were also asked if the impact would be severe enough to cause them to move. If the operators indicated a possible move, they were asked where they might go. The forms used to conduct the interviews are included herein as *Attachment A-1.*

The results of the interviews are described in a separate report entitled *BUR Part 161 Study - General Aviation/Corporate Operator Interviews - July 2006.*

Over half of the corporate operators, including all three movie studios, the largest aircraft management company and the major cargo air taxi operator, indicated that they would give serious consideration to moving to another airport or establishing satellite facilities at another airport if either the full curfew or departure curfew were adopted.

The third alternative curfew, the noise-based curfew, was presented to the operators during the July 2006 interviews as a curfew for aircraft with cumulative noise levels below 271 EPNdB. A noise-based curfew set at this level would present no impact to the operators as almost all turbine powered aircraft based at the Airport have cumulative noise levels below this limit.

The 253 EPNdB noise limit was not discussed during the interviews, as the Authority had not yet revised the maximum nighttime noise limit alternative. A review of the certificated noise levels of the jet aircraft currently based at Bob Hope Airport shows that only 9% have cumulative noise limits below 253 EPNdB. *Attachment A-2* to this Appendix lists the turboprops based at the Airport and shows that nearly all appear to comply with the 253 EPNdB limit. However, none of the jet aircraft operated by those operators who indicated they were likely to move with the full curfew meet the 253 EPNdB limit. Therefore, the noise-based curfew would have almost the same impact as the full curfew for these operators. The noise-based curfew would less severely affect itinerant jet operators because they tend to operate fleets with a higher proportion of aircraft complying with the 253 EPNdB limit. Approximately 45% of the NetJets fleet, for example, complies with the 253 EPNdB limit.

All operators indicated that they respect the community's desire to reduce noise and each has taken steps in recognition of these concerns. These steps included:

- Locally based operators have decreased the number of Stage 2 aircraft significantly over the last 5 years. Stage 2 aircraft are rapidly being replaced with Stage 4 compliant aircraft (quieter than Stage 3 levels by a combined 10 EPNdB).

- Ameriflight's nighttime financial courier operation, which uses small jets, is rapidly being phased out. Discussions with their management indicate that this operation will likely cease during 2007.

All interviewed general aviation users stated that they try to abide by the voluntary curfew hours. They also pointed out, however, that the nature of their business is to provide a service to their owners, senior management and customers. Locally based operators stated that there are a number of factors that cause them to operate during the nighttime hours in order to meet the demands of their principals and customers. These examples included:

- Burbank to New York: To arrive at the start of the next business day in New York requires a departure from the Airport between 11:00 p.m. and midnight.

- Burbank to London or Paris: To arrive in time for dinner and a night's sleep, as many experienced travelers prefer in order to maximize the effective use of their time abroad, requires a departure between 10:00 p.m. and midnight.

- Arrival from Las Vegas or San Francisco or departure to entertainment industry events: most of these events are typically in the evening as they involve dinners, receptions, movie openings and similar activities. Departures from the Airport for those attending these events in the Los Angeles area are often in the 11:00 p.m. to midnight timeframe. Arrivals from Las Vegas and other venues tend to be even later. If the aircraft had to arrive or depart before 10:00 p.m., the passengers would have to cut short their participation in the event or stay overnight. To many interviewees, this is counterproductive and unacceptable.

- Many overseas airports assign departure or arrival slots and many have curfews. Compliance with these restrictions often requires departures or arrivals at Bob Hope Airport between 10:00 p.m. and 7:00 a.m.

- Ameriflight has developed a successful statewide, 24 hour daily courier service for the financial institutions that are based in the Los Angeles basin. This service uses twin-engine piston and turboprop aircraft and is predicated on the ability to depart and arrive from the Airport late at night and early in the morning.

An additional issue with a 10:00 p.m. departure curfew is related to the occasional occurrence of minor mechanical delays. For example, a flight scheduled may be scheduled to depart at 9:50 p.m., before the curfew, but at departure time, a minor mechanical problem is found as the crew goes through its checklist. It typically takes more than 10 minutes to fix the problem, and the passengers are usually prepared to wait. If the resolution takes 75 minutes or more, this delays the departure time to 11:05 p.m., after the one-hour grace period for operations. The options for the operator are to ignore the problem and depart without fixing it or to reschedule the operation. The first option may be unsafe, and the second could cause a potential loss of business.

In the interviews, many operators indicated that they would seriously consider moving their operations from the Airport if a mandatory curfew was enacted. To assess the potential impact of the operators' stated intention to seriously consider moving to another airport, the following approach was used:

- First, the number of aircraft that could be impacted by departure/arrival curfews was determined for each operator. The number was estimated during the interview.

- Second, a percentage probability was assigned to each operator's expression of intent to move. This probability was based on the discussions during the interview, combined with the judgment of the consultant. Factors informing this independent professional judgment included:

  – the severity of the potential business disruption that each operator would suffer;

  – the approximate cost and logistical difficulties involved in continuing to operate at the Airport;

  – the approximate cost and logistical difficulties involved in moving operations to another airport;

  – the availability of suitable facilities at alternate airports and the suitability of those airports to meet the business needs of the operator.

- Third, the probability that the operator would actually move was applied to the number of aircraft likely to be affected, and the results were then summed. This application provided the forecast of the number of aircraft that would probably move if a curfew were adopted.

2.2 Helicopters

The overwhelming majority of helicopter operations are the result of the law enforcement agencies that base their aircraft at the Airport. These operations would be specifically exempted from any curfew. Helicopters used by Ameriflight are expected to be eliminated by the end of 2007, as their operation is being discontinued. Therefore, the curfew alternatives would have little or no impact on helicopter operations at the Airport.

2.3 Single and Multi-Engine Piston Aircraft

Operations by these categories of aircraft are in rapid decline at the Airport, with annual rates of decline accelerating from about 6% in 2000 to 38% in 2006. (See Table 25 on page 50 in the main body of this Technical Report.) Given that most are

owner-flown and that the air cargo operators of piston twins are switching to small turboprops, the curfews would not have a significant impact beyond the already rapid decline.

3.0 FORECAST WITH FULL CURFEW

Without a curfew, the turbine powered aircraft based at the Airport are projected to increase from 83 aircraft in 2006 to 97 in 2008. Assuming that the full curfew is implemented in 2008, a total of 24 aircraft are expected to move to other airports leaving a fleet of 73 aircraft. This reduction in the locally based turbine powered fleet would result in a decrease of approximately 25% in the operations associated with those aircraft.

For based turbine aircraft, Table AA-1 shows the methodology used to arrive at these projections. The approach was to ask the operators interviewed how many aircraft would be impacted by the curfew because of their need to operate during curfew hours (this is shown in the column marked "Aircraft Impacted"). The consultant asked follow-up questions to get a sense of how many of these aircraft the operator would seriously consider moving after careful analysis (column marked "Might Move"). After considering the operator's responses to the interview, the consultant independently assessed the reasonableness of the operator's stated intentions, developing an estimate of the likelihood that the aircraft actually would be moved (column marked "Probability"). Lastly these numbers were multiplied to get an estimate of how many aircraft would probably move to other airports. This is shown in the column labeled "Probably Move."

This approach was used because experience shows that moving the home base for an aircraft or a flight operations department is often so disruptive to operations and business base that, after the evaluation of the pros and cons, many operators ultimately decide against a move because the cost would exceed the benefit.

Table AA-1 shows a reduction of 24.7% in the number of based turbine aircraft in 2008 compared with the unrestricted forecast.

Based on discussions with NetJets, it is projected that, without additional restrictions, fractional aircraft operations at the Airport will increase from 2,914 in 2006 to 3,209 in 2008. With a full curfew, NetJets anticipates that approximately one-sixth of those operations (534 operations) would be moved to other airports, leaving 2,675 operations at the Airport in 2008—a decrease of approximately 16.6%.

Table AA-1

IMPACT OF FULL CURFEW ON BASED TURBINE AIRCRAFT AND ON NETJETS OPERATIONS – 2008
Bob Hope Airport

Aircraft fleet	No curfew 2006	No curfew 2008	With full curfew: Aircraft impacted	Might Move	Probability	Probably Move	2008: Remain at BUR	2008: Change with curfew
Interviewed operators								
Chartwell Partners	1	1	0	0	100%	0	1	
JG Boswell	1	1	0	0	100%	0	1	
Sierra Land	2	2	0	0	100%	0	2	
TWC Aviation	8	8	0	0	100%	0	8	
Occidental Petroleum	3	3	3	3	33%	0.99	2.01	
Avjet	25	31	31	16	50%	8	23	
Disney/Earthstar	3	4	4	4	33%	1.32	2.68	
Ameriflight	10	10	4	4	100%	4	6	
Dreamworks	2	2	2	2	33%	0.66	1.34	
Warner/GTC	2	2	2	2	33%	0.66	1.34	
Subtotal	57	64				16	48	
Other operators								
25 operators	26	33				8	25	
Total based aircraft	83	97				24	73	(24.7%)
NetJets operations	2,914	3,209	1,068	1,068	50%	534	2,675	(16.6%)

Source: Conklin & deDecker analysis 2007.

As shown in Table AA-2, the full curfew is expected to reduce the total number of operations by turbine powered aircraft at the Airport by approximately 23.3% in 2008 compared with baseline, unrestricted operations. Table AA-2 also shows this percentage was computed. Based on the consultant's interviews with NetJets, fractional jets are estimated to account for approximately 16.5% of total jet operations at the Airport. The remainder is assumed to be evenly split between locally based and itinerant operators. As discussed above, operations by fractional jets are projected to decline by 16.6% and operations by locally based and itinerant aircraft by 24.7% with the full curfew. When the proportion of operations by category is multiplied by the percentage decrease in operations by category, the result is the decrease in total turbine operations. As shown in Table AA-2, the total reduction in turbine powered operations is projected to be 23.3% in 2008, compared to the baseline forecast for 2008.

Table AA-2

CALCULATION OF REDUCTION IN OPERATIONS BY TURBINE POWERED AIRCRAFT WITH FULL CURFEW – 2008
Bob Hope Airport

	Operations by category as percentage of baseline operations	Percentage reduction with Full Curfew, by operator category	Percentage reduction in total jet operations
Based business jets	41.8%	24.7%	10.3%
Transient business jets	41.8%	24.7%	10.3%
Fractional operators	16.5%	16.6%	2.7%
Total reduction			23.3%

Source: Conklin & deDecker analysis 2007.

The projected annual growth rate in operations at the Airport after implementation of a full curfew would also be reduced relative to the baseline forecast. This is because the Airport would be less attractive as an aircraft base and as a destination for itinerant aircraft. It is assumed that the projected compound annual growth rate (CAGR) for each turbine powered aircraft group would be diminished by the same proportion as the reduction in 2008 operations with a full curfew (-23.3%).

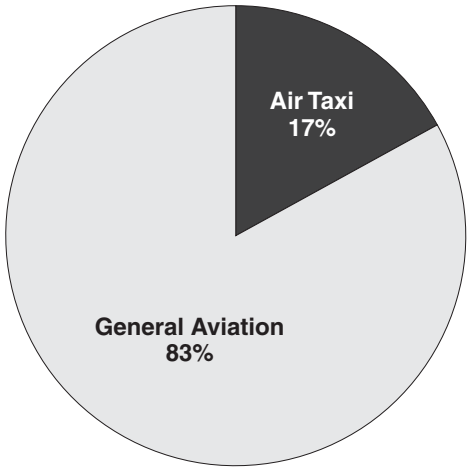
The other groups of aircraft (helicopters and piston aircraft) are not expected to be affected, as discussed in Sections 2.2 and 2.3.

As discussed in the baseline forecast, owners and operators of general aviation aircraft can operate them as either (1) general aviation, operating under FAR Part 91 or (2) air taxi, operating under FAR part 135. Figure AA-1 shows the distribution of multi-engine business jet operations between general aviation and air taxi operations. The proportion of business jet operations operating as air taxi and general aviation is expected to remain relatively constant from 2008 to 2015 and for the three curfew alternatives.

Figure AA-1

DISTRIBUTION OF BUSINESS JET OPERATIONS BETWEEN AIR TAXI AND GENERAL AVIATION SERVICE—2006

Bob Hope Airport



2006 BUSINESS JET OPERATIONS	
Air Taxi	3,480
General Aviation	17,223
Total	**20,703**

Source: Conklin & de Decker analysis of 2006 operations data, Burbank-Glendale-Pasadena Airport Authority.

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Table AA-3 shows the combined general aviation and air taxi operations for each of the forecast years with a full curfew.

Table AA-3

GENERAL AVIATION AND AIR TAXI OPERATIONS WITH FULL CURFEW

Bob Hope Airport

		2008		2015		2008-2015 CAGR	
Class of aircraft	2006	No Curfew	With Curfew	No Curfew	With Curfew	No Curfew	With Curfew
Mainline Jet	371	400	307	490	358	2.9%	2.2%
Multi-Engine Business Jet	20,713	22,833	17,513	30,555	21,959	4.2%	3.3%
Very Light Jet (VLJ)	0	479	367	5,141	2,429	40.4%	30.9%
Multi-Engine Turboprop	3,960	4,363	3,346	5,311	3,900	2.8%	2.2%
Multi-Engine Piston	5,280	4,677	4,677	1,210	1,210	-17.6%	-17.6%
Single-Engine Turboprop	2,869	3,111	2,386	3,603	2,675	2.1%	1.6%
Single-Engine Piston	9,903	8,129	8,129	1,283	1,283	-23.2%	-23.2%
Helicopters	1,870	1,988	1,988	2,177	2,177	1.3%	1.3%
Total Operations	44,966	45,980	38,714	49,770	35,991	1.1%	-1.0%

Source: Conklin & deDecker analysis 2007.

4.0 FORECAST WITH DEPARTURE CURFEW

The methodology for forecasting future operations with a departure curfew is identical to the methodology described above for forecasting the impacts of the full curfew. Based on discussions with the operators, approximately 19 aircraft would move from the Airport to another airport in 2008 (see Table AA-4 below). This would leave a fleet of 78 aircraft in 2008, a decrease of 19.6% compared with the unrestricted, baseline forecast for 2008. It is assumed that the operations associated with locally based aircraft would decline by the same percentage.

As discussed in a previous section, NetJets expects their fractional aircraft operations at the Airport to increase from 2,914 in 2006 to 3,209 in 2008, without a restriction. If a departure curfew is implemented, they estimate that about one-tenth to one-twelfth of their operations at Bob Hope Airport (estimated at 267 operations) would be moved to other airports. This would leave 2,942 NetJets operations at BUR in 2008, a reduction of 8.3% based on the unrestricted baseline forecast of NetJets operations for 2008.

Table AA-4

IMPACT OF DEPARTURE CURFEW ON BASED TURBINE POWERED AIRCRAFT AND NETJETS OPERATIONS
Bob Hope Airport

	No curfew		With departure curfew				2008	
Aircraft fleet	2006	2008	Aircraft impacted	Might Move	Probability	Probably Move	Remain at BUR	Change
Interviewed Operators								
Chartwell Partners	1	1	0	0	100%	0	1	
JG Boswell	1	1	0	0	100%	0	1	
Sierra Land	2	2	0	0	100%	0	2	
TWC Aviation	8	8	0	0	100%	0	8	
Occidental Petroleum	3	3	3	3	25%	0.75	2.01	
Avjet	25	31	31	11.62	50%	5.81	30	
Disney/Earthstar	3	4	4	4	25%	1	2.68	
Ameriflight	10	10	4	4	100%	4	6	
Dreamworks	2	2	2	2	25%	0.5	1.34	
Warner/GTC	2	2	2	2	25%	0.5	1.34	
Subtotal	57	64				12.56	59	
Other Operators								
25 operators	26	33				6.46	30	
Total Based Aircraft	83	97				19	78	(19.6%)
NetJets Operations	2,914	3,209	534	534	50%	267	2,942	(8.3%)

Source: Conklin & deDecker analysis 2007.

Table AA-5 shows the net loss in operations for multi-engine business jets at the Airport by operator category. As discussed above, fractional operations represent about 16.5% of total jet and turboprop operations at the Airport, and other itinerant aircraft and locally based aircraft are estimated to account for the balance. Applying these ratios to the projected decrease in operations for each category yields a cumulative average decrease in operations by turbine powered aircraft of 17.7% reduction in 2008 operations with implementation of the departure curfew.

Table AA-5

CALCULATION OF REDUCTION IN OPERATIONS BY TURBINE POWERED AIRCRAFT WITH DEPARTURE CURFEW—2008

Bob Hope Airport

	Operations by category as percentage of baseline operations	Percentage reduction with departure curfew, by operator category	Percentage reduction in total jet operations
Based business jets	41.8%	19.6%	8.2%
Transient business jets	41.8%	19.6%	8.2%
Fractional operators	16.5%	8.3%	1.4%
Total reduction			17.7%

Source: Conklin & deDecker analysis 2007.

The departure curfew would also affect the projected annual growth rate because the Airport would be less attractive to both itinerant aircraft and based aircraft operators. It is projected that the compound annual growth rate (CAGR) calculated for each turbine powered aircraft group will be affected by the same decrease of 17.7% projected for operations.

The other types of aircraft using the airport, piston engine aircraft and helicopters, are not expected to be affected by the departure curfew, as discussed earlier in Sections 2.2 and 2.3.

Table AA-6 shows combined general aviation and air taxi operations for both forecast years with a departure curfew.

Table AA-6

GENERAL AVIATION AND AIR TAXI OPERATIONS FORECAST WITH DEPARTURE CURFEW
Bob Hope Airport

Class of aircraft	2006	2008 No Curfew	2008 With Curfew	2015 No Curfew	2015 With Curfew	2006-2015 CAGR No Curfew	2006-2015 CAGR With Curfew
Narrowbody/regional jet	371	400	326	490	383	2.9%	2.3%
Multi-engine business jet	20,713	22,833	18,792	30,555	23,907	4.2%	3.5%
Very light jet (VLJ)	0	479	394	5,141	2,928	40.4%	33.2%
Multi-engine turboprop	3,960	4,363	3,591	5,311	4,225	2.8%	2.3%
Multi-engine piston	5,280	4,677	4,677	1,210	1,210	-17.6%	-17.6%
Single-engine turboprop	2,869	3,111	2,560	3,603	2,890	2.1%	1.7%
Single-engine piston	9,903	8,129	8,129	1,283	1,284	-23.2%	-23.2%
Helicopters	1,870	1,988	1,988	2,177	2,177	1.3%	1.3%
Total operations	44,966	45,980	40,457	49,770	39,003	1.1%	-0.5%

Source: Conklin & deDecker analysis 2007.

5.0 FORECAST WITH NOISE-BASED CURFEW

Shortly after the interviews with owners and operators of general aviation aircraft were conducted, the Airport switched from a proposed 271 EPNdB nighttime noise limit to a 253 EPNdB limit. All mainline and regional jets (in addition to many transport category turboprops) would be prohibited at night with this curfew, but none of the light twin and single-engine aircraft would be affected. Thus, the operations forecast with the noise-based curfew would be the same as with the full curfew for mainline and regional jets and would be the same as the unrestricted, baseline forecast for the light aircraft.

Many multi-engine business jets would be affected by this alternative. For purposes of developing a forecast of the effect of the noise-based curfew, these aircraft are divided into three categories: (1) those based at the Airport; (2) those operated by fractional ownership companies; (3) and other transient aircraft. Among business jets based at the Airport, 93% do not comply with the 253 EPNdB limit. It is estimated that 55% of the fractional aircraft do not comply with the limit (based on figures for the NetJets fleet). It is estimated that 75% of the other transient aircraft do not comply with the limit (based on an estimated of the makeup of the national fleet).

As stated previously, fractional operations account for approximately 16.5% of all multi-engine business jet operations at the Airport. The remaining business jet operations are split in roughly even shares between locally based and transient operations. Under the noise-based curfew, the reduction in operations by business

jets not in compliance with the 253 EPNdB limit would be the same as the reduction with the full curfew – 16.6% for fractional aircraft and 24.7% for other transient and based aircraft. The net reduction in 2008 operations by multi-engine business jets at Bob Hope Airport is forecast to be 18.8%, as shown in Table AA-7 below.

Table AA-7

CALCULATION OF REDUCTION IN BUSINESS JET OPERATIONS WITH NOISE-BASED CURFEW
Bob Hope Airport

	Percentage of fleet non-compliant with 253 EPNdB noise Limit	Operations by category as percentage of baseline operations	Percentage reduction with noise-based curfew, by operator category	Percentage reduction in total jet operations
Based business jets	93.0%	41.8%	24.7%	9.6%
Transient business jets	75.0%	41.8%	24.7%	7.7%
Fractional operators	55.0%	16.5%	16.6%	1.5%
Total reduction				18.8%

Source: Conklin & deDecker analysis 2007.

The noise-based curfew would also affect the projected annual growth rate because the Airport would be less attractive to both itinerant aircraft and based aircraft operators. It is projected that the CAGR calculated for each turbine powered aircraft group will be affected by the same decrease of 18.8% projected for operations.

Table AA-8 shows combined general aviation and air taxi operations for each of the forecast years under the noise-based curfew.

Table AA-8

GENERAL AVIATION AND AIR TAXI OPERATIONS FORECAST WITH NOISE-BASED CURFEW
Bob Hope Airport

		2008		2015		2006-2015 CAGR	
Class of aircraft	2006	No Curfew	With Curfew	No Curfew	With Curfew	No Curfew	With Curfew
Mainline jet	371	400	307	490	358	2.9%	2.2%
Multi-engine business jet	20,713	22,833	18,494	30,555	23,544	4.2%	3.5%
Very light jet (VLJ)	0	479	479	5,141	5,141	40.4%	40.4%
Multi-engine turboprop	3,960	4,363	4,363	5,311	5,311	2.8%	2.8%
Multi-engine piston	5,280	4,677	4,677	1,210	1,210	-17.6%	-17.6%
Single-engine turboprop	2,869	3,111	3,111	3,603	3,603	2.1%	2.1%
Single-engine piston	9,903	8,129	8,129	1,283	1,283	-23.2%	-23.2%
Helicopters	1,870	1,988	1,988	2,177	2,177	1.3%	1.3%
Total operations	44,966	45,980	41,548	49,770	42,627	1.1%	-0.6%

Source: Conklin & deDecker analysis 2007.

6.0 ALTERNATE AIRPORTS FOR GA AND AIR TAXI USERS

The following observations are focused on the business aviation community and the sector of the air cargo business that uses small turbine powered and piston powered aircraft.

Bob Hope Airport is conveniently located for numerous businesses in the San Fernando Valley, Pasadena, downtown Los Angeles, Beverly Hills and Westwood. For many years, it has been the airport of choice for the entertainment industry. The nearest other business airport is Van Nuys, a congested facility located 8 miles to the west. Nearby airports and their proximity to Bob Hope Airport are listed in Table AA-9.

Minimal investments in new or upgraded corporate hangar facilities have been made at the Airport. The only modernized facilities observed during the corporate GA interviews were the Mercury and Million Air terminal buildings. For the rest, several of the tenants (Disney, Dreamworks, TWC and to some extent Warner) appear to have refurbished the office space attached to their hangars. The other facilities observed are clean and well painted but they are old (WW II vintage). In the case of Avjet, the facilities do not fit the image of their high-value customers. In addition, the size of the hangars makes for a very tight fit for a Gulfstream 550 or Global Express class aircraft. They cannot accommodate a BBJ or B-757 class aircraft.

As of mid-2006, no U.S. customs service was available at the Airport. This is an inconvenience for international operations and would become an increasing inconvenience as international operations multiply.

Table AA-9

ALTERNATE AIRPORTS FOR GA/AIR TAXI OPERATORS

Airport	Distance from BUR (statute miles)	Direction from BUR	Characteristics that might affect an operators decision to relocate
Whiteman (WHP)	4	NW	Congested. Short, narrow runway (4,120' x 75'), lightweight pavement (12,500 lbs.). No ILS.
Van Nuys (VNY)	8	W	Congested. Departure curfew on loud aircraft, 10:00 p.m. to 7:00 a.m.
Santa Monica (SMO)	15	SW	Prohibition on loud aircraft. Departure curfew on all aircraft, 11:00 p.m. to 7:00 a.m. weekdays, to 8:00 a.m. weekends
Los Angeles International (LAX)	30	S	Highly congested and high landing fees.
Long Beach (LGB)	36	S	Maximum nighttime noise limits. Noise budget. Nighttime use limited to one runway.*
Camarillo (CMA)	50	W	Departure curfew on all aircraft without prior approval, midnight to 5:00 a.m. No ILS at present

*Long Beach also has a curfew on air carrier and commuter flights from 10:00 p.m. to 7:00 a.m.

Source: Conklin & de Decker Analysis, 2007.

Thus, while the convenient location and basic lease terms make the airport desirable, the image and capabilities of corporate facilities do not necessarily bind the tenants to the airport.

A number of the tenants interviewed for this study indicated they would seriously consider moving part or all of their operation to another airport if they were substantially impacted by an operational curfew.

There is capacity for additional operations and hangar space available at the following regional airports:

- Whiteman is located just 4 miles northwest of Burbank and is home to over 700 aircraft, most of which are piston-powered. No curfew is in place for fixed wing aircraft, and there are no restrictions on transient traffic. The runway is approximately 4,100 feet in length and should be sufficient to accommodate piston aircraft, small turboprops and very light jets (VLJs).

- Van Nuys, although congested at peak times, has capacity for additional operations as well as available hangar space. Given its nearby location, Van Nuys is a likely alternative for those operators that would be affected by a BUR curfew – presuming Van Nuys does not institute its own operational curfew.

- Camarillo has ground fog during certain times of the year and does not have an ILS. However, the airport operator is planning to acquire an ILS. In addition, the access roads from the San Fernando Valley to Camarillo are being improved, and the airport itself is surrounded by noise-compatible agricultural land. However, Camarillo does have a curfew on departures between midnight and 5:00 a.m. This limits its attractiveness to corporate operators for whom international travel is especially important. Most users who focus on travel within North America would likely not be affected by the departure curfew. Given its location, Camarillo may be a good alternative for those operators whose owners are located in the San Fernando Valley west of Burbank.

- Long Beach is not convenient for people in the San Fernando Valley but is probably a realistic alternative for people in the Pasadena and downtown LA areas. The airport has sufficient facilities to meet the needs of most aircraft and is currently underutilized—the former McDonnell Douglas facility is closed and Boeing is planning to close the C17 facility. The airport has noise abatement procedures and limits nighttime operations to one runway, but these limitations are not so strict as to make nighttime use of the airport impracticable for most general aviation operators.

- Los Angeles International Airport (LAX) is congested and expensive, but it does have an FBO (Landmark) with a good reputation among general aviation users with its 24-hour customs service. A number of operators based at Bob Hope Airport already use LAX as a staging place for late or early arrivals and departures as well as ultra long range flights. It is a good alternative to Bob Hope Airport for people in the downtown Los Angeles, Beverly Hills, and Westwood areas.

- Santa Monica Airport is conveniently located for the entertainment industry. However, it is not a likely alternative to Bob Hope Airport because Santa

Monica Airport has a mandatory departure and voluntary arrival curfew (11:00 p.m. to 7:00 a.m. weekdays and to 8:00 a.m. weekends) as well as a prohibition on aircraft exceeding a given noise level (in effect, a ban on Stage 2 aircraft).

In short, operators based at Bob Hope Airport do have reasonable options that would allow them to accommodate their needs in the event of a curfew being imposed. The following sections explore two possible scenarios, one with the current condition of no curfew in place at Van Nuys, the other assuming a curfew would be imposed at Van Nuys.

6.1 Use of Alternate Airports

Based on interviews with operators, it is anticipated that those leaving Bob Hope Airport because of a curfew would primarily move to Van Nuys, provided that no similar curfew is imposed there. (The current departure curfew at Van Nuys affects only Stage 2 aircraft and the loudest Stage 3 jets, including about 25% of the jets currently based at Bob Hope Airport. The Van Nuys restriction is similar to the current noise-based nighttime restriction in effect at Bob Hope Airport.) Many of the operations by lighter aircraft displaced because of the curfew, including VLJs and turboprops, are expected to go to Whiteman. Ameriflight is expected to move to Ontario where it already has a substantial operation. Others would be dispersed among Camarillo, Long Beach, and LAX.

The distribution of operations to these other airports is projected to be as shown in Table AA-10.

Table AA-10

PERCENTAGES OF OPERATIONS SHIFTED TO OTHER AIRPORTS WITH CURFEW AT BOB HOPE AIRPORT

	Business Jets		VLJs		Turboprop		ME Piston	
Alternate Airport	BUR-Based	Transient	BUR-Based	Transient	BUR-Based	Transient	BUR-Based	Transient
Camarillo	5%	0%	0%	0%	0%	0%	0%	0%
LAX	5%	5%	0%	0%	0%	0%	0%	0%
Long Beach	5%	5%	0%	0%	0%	0%	0%	0%
Ontario*	0%	0%	0%	0%	80%	0%	100%	0%
Van Nuys	85%	90%	50%	50%	10%	90%	0%	0%
Whiteman	0%	0%	50%	50%	10%	10%	0%	0%

*All operations shifted to Ontario are assumed to be Ameriflight.

Note: While percentages remain the same for all curfew alternatives, the number of shifted operations varies with each alternative.

Source: Conklin & deDecker analysis 2007.

Attachment AA-1
BUR Part 161 Study—Operator Interview Form

Date: _____ LFA/CD: _____

Operator: _____

Address: _____

_____

_____

Representative: _____

Aircraft: _____ _____

_____ _____

_____ _____

Demand (Current Voluntary Curfew)

Current movements In/Out of BUR per year (total): _____

How does this compare with 2000/2001:

Up by _____ % Same _____ Down by _____%

How do you see your demand over the next 5 years (assuming no change in the curfews):

Up by _____ % Same _____ Down by _____ %

What is driving the change? _____

Have you/will you add/delete any aircraft? _____

Add/delete staff? What type? _____

Comments _____

_____

_____

Impact of Mandatory Curfews

What % of your current operations fall within the 10PM – 7 AM curfew hours: _____%

What portion of these operations are EMS, law enforcement, unavoidable delays: _____

Are any of your aircraft impacted by the 271 EPNdB curfew: Yes No

If "Yes", which ones: _____

How will/can you deal with the mandatory curfews:

Alternate 1 – No operations 10 PM – 7 AM

No Impact

Schedule around it (what %)

Consider other airports for flights affected (what %)

Move to another airport

Comments: _____

_____

_____

_____

Alternate 2 – No departures 10 PM – 7 AM

No Impact

Schedule around it (what %)

Consider other airports for flights affected (what %)

Move to another airport

Comments: _____

_____

_____

_____

Alternate 3 – No operations 10 PM – 7 AM for aircraft over 271 EPNdB

No Impact

Schedule around it (what %)

Consider other airports for flights affected (what %)

Move to another airport

Purchase/acquire compliant aircraft

Comments: _____

_____

_____

_____

Attachment AA-2

BASED JET AIRCRAFT MEETING 253 EPNdB NOISE LIMIT

Registration	Make/Model	Meets 253 EPNdB		Owner
		No	Yes	
N60AV	1124 Westwind	1		Avjet Corp
N379AV	1124A Westwind II	1		Avjet Corp
N3AV	1124A Westwind II	1		Avjet Corp
N157GA	1125 Westwind Astra	1		E&L Adventures c/o TWC Aviation
N212LD	1125 Westwind Astra	1		Seven Brothers Productions
N225AL	1125SP Westwind Astra	1		TWC Aviation
N100ES	BD-700, Global Express	1		Earth Star Inc.
N300ES	BD-700, Global Express	1		Earth Star Inc.
N451CS	BD-700, Global Express	1		Saban Music Group, c/o Avjet
N700KS	BD-700, Global Express	1		Global Enterprises I LLC
N2121	Boeing 737-700 (BBJ)	1		Shangri-La Entertainment LLC, c/o Avjet
N742PB	Boeing 737-700 (BBJ)	1		Chartwell Aviation Services
N770BB	Boeing 757-200	1		Yucalpa Companies LLC
N123GF	Citation Bravo (550)		1	Rockjet Inc., c/o Avjet
	Citation CJ		1	c/o TWC Aviation
N911MM	Citation I SP		1	Mercmed LLC, c/o Mercury Aviation
	Citation Ultra (560)	1		c/o TWC Aviation
N561B	Citation V (560)	1		J G Boswell Co.
N59DF	Citation V (560)	1		Sierra Land Group
N217AL	Citation X (750)		1	The Winning Combination, c/o TWC Aviation
N257AL	Citation X (750)		1	c/o TWC Aviation
	CL 601	1		c/o TWC Aviation
N601JM	CL 601-1A	1		Airborne Charters, c/o Avjet
N53DF	CL 604	1		Sierra Land Group
N600ES	CL 604	1		Earth Star Inc.
N900ES	CL 604	1		Earth Star Inc.
N600ES	CL-600-2B16	1		Earth Star Inc.
N194K	Falcon 50	1		NATLSCO
N118KA	G 200	1		Kandrew Air, c/o Avjet
N169EA	G II	1		Bank of America
N396BC	G II	1		Boxing Cat Productions, c/o Avjet
N396CF	G II	1		Hollywood Aviation
N892TM	G II	1		Trayton Aviation
N222NB	G IIB	1		222 Aviation LLC, c/o Avjet
N868SM	G IIB	1		Tricycle Aviation
N17NC	G III	1		Saturn Productions, c/o Avjet
N353VA	G III	1		VenusAir LLC, c/o Avjet
N36WL	G III	1		Martin Aviation Inc., c/o TWC Aviation
N4500X	G III	1		Platinum Dunes Productions

Registration	Make/Model	Meets 253 EPNdB		Owner
N579TG	G III	1		TIG Productions
N848RJ	G III	1		N848RJ Inc.
VP-CNP	G III	1		Independent Aviation Services, c/o Avjet
N105Y	G IV	1		Ocidental International, c/o Mercury Aviation
N14456	G IV	1		Bandwidth LLC
N205X	G IV	1		Occidental Petroleum, c/o Mercury Aviation
N888ES	G IV	1		C&S Aviation Inc., c/o Avjet
N961SV	G IV	1		GE Capital Corp.
N961V	G IV	1		Swiflite Aircraft Corp.
VP-CNP	G IV	1		Independent Aviation Services, c/o Avjet
N663PD	G IV	1		HMS Air LLC, c/o Avjet
N40HB	G IVSP	1		Zeus LLC, c/o Avjet
N415WW	G IVSP	1		1226 Enterprises LLC, c/o Avjet
N477JB	G IVSP	1		Jerry Bruckheimer Inc./JB Films, c/o Avjet
N595PE	G IVSP	1		Platinum Equity LLC, c/o Avjet
N79RP	G IVSP	1		Warner Communications
N808T	G IVSP	1		Odin Aircraft, c/o Avjet
	G IVSP	1		Ocidental International, c/o Mercury Aviation
N256LK	G V	1		Garthorpe Inc., c/o Avjet
N451CS	G V	1		Saban Capital Group, c/o Avjet
N73RP	G V	1		Warner Communications
N806AC	G V	1		Casden Aircraft LLC
N221DG	G VSP (G-550)	1		David Geffen Co.
N409AV	Hawker 800XP	1		Avjet Corp
N414RF	HS 125-700A	1		Hollywood Aviation
N48WA	LJ 25B	1		Divine Aviation
N49WA	LJ 25B	1		Fleet Unlimited Inc.
N43PJ	LJ 28	1		Pacific Jet Inc.
N128CA	LJ 35A	1		Ameriflight
N237AF	LJ 35A	1		Ameriflight
N535AF	LJ 35A	1		Ameriflight
N754GL	LJ 35A	1		Ameriflight
N94AF	LJ 35A	1		Ameriflight
	Raytheon 390 Premier 1		1	c/o Avjet
N36636	Raytheon 390 Premier I		1	C&B LLC, c/o TWC Aviation
N789SG	Sabreliner 60 (NA-265-60)	1		TAG IT Pacific
Total		68	7	
Percentage		91%	9%	

Sources: Based aircraft lists provided by Burbank-Glendale-Pasadena Airport Authority.
Analysis of compliance with 253 EPNdB by Jacobs Consultancy, 2007.

Technical Report 1

AVIATION DEMAND FORECASTS

Appendix BB

AIR CARRIER FORECASTS WITH ALTERNATIVE RESTRICTIONS

Bob Hope Airport

March 2008

CONTENTS

TABLES

Appendix BB

AIR CARRIER FORECASTS WITH ALTERNATIVE RESTRICTIONS

1.0 INTRODUCTION

This Appendix presents restricted forecasts of air carrier operations and enplaned/deplaned airline passengers for 2008* and 2015, categorized both by airline and aircraft type, under each of the three curfew alternatives. These forecasts are referred to as "restricted forecasts".

The alternative curfews are being evaluated in the Part 161 Study include:

- ***Full Curfew***: Prohibits all departures and arrivals between 10:00 p.m. and 6:59 a.m. Aircraft subject to weather, mechanical, or air traffic control delays would be permitted to land or takeoff after 10:00 p.m. and before 11:00 p.m. The only other exceptions are for military and law enforcement operations, air ambulance (EMS) operations and emergencies.

- ***Departure Curfew***: Prohibits departures between 10:00 p.m. and 6:59 a.m., subject to the same exceptions as the Full Curfew. Arrivals are not restricted.

- ***Curfew on Aircraft with Combined Certificated Noise Levels Above 253 EPNdB (Noise-Based Curfew):*** Prohibits all departures and arrivals between 10:00 p.m. and 6:59 a.m. by aircraft with noise levels above 253 EPNdB, based on the sum of FAA-certificated levels at the three Part 36 measurement points. Light propeller aircraft certificated at only one measurement point would be prohibited if they exceed the following noise levels: corrected level of 81.1 dBA (for aircraft reported in AC 36-1H, Appendices 7 and 9); or 91.8 dBA (for aircraft reported in AC 36-1H, Appendix 8). This curfew would be subject to the same exceptions as the Full Curfew.

2.0 METHODOLOGY

The restricted air carrier forecasts were developed using the following approach:

- Conducting interviews with the commercial carriers operating at BUR;

- Identifying current flights arriving late and in the proposed curfew period;

- Creating daily flight schedules for the unrestricted forecasts;

*Even though 2008 is a leap-year, for comparison purposes throughout this year, 365 days were used when making 2008 calculations.

- Identifying the flights likely to be affected by the restrictions for each of the three alternatives;
- Creating daily flight schedules for the restricted forecasts;
- Considering the likely response of passengers to flights that are eliminated, cancelled, or diverted; and
- Estimating the annual operations and total passengers in each forecast year for each curfew alternative by subtracting the numbers of operations and passengers lost to BUR from those in the unrestricted forecasts.

A bottom-up approach was used to develop the unrestricted forecasts as the effects of the nighttime restrictions are dependent on the flight schedules and characteristics of each airline's fleet and route structure.

3.0 CURRENT AND FORECAST AIR CARRIER FLIGHT SCHEDULES

The methodology used for determining the number of air carrier operations per year likely to be affected under each of the alternative nighttime restrictions is based on the forecast unrestricted daily flight schedules for 2008 and 2015.*

Table BB-1 presents the current airline flight schedule at Burbank during the proposed curfew hours (10:00 p.m. to 6:59 a.m.), based on the October 2006 Official Airline Guide (OAG). ** As shown in Table BB-1, three flights are currently scheduled for departure before 7:00 a.m. within the proposed curfew hours. The schedule also includes flights scheduled during the evening (7:00 p.m. to 9:59 p.m.) and in the morning immediately after the curfew hours (7:00 a.m. to 7:15 a.m.). Flights scheduled to arrive in the evening are at increasingly higher risk of being delayed into curfew hours the closer their scheduled arrival time is to 10:00 p.m.

The projected unrestricted daily flight schedules for 2008 and 2015 were developed from the 2006 schedule. The number of flights was increased, consistent with the air carrier operations forecasts presented in the main body of this Technical Report (Table 14). The additional flights were allocated among the different carriers and aircraft types based on an assessment of potentially underserved markets, a consideration of the practices of each airline in adding routes and service, and a consideration of the fleet acquisition plans of each carrier.

Table BB-2 presents the projected unrestricted schedule for 2008. New flights projected to be added after 2006 are noted with an asterisk. Table BB-3 presents the unrestricted schedule for 2015, where flights added after 2008 are noted with an asterisk. Note that the schedules only show the 12 hour, 15-minute period from 7:00 p.m. to 7:15 a.m. In developing the schedules, it is assumed that flights

*The projected "unrestricted" schedules for 2008 and 2015 were prepared to be consistent with the annual unrestricted forecasts, presented in the main body of Technical Report 1.

**The OAG reports all flight times based on a 24-hour clock. That practice is followed in these tables.

operating in the current schedule will continue to operate in the future. Similarly, flights projected to operate in 2008 are assumed to remain in 2015. With one exception, all new flights were scheduled to conform to the existing voluntary curfew (from 10:00 p.m. to 7:00 a.m.) since it is a well established practice at the Airport for airlines to try to do so. The exception is a forecast flight from Hawaii, scheduled to arrive at 6:45 a.m. (This projected arrival time is based on a typical departure time from Honolulu.)

Table BB-1

CURRENT (OCTOBER 2006) PASSENGER AIRLINE FLIGHT SCHEDULE
FAR Part 161 Study
Bob Hope Airport

Arrivals (After 1900 until 0715)						Departures (After 1900 until 0715)					
Airline, Flt. #	Sched Arr Time	FROM	Equipment	Frequency	Remarks	Airline, Flt. #	Sched Dep Time	TO	Equipment	Frequency	Remarks
Evening Arrivals						***Morning Departures***					
WN 267	1900	LAS	737	D		UA 704	645	SFO	733	D	
AA 1865	1915	DFW	M83	D		US 590	645	PHX	733	D	
UA 1187	1923	SFO	735	D		DL 3997	650	SLC	CRJ	D	Skywest
WN 1735	1925	OAK	737	D		WN 1617	700	PHX	737	X67	
WN 118	1935	LAS	733	D		WN 476	700	LAS	737	D	
B6 357	1945	JFK	320	D		B6 350	700	JFK	320	D	
WN 402	1955	OAK	737	X6		UA 1232	700	DEN	735	D	
WN 2010	1955	SMF	733	X6		AA 1822	705	DFW	M83	D	
WN 2314	2010	SMF	737	6		WN 137	710	SMF	737	X67	
WN 348	2030	SJC	733	D		WN 182	715	SJC	733	X67	
WN 1781	2040	PHX	733	D		***Evening Departures***					
US 2789	2045	LAS	CRJ	X6	Mesa	WN 565	1920	PHX	733	D	
AS 358	2050	SEA	73G	D		WN 267	1925	OAK	737	X6	
WN 121	2050	LAS	737	D		WN 1735	1950	LAS	737	D	
WN 1210	2050	OAK	737	D		WN 126	1955	SMF	737	X6	
US 480	2114	PHX	733	D		WN 2311	2015	SJC	737	X6	
WN 1939	2115	SJC	737	X6		UA 6349	2020	SFO	CRJ	D	Skywest
WN 2492	2120	LAS	737	D		WN 677	2020	OAK	737	X6	
WN 713	2125	PHX	737	X6		WN 2314	2035	LAS	737	6	
UA 571	2128	SFO	733	D		WN 1948	2050	PHX	737	X6	
WN 1697	2140	SMF	733	X6		B6 358	2050	JFK	320	D	
UA 1181	2145	DEN	735	D		US 475	2055	LAS	319	6	
DL 3953	2149	SLC	CRJ	D	Skywest	WN 1781	2105	SMF	733	X6	
B6 359	2150	JFK	320	D		US 2800	2115	LAS	CRJ	X6	Mesa
WN 1738	2150	OAK	737	X6		WN 1210	2115	LAS	737	X6	
AS 2555	2159	PDX	CR7	D	Horizon	WN 1623	2120	PHX	737	X6	

	Flights scheduled within curfew hours in unrestricted case
	Flights with high diversion or cancellation risk with curfew
	Flights with moderate diversion or cancellation risk with curfew
	Flights with low diversion or cancellation risk with curfew
	Departures unaffected by curfew

Code	Legend
X	Except
6	Saturday
7	Sunday
D	Daily

Code	Legend
AS	Alaska & Horizon
AA	American
DL	Delta & Skywest
HA	Hawaiian Airlines
B6	JetBlue
SB	Skybus
WN	Southwest
UA	United & Skywest
US	US Airways & Mesa
VA	Virgin America

Table BB-2

PROJECTED 2008 PASSENGER AIRLINE FLIGHT SCHEDULE
FAR Part 161 Study
Bob Hope Airport

Arrivals (After 1900 until 0715)

Airline, Flt. #	Sched Arr Time	FROM	Equipment	Frequency	Remarks
Evening Arrivals					
WN 267	1900	LAS	737	D	
*VA 107**	*1905*	*SFO*	*320*	*X6*	
UA 1187	1923	SFO	735	D	
WN 1735	1925	OAK	737	D	
WN 118	1935	LAS	733	D	
B6 357	1945	JFK	320	D	
WN 402	1955	OAK	737	X6	
WN 2010	1955	SMF	737	X6	
WN 2314	2010	SMF	737	6	
WN 348	2030	SJC	733	D	
AA 1865	2035	DFW	M83	D	
WN 1781	2040	PHX	733	D	
US 2789	2045	LAS	CRJ	X6	Mesa
AS 358	2050	SEA	73G	D	
WN 121	2050	LAS	737	D	
WN 1210	2050	OAK	737	D	
US 480	2114	PHX	733	D	
WN 1939	2115	SJC	737	X6	
WN 2492	2120	LAS	737	D	
WN 713	2125	PHX	737	X6	
UA 571	2128	SFO	733	D	
*VA 109**	*2133*	*SFO*	*320*	*D*	
WN 1697	2140	SMF	733	X6	
*B6 281**	*2145*	*IAD*	*320*	*D*	
UA 1181	2145	DEN	735	D	
DL 3953	2149	SLC	CRJ	D	Skywest
B6 359	2150	JFK	320	D	
WN 1738	2150	OAK	737	X6	
AS 2555	2159	PDX	CR7	D	Horizon

Departures (After 1900 until 0715)

Airline, Flt. #	Sched Dep Time	TO	Equipment	Frequency	Remarks
Morning Departures					
UA 704	645	SFO	733	D	
US 590	645	PHX	733	D	
DL 3997	650	SLC	CRJ	D	Skywest
WN 1617	700	PHX	737	X67	
WN 476	700	LAS	737	D	
B6 350	700	JFK	320	D	
UA 1232	700	DEN	735	D	
*VA 100**	*705*	*SFO*	*320*	*D*	
AA 1822	705	DFW	M83	D	
WN 137	710	SMF	733	X7	
WN 182	715	SJC	737	X67	
Evening Departures					
WN 565	1920	PHX	733	D	
WN 267	1925	OAK	737	X6	
*VA 108**	*1945*	*SFO*	*320*	*X6*	
WN 1735	1950	LAS	737	D	
WN 126	1955	SMF	737	X6	
WN 2311	2015	SJC	733	X6	
UA 6349	2020	SFO	CRJ	D	Skywest
WN 677	2020	OAK	737	X6	
WN 2314	2035	LAS	737	6	
WN 1948	2050	PHX	737	X6	
B6 358	2050	JFK	320	D	
US 475	2055	LAS	319	6	
WN 1781	2105	SMF	733	X6	
US 2800	2115	LAS	CRJ	X6	Mesa
WN 1210	2115	LAS	737	X6	
WN 1623	2120	PHX	737	X6	

	Flights scheduled within curfew hours in unrestricted case
	Flights with high diversion or cancellation risk with curfew
	Flights with moderate diversion or cancellation risk with curfew
	Flights with low diversion or cancellation risk with curfew
	Departures unaffected by curfew
*	*New flight projected to be added after 2006*

Code	Legend
X	Except
6	Saturday
7	Sunday
D	Daily

Code	Legend
AS	Alaska & Horizon
AA	American
DL	Delta & Skywest
HA	Hawaiian Airlines
B6	JetBlue
SB	Skybus
WN	Southwest
UA	United & Skywest
US	US Airways & Mesa
VA	Virgin America

Table BB-3

PROJECTED 2015 PASSENGER AIRLINE FLIGHT SCHEDULE
FAR Part 161 Study
Bob Hope Airport

Arrivals (After 1900 until 0715)

Airline, Flt. #	Sched Arr Time	FROM	Equipment	Frequency	Remarks
		Morning Arrivals			
*HA 201**	*645*	*HNL*	*739*	*D*	
		Evening Arrivals			
WN 267	1900	LAS	737	D	
VA 107	1905	SFO	320	X6	
UA 1187	1923	SFO	735	D	
WN 1735	1925	OAK	737	D	
*WN 3004**	*1930*	*DAL*	*737*	*D*	
WN 118	1935	LAS	733	D	
*WN 3006**	*1940*	*DEN*	*737*	*D*	
B6 357	1945	JFK	320	D	
WN 402	1955	OAK	737	X6	
WN 2010	1955	SMF	733	X6	
WN 2314	2010	SMF	737	6	
*US 006**	*2020*	*PHL*	*319*	*D*	
WN 348	2030	SJC	733	D	
AA 1865	2035	DFW	738	D	
WN 1781	2040	PHX	733	D	
US 2789	2045	LAS	CRJ	X6	Mesa
AS 358	2050	SEA	73G	D	
WN 121	2050	LAS	737	D	
WN 1210	2050	OAK	737	D	
B6 281	2055	IAD	320	D	
US 480	2114	PHX	733	D	
WN 1939	2115	SJC	737	X6	
WN 2492	2120	LAS	737	D	
*SB 300**	*2123*	*CMH*	*319*	*D*	
WN 713	2125	PHX	737	X6	
UA 571	2128	SFO	733	D	
*WN 3002**	*2130*	*DAL*	*737*	*X6*	
VA 109	2133	SFO	320	D	
*B6 999**	*2135*	*BOS*	*320*	*D*	
WN 1697	2140	SMF	733	X6	
UA 1181	2145	DEN	735	D	
DL 3953	2149	SLC	CRJ	D	Skywest
B6 359	2150	JFK	320	D	
*WN 3000**	*2150*	*DEN*	*737*	*D*	
WN 1738	2150	OAK	737	X6	
AS 2555	2159	PDX	CR7	D	Horizon

Departures (After 1900 until 0715)

Airline, Flt. #	Sched Dep Time	TO	Equipment	Frequency	Remarks
		Morning Departures			
UA 704	645	SFO	733	D	
US 590	645	PHX	733	D	
DL 3997	650	SLC	CRJ	D	Skywest
*WN 3001**	*700*	*DEN*	*737*	*D*	
WN 1617	700	PHX	737	X67	
WN 476	700	LAS	737	D	
B6 350	700	JFK	320	D	
UA 1232	700	DEN	735	D	
*WN 3003**	*705*	*DAL*	*737*	*X7*	
VA 100	705	SFO	320	D	
AA 1822	705	DFW	738	D	
B6 998	710	IAD	320	D	
WN 137	710	SMF	733	X7	
*SB 301**	*715*	*CMH*	*319*	*D*	
WN 182	715	SJC	737	X67	
		Evening Departures			
WN 565	1920	PHX	733	D	
WN 267	1925	OAK	737	X6	
VA 108	1945	SFO	320	X6	
WN 1735	1950	LAS	737	D	
WN 126	1955	SMF	737	X6	
*WN 3005**	*2000*	*DAL*	*737*	*X6*	
*WN 3007**	*2010*	*DEN*	*737*	*D*	
WN 2311	2015	SJC	733	X6	
UA 6349	2020	SFO	CRJ	D	Skywest
WN 677	2020	OAK	737	X6	
WN 2314	2035	LAS	737	6	
WN 1948	2050	PHX	737	X6	
B6 358	2050	JFK	320	D	
US 475	2055	LAS	319	6	
WN 1781	2105	SMF	737	X6	
US 2800	2115	LAS	CRJ	X6	Mesa
WN 1210	2115	LAS	733	X6	
*US 007**	*2120*	*PHL*	*319*	*D*	
WN 1623	2120	PHX	737	X6	
*B6 282**	*2140*	*IAD*	*320*	*D*	

	Flights scheduled within curfew hours in unrestricted case
	Flights with high diversion or cancellation risk with curfew
	Flights with moderate diversion or cancellation risk with curfew
	Flights with low diversion or cancellation risk with curfew
	Departures unaffected by curfew
*	*New flight projected to be added after 2008*

Code	Legend
X	Except
6	Saturday
7	Sunday
D	Daily

Code	Legend
AS	Alaska & Horizon
AA	American
DL	Delta & Skywest
HA	Hawaiian Airlines
B6	JetBlue
SB	Skybus
WN	Southwest
UA	United & Skywest
US	US Airways & Mesa
VA	Virgin America

4.0 AIRLINES AT BURBANK

Table BB-4 lists the airlines operating at Bob Hope Airport early in 2007 and projected new entrants at the Airport in 2008 and 2015. It is acknowledged that the specific airlines and aircraft types projected to operate in 2008 and 2015 may not be precise (e.g. Hawaiian Airlines may never operate at the Airport). Nevertheless, it is likely that if not these airlines, others using similar aircraft types and serving similar markets would likely operate in their place.

Table BB-4

CURRENT AND FORECAST AIRLINES
FAR Part 161 Study
Bob Hope Airport

Code	Airline	Current	In 2008	In 2015
AS	Alaska & Horizon	X	X	X
AA	American	X	X	X
DL	Delta & Skywest	X	X	X
HA	Hawaiian Airlines			X
B6	JetBlue	X	X	X
SB	Skybus			X
WN	Southwest	X	X	X
UA	United & Skywest	X	X	X
US	US Airways & Mesa	X	X	X
VA	Virgin America		X	X

Notes: Mesa, Skywest and Horizon are commuter/feeder airlines for the national carriers and operate with the national carriers' codes and flight numbers. Mesa operates exclusively as US Airways Express from Burbank on behalf of US Airways. Horizon is a wholly-owned subsidiary of Alaska and operate on their behalf. Skywest operates as United Express on behalf of United and as Delta Connection on behalf of Delta. Skybus began serving the Airport in May 2007, after this analysis was completed.

4.1 Late Flights at the Airport

Throughout October 2006, Jacobs Consultancy tracked air carrier arrivals to determine the frequency with which passenger flights arrived late, either during the grace period from 10:00 p.m. to 10:59 p.m. or after 10:59 p.m. The purpose of the tracking exercise was to determine whether any flights were subject to recurrent problems that might cause a carrier to cancel it if a mandatory curfew was enacted.

Over the 31-day period, 79 flights were observed arriving past 10:00 p.m. Nine flights were observed arriving after 11:00 p.m. -- an average of 0.3 arrivals per night.

Table BB-5 presents the number of post-11:00 p.m. arrivals by airline in October 2006.

Table BB-5

POST-11:00 P.M. AIR CARRIER ARRIVALS IN OCTOBER 2006
FAR Part 161 Study
Bob Hope Airport

Airline	# of Arrivals , 11:00 p.m. or Later
Alaska	0
Horizon	0
American	0
Delta Connection-Skywest	0
JetBlue	2
Southwest	2
United	4
United Express-Skywest	0
US Airways	0
US Airways Express-Mesa	1
Total	9

Source: http://flightaware.com/

During the 31-day period:

- 88.6% of the post-10:00 p.m. arrivals arrived within the one-hour "grace period" proposed for each curfew alternative (before 11:00 p.m.).
- 64.6% of the post-10:00 p.m. arrivals landed before 10:30 p.m.
- 11.4% of the late arrivals were after 11:00 p.m.
- Four airlines accounted for all of the post-11:00 p.m. arrivals.

4.2 Air Carrier Aircraft Types at Burbank

It is anticipated that B737 and A320 aircraft will continue to be operated by the majority of air carriers at the Airport in 2008 and 2015. It is also expected that the number of regional jet (RJ) flights at Burbank will remain relatively unchanged over the forecast period. This is because the RJ fleets are operated by the regional airlines on behalf of the major carriers at the Airport. It is projected that the dominant carriers and new entrants at the Airport will be airlines typically operating B737 or A320 aircraft and that do not have commuter affiliates (e.g., Southwest Airlines).

4.3 Projected New Flights And Air Carriers In 2008

The following new passenger flights are expected to be introduced at the Airport by 2008 in the unrestricted forecast scenario:

- The only new entrant that is forecast by 2008 is Virgin America, with 4 daily flights on A320 aircraft to San Francisco. Virgin America is a new airline based in San Francisco which commenced operations in 2007. Flight VA 108, departing at 7:45 p.m., and VA 109, arriving at 9:33 p.m., are the only projected Virgin America flights that could be affected by a curfew.

- JetBlue is forecast to introduce daily nonstop service from Washington-Dulles, with an evening arrival at 9:45 p.m (flight 281). This arrival time is based on a departure time coinciding with the end of the business day in Washington D.C. The corresponding Burbank departure is flight B6 281, expected to depart at 7:30 a.m. the next morning, 30 minutes after JetBlue's 7:00 a.m. departure to JFK. By scheduling these flights at similar times, the airline is able to efficiently use its local staff. Southwest is forecast to add an additional daily roundtrip flight to their existing nonstop routes from Burbank to Sacramento, San José and Las Vegas. All of these flights would be during the middle of the day and would not be affected by a nighttime restriction, as Southwest would seek additional capacity during peak business hours for these markets.

The projected unrestricted passenger flight schedule for 2008 is shown above in Table BB-2. (The projected schedule shows only flights operating between 7:00 p.m. and 7:15 a.m.)

4.4 Projected New Flights and Air Carriers in 2015

Two new airlines are forecast to begin serving Burbank between 2008 and 2015.

- Skybus is projected to initiate service with 2 flights daily to Columbus, Ohio with A319s. Skybus is a startup low-cost carrier, which commenced operations in 2007 from their hub in Columbus. Low-cost carriers already represent a large proportion of Burbank's air service, and this is expected to remain true in 2015. One flight, SB #300, is forecasted to arrive in the evening at about 9:23 p.m. It would depart the next day at 7:15 a.m. The frequency of 2 flights per day would permit Skybus to offer an early afternoon departure to Columbus, in addition to the morning departure, allowing sufficient time for connections.*

- Hawaiian Airlines is projected to initiate service with daily B737-900ER flights to Honolulu between 2008 and 2015, rereestablishing a link from the Airport to Hawaii. (Aloha Airlines terminated service from Burbank to Hawaii at the

*Skybus actually started serving Bob Hope Airport in May 2007, after this analysis was completed.

end of 2005. It is possible that they would resume this service by 2015 instead of Hawaiian.) It is anticipated that one Hawaiian flight, HA 01, would be scheduled to arrive at 6:45 a.m. This assumes that the flight would be scheduled to depart Honolulu at approximately 11:40 p.m. Most cities in California with nonstop service to Hawaii have similar red-eye flights.

It is also projected that the following airlines currently using the Airport would add additional flights on existing routes or establish new routes.

JetBlue:

- Introduction of a second daily nonstop flight to Washington-Dulles with an evening red-eye departure at 9:40 p.m. Evening departures to the east coast are attractive for airlines as they allow for early morning (6:00-6:30 a.m.) arrivals, positioning the aircraft in time for morning connections, while effectively utilizing the aircraft during overnight hours. It is anticipated that flight B6 281 from IAD would be rescheduled to arrive at BUR at 8:55 p.m. to allow that aircraft to depart at 9:40 p.m.

- Introduction of daily nonstop service to Boston, with an evening arrival at 9:35 p.m. at BUR and midday departure. For scheduling and aircraft rotation purposes, the aircraft arriving from Boston would depart the following morning to Washington-Dulles at 7:10 a.m., while the morning inbound flight from Washington-Dulles would depart to Boston.

US Airways:

- US Airways is projected to introduce daily nonstop service to Philadelphia with an early evening arrival at 8:20 p.m. and late evening red-eye departure to Philadelphia at 9:20 p.m. Not only does this flight pattern maximize aircraft utilization, it also allows for Burbank passengers to connect to the multiple destinations served by US Airways from Philadelphia.

Delta:

- Delta is projected to reintroduce nonstop service to Atlanta using B757 aircraft as it is anticipated that demand will have grown sufficiently by 2015 to support year-round service. (Delta operated seasonal service in 2005 and 2006.) Because this flight would be served by the B757, it is also expected that this flight would operate in the middle of the day, avoiding any effects of a nighttime restriction.

Southwest:

- Southwest is projected to introduce service to Dallas-Love Field, with three daily flights, two times per day on weekends. This anticipates a full phase-out of the Wright Amendment that currently limits destinations and states

served from Dallas-Love Field. It is assumed that the latest arrival from Dallas-Love Field would be WN 3002 at 9:30 p.m.

- It is projected that Southwest would also initiate service to Denver, with three daily flights, two times per day on weekends. It is assumed that the latest arrival, WN 3000, would be scheduled at 9:50 p.m.

The projected unrestricted passenger flight schedule for 2015 is shown above in Table BB-3. (The schedule shows only flights operating between 7:00 p.m. and 7:15 a.m.)

4.5 Ad Hoc Passenger Charters

The flight schedules shown in Tables B-2 and B-3 include only regularly scheduled passenger carriers. The development of forecast flight schedules is complex, requiring the matching of forecast operations by time-of-day and aircraft type with judgment about the carriers most likely to be serving the airport in the future. Many variables need to be adjusted and balanced to ensure that the forecast schedules are realistic. Obviously, there is considerable uncertainty about the specific details in the forecast schedules, but the overall pattern – the number of flights by time of day, the general type of aircraft serving the airport, and the mix of short-haul and long-haul routes served by the carriers, is subject to much less uncertainty.

One of the common artifacts of the schedule development process is a small number of residual operations that, for various reasons, cannot be allocated to a regular schedule. This is most often the case where the number of residual operations is too small to be spread out through an entire year's flight schedule. Another complication might include a small imbalance between forecast aircraft types and the forecast of carriers expected to serve the airport.

In the development of the forecast air carrier schedules for Bob Hope Airport, 33 residual nighttime operations by MD82/83 aircraft were left unassigned in 2008 and 346 by B737-800 aircraft in 2015. For purposes of subsequent analysis, these unscheduled flights are assumed to be operated by ad hoc air charter companies. While the projected tenfold increase from 2008 to 2015 appears great, it involves less than one operation per day. It is a tiny proportion (about 0.4%) of total air carrier operations projected for 2015. Part of the increase is likely to be accounted for by growth in occasional special charter flights, which is only to be expected. The rest of the increase could be accounted for by the start of a regular air tour charter service, to the Nevada casinos, for example, with flights two or three times a week. Regular use of the Airport by a professional sports team could also account for potential increases in charter service.

5.0 ASSUMPTIONS IN ASSESSING EFFECT OF ALTERNATIVE CURFEWS

This section discusses the assumptions and general approach taken to assessing the effect of the alternative curfews on air carrier operations and passengers.

5.1 Effects on Flight Schedules

The projected unrestricted flight schedules for each forecast year were adjusted for each curfew alternative by eliminating, cancelling, changing the aircraft type, or rescheduling flights. The effects of each alternative were estimated based on the timing of the flight:

- For flights scheduled to arrive or depart during the curfew period (between 10:00 p.m. and 6:59 a.m.), it was determined which flights would be eliminated or rescheduled (and at what time).

- For flights scheduled to arrive or depart in the three-hour period of the evening before the curfew goes into effect (7:00 p.m. through 9:59 p.m.), estimates were made of the frequency that each of these flights would be delayed beyond the one-hour grace period ending at 11:00 p.m. These estimates provided the basis for calculating the proportion of flights that would be diverted or cancelled.

- For flights eliminated, diverted or cancelled, the numbers of passengers who would be prevented from using BUR was calculated. This estimate took into account passengers who would be able to switch from cancelled flights to other flights to BUR.

- Because ad-hoc charter flights represent such a small proportion of passenger air carrier operations at the Airport (less than 0.2%), Allegiant Airlines, one of the most common charter operators at Burbank, was taken to be representative of all ad-hoc charter operations.

Judgments about the effects of the alternative curfews on flight schedules were informed by (1) interviews with carriers operating at BUR; (2) an analysis of actual flights arriving late into BUR after 11:00 p.m.; (3) typical airline practices; and (4) current and historical air carrier data.

When an airline becomes aware that an arrival will be delayed past the one-hour grace period, it will either cancel it or divert it to another airport. If this is known before the flight takes off, the airline is likely to cancel the flight, rather than dealing with the disruption and cost of a diversion. Arrivals that incur delays enroute to BUR, will be diverted to another airport in the region. This situation is more likely to occur with long-haul rather than short flights.

When airlines are forced to divert late arrivals to another airport, it is assumed that, if at all possible, they will divert to an airport where they have regularly scheduled passenger service. This will minimize their costs in a number of ways, involving ground crew and equipment expenses and airport usage charges.

Evening departures from BUR that are delayed past the one-hour grace period will be cancelled. If those flights have been delayed because of problems earlier in the

day, enabling airlines to predict the risk of a cancelled departure from BUR, the corresponding arrival to BUR is likely to be cancelled. The airlines would want to avoid the risk of having an aircraft stranded overnight at BUR, leaving it out of position for the next day's flight schedule.

For each curfew alternative, the number of affected operations was calculated by airline and aircraft type. The total number of annual operations with each alternative curfew was computed by subtracting the affected operations (eliminated, cancelled and diverted operations) from the unrestricted forecasts.

5.2 Effects on Enplaned/Deplaned Passengers

The 2008 and 2015 restricted passenger forecasts were developed from the restricted operations forecasts. The numbers of total enplaned/deplaned passengers were estimated from the number of passenger seats on the aircraft coupled with average passenger load factors. Attachments B-1 and B-2, list the seating capacities for each aircraft type by airline and the assigned load factors for the 2008 and 2015 forecasts, respectively.* An aircraft's load factor is defined as the average percentage of seats occupied per flight.** The load factors are based on historical published data, adjusted to reflect Burbank passenger data.

The load factors in Attachments B-1 and B-2 do not apply when an airline is projected to replace one aircraft type with a smaller type on the same flight. (This could occur because of schedule adjustments that cause a BUR departure to miss important connections at the airline's hub.) In those cases, it is assumed that the smaller replacement aircraft have a higher load factor than the standard factors in Attachments B-1 and B-2. In these cases, it is likely that BUR passenger demand for these flights would remain somewhat elevated because of the prior history of service by a larger aircraft on the route.

Table BB-6 on the following page lists the forecast percentage of passengers that would be lost to BUR on flights that are assumed to be diverted, cancelled or eliminated. The following factors were considered in estimating these percentages:

- When a flight is diverted to another airport, BUR would lose 100% of the passengers (see the "Diverted Flight" column).

- It is assumed that when a flight is cancelled, a high proportion of passengers would be lost to BUR because of the large number of alternatives available to most passengers and because the airlines would assist them in booking alternate flights. Most passengers flying to and from

*Seating configuration sources: www.seatguru.com, airline websites and aircraft manufacturer websites.

**Airlines report load factors as the ratio of passenger-miles to available seat miles. These are typically slightly higher than the ratio of total passengers to total departing seats as load factors tend to be higher on longer flights.

BUR would not have the option of an alternate flight to BUR, but they may opt for another LA-area airport. Some potential alternate routings include: Oakland-Ontario instead of Oakland-Burbank

- Phoenix-Los Angeles instead of Phoenix-Burbank
- New York-Long Beach instead of New York-Burbank
- Las Vegas-Santa Ana instead of Las Vegas-Burbank

Table BB-6

PERCENTAGE OF PASSENGERS LOST TO BUR DUE TO DIVERTED, CANCELLED OR ELIMINATED FLIGHTS – 2008 AND 2015

FAR Part 161 Study
Bob Hope Airport

Airline	Average % of Passengers on Flight Lost		
	Diverted Flight %	Cancelled Flight %	Eliminated Flight %
Ad-hoc Charters (Allegiant)	n/a	n/a	100
Alaska	100	50	n/a
American	100	50	n/a
Delta	100	n/a	n/a
Delta-Skywest	100	50	n/a
Hawaiian	100	n/a	n/a
Horizon	100	50	20
JetBlue	100	10	40
Skybus	100	n/a	n/a
Southwest	100	70	10
United	100	50	20
United-Skywest	100	50	n/a
US Airways	100	50	45
US Airways – Mesa	100	60	n/a
Virgin America	100	25	n/a

The percentages of passengers lost by BUR due to any of the curfews are identical for both the 2008 and 2015 forecasts. The forecasts of passengers lost to BUR under each alternative curfew were calculated by subtraction from the unrestricted passenger forecasts, presented in Table 11 in the main body of Technical Report 1.

"n/a" (not applicable) means that no cancelled or eliminated flights for the airline were projected with the restricted forecasts.

It is assumed that when a flight is eliminated from the schedule, a majority of passengers would continue using Burbank by choosing another flight on the same route at a different time of day. A number of factors were evaluated when forecasting the percentage of passengers Burbank would lose due to a cancelled or eliminated flight, including:

- The number of options a passenger has to use an alternate airport;
- The number of flights a day an airline operates at the Airport;
- The airline's forecast load factors at the Airport; and,
- The stimulation of passenger demand that a new flight would bring to the Airport in the unrestricted forecast scenario. (If those new flights are expected to remain with the alternative curfews, it is likely that, when delays force the cancellation of those flights, at least some of those passengers will find alternate flights to BUR the next day. Some of those passengers would never have used BUR without the new flight having been added to the schedule.)

6.0 RESTRICTED FORECASTS OF AIR CARRIER OPERATIONS

This section presents the restricted operations forecasts for each curfew alternative for both forecast years – 2008 and 2015.

6.1 Forecasts with Full Curfew

The full curfew would completely ban all non-emergency arrivals and departures between 10:00 p.m. and 6:59 a.m., with certain exceptions. These include a one-hour "grace period" to allow flights with scheduled pre-10:00 p.m. arrival or departure times to arrive or depart until 11:00 p.m. if they are delayed by weather, aircraft mechanical, or air traffic control problems.

6.1.1 2008 Forecasts

The anticipated responses of each airline to the full curfew in 2008 are discussed in this section. The projected flight schedule in 2008 with the full curfew, shown in Table BB-7, provides the basis for the discussion.

Table BB-7

2008 PROJECTED FLIGHT SCHEDULE WITH FULL CURFEW
FAR Part 161 Study
Bob Hope Airport

Arrivals (After 1900 until 0715)

Airline, Flt. #	Sched Arr Time	FROM	Equipment	Frequency	Remarks
		Evening Arrivals			
WN 267	1900	LAS	737	D	
*VA 107**	*1905*	*SFO*	*320*	*X6*	
UA 1187	1923	SFO	735	D	
WN 1735	1925	OAK	737	D	
WN 118	1935	LAS	733	D	
B6 357	1945	JFK	320	D	
WN 402	1955	OAK	737	X6	
WN 2010	1955	SMF	733	X6	
WN 2314	2010	SMF	737	6	
WN 348	2030	SJC	733	D	
AA 1865	2035	DFW	M83	D	
WN 1781	2040	PHX	733	D	
US 2789	2045	LAS	CRJ	X6	Mesa
AS 358	2050	SEA	73G	D	
WN 121	2050	LAS	737	D	
WN 1210	2050	OAK	737	D	
*B6 281**	*2055*	*IAD*	*320*	*D*	
B6 359	2100	JFK	320	D	
US 480	2114	PHX	733	D	
WN 1939	2115	SJC	737	X6	
WN 2492	2120	LAS	737	D	
VA 109	2123	SFO	320	D	
*WN 713**	*2125*	*PHX*	*737*	*X6*	
UA 6571	2128	SFO	CR7	D	Skywest
UA 1181	2135	DEN	735	D	
WN 1697	2140	SMF	733	X6	
DL 3953	2149	SLC	CRJ	D	Skywest
WN 1738	2150	OAK	737	X6	
AS 2555	2159	PDX	CR7	D	Horizon

Departures (After 1900 until 0715)

Airline, Flt. #	Sched Dep Time	TO	Equipment	Frequency	Remarks
		Morning Departures			
US 590	645	PHX	733	D	
DL 3997	650	SLC	CRJ	D	Skywest
UA 6704	655	SFO	CR7	D	Skywest
WN 1617	700	PHX	737	X67	
WN 476	700	LAS	737	X7	
WN 476	700	LAS	737	7	
B6 350	700	JFK	320	D	
UA 1232	700	DEN	735	D	
*VA 100**	*705*	*SFO*	*320*	*D*	
AA 1822	705	DFW	M83	D	
WN 137	710	SMF	733	X7	
WN 182	715	SJC	737	X67	
AS 2508	716	PDX	CR7	D	Horizon
		Evening Departures			
WN 565	1920	PHX	733	D	
WN 267	1925	OAK	737	X6	
*VA 108**	*1945*	*SFO*	*320*	*X6*	
WN 1735	1950	LAS	737	D	
WN 126	1955	SMF	737	X6	
WN 2311	2015	SJC	733	X6	
UA 6349	2020	SFO	CRJ	D	Skywest
WN 677	2020	OAK	737	X6	
WN 2314	2035	LAS	737	6	
WN 1948	2050	PHX	737	X6	
B6 358	2050	JFK	320	D	
US 475	2055	LAS	319	6	
WN 1781	2105	SMF	733	X6	
US 2800	2115	LAS	CRJ	X6	Mesa
WN 1210	2115	LAS	737	X6	
WN 1623	2120	PHX	737	X6	

	Flights scheduled within curfew hours in unrestricted case
	Flights with high diversion or cancellation risk with curfew
	Flights with moderate diversion or cancellation risk with curfew
	Flights with low diversion or cancellation risk with curfew
	Departures unaffected by curfew
	Flights eliminated due to curfew
	Flight/schedule change (time, equipment) to accommodate curfew
*	*New flight projected to be added after 2006 in unrestricted case*

Code	Legend
X	Except
6	Saturday
7	Sunday
D	Daily

Code	Legend
AS	Alaska & Horizon
AA	American
DL	Delta & Skywest
HA	Hawaiian Airlines
B6	JetBlue
SB	Skybus
WN	Southwest
UA	United & Skywest
US	US Airways & Mesa
VA	Virgin America

Alaska & Horizon in 2008:

- Horizon, with the last scheduled arrival into BUR at 2159 (flight AS 2555 from Portland on a CRJ-700), cannot leave Portland earlier without losing important connections. It is assumed that Horizon will continue to operate this flight but that it would be delayed until after 11:00 p.m. 1.5 times per month. Those flights would be cancelled in Portland rather than being diverted to another LA area airport, equating to 18 cancellations per year. The corresponding departure the following morning would also be cancelled, resulting in the loss of 36 operations per year.

- It is assumed that flight AS 358, scheduled to arrive at 8:50 p.m., would miss the one-hour grace period 2 times per year. Given the distance from Seattle, it is assumed this flight would divert to another Los Angeles-area airport (assumed to be LAX) and reposition to Bob Hope Airport the following morning, resulting in a loss of passengers but no net loss of operations at BUR.

- Alaska and Horizon would lose a total of 36 operations per year.

American in 2008:

- Based on the unrestricted night fleet mix, an average of 0.1 MD-82/83 arrivals per night are projected to be delayed after the 11:00 p.m. grace period. (See Table 47 on page 86 of the main body of Technical Report 1.) It is estimated that American will account for 20% of these arrivals -- 0.02 operations per night or 8 arrivals per year. It is assumed that American would cancel these flights and the corresponding departure the following day, resulting in the loss of 16 operations per year.

Delta/Skywest in 2008:

- Although Skywest has a Delta Connection departure scheduled for 6:50 a.m., the station manager has stated that they would keep the flight as scheduled. They would comply with the curfew by pushing back from the gate at 6:50 but delaying the takeoff until 7:00 a.m.

- Delta Connection has a 9:49 p.m. arrival from Salt Lake City (flight #3953). It is assumed that this flight would miss the 11:00 p.m. grace period an average of 0.5 times per month. It is assumed that these flights would be cancelled (along with the following day's departure), resulting in a loss of 12 CRJ-200 operations per year.

JetBlue in 2008:

- It is assumed that the airline would shift their arrivals from JFK and Washington to arrive 45 to 60 minutes earlier, accommodating the curfew.

The probable result is that only 0.5% of those flights would miss the curfew and one-hour grace period. These flights would divert to Ontario where JetBlue also operates, resulting in 4 diversions in 2008. Aircraft would be re-positioned to Bob Hope Airport for the next morning, resulting in no loss of BUR operations, but a loss of arriving passengers. (JetBlue also operates at Long Beach. It is anticipated that they would divert to Ontario, though, because of the noise restrictions at Long Beach.)

- It is assumed that in rare instances, flight B6 358, scheduled to depart at 8:50 p.m., would be delayed until after one-hour grace period, resulting in cancellation of the flight. It is assumed that these delays are likely to happen earlier in the day, enabling JetBlue to anticipate the problem by cancelling the flight to Burbank that would turn around to become flight #358. (This would avoid having the aircraft stranded at BUR overnight, putting it out of position for the next day's flights.) That is flight B6 357, scheduled to arrive at 7:45 p.m. This is estimated to happen four times per year, resulting in a loss of 8 A320 operations.

Southwest in 2008:

- According to Southwest's Burbank station manager, the airline never diverts flights unless dictated by an emergency. Thus, it is assumed that Southwest would cancel all late arriving flights where they know they will not be able to arrive before the one-hour grace period expires at 11:00 p.m. Similarly, it is assumed that they will cancel all inbound flights that are scheduled to turn around and depart from Burbank if the departures would be delayed until after 11:00 p.m.

- Southwest has 3 arrivals (all operated with B737-700 equipment) scheduled between 9:00 and 9:29 p.m. per day. It is assumed that each would be delayed until after 11:00 p.m. an average of 5 times per year. Southwest would cancel these arrivals and the corresponding departures the next day, resulting in the loss of 30 operations in 2008.

- Two Southwest flights are scheduled to arrive between 9:30 and 9:59 p.m. per day. It is assumed that they would be delayed until after 11:00 p.m. an average of 10 times per year. These flights and the corresponding departures the next day would be canceled, resulting in the loss of 40 operations in 2008 (20 by B737-300s and 20 by B737-700s).

- Southwest has 8 departures scheduled between 7:00 and 8:59 p.m. It is assumed that delays experienced earlier in the day would cause each of these to be delayed after 11:00 p.m. once per year. To avoid stranding the aircraft overnight at BUR, Southwest would cancel the inbound arrivals. This would result in a loss of 16 operations (4 by B737-300 aircraft and 12 by B737-700s).

- Southwest has 3 departures scheduled between 9:00 and 9:59 p.m. It is assumed that they would be delayed until after 11:00 p.m. 4 times per year. Again, Southwest would cancel the inbound arrivals to avoid the aircraft having to stay overnight at BUR. This would result in a loss of 24 operations (8 by B737-300s and 16 by B737-700s).

- The lost annual operations for Southwest in 2008 are estimated to be 110.

United in 2008:

- United currently has a B737-300 assigned to the 6:45 a.m. San Francisco departure, and this flight is expected to remain in the schedule in 2008. If a curfew is adopted, it is assumed that United would reschedule the departure for 6:55 a.m., with the aircraft actually taking off after 7:00 a.m. The loss of many connection opportunities at San Francisco, however, would cause the airline to substitute a smaller Skywest CRJ-700 for the B737. (The flight, currently UA #704, would be renumbered UA 6704.) Of course, this change would also apply to the inbound arrival that would become flight UA 6704 – currently flight UA 571 that arrives from San Francisco at 9:28 p.m. the preceding night. (This flight would be renumbered UA 6571.) The reassignment of aircraft would result in a loss of 730 B737 operations and a gain of 730 CRJ-700 operations. While the total number of operations would remain the same, the equipment change would result in a loss of passengers.

- UA 571, to be renumbered UA 6571, arrives from San Francisco at 9:28 p.m., as noted above. This flight is expected to be delayed past the one-hour grace period an average of one time per month. On those occasions, the flight would be cancelled, causing the cancellation of the departure the following day, resulting in the loss of 24 operations in 2008.

- It is anticipated that United will reschedule the arrival time for UA 1181 from Denver to 9:35 p.m., 10 minutes earlier than the unrestricted schedule. This flight is expected to be delayed until after 11:00 p.m. an average of 1 time per month, even with the earlier scheduled arrival time. It is assumed that the delayed flights would be cancelled. The corresponding departure, UA 1232, would also be cancelled. The result is the loss of 24 B737-500 United operations per year.

- On rare occasions, flight UA 6349, scheduled to depart for San Francisco at 8:20 p.m., would be delayed until after 11:00 p.m. In those cases, it is anticipated that the corresponding arrival would be cancelled to avoid leaving the aircraft at BUR overnight. It is estimated that this would happen 2 times per year, resulting in a loss of 4 operations.

- Total lost United and Skywest operations for 2008 would be 52.

US Airways & Mesa in 2008:

- US Airways has a daily departure to Phoenix at 6:45 a.m. using a B737-300 (US 590). In an interview with the consultant, the US Airways' BUR station manager said that this flight must leave before 7:00 a.m. to make connections at Phoenix. Since the curfew would prevent a pre-7:00 a.m. takeoff, this flight would be eliminated. The corresponding arrival the previous evening (US 480 from Phoenix) would also be eliminated, resulting in a loss of 730 (B737-300) operations per year.

- In rare cases, flights US 2800 (CRJ-200) and US 475 (A319), scheduled to takeoff at 9:15 p.m. and 8:55 p.m., respectively, would be delayed past 11:00 p.m. In these cases, it is assumed that the airline would cancel the corresponding arrivals to avoid stranding the aircraft overnight at BUR. It is assumed this would happen 6 times per year (5 times to US #2800 and 1 time to US #475), resulting in a loss of 12 operations.

- The total lost US Airways/Mesa operations would be 742.

Virgin America in 2008:

- It is estimated that Virgin America would operate 27% of all A320 operations at Bob Hope Airport in 2008. Based on the unrestricted night fleet mix, an average of 0.2 A320 arrivals per night are projected to be delayed until after 11:00 p.m. It is assumed that Virgin America would account for 27% of these late arrivals -- 0.05 operations per night or 18 arrivals during the year. The airline would likely cancel these late arrivals and the corresponding departures the following day, resulting in the loss of 36 operations per year.

- Flight VA 108, scheduled to depart for San Francisco at 7:45 p.m., would be delayed until after 11:00 p.m. an estimated 2 times per year. In those cases, it is expected that the airline would cancel the corresponding arrival to avoid stranding the aircraft away from its San Francisco hub. This would result in an annual loss of 4 A320 operations.

- The lost annual operations for Virgin America in 2008 would be 40.

Ad-hoc Charter Carriers in 2008:

- It is assumed that ad-hoc charters account for 80% of all MD-82/83 operations between 11:00 p.m. to 6:59 a.m., equal to 33 operations per year. These charter flights occur on an irregular basis. Examples include group casino charters to Nevada and professional sports charters.

- Since charters tend to arrive and depart during the restricted hours, it is assumed all of them would move to another LA-area airport (usually LAX). This would result in the loss of 33 operations in 2008.

In summary, the Airport is projected to handle 1,049 fewer air carrier operations in 2008, with the full curfew compared to the unrestricted forecast, a 1.5% reduction in operations. The forecast total passenger aircraft operations with the full curfew would be 68,764. Table BB-8 summarizes the forecast operations with the full curfew and presents the impacts on each airline in 2008. All airlines would experience a reduced number of operations with the curfew.

Table BB-8

FULL CURFEW: EFFECT ON OPERATIONS BY AIRLINE FOR 2008
FAR Part 161 Study
Bob Hope Airport

	Annual Operations - 2008
Unrestricted Forecast Air Carrier Operations	69,813
Lost Operations with Full Curfew:	
Alaska/Horizon	36
American	16
Delta/Skywest	12
JetBlue	8
Southwest	110
United & Skywest	52
US Airways & Mesa	742
Virgin America	40
Ad-hoc Charter	33
Total Lost Operations with Full Curfew	1,049
Forecast Air Carrier Operations with Full Curfew	**68,764**

Table BB-9 breaks down the lost air carrier operations by aircraft type for the full year and for an average day.

Table BB-9

EFFECT OF FULL CURFEW ON OPERATIONS BY AIRCRAFT TYPE FOR 2008
FAR Part 161 Study
Bob Hope Airport

	A320	A319	B737-300	B737-400	B737-500	B737-700	B737-800	MD-82	MD-83	CRJ-200	CRJ-700	CRJ-900	Total
Reduced Operations For Year*	48	0	1,494	0	24	78	0	24	25	22	-666	0	1,049
Avg. Reduction in Daily Operations*	0.1	0	4.1	0.0	0.1	0.2	0.0	0.1	0.1	0.1	-1.8	0.0	2.9
Unrestricted: Avg. Per Night	1.5	1.6	2.4	0.2	0.5	1.1	0.2	0.1	0.4	0.6	1.1	0.0	9.6
Operations Shifted to Daytime**	1.3	1.6	-1.6	0.2	0.4	0.8	0.2	0.0	0.3	0.5	2.9	0.0	6.7
Full Curfew: Avg. Per Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full Curfew: Nighttime Operations Per Year	0	0	0	0	0	0	0	0	0	0	0	0	0

*A negative number of "reduced operations" means that there is an increase in operations for that aircraft type because it is substituted for a different type.

6.1.2 2015 Forecasts

The following airlines would experience a reduced number of operations as the result of the full curfew:

- Alaska & Horizon
- American
- Delta & Skywest
- JetBlue
- Southwest
- Virgin America
- United & Skywest
- US Airways & Mesa
- Ad-hoc Charter Carriers

Only Skybus and Hawaiian would avoid a reduction in operations with a full curfew. The restricted flight schedule with a full curfew is shown in Table BB-10. A full description of the specific flights that would be affected for each airline follows the table.

Table BB-10

2015 PROJECTED FLIGHT SCHEDULE WITH FULL CURFEW
FAR Part 161 Study
Bob Hope Airport

Arrivals (After 1900 until 0715)						Departures (After 1900 until 0715)					
Airline, Flt. #	Sched Arr Time	FROM	Equipment	Frequency	Remarks	Airline, Flt. #	Sched Dep Time	TO	Equipment	Frequency	Remarks
Morning Arrivals						***Morning Departures***					
*HA 201**	*700*	*HNL*	*739*	*D*		US 590	645	PHX	733	D	
Evening Arrivals						DL 3997	650	SLC	CRJ	D	Skywest
WN 267	1900	LAS	737	D		UA 6704	655	SFO	CR7	D	Skywest
VA 107	1905	SFO	320	X6		*WN 3001**	*700*	*DEN*	*737*	*D*	
UA 1187	1923	SFO	735	D		WN 1617	700	PHX	737	X67	
WN 1735	1925	OAK	737	D		WN 476	700	LAS	737	D	
*WN 3004**	*1930*	*DAL*	*737*	*D*		B6 350	700	JFK	320	D	
WN 118	1935	LAS	733	D		UA 1232	700	DEN	735	D	
*WN 3006**	*1940*	*DEN*	*737*	*D*		AA 1822	705	DFW	738	D	
B6 357	1945	JFK	320	D		VA 100	705	SFO	320	D	
WN 402	1955	OAK	737	X6		*WN 3003**	*705*	*DAL*	*737*	*X7*	
WN 2010	1955	SMF	733	X6		B6 998	710	IAD	320	D	
WN 2314	2010	SMF	737	6		WN 137	710	SMF	733	X7	
*US 006**	*2020*	*PHL*	*319*	*D*		*SB 301**	*715*	*CMH*	*319*	*D*	
WN 348	2030	SJC	733	D		WN 182	715	SJC	737	X67	
AA 1865	2035	DFW	738	D		AS 2508	716	PDX	CR7	D	Horizon
WN 1781	2040	PHX	733	D		WN 1739	720	OAK	737	X7	
US 2789	2045	LAS	CRJ	X6	Mesa	***Evening Departures***					
AS 358	2050	SEA	73G	D		WN 565	1920	PHX	733	D	
WN 121	2050	LAS	737	D		WN 267	1925	OAK	737	X6	
WN 1210	2050	OAK	737	D		VA 108	1945	SFO	320	X6	
B6 281	2055	IAD	320	D		WN 1735	1950	LAS	737	D	
B6 359	2100	JFK	320	D		WN 126	1955	SMF	737	X6	
*B6 999**	*2110*	*BOS*	*320*	*D*		*WN 3005**	*2000*	*DAL*	*737*	*X6*	
US 480	2114	PHX	733	D		*WN 3007**	*2010*	*DEN*	*737*	*D*	
WN 1939	2115	SJC	737	X6		WN 2311	2015	SJC	733	X6	
WN 2492	2120	LAS	737	D		UA 6349	2020	SFO	CRJ	D	Skywest
VA 109	2123	SFO	320	D		WN 677	2020	OAK	737	X6	
*SB 300**	*2123*	*CMH*	*319*	*D*		WN 2314	2035	LAS	737	6	
WN 713	2125	PHX	737	X6		WN 1948	2050	PHX	737	X6	
UA 6571	2128	SFO	CR7	D	Skywest	B6 358	2050	JFK	320	D	
*WN 3002**	*2130*	*DAL*	*737*	*X6*		US 475	2055	LAS	319	6	
UA 1181	2135	DEN	735	D		WN 1781	2105	SMF	737	X6	
WN 1697	2140	SMF	733	X6		US 2800	2115	LAS	CRJ	X6	Mesa
DL 3953	2149	SLC	CRJ	D	Skywest	WN 1210	2115	LAS	733	X6	
*WN 3000**	*2150*	*DEN*	*737*	*D*		*US 007**	*2120*	*PHL*	*319*	*D*	
WN 1738	2150	OAK	737	X6		WN 1623	2120	PHX	737	X6	
AS 2555	2159	PDX	CR7	D	Horizon	*B6 282**	*2140*	*IAD*	*320*	*D*	

	Flights scheduled within curfew hours in unrestricted case
	Flights with high diversion or cancellation risk with curfew
	Flights with moderate diversion or cancellation risk with curfew
	Flights with low diversion or cancellation risk with curfew
	Departures unaffected by curfew
	Flights eliminated due to curfew
	Flight/schedule change (time, equipment) to accommodate curfew
*	*New flight projected to be added after 2008 in unrestricted case*

Code	Legend
X	Except
6	Saturday
7	Sunday
D	Daily

Code	Legend
AS	Alaska & Horizon
AA	American
DL	Delta & Skywest
HA	Hawaiian Airlines
B6	JetBlue
SB	Skybus
WN	Southwest
UA	United & Skywest
US	US Airways & Mesa
VA	Virgin America

Alaska & Horizon in 2015:

- The same effects noted above for 2008 would remain in 2015, resulting in a loss of 36 operations in 2015.

American in 2015:

- In 2015, it is projected that American would be using only the B737-800 at Burbank. It is estimated that B737-800 arrivals after 11:00 p.m. would average about 1.0 per night. (See Table 50 on page 89 in the main body of Technical Report 1.) It is estimated that American would account for 3% of those late arrivals or 0.03 operations per night, equal to 11 arrivals per year. The affected flight would be AA 1865, scheduled to arrive from Dallas-Fort Worth at 8:35 p.m. It is assumed that American would cancel these late arrivals and the corresponding departures the following morning (AA 1822 to Dallas-Fort Worth). This would result in the loss of 22 operations per year.

Delta/Skywest in 2015:

- The same changes noted for 2008 would remain in 2015, resulting in a loss of 12 operations in 2015.

Hawaiian in 2015:

- It is assumed Hawaiian would re-schedule their daily B737-900ER red-eye flight from Honolulu to arrive into Burbank just after 7:00 a.m. Should the flight be early, it would hold to land and would not divert to another Los Angeles-area airport. Therefore, the full curfew would not have any impact on Hawaiian's forecast BUR operations.

JetBlue in 2015:

- As discussed for the 2008 case, the airline would have shifted their arrivals from JFK and Washington to arrive 45 to 60 minutes earlier than in the baseline case to accommodate the curfew. It is estimated that 0.5% of those flights would miss the curfew and one-hour grace period. These flights would divert to Ontario where JetBlue also operates, resulting in 4 diversions in 2008. Aircraft would be re-positioned to Bob Hope Airport for the next morning, resulting in no loss of BUR operations, but a loss of arriving passengers.

- As discussed for the 2008 case, flight B6 358, scheduled to depart at 8:50 p.m., is expected to be delayed four times per year. It is assumed that JetBlue would be able to anticipate the problem and cancel the corresponding arrival (B6 357), resulting in a loss of 8 A320 operations.

- The unrestricted flight schedule for 2015 anticipates that JetBlue would add a nightly red-eye departure to Washington-Dulles (B6 282) by 2015. With the adoption of a nighttime curfew, this flight would never be scheduled. In discussions with the consultant, JetBlue said that it considered it too risky to operate a late-night red-eye departure from BUR with a curfew in place. Elimination of this flight would result in an annual loss of 730 A320 operations compared to the unrestricted case.

- In 2015, the total loss of operations for JetBlue would be 738.

Skybus in 2015:

- It is assumed that arriving flight SB 300 would miss the curfew 3 times per year. Given the distance from Columbus, it is also assumed this flight would divert to a Los Angeles-area airport (probably ONT) and re-position to Burbank the following morning. Therefore, passengers on three Skybus arrivals would be lost to BUR, but no net loss of operations would be experienced.

Southwest in 2015:

- As in 2008, Southwest is expected to have three flights (all operated with B737-700 equipment) scheduled to arrive between 9:00 and 9:29 p.m. per day. It is assumed that they each would be delayed until after 11:00 p.m. an average of five times per year, resulting in cancellation of those flights and the corresponding departures. This would be a loss of 30 annual operations.

- In 2015, Southwest is projected to have four flights scheduled to arrive between 9:30 and 9:59 p.m. It is assumed that each would be delayed until after 11:00 p.m. 10 times per year. Southwest would cancel these arrivals and the corresponding departures the next day, resulting in the loss of 80 operations in 2015 (20 B737-300 and 60 B737-700 operations).

- As discussed for 2008 conditions, it is anticipated that the Southwest departures scheduled between 7:00 and 8:59 p.m. would be delayed past 11:00 p.m. once per year. In 2015, ten departures are scheduled during that period. The corresponding arrivals also would be cancelled, resulting in a loss of 20 operations (4 B737-300 operations and 16 B737-700 operations).

- Again, as discussed for 2008 conditions, the three Southwest departures scheduled between 9:00 and 9:59 p.m. are projected to be delayed after 11:00 p.m. four times per year, resulting in their cancellation together with the corresponding arrivals. This would result in a loss of 24 operations (8 B737-300 operations and 16 B737-700 operations).

- The lost annual operations for Southwest in 2015 would be 154.

United in 2015:

- The changes noted for 2008 would remain in 2015. Those changes result in a loss of 52 operations.

US Airways & Mesa in 2015:

- As discussed for the 2008 schedule, US 590 to Phoenix, scheduled to depart at 6:45 a.m., is expected to be eliminated if a curfew is established. With the elimination of the corresponding arrival the preceding evening, 730 annual operations per year (by B737-300s) would be lost.

- The flights scheduled to depart at 9:15 p.m. (US 2800) and 8:55 p.m. (US 475) would be occasionally delayed past 11:00 p.m. causing them and the corresponding arrivals to be cancelled, resulting in the loss of 12 operations per year.

- Flight US 007, which is projected to be added to the schedule by 2015, with a 9:20 p.m. departure time, would be delayed in departing until after 11:00 p.m. on occasion. When that happens, the departure would be cancelled, as would the corresponding arrival. This is projected to occur four times per year, resulting in the loss of 8 operations by A319 aircraft.

- A total of 750 US Airways/Mesa operations would be lost in 2015.

Virgin America in 2015:

- It is estimated Virgin America would operate 19% of all A320 operations at the Airport in 2015. Based on the unrestricted nighttime fleet mix forecast, 0.5 A320 operations per night would occur after 11:00 p.m. (See Table 50 on page 89 in the main body of Technical Report 1.) This would amount to 33 late arrivals. It is assumed that Virgin would cancel these flights and the corresponding departures the following day, resulting in the loss of 66 operations per year.

- In addition, delays are projected to cause Virgin America to cancel flight VA 108, an evening departure to San Francisco, two times per year. With the cancellation of the corresponding arrivals, this would amount to a loss of four A320 operations.

- In 2015, Virgin America is projected to lose a total of 70 operations with a full curfew.

Ad-hoc Passenger Charters in 2015:

- By 2015, the ad-hoc charter airline at Burbank would have retired their MD-82/83s and replaced them with B737-800s.

- It is assumed ad-hoc charters account for 97% of all B737-800 operations projected to occur between 11:00 p.m. to 7:00 a.m. in the unrestricted forecast, where one operation per night is forecast. (See Table 50 on page 89 in the main body of Technical Report 1.) This would amount to 346 operations per year. It is anticipated that the operators of these nighttime charter flights would move to another airport in the area, most likely LAX. This would result in the loss of 346 operations in 2015.

In summary, with the full curfew, the Airport is projected to handle 2,180 fewer air carrier operations in 2015, as compared to the unrestricted forecast. This is 2.8% below the unrestricted forecast total. The forecast total passenger aircraft operations in 2015 with the full curfew are 76,412.

Table BB-11 summarizes the full curfew forecast and presents the impacts on each airline in 2015. There is forecast to be a loss of 2,180 operations due to the full curfew.

Table BB-11

FULL CURFEW: EFFECT ON OPERATIONS BY AIRLINE FOR 2015
FAR Part 161 Study
Bob Hope Airport

	Annual Operations - 2015
Unrestricted Forecast Air Carrier Operations	78,592
Lost Operations with Full Curfew:	
Alaska/Horizon	36
American	22
Delta/Skywest	12
Hawaiian	0
JetBlue	738
Skybus	0
Southwest	154
United & Skywest	52
US Airways & Mesa	750
Virgin America	70
Ad-hoc Charter	346
Total Lost Passenger Operations with a Full Curfew	2,180
Forecast Air Carrier Operations with Full Curfew	76,412

Table BB-12 breaks down the 2,180 lost air carrier operations by aircraft type and notes the average reduction per day.

Table BB-12

FULL CURFEW: EFFECT ON OPERATIONS BY AIRCRAFT TYPE FOR 2015
FAR Part 161 Study
Bob Hope Airport

	B737-900ER	A320	A319	B737-300	B737-400	B737-500	B737-700	B737-800	CRJ-200	CRJ-700	CRJ-900	Total
Reduced Operations For Year*	0	808	14	1,492	0	24	122	368	18	-666	0	2,180
Avg. Reduction in Daily Operations*	0.0	2.2	0.04	4.1	0.0	0.1	0.3	1.0	0.05	-1.8	0.0	6.0
Unrestricted: Avg. Per Night	0.5	3.1	3.8	1.6	0.3	0.7	2.3	1.0	0.5	2.2	0.2	16.1
Operations Shifted to Daytime	0.5	0.9	3.8	-2.4	0.3	0.6	1.9	0.0	0.4	4.0	0.2	10.2
Full Curfew: Avg. Per Night	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full Curfew: Nighttime Operations Per Year	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*A negative number of "reduced operations" means that there is an increase in operations for that aircraft type because it is substituted for a different type.

6.2 Forecasts With Departure Curfew

This alternative involves a curfew on all departures from 10:00 p.m. to 7:00 a.m. Flights delayed because of mechanical, air traffic control, or weather problems would be permitted to depart during the one-hour grace period from 10:00 to 11:00 p.m. Arriving flights would be permitted to land throughout the night.

6.2.1 2008 Forecasts

The following airlines would experience a reduced number of operations as a result of the departure curfew:

- JetBlue
- Southwest
- Virgin America
- United & Skywest
- US Airways & Mesa
- Ad-hoc Charter Carriers

All other airlines, including Alaska and Horizon, American, and Delta/Skywest would be unaffected by the departure curfew.

The projected 2008 flight schedule with a departure curfew is shown in Table BB-13. The rest of this section describes the affected flights, by airline.

Table BB-13

2008 PROJECTED FLIGHT SCHEDULE WITH DEPARTURE CURFEW
FAR Part 161 Study
Bob Hope Airport

Arrivals (After 1900 until 0715)						Departures (After 1900 until 0715)					
Airline, Flt. #	Sched Arr Time	FROM	Equipment	Frequency	Remarks	Airline, Flt. #	Sched Dep Time	TO	Equipment	Frequency	Remarks
Evening Arrivals						***Morning Departures***					
WN 267	1900	LAS	737	D		US 590	645	PHX	733	D	
*VA 107**	*1905*	*SFO*	*320*	*X6*		DL 3997	650	SLC	CRJ	D	Skywest
UA 1187	1923	SFO	735	D		UA 6704	655	SFO	CR7	D	Skywest
WN 1735	1925	OAK	737	D		WN 1617	700	PHX	737	X67	
WN 118	1935	LAS	733	D		WN 476	700	LAS	737	D	
B6 357	1945	JFK	320	D		B6 350	700	JFK	320	D	
WN 402	1955	OAK	737	X6		*UA 1232**	*700*	*DEN*	*735*	*D*	
WN 2010	1955	SMF	733	X6		VA 100	705	SFO	320	D	
WN 2314	2010	SMF	737	6		AA 1822	705	DFW	M83	D	
WN 348	2030	SJC	733	D		WN 137	710	SMF	733	X7	
AA 1865	2035	DFW	M83	D		WN 182	715	SJC	737	X67	
WN 1781	2040	PHX	733	D		***Evening Departures***					
US 2789	2045	LAS	CRJ	X6	Mesa	WN 565	1920	PHX	733	D	
AS 358	2050	SEA	73G	D		*WN 267**	*1925*	*OAK*	*737*	*X6*	
WN 121	2050	LAS	737	D		VA 108	1945	SFO	320	X6	
WN 1210	2050	OAK	737	D		WN 1735	1950	LAS	737	D	
US 480	2114	PHX	733	D		WN 126	1955	SMF	737	X6	
WN 1939	2115	SJC	737	X6		WN 2311	2015	SJC	733	X6	
WN 2492	2120	LAS	737	D		UA 6349	2020	SFO	CRJ	D	Skywest
WN 713	2125	PHX	737	X6		WN 677	2020	OAK	737	X6	
UA 6571	2128	SFO	CR7	D		WN 2314	2035	LAS	737	6	
*VA 109**	*2133*	*SFO*	*320*	*D*		WN 1948	2050	PHX	737	X6	
WN 1697	2140	SMF	733	X6		B6 358	2050	JFK	320	D	
*B6 281**	*2145*	*IAD*	*320*	*D*		US 475	2055	LAS	319	6	
UA 1181	2145	DEN	735	D	Skywest	WN 1781	2105	SMF	733	X6	
DL 3953	2149	SLC	CRJ	D	Skywest	US 2800	2115	LAS	CRJ	X6	Mesa
B6 359	2150	JFK	320	D		WN 1210	2115	LAS	737	X6	
WN 1738	2150	OAK	737	X6		WN 1623	2120	PHX	737	X6	
AS 2555	2159	PDX	CR7	D	Horizon						

	Flights scheduled within curfew hours in unrestricted case
	Flights with high diversion or cancellation risk with curfew
	Flights with moderate diversion or cancellation risk with curfew
	Flights with low diversion or cancellation risk with curfew
	Departures unaffected by curfew
	Flights eliminated due to curfew
	Flight/schedule change (time, equipment) to accommodate curfew
*	*New flight projected to be added after 2006 in unrestricted case*

Code	Legend
X	Except
6	Saturday
7	Sunday
D	Daily

Code	Legend
AS	Alaska & Horizon
AA	American
DL	Delta & Skywest
HA	Hawaiian Airlines
B6	JetBlue
SB	Skybus
WN	Southwest
UA	United & Skywest
US	US Airways & Mesa
VA	Virgin America

Delta/Skywest in 2008:

- As noted in the discussion of the full curfew (Section 6.1.1), Skywest would keep its 6:50 a.m. departure as scheduled. They would simply taxi out to the runway and wait for 7:00 a.m. before taking-off. Therefore, the departure curfew should have no adverse impact on Delta/Skywest.

JetBlue in 2008:

- As discussed in Section 6.1.1, JetBlue would be affected by this curfew only when flight B6 358, scheduled to depart at 8:50 p.m., is delayed. It is assumed this would happen four times per year and that JetBlue would be able to anticipate the problem and cancel the corresponding arrival (B6 357). This would result in a loss of 8 A320 operations.

Southwest in 2008:

- As discussed in Section 6.1.1, it is assumed that delays experienced earlier in the day would cause each of the 8 departures scheduled between 7:00 and 8:59 p.m. to be delayed after 11:00 p.m. an average of once per year. To avoid the aircraft being stranded overnight at BUR, Southwest would cancel the inbound arrivals. This would result in a loss of 16 operations (4 by B737-300 aircraft and 12 by B737-700s).

- It is assumed that 3 departures scheduled between 9:00 and 9:59 p.m. would be delayed until after 11:00 p.m. 4 times per year. Again, it is assumed that Southwest would cancel the inbound arrivals to avoid the aircraft having to stay overnight at BUR. This would result in a loss of 24 operations (8 by B737-300s and 16 by B737-700s).

- Total lost Southwest operations are estimated at 40 (12 B737-300 operations and 28 B737-700 operations).

United in 2008:

- As discussed in Section 6.1.1, United would reschedule flight UA 704 to depart 10 minutes later, taking off after 7:00 a.m. The change would cause the airline to replace the B737-300 currently serving that route with a smaller CRJ-700 because of the loss of connecting possibilities in San Francisco. Therefore, there would be a loss of 730 B737-300 operations yearly and a gain of 730 CRJ-700 operations.

- On occasion, as explained in Section 6.1.1, flight UA 6349, scheduled to depart at 8:20 p.m., would be subject to mechanical, weather, or air traffic control delays causing it be delayed in departing from BUR until after 11:00 p.m. In those cases, it is anticipated that the corresponding arrival would be cancelled to avoid leaving the aircraft at BUR overnight. It is estimated that this would happen 2 times per year, resulting in a loss of 4 operations.

- The total net loss in United and Skywest operations would be 4.

US Airways & Mesa in 2008:

- As discussed in Section 6.1.1, US Airways operates flight US 590 with a B737-300 daily at 6:45 a.m. This flight is expected to be eliminated because it cannot be rescheduled without missing numerous connections at Phoenix. This would force the elimination of the corresponding arrival the preceding evening, resulting in a loss of 730 (B737-300) operations per year.

- As discussed in Section 6.1.1, flights US 2800 (CRJ-200) and US 475 (A319), scheduled to takeoff at 9:15 p.m. and 8:55 p.m., respectively, occasionally would be delayed past 11:00 p.m. It is assumed that the airline would cancel the corresponding arrivals to avoid stranding the aircraft overnight at BUR. This is assumed to happen 6 times per year (5 times to US 2800 and 1 time to US 475), resulting in a loss of 12 operations.

- The total lost US Airways and Mesa operations would be 742.

Virgin America in 2008:

- As explained in Section 6.1.1, flight VA 108, scheduled to depart for San Francisco at 7:45 p.m., would be delayed until after 11:00 p.m. an estimated 2 times per year. The airline would cancel the corresponding arrival to avoid stranding the aircraft away from its hub. This would result in an annual loss of 4 A320 operations.

Ad-hoc Passenger Charters in 2008:

- A departure curfew would have essentially the same effect on nighttime passenger charters as a full curfew. It is assumed that all nighttime passenger charters would move to another LA-area airport (usually LAX), resulting in the loss of 33 operations in 2008.

Table BB-14 shows the effect of the departure curfew on the airlines in 2008. With a departure curfew, the Airport is projected to handle 831 fewer air carrier operations in 2008, compared to the unrestricted forecast. This includes 382 nighttime air carrier operations and 449 daytime and evening air carrier operations.* This corresponds to a reduction of 1.2% from the unrestricted forecast. The total air carrier operations forecast with the departure curfew are 68,974.

Table BB-14

DEPARTURE CURFEW: EFFECT ON OPERATIONS BY AIRLINE FOR 2008
FAR Part 161 Study
Bob Hope Airport

	Annual Operations - 2008
Unrestricted Forecast Air Carrier Operations	69,813
Lost Operations with Departure Curfew:	0
Alaska/Horizon	
American	0
Delta/Skywest	0
JetBlue	8
Southwest	40
United & Skywest	4
US Airways & Mesa	742
Virgin America	4
Ad-hoc Charter	33
Total Lost Passenger Operations with Departure Curfew	831
Forecast Air Carrier Operations with Departure Curfew	68,982

*The number of evening operations will decline because airlines are likely to eliminate red-eye flights to the east coast with scheduled departure times near 10:00 pm, rather than risk not being able to depart on-time if the arrival of the aircraft to BUR is late.

Table BB-15 breaks down the 831 fewer air carrier operations by aircraft type and the new projected number of operations during curfew hours. It is assumed there is an equal 50/50 spilt between MD-82s and MD-83s.*

Table BB-15

DEPARTURE CURFEW: EFFECT ON OPERATIONS BY AIRCRAFT TYPE FOR 2008
FAR Part 161 Study
Bob Hope Airport

	A320	A319	B737-300	B737-400	B737-500	B737-700	B737-800	MD-82	MD-83	CRJ-200	CRJ-700	CRJ-900	Total
Reduced Operations For Year*	12	2	1,472	0	0	28	0	16	17	14	-730	0	831
Avg. Reduction in Operations Daily Operations*	0.03	0.01	4.0	0.0	0.0	0.1	0.0	0.04	0.05	0.04	-2.0	0.0	2.3
Unrestricted: Avg. Per Night	1.5	1.6	2.4	0.2	0.5	1.1	0.2	0.1	0.4	0.6	1.1	0.0	9.6
Operations Shifted to Daytime	0.0	0.0	-1.7	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	-1.2
Departure Curfew: Avg. Per Night	1.4	1.6	0.0	0.2	0.5	1.0	0.2	0.0	0.0	0.6	3.1	0.0	8.6
Departure Curfew: Nighttime Operations Per Year	525	587	0	64	166	358	69	0	0	203	1149	0	3,121

* A negative number of "reduced operations" means that there is an increase in operations for that aircraft type because it is substituted for a different type.

6.2.2 2015 Forecasts

With a departure curfew, the Airport is projected to handle 1,886 fewer air carrier operations in 2015, as compared to the unrestricted forecast, a. 2.4%. The total passenger aircraft operations forecast with the departure curfew are 76,706. The following airlines would experience a reduced number of operations as a result of this curfew:

- JetBlue
- United & Skywest
- US Airways & Mesa
- Southwest
- Virgin America
- Ad-hoc Passenger Charters

All other airlines, including Alaska & Horizon, American, Delta/Skywest, Hawaiian and Skybus would not experience any reduced operations with a departure curfew. The projected 2015 flight schedule with a departure curfew is shown in Table BB-16.

*Figures may not be an exact 50/50 split due to rounding.

A full description of the specific flights affected for each airline, follows:

Delta/Skywest in 2015:

- As discussed for the 2008 case, Skywest would keep its 6:50 a.m. departure as scheduled. They would simply wait for 7:00 a.m. before taking-off. Therefore, the departure curfew should have no adverse impact on Delta/Skywest in 2015.

JetBlue in 2015:

- In 2015, the effects of the departure curfew on JetBlue would be the same as the full curfew, discussed in Section 6.1.2, above. Flight B6 358, scheduled to depart at 8:50 p.m., would be delayed four times per year. Both the departure and the corresponding arrival would be cancelled. In addition, JetBlue would eliminate the daily 9:40 p.m. departure to Washington-Dulles (B6 282), resulting in a loss of 730 A320 operations yearly. It would be too risky to operate a late-night red-eye departure from BUR with a departure curfew in place.

- Total lost JetBlue operations in 2015 would be 738.

Southwest in 2015:

- As discussed for 2008 conditions, it is anticipated that the Southwest departures scheduled between 7:00 and 8:59 p.m. would be delayed past 11:00 p.m. once per year. In 2015, ten departures are scheduled during that period. The corresponding arrivals also would be cancelled, resulting in a total loss of 20 operations (4 B737-300 operations and 16 B737-700 operations).

- As discussed for 2008 conditions, delays earlier in the day are anticipated to cause the three Southwest departures scheduled between 9:00 and 9:59 p.m. to be delayed after 11:00 p.m. 4 times per year, resulting in their cancellation together with the corresponding arrivals. This would result in a loss of 24 operations (8 B737-300 operations and 16 B737-700 operations).

- Total lost Southwest operations are estimated at 44 (12 B737-300 and 32 B737-700 operations).

Table BB-16

2015 PROJECTED FLIGHT SCHEDULE WITH DEPARTURE CURFEW
FAR Part 161 Study
Bob Hope Airport

Arrivals (After 1900 until 0715)

Airline, Flt. #	Sched Arr Time	FROM	Equipment	Frequency	Remarks
		Morning Arrivals			
*HA 201**	*0700*	*HNL*	*739*	*D*	
		Evening Arrivals			
WN 267	1900	LAS	737	D	
VA 107	1905	SFO	320	X6	
UA 1187	1923	SFO	735	D	
WN 1735	1925	OAK	737	D	
*WN 3004**	*1930*	*DAL*	*737*	*D*	
WN 118	1935	LAS	733	D	
*WN 3006**	*1940*	*DEN*	*737*	*D*	
B6 357	1945	JFK	320	D	
WN 402	1955	OAK	737	X6	
WN 2010	1955	SMF	733	X6	
WN 2314	2010	SMF	737	6	
*US 006**	*2020*	*PHL*	*319*	*D*	
WN 348	2030	SJC	733	D	
AA 1865	2035	DFW	738	D	
WN 1781	2040	PHX	733	D	
US 2789	2045	LAS	CRJ	X6	Mesa
AS 358	2050	SEA	73G	D	
WN 121	2050	LAS	737	D	
WN 1210	2050	OAK	737	D	
B6 281	2055	IAD	320	D	
US 480	2114	PHX	733	D	
WN 1939	2115	SJC	737	X6	
WN 2492	2120	LAS	737	D	
*SB 300**	*2123*	*CMH*	*319*	*D*	
WN 713	2125	PHX	737	X6	
UA 6571	2128	SFO	CR7	D	
*WN 3002**	*2130*	*DAL*	*737*	*X6*	
VA 109	2133	SFO	320	D	
*B6 999**	*2135*	*BOS*	*320*	*D*	
WN 1697	2140	SMF	733	X6	
UA 1181	2145	DEN	735	D	
DL 3953	2149	SLC	CRJ	D	Skywest
B6 359	2150	JFK	320	D	
*WN 3000**	*2150*	*DEN*	*737*	*D*	
WN 1738	2150	OAK	737	X6	
AS 2555	2159	PDX	CR7	D	Horizon

Departures (After 1900 until 0715)

Airline, Flt. #	Sched Dep Time	TO	Equipment	Frequency	Remarks
		Morning Departures			
US 590	645	PHX	733	D	
DL 3997	650	SLC	CRJ	D	Skywest
UA 6704	655	SFO	CR7	D	Skywest
*WN 3001**	*700*	*DEN*	*737*	*D*	
WN 1617	700	PHX	737	X67	
WN 476	700	LAS	737	D	
B6 350	700	JFK	320	D	
UA 1232	700	DEN	735	D	
*WN 3003**	*705*	*DAL*	*737*	*X7*	
VA 100	705	SFO	320	D	
AA 1822	705	DFW	738	D	
B6 998	710	IAD	320	D	
WN 137	710	SMF	733	X7	
*SB 301**	*715*	*CMH*	*319*	*D*	
WN 182	715	SJC	737	X67	
		Evening Departures			
WN 565	1920	PHX	733	D	
WN 267	1925	OAK	737	X6	
VA 108	1945	SFO	320	X6	
WN 1735	1950	LAS	737	D	
WN 126	1955	SMF	737	X6	
*WN 3005**	*2000*	*DAL*	*737*	*X6*	
*WN 3007**	*2010*	*DEN*	*737*	*D*	
WN 2311	2015	SJC	733	X6	
UA 6349	2020	SFO	CRJ	D	Skywest
WN 677	2020	OAK	737	X6	
WN 2314	2035	LAS	737	6	
WN 1948	2050	PHX	737	X6	
B6 358	2050	JFK	320	D	
US 475	2055	LAS	319	6	
WN 1781	2105	SMF	737	X6	
US 2800	2115	LAS	CRJ	X6	Mesa
WN 1210	2115	LAS	733	X6	
*US 007**	*2120*	*PHL*	*319*	*D*	
WN 1623	2120	PHX	737	X6	
*B6 282**	*2140*	*IAD*	*320*	*D*	

	Flights scheduled within curfew hours in unrestricted case
	Flights with high diversion or cancellation risk with curfew
	Flights with moderate diversion or cancellation risk with curfew
	Flights with low diversion or cancellation risk with curfew
	Departures unaffected by curfew
	Flights eliminated due to curfew
	Flight/schedule change (time, equipment) to accommodate curfew
*	*New flight projected to be added after 2008 in unrestricted case*

Code	Legend
X	Except
6	Saturday
7	Sunday
D	Daily

Code	Legend
AS	Alaska & Horizon
AA	American
DL	Delta & Skywest
HA	Hawaiian Airlines
B6	JetBlue
SB	Skybus
WN	Southwest
UA	United & Skywest
US	US Airways & Mesa
VA	Virgin America

United in 2015:

- The same effects projected for 2008 are anticipated to remain in 2015. These include a change in the departure time of flight UA 704 and the substitution of a CRJ-700 for a B737-300 on the flight. Another effect is anticipated to be the cancellation of flight UA 6349, scheduled to depart at 8:20 p.m. and the corresponding arrival twice per year.

- These effects would result in a net loss of four operations in 2015.

US Airways & Mesa in 2015:

- In 2015, US Airways would experience the same effects as discussed for 2008 with the departure curfew. This includes elimination of flight US 590, scheduled for a 7:45 a.m. departure in the unrestricted case and the corresponding arrival the previous evening. This results in the loss of 730 operations per year. In addition, the flights scheduled to depart at 9:15 p.m. and 8:55 p.m. would be occasionally delayed past 11:00 p.m. On those occasions, the flights would be cancelled, together with the corresponding arrivals, resulting in the loss of 12 operations per year.

- Flight US 007, which is projected to be added to the schedule by 2015, would be delayed in departing until after 11:00 p.m. The scheduled departure time would be 9:20 p.m. On these occasions, the departure would be cancelled, as would the corresponding arrival. This is assumed to happen 4 times per year, resulting in the loss of 8 operations by A319 aircraft.

- The total lost US Airways/Mesa operations in 2015 would be 750.

Virgin America in 2015:

- Virgin America is projected to experience the same effects in 2015 as anticipated in 2008. This involves the cancellation of two late departures and the corresponding arrivals per year, for a loss of four A320 operations.

Ad-hoc Passenger Charters in 2015:

- The departure curfew would have essentially the same effect on the charter operators as the full curfew. This would result in the loss of 346 operations in 2015.

Table BB-17 summarizes the forecasts under the departure curfew, and presents the impacts on each airline for 2015. There is forecast to be a loss of 1,886 operations due to the departure curfew. This includes a reduction of 1,005 nighttime operations and 881 evening operations.*

Table BB-17

DEPARTURE CURFEW: EFFECT ON OPERATIONS BY AIRLINE FOR 2015
FAR Part 161 Study
Bob Hope Airport

	Annual Operations - 2015
Unrestricted Forecast Air Carrier Operations	78,592
Lost Operations with Departure Curfew:	0
Alaska/Horizon	
American	0
Delta/Skywest	0
Hawaiian	0
JetBlue	738
Skybus	0
Southwest	44
United & Skywest	4
US Airways & Mesa	750
Virgin America	4
Ad-hoc Charter	346
Total Lost Passenger Operations with Departure Curfew	1,886
Forecast Air Carrier Operations with Departure Curfew	76,706

*The number of evening operations will decline because some airlines would decide to eliminate red-eye flights to the east coast departing close to 10:00 pm under a departures curfew, rather than risk not being able to depart on-time if the arrival of the aircraft into BUR is late.

Table BB-18 depicts the 1,886 fewer passenger aircraft operations broken down by aircraft type and the new projected number of operations during curfew hours:

Table BB-18

DEPARTURE CURFEW: EFFECT ON OPERATIONS BY AIRCRAFT TYPE FOR 2015
FAR Part 161 Study
Bob Hope Airport

	B737-900ER	A320	A319	B737-300	B737-400	B737-500	B737-700	B737-800	CRJ-200	CRJ-700	CRJ-900	Total
Reduced Operations For Year*	0	742	10	1,472	0	0	32	346	14	-730	0	1,886
Avg. Reduction in Daily Operations*	0.0	2.0	0.03	4.0	0.0	0.0	0.1	0.9	0.04	-2.0	0.0	5.2
Unrestricted: Avg. Per Night	0.5	3.1	3.8	1.6	0.3	0.7	2.3	1.0	0.5	2.2	0.2	16.1
Operations Shifted to Daytime	0.0	0.0	0.0	-2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.4
Departure Curfew: Avg. Per Night	0.5	1.0	3.8	0.0	0.3	0.7	2.2	0.0	0.4	4.2	0.2	13.4
Departure Curfew: Nighttime Operations Per Year	179	379	1,382	0	106	261	801	11	159	1,537	59	4,874

*A negative number of "reduced operations" means that there is an increase in operations for that aircraft type because it is substituted for a different type.

6.3 Forecasts with Noise-Based Curfew

The third alternative is a curfew on nighttime takeoffs and landings by aircraft with Part 36 certificated noise levels exceeding 253 EPNdB (or 81.1 CdBA for aircraft certificated at only one measurement point as reported in AC 36-1H, Appendices 7 and 9, or 91.8 dBA for aircraft listed in AC 36-1H Appendix 8.)

Very few aircraft types in airline passenger operation produce a noise footprint below 253 EPNdB. These include:

- ATR 42-500 and ATR 42-400
- Dash-8-100
- EMB-120
- Saab 340
- Beech 1900D
- Fairchild Metro
- Jetstream 31/32

All of these aircraft types are turboprop aircraft. None of the airlines operating at Burbank currently serve the Airport with turboprop equipment. No commercial jets produce noise below the 253 EPNdB level. While engine technology has continued to improve, resulting in quieter noise levels for later aircraft models, it is not expected that there will be any new jet engine types introduced before 2015 with a noise footprint below 253 EPNdB.

6.3.1 Airlines at Burbank with Aircraft Quieter than 253 EPNdB

As of October 2006, only two airlines at the Airport had any aircraft in their fleets with certificated noise levels below 253 EPNdB – Skywest, with the EMB-120 and Mesa, with the B1900D. During the 2008 and 2015 forecast periods, none of the forecast new airline entrants to the Airport will be operating any aircraft type below 253 EPNdB.

6.3.1.1 Skywest

The longest route Skywest currently serves from Salt Lake City with the EMB-120, on behalf of Delta Airlines, is 320 miles. Since the SLC-BUR route covers a distance of 574 miles, it is unlikely that Delta would consider using this aircraft on that route. Thus, the effect of the 253 EPNdB curfew would be the same on Delta/Skywest as the full curfew.

The longest route Skywest currently serves from San Francisco with the EMB-120 turboprop, on behalf of United Airlines, is 462 miles. The SFO-BUR route covers a distance of 326 miles. Skywest could possibly consider using the EMB-120 on this route in place of the CRJ-700 on flight UA #6571 which has a scheduled arrival time of 9:28 p.m. This would allow flexibility for that flight to arrive late without being penalized, cancelled, or diverted to another LA-area airport. The EMB-120's maximum seating capacity, however, is only 30 -- 57% lower than a CRJ-700. It is doubtful that Skywest and United would be willing to lose this much capacity on the flight. Thus, it is assumed that the airline will continue using the CRJ-700 on flight UA #6571 with the same scheduled arrival time. Thus, United/Skywest's affected operations will be identical to those listed in the preferred full curfew.

6.3.1.2 Mesa

Since Mesa currently operates only three B1900D flights per day for US Airways from Phoenix, it is assumed they would not consider utilizing this aircraft type on the PHX-BUR route. The three flights are timed so that only a single B1900D aircraft is needed to operate all of them. Additionally, the three B1900D flights serve two small towns near Phoenix and not any major metropolitan centers such as Burbank.

6.3.2 2008 and 2015 Forecasts

Based on the analysis above, it is evident that a noise-based curfew noise limit will yield the same reductions in air carrier operations as a full curfew. Table BB-19 summarizes the forecast number of operations with a noise-based curfew curfew for 2008 and 2015 as compared with the unrestricted forecast. Tables B-7 and B-10, presented above, show the detailed schedule changes with the full curfew (and the noise-based curfew nighttime noise limit).

Table BB-19

FORECAST OF AIR CARRIER OPERATIONS WITH NOISE-BASED CURFEW—2008 AND 2015

FAR Part 161 Study
Bob Hope Airport

Year	Scenario	Total Air Carrier Operations	% Reduction From Unrestricted
2008	Unrestricted	69,813	--
	253 EPNdB Noise-Based Curfew	68,764	1.5%
2015	Unrestricted	78,592	--
	253 EPNdB Noise-Based Curfew	76,412	2.8%

7.0 RESTRICTED FORECASTS OF ENPLANED/DEPLANED PASSENGERS

The forecast of passengers that Bob Hope Airport will handle under the restricted conditions were developed based on the reductions in aircraft operations by aircraft type and airline due to the restrictions, as described in Section 6.0.

7.1 Passenger Forecasts with Full Curfew and Noise-Based Curfew

Passenger projections are based on the reduced number of operations with a full curfew (which is the same as the reduced number of operations with the noise-based curfew). This means no aircraft operations are permitted between 10:00 p.m. and 7:00 a.m., except during the one-hour grace period from 10:00 to 11:00 p.m.

With a full curfew, air carrier operations in 2008 at Burbank are forecast to be 68,764, or 1,049 operations below the unrestricted forecast. The losses in operations and the resulting losses in passengers are broken down by airline and are shown in Table BB-20. The reductions for this and all other curfew scenarios are based upon the projected load factors by airline (see Attachments B-1 and B-2) and the forecast

percentage of passengers on cancelled and eliminated flights that will be accommodated on other flights to and from Burbank, as noted in Table BB-6.

Table BB-20

LOST PASSENGERS BY AIRLINE AND AIRCRAFT TYPE WITH FULL CURFEW AND NOISE-BASED CURFEW—2008

FAR Part 161 Study
Bob Hope Airport

Airline	Aircraft Type	Aircraft Seating Capacity	Lost Arrivals	Lost Departures	Gained Arrivals	Gained Departures	Average Load Factor	Average Passengers Per Flight	Passengers Unable to Book Another BUR Flight	Passengers Lost Per Flight	Passengers Lost Per Year
Alaska	B737-700	124	2	0	0	0	75%	93	100%	93	186
American	MD-82/83	136	8	8	0	0	75%	102	50%	51	816
Delta-Skywest	CRJ-200	50	6	6	0	0	65%	33	50%	16	195
Horizon	CRJ-700	70	18	18	0	0	70%	49	50%	25	882
JetBlue	A320	156	4	4	0	0	83%	129	10%	13	104
JetBlue	A320	156	4	0	0	0	83%	129	100%	129	518
Southwest	B737-300	137	16	16	0	0	70%	96	70%	67	2,148
Southwest	B737-700	137	39	39	0	0	70%	96	70%	67	5,236
United-Skywest	CRJ-200	50	2	2	0	0	65%	33	50%	16	65
United	B737-500	110	12	12	0	0	75%	83	50%	41	990
United	B737-300	128	365	365	0	0	75%	96	83%	30	22,176
United-Skywest	CRJ-700	66	0	0	365	365	90%	59	0%	0	0
US Airways	A319	124	1	1	0	0	75%	93	50%	47	93
US Airways	B737-300	134	365	365	0	0	75%	101	52%	52	38,076
US-Airways-Mesa	CRJ-200	50	5	5	0	0	65%	33	60%	20	195
Virgin America	A320	150	20	20	0	0	70%	105	25%	26	1,050
Ad-hoc Charters	MD-82/83	150	16.5	16.5	0	0	88%	132	100%	132	4,356
									Total Passengers Lost in 2008:		**77,086**

In 2015 with a full curfew, air carrier operations are forecast to be 76,412, or 2,180 operations below the unrestricted forecast. The resulting losses in passengers broken down by airline are shown in Table BB-21.

Table BB-21

LOST PASSENGERS BY AIRLINE AND AIRCRAFT TYPE WITH FULL CURFEW AND NOISE-BASED CURFEW—2015

FAR Part 161 Study
Bob Hope Airport

Airline	Aircraft Type	Aircraft Seating Capacity	Lost Arrivals	Lost Departures	Gained Arrivals	Gained Departures	Average Load Factor	Average Passengers Per Flight	Passengers Unable to Book Another BUR Flight	Passengers Lost Per Flight	Passengers Lost Per Year
Alaska	B737-700	124	2	0	0	0	78%	97	100%	97	193
American	B737-800	136	11	11	0	0	78%	106	50%	53	1,167
Delta-Skywest	CRJ-200	50	6	6	0	0	70%	35	50%	18	210
Horizon	CRJ-700	70	18	18	0	0	75%	53	50%	26	945
JetBlue	A320	156	365	365	0	0	85%	133	41%	54	39,203
JetBlue	A320	156	4	4	0	0	85%	133	20%	27	212
JetBlue	A320	156	4	0	0	0	85%	133	100%	133	530
Skybus	A319	150	3	0	0	0	80%	120	100%	120	360
Southwest	B737-300	137	16	16	0	0	74%	101	70%	71	2,271
Southwest	B737-700	137	61	61	0	0	74%	101	70%	71	8,658
United-Skywest	CRJ-200	50	2	2	0	0	70%	35	50%	18	70
United	B737-500	110	12	12	0	0	78%	86	50%	43	1,030
United	B737-300	128	365	365	0	0	75%	96	83%	30	22,176
United-Skywest	CRJ-700	66	0	0	365	365	90%	59	0%	0	0
US Airways	B737-300	134	365	365	0	0	78%	105	52%	54	39,676
US Airways	A319	124	5	5	0	0	78%	97	50%	48	484
US-Airways-Mesa	CRJ-200	50	5	5	0	0	70%	35	60%	21	210
Virgin America	A320	150	35	35	0	0	82%	123	25%	31	2,153
Ad-hoc Charters	B737-800	150	173	173	0	0	90%	135	100%	135	46,710
									Total Passengers Lost in 2015:		**166,257**

Table BB-22 summarizes the enplaned/deplaned passenger forecast with the full curfew and presents the impacts on each airline. In 2008, it is projected that Bob Hope Airport will handle 77,086 fewer total passengers, 1.3% below the unrestricted forecast total. The passenger forecast with the full curfew is 5,996,914 total passengers.

In 2015, it is projected that the Airport will handle 166,257 fewer total passengers in 2015, 2.3% below the unrestricted forecast total. The passenger forecast with a full curfew is 7,103,743 total passengers.

Table BB-22

PROJECTED TOTAL PASSENGERS WITH FULL CURFEW AND NOISE-BASED CURFEW
FAR Part 161 Study
Bob Hope Airport

	Annual Passengers	
	2008	2015
Unrestricted Forecast Enplaned/Deplaned Passengers	6,074,000	7,270,000
Lost Passengers with Full Curfew:	1,068	1,138
Alaska & Horizon		
American	816	1,167
Delta/Skywest	195	210
Hawaiian	0	0
JetBlue	622	39,946
Skybus	0	360
Southwest	7,384	10,929
United & Skywest	23,231	23,276
US Airways & Mesa	38,364	40,369
Virgin America	1,050	2,153
Ad-hoc Charter	4,356	46,710
Total Reduction in Passengers with Full Curfew	77,085	166,257
Forecast Enplaned/Deplaned Passengers with Full Curfew	5,996,914	7,103,743

7.2 Passenger Forecasts With Departure Curfew

With the departure curfew, air carrier operations in 2008 at Burbank are forecast to be 68,982, a reduction of 831 from the unrestricted forecast. This results in the losses in total passengers broken down by airline shown in Table BB-23 below.

Table BB-23

LOST PASSENGERS BY AIRLINE AND AIRCRAFT TYPE WITH DEPARTURE CURFEW—2008
FAR Part 161 Study
Bob Hope Airport

Airline	Aircraft Type	Aircraft Seating Capacity	Lost Arrivals	Lost Departures	Gained Arrivals	Gained Departures	Average Load Factor	Average Passengers Per Flight	Passengers Unable to Book Another BUR Flight	Passengers Lost Per Flight	Passengers Lost Per Year
JetBlue	A320	156	4	4	0	0	83%	129	10%	13	104
Southwest	B737-300	137	6	6	0	0	70%	96	75%	72	863
Southwest	B737-700	137	14	14	0	0	70%	96	75%	72	2,014
United-Skywest	CRJ-200	50	2	2	0	0	65%	33	50%	16	65
United	B737-300	128	365	365	0	0	75%	96	83%	30	22,176
United-Skywest	CRJ-700	66	0	0	365	365	90%	59	0%	0	0
US Airways	A319	124	1	1	0	0	75%	93	50%	47	93
US Airways	B737-300	134	365	365	0	0	75%	101	52%	52	38,076
US-Airways-Mesa	CRJ-200	50	5	5	0	0	65%	33	60%	20	195
Virgin America	A320	150	2	2	0	0	70%	105	50%	53	210
Ad-hoc Charters	MD-82/83	150	16.5	16.5	0	0	88%	132	100%	132	4,356
									Total Passengers Lost in 2008:		**68,152**

In 2015 with a departure curfew, air carrier operations are forecast to be 76,706, or 1,886 below the unrestricted forecast. This reduction in operations results in the losses in total passengers broken down by airline shown in Table BB-24 below.

Table BB-24

LOST PASSENGERS BY AIRLINE AND AIRCRAFT TYPE WITH DEPARTURE CURFEW—2015
FAR Part 161 Study
Bob Hope Airport

Airline	Aircraft Type	Aircraft Seating Capacity	Lost Arrivals	Lost Departures	Gained Arrivals	Gained Departures	Average Load Factor	Average Passengers Per Flight	Passengers Unable to Book Another BUR Flight	Passengers Lost Per Flight	Passengers Lost Per Year
JetBlue	A320	156	4	4	0	0	85%	133	20%	27	212
JetBlue	A320	156	365	365	0	0	85%	133	41%	54	39,203
Southwest	B737-300	137	6	6	0	0	74%	101	70%	71	852
Southwest	B737-700	137	16	16	0	0	74%	101	70%	71	2,271
United-Skywest	CRJ-200	50	2	2	0	0	70%	35	50%	18	70
United	B737-300	128	365	365	0	0	75%	96	83%	30	22,176
United-Skywest	CRJ-700	66	0	0	365	365	90%	59	0%	0	0
US Airways	B737-300	134	365	365	0	0	78%	105	52%	54	39,676
US Airways	A319	124	5	5	0	0	78%	97	50%	48	484
US-Airways-Mesa	CRJ-200	50	5	5	0	0	70%	35	60%	21	210
Virgin America	A320	150	2	2	0	0	82%	123	25%	31	123
Ad-hoc Charters	B737-800	150	173	173	0	0	90%	135	100%	135	46,710
									Total Passengers Lost in 2015:		**151,986**

Table BB-25 summarizes the departures curfew total enplaned/deplaned passenger forecast and presents the impacts on each airline for 2008 and 2015. With a departure curfew, it is projected that the Airport will handle 68,152 fewer total passengers in 2008, 1.1% below the unrestricted forecast total. The forecast with a departure curfew is 6,005,848 total passengers.

In 2015, it is projected that the Airport will handle 151,986 fewer total passengers, 2.1% below the unrestricted forecast total. The total passenger forecast in 2015 with a departure curfew is 7,118,014 total passengers.

Table BB-25

DEPARTURE CURFEW: EFFECT ON PASSENGERS
FAR Part 161 Study
Bob Hope Airport

	Annual Passengers	
	2008	2015
Unrestricted Forecast Enplaned/Deplaned Passengers	6,074,000	7,270,000
Lost Passengers with a Departure Curfew	0	0
Alaska & Horizon		
American	0	0
Delta/Skywest	0	0
Hawaiian	0	0
JetBlue	104	39,415
Skybus	0	0
Southwest	2,877	3,123
United & Skywest	22,241	22,246
US Airways & Mesa	38,364	40,370
Virgin America	210	123
Ad-hoc Charter	4,356	46,710
Total Reduction in Passengers with Departure Curfew	68,152	151,986
Forecast Enplaned/Deplaned Passengers with Departure Curfew	6,005,848	7,118,014

8.0 SUMMARY OF THE RESTRICTED FORECASTS

A summary of the projected changes from the original unrestricted operations and total passenger forecasts is presented in Table BB-26.

Table BB-26

SUMMARY OF RESTRICTED FORECASTS OF OPERATIONS AND PASSENGERS IN 2008 AND 2015 WITH ALTERNATIVE CURFEWS

FAR Part 161 Study
Bob Hope Airport

Year	Curfew Option	Total Air Carrier Operations	% Reduction From Unrestricted	Total Passengers	% Reduction From Unrestricted
2008	Unrestricted	69,813	-	6,074,000	-
	Restricted Curfew Option				
	Full Curfew	68,764	1.5%	5,996,914	1.3%
	Departure Curfew	68,982	1.2%	6,005,848	1.1%
	Noise-Based Curfew	68,764	1.5%	5,996,914	1.3%
2015	Unrestricted	78,592	-	7,270,000	-
	Restricted Curfew Option				
	Full Curfew	76,412	2.8%	7,103,743	2.3%
	Departure Curfew	75,706	2.4%	7,118,014	2.1%
	Noise-Based Curfew	76,412	2.8%	7,103,743	2.3%

Technical Report 1

AVIATION DEMAND FORECASTS

Appendix CC

ALL-CARGO AIRLINE FORECASTS WITH ALTERNATIVE RESTRICTIONS

Bob Hope Airport

March 2008

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ALL-CARGO AIRLINE FORECASTS WITH ALTERNATIVE RESTRICTIONS

1.0 INTRODUCTION

This Appendix describes the restricted forecasts of all-cargo airline activity for Bob Hope Airport (the Airport or BUR). These forecasts have been developed to facilitate the evaluation required for the application to the FAA for a nighttime noise restriction at the Airport, as required by FAR Part 161.

The Burbank-Glendale-Pasadena Airport Authority (Authority) is evaluating three alternative curfews:

- ***Full Curfew***: Prohibits all departures and arrivals between 10:00 p.m. and 6:59 a.m. Aircraft subject to weather, mechanical, or air traffic control delays would be permitted to land or takeoff after 10:00 p.m. and before 11:00 p.m. The only other exceptions are for military and law enforcement operations, air ambulance operations and emergencies.

- ***Departure Curfew***: Prohibits only departures between 10:00 p.m. and 6:59 a.m. Arrivals are not restricted. This curfew would be subject to the same exceptions as the Full Curfew.

- ***Curfew on Aircraft with Combined Certificated Noise Levels above 253 EPNdB (Noise-Based Curfew):*** Prohibits all departures and arrivals between 10:00 p.m. and 6:59 a.m. by aircraft with noise levels above 253 EPNdB, based on the sum of FAA-certificated levels at the three Part 36 measurement points. Light propeller aircraft certificated at only one measurement point would be prohibited if they exceed the following noise levels: corrected level of 81.1 dBA (for aircraft reported in AC 36-1H, Appendices 7 and 9); or 91.8 dBA (for aircraft reported in AC 36-1H, Appendix 8). This curfew would be subject to the same exceptions as the Full Curfew.

This appendix presents forecasts of all-cargo airline activity under each of the three alternatives for 2008 and 2015. These forecasts are referred to as "restricted forecasts".

2.0 METHODOLOGY

A bottom-up approach was used to develop the restricted forecasts as the effects of the nighttime restrictions are dependent upon the flight schedules and

characteristics of each airline's aircraft fleet and route structure. The restricted all-cargo operations forecasts were developed based on the following approach:

- Reviewing the unrestricted forecasts;
- Undertaking interviews with scheduled cargo carriers operating at the Airport;
- Analyzing current all-cargo flights, including those in the proposed curfew period;
- Creating daily flight schedules for the unrestricted forecasts for the all-cargo airlines which operate large jet freighters at the Airport for 2008 and 2015*;
- Identifying the flights affected by the each alternative curfew and considering the likely response of the all-cargo carriers in dealing with flights during the proposed curfew hours;
- Creating daily flight schedules for the curfew scenarios in 2008 and 2015.
- Calculating the restricted forecasts for each option by subtracting the number of lost operations at the Airport from those in the unrestricted forecasts; and
- Calculating the restricted cargo tonnage forecasts for each alternative, based on the number of lost operations by carrier type.

3.0 CURRENT AND FORECAST FLIGHT SCHEDULES

There are currently three air carriers at Burbank with scheduled all-cargo operations.

- Ameriflight—Commuter/Air Taxi operator
- FedEx—Mainline jet operator
- UPS—Mainline jet operator

As discussed in Chapter 5 of Technical Report 1, these carriers are expected to continue as the primary all-cargo-carriers at the Airport over the next 10 years.

Table CC-1 summarizes the all-cargo operations in 2005 at the Airport and the unrestricted forecasts for 2008 and 2015 reported in Table 16 on page 33 of Technical Report 1. In addition, Table CC-1 shows that, in 2005, 7,442 all-cargo operations occurred between 10:00 p.m. and 7:00 a.m. This represents 46.9% of all freighter flights operated at the Airport that year.

*These projected "unrestricted" schedules for 2008 and 2015 are consistent with the unrestricted forecasts, documented in the main body of Technical Report 1, Aviation Demand Forecast.

Table CC-1

SUMMARY OF CURRENT AND FORECAST ALL-CARGO OPERATIONS
Bob Hope Airport

Category	Actual 2005 Nighttime	Actual 2005 Total	Forecast 2008 Total	Forecast 2015 Total
Commuter (Ameriflight)	7,228	14,354	14,800	14,800
Air Carrier Jet	214	1,507	2,055	2,530
Total	7,442	15,861	16,855	17,330

Note: "Nighttime" is defined from 10:00 p.m. to 7:00 a.m.

Sources: 2005 data from Burbank Pasadena Airport Authority.
Forecasts by Jacobs Consultancy 2007.

The current flight schedules for FedEx and UPS and the forecast schedules in an unrestricted operating environment are outlined below. These forecasts of flight schedules for 2008 and 2015 are consistent with the unrestricted forecast of all-cargo operations given in Table CC-1. Data for compiling cargo airline flight schedules are not readily available as most cargo airlines do not publish their flight schedules in the Official Airline Guide (OAG). Accordingly, the current flight schedules for FedEx and UPS used in the discussions below are taken from an online flight tracker.* The current flight schedule for Ameriflight was obtained from analysis of data obtained from the Airport's air traffic control tower.

3.1 Ameriflight Current Flight Operations

While Ameriflight only accounted for 14% of all-cargo tonnage in 2005, they accounted for 90.5% of all-cargo aircraft operations.** Ameriflight primarily operates light turboprop and piston-engine aircraft on regional routes along the West Coast of the U.S., primarily carrying light-weight, time-sensitive freight. The banking industry is an important source of business for them and accounts for a large portion of the airline's nighttime operations. Although Ameriflight formerly operated LearJet 35s in support of its check courier operation, it is removing them from cargo service. In interviews with the consultant in July 2006, Ameriflight reported that the LearJet 35s will all be converted to service the air taxi and on-demand charter passenger market.

Because much of the cargo Ameriflight carries involves time-sensitive business shipments, approximately half of the airline's operations occur between 10:00 pm

*Source: www.flightaware.com

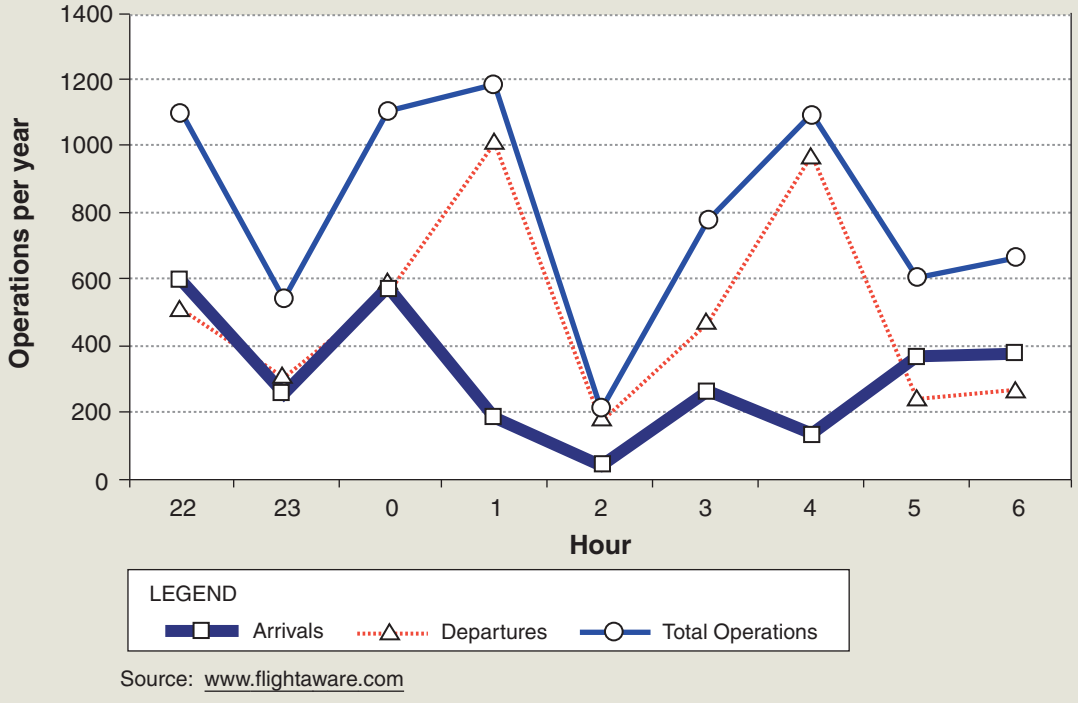
**It is assumed Ameriflight accounts for 100% of the all-cargo commuter air carrier operations at Burbank.

and 6:59 am. Figure CC-1 provides a breakdown of Ameriflight's total nighttime operations in 2005. The majority (24.6%) of Ameriflight's current nighttime operations occur during the nighttime "shoulder hours" with 15.3% occurring between 10:00-10:59 p.m. and 9.3% between 6:00-6:59 am. Approximately 60% of its nighttime operations are departures and 40% are arrivals.

Figure CC-1

CURRENT (2005) AMERIFLIGHT NIGHTTIME HOURLY OPERATIONS

Bob Hope Airport



Source: www.flightaware.com

BUR521 F-0012

3.2 Forecast Ameriflight Operations

With no nighttime restrictions, the number of Ameriflight operations is forecast to increase only slightly from 14,354 in 2005 to 14,800 in 2008 and then to remain unchanged to 2015. (See Table 16 on page 33 of the main forecast report.) With almost no change in total operations, it is also projected that Ameriflight's nighttime operations will remain unchanged from 2005 levels in an unrestricted operational environment.

3.3 FedEx Current Flight Schedule

Data obtained from flightaware.com for January 2007, indicates FedEx currently operates 12 flights weekly to their cargo hubs at Memphis and Indianapolis. Their schedule is as follows:

- Four times weekly, FedEx flight #520 from Memphis arrives into Burbank at approximately 5:30 pm and departs for Indianapolis at approximately 7:45 p.m. as flight #2623.
- Four times weekly, FedEx flight #733 arrives into Burbank at approximately 5:15 p.m. and departs for Memphis at approximately 7:30 p.m. as flight #2238.
- Four times weekly, FedEx flight #1417 arrives into Burbank at approximately 5:30 a.m. and departs for Memphis at approximately 7:30 a.m. as flight #651.

FedEx uses widebody Airbus A300 and A310 freighters on all Burbank flights.*

3.4 FedEx Forecast Flight Schedule

It is forecast that FedEx will not make any changes to their existing Burbank schedule by 2008. By 2015 it is predicted FedEx will increase the flight frequency of its early morning arriving flight #1417, and corresponding departing flight #651, from four to five per week. It is also projected that by 2015 FedEx will increase the frequency of one of its two daytime arriving flights, and the corresponding departing flight, from four to five per week.

3.5 UPS Current Flight Schedule

During 2005, UPS operated four flights per week to Las Vegas utilizing A300 freighter aircraft. Data obtained from flightaware.com indicate that in early 2006, UPS increased their Burbank operations to eight flights per week by introducing a new morning flight to their cargo hub at Louisville four times weekly. As of January 2007, their schedule was as follows:

- Four times weekly, a UPS flight** arrives into Burbank from Las Vegas at approximately 5:45 p.m. and departs for Louisville at approximately 7:30 p.m. Equipment used on this flight is the widebody A300 freighter. Depending upon demand, occasionally this flight makes a stop at Ontario.

*Airbus A300 aircraft are generally only scheduled during the busy Christmas holiday season from late November to late December. Occasional upgrades from an A310 to A300 occur throughout the remainder of the year.

**Flight numbers for UPS are not given as they change frequently.

- Four times weekly, a UPS flight arrives into Burbank from Louisville at approximately 5:00 am and departs for Las Vegas at approximately 3:30 p.m. Equipment used on this flight is the narrowbody B757 freighter.

UPS makes frequent adjustments to its schedule. From time to time, it has temporarily discontinued the early morning arrival and adjusted the arrival and departure times of the other flight.

3.6 UPS Forecast Flight Schedule

It is forecast that UPS will not make any changes to their existing Burbank schedule by 2008. By 2015 it is predicted UPS will increase the flight frequency of both Burbank flights from four to five per week.

4.0 RESTRICTED FORECASTS OF ALL-CARGO CARRIER OPERATIONS

The restricted forecasts below are based on the projected 2008 and 2015 all-cargo flight schedules of FedEx and UPS and on the characteristics of flights operated by Ameriflight.

4.1 Cargo Operations Forecast with the Full Curfew

All three cargo airlines would experience reduced operations resulting from a full curfew. Table CC-2 summarizes the full curfew forecast and presents the impacts on each airline in 2008 and 2015. A full description of the specific flights that would be affected for each airline is provided the following section.

Table CC-2

FORECAST OPERATIONS BY CARGO AIRLINE WITH FULL CURFEW
Bob Hope Airport

	Annual operations	
	2008	2015
Unrestricted Operations	16,855	17,330
Reduction in Operations with Full Curfew		
Ameriflight	8,830	8,380
FedEx	416	520
UPS	416	520
Total Reduction	9,662	9,870
Restricted Operations	7,193	7,460
Percentage Reduction	57%	57%

Source: Jacobs Consultancy analysis 2007.

4.1.1 Ameriflight Changes with Full Curfew

Unrestricted forecast commuter cargo operations are predicted to experience only very slight growth to 2008 and no growth from 2008 to 2015. Unrestricted nighttime operations are expected to remain unchanged through the forecast period.

Under a full curfew, Ameriflight's nighttime courier service would shift to Ontario, where they have another base of operations. It is anticipated that Ameriflight would keep its maintenance base and headquarters at Bob Hope Airport and that it would continue providing daytime cargo and courier service at the Airport. Among these operations that are expected to continue is the feeder service that Ameriflight currently provides to both FedEx and UPS.

The following assumptions have been made in estimating the number of lost Ameriflight operations with a full curfew:

- In the unrestricted case, 7,228 total nighttime Ameriflight operations are forecast. Approximately 60% (approximately 4,415) of those operations are departures, and the rest (2,813) are arrivals.

- It is projected that all flights currently operating at night would be shifted to Ontario. This is estimated to involve 8,830 operations. This includes the 7,228 operations that typically occur at night and approximately 1,602 arrivals representing the return leg of as many nighttime departures.

4.1.2 FedEx and UPS Changes with Full Curfew

The early morning FedEx and UPS arrivals between 5:00 and 5:30 a.m. allow for delivery of high-priority overnight freight from each airline's main hub located in Memphis and Louisville respectively. FedEx is forecast to operate four weekly early morning (pre-7:00 a.m.) arrivals from Memphis in 2008, while UPS is forecast to operate four weekly early morning arrivals from Louisville.

UPS's early morning arrival was added in 2006. Therefore, the forecast growth in air carrier cargo operations from 2005 to 2008 that was projected in the unrestricted forecast has already occurred.

Due to the time-sensitive nature of much of the cargo being carried on flights with pre-7:00 a.m. arrival times, it is assumed that neither FedEx nor UPS would be willing to re-schedule their flights to arrive 1.5 to 2 hours later. Therefore, all of these early-morning FedEx and UPS arrivals would be lost to another area airport, along with the corresponding post-7:00 am departure. It is assumed that these flights would relocate to LAX, where both airlines have operations and where they would remain closer to their customers served from Bob Hope Airport than if they used another airport, such as Ontario. Therefore, in 2008, both FedEx and UPS would each reduce their Burbank schedule by 416 operations per year, for a total of 832 fewer operations.

Between 2008 and 2015, it is forecast that the frequency of both the FedEx and UPS flights arriving between 5:00 and 5:30 a.m. will increase from four to five weekly. With a full curfew, these flights are expected to be relocated to LAX. Therefore, in 2015 both FedEx and UPS will each reduce their Burbank operations by 520 per year for a total of 1,040 operations.

4.1.3 Summary of Effects of Full Curfew

With a full curfew, the Airport is projected to handle 9,662 fewer all-cargo carrier operations in 2008, as compared to the unrestricted forecast. This corresponds to a 57.3% reduction in cargo operations. For 2008, the forecast total all-cargo aircraft operations with the full curfew are 7,193.

In 2015, the Airport is projected to handle 9,870 fewer all-cargo operations compared to the unrestricted forecast. As in the 2008 forecast, this is a 57.0% reduction in operations. Total all-cargo operations with the full curfew are 7,460 for 2015.

4.2 Cargo Operations Forecast with Departure Curfew

This alternative involves a curfew on all departures between 10:00 p.m. and 7:00 a.m. Arriving flights would still be permitted to land during this period. Ameriflight is the only cargo airline that would experience reduced operations with a departure curfew.

4.2.1 Ameriflight Changes with Departure Curfew

In interviews with Ameriflight, their management indicated that the departure curfew would disrupt their courier service nearly as much as the full curfew and that they would have to relocate those operations to Ontario in the event of a departure curfew. Therefore, it is assumed that the departure curfew would have the same effect on Ameriflight as the full curfew. Accordingly, under a departure curfew, the total lost Ameriflight operations is forecast to equal 8,830 for both 2008 and 2015.

4.2.2 FedEx and UPS Changes with Departure Curfew

All FedEx and UPS operations between 10:00 p.m. and 7:00 a.m. are currently arrivals. It is forecast that this will continue to be the case in both 2008 and 2015. Therefore, neither FedEx nor UPS would be affected by a departure curfew.

4.2.3 Summary of Effects of Departure Curfew

With a departure curfew, the Airport is projected to handle 8,830 fewer all-cargo carrier operations in both 2008 and 2015 compared to the unrestricted forecast. This corresponds to a 52% reduction in 2008 cargo operations and a 50% reduction in 2015 operations. As shown in Table CC-3, total all-cargo operations with the departure curfew are 8,025 in 2008 and 8,500 in 2015.

Table CC-3

FORECAST OPERATIONS BY AIRLINE WITH DEPARTURE CURFEW
Bob Hope Airport

	Annual Operations	
	2008	2015
Unrestricted Operations	16,855	17,330
Reduction in Operations with Full Curfew		
Ameriflight	8,830	8,830
FedEx	--	--
UPS	--	--
Total Reduction	8,830	8,830
Restricted Operations	8,025	8,500
Percentage Reduction	52%	51%

Source: Jacobs Consultancy analysis 2007.

4.3 Cargo Operations Forecast with Noise-Based Curfew

The third alternative under consideration is a curfew that would restrict nighttime takeoffs and landings by aircraft with Part 36 certificated noise levels exceeding 253 EPNdB.

Ameriflight would be unaffected by this curfew alternative because its cargo aircraft operating at Burbank fall below 253 EPNdB noise levels. While Ameriflight has had Learjet 35 aircraft in cargo service, they are converting them to passenger configuration.

FedEx and UPS operate all-cargo aircraft which exceed the 253 EPNdB nighttime noise limit. Therefore, the effect on FedEx and UPS operations of this alternative would be the same as the full curfew discussed previously.

With the noise-based curfew, the Airport is projected to handle 832 fewer all-cargo operations in 2008 and 1,040 fewer in 2015. This corresponds to a 5% reduction in 2008 and a 6% reduction in 2015 operations. As shown in Table CC-4, the forecast total all-cargo operations would be 16,023 in 2008 and 16,290 in 2015.

Table CC-4

FORECAST OPERATIONS BY AIRLINE WITH NOISE-BASED CURFEW
Bob Hope Airport

	Annual Operations	
	2008	2015
Unrestricted Operations	16,855	17,330
Reduction in Operations		
Ameriflight	--	--
FedEx	416	520
UPS	416	520
Total Reduction	832	1,040
Restricted Operations	16,023	16,290
Percentage Reduction	5%	6%

Source: Jacobs Consultancy analysis 2007.

5.0 RESTRICTED FORECASTS OF CARGO TONNAGE HANDLED

The forecasts of cargo tonnage that Bob Hope Airport would handle under the restricted conditions were developed based on the projected reductions in aircraft operations by aircraft type and airline. It is assumed that the reduction in cargo tonnage will generally correspond to the reduction in cargo capacity caused by the reduction in operations. While that general relationship is reasonable, it is likely that a small proportion of the affected cargo would be transferred to daytime flights. For planning purposes, it is assumed that 10% of the displaced nighttime mainline jet cargo and 5% of the displaced nighttime commuter cargo would be transferred to daytime flights.

5.1 Cargo Tonnage Forecast with Full Curfew

Based on the forecasts with a full curfew, all-cargo carrier operations in 2008 are forecast to be 7,193, or 9,662 operations below the unrestricted forecast. This will result in corresponding reductions in enplaned/deplaned cargo tonnage in 2008. The losses for 2008, as well as 2015, are broken down by aircraft type (commuter and mainline jet) and are shown in Table CC-5.

The displacement of the cargo tonnage from nighttime flights to daytime flights is accounted for in each of the cargo tonnage tables in the column, "Reduced Tonnage".

In 2008, under a full curfew, Burbank is forecast to handle 36,061 short-tons of cargo or 39.1% below the unrestricted forecast. In 2015, the restricted forecast projects that the Airport would handle 43,319 short-tons of cargo, or 39.1% below the unrestricted forecast.

Table CC-5

LOST CARGO TONNAGE BY AIRLINE WITH FULL CURFEW—2008 AND 2015
Bob Hope Airport

Air carrier category	Average Tonnage per Operation	Reduced operations	Reduced tonnage	Unrestricted forecast tonnage	Restricted forecast tonnage
2008					
Commuter (Ameriflight)	0.5	8,830	4,194	7,300	3,106
Mainline Jet (FedEx, UPS)	25.3	832	18,94	51,900	32,955
Totals	--	9,662	23,139	59,200	36,061
2015					
Commuter (Ameriflight)	0.5	8,830	4,194	7,300	3,106
Mainline Jet (FedEx, UPS)	25.3	1,040	23,587	63,800	40,213
Totals	--	9,870	27,781	71,100	43,319

Source: Jacobs Consultancy analysis 2007.

5.2 Cargo Tonnage Forecast with Departure Curfew

With a departure curfew, all-cargo operations in 2008 are forecast to be 8,025, or 8,830 operations below the unrestricted forecast. The resulting reductions in enplaned/deplaned cargo tonnage in 2008 broken down by aircraft type (commuter and mainline jet) and are shown in Table CC-6.

In 2008, under a departure curfew, Burbank is forecast to handle 55,006 short-tons of cargo or 7% below the unrestricted forecast. In 2015, the restricted forecast projects that the Airport would handle 66,906 short-tons of cargo, or about 6% below the unrestricted forecast.

5.3 Cargo Tonnage Forecast with Noise-Based Curfew

With the noise-based curfew, all-cargo operations in 2008 are forecast to be 16,023, or 832 operations below the unrestricted forecast. The resulting reductions in enplaned/deplaned cargo tonnage in 2008 broken down by aircraft type (commuter and mainline jet) and are shown in Table CC-7.

In 2008, under the noise-based curfew, Burbank is forecast to handle 40,255 short-tons of cargo or 32% below the unrestricted forecast. In 2015, the restricted forecast

projects that the Airport would handle 47,513 short-tons of cargo, or about 33% below the unrestricted forecast.

Table CC-6

LOST CARGO TONNAGE BY AIRLINE WITH DEPARTURE CURFEW—2008 AND 2015
Bob Hope Airport

Air Carrier Category	Average Tonnage Per Operation	Reduced Operations	Reduced Tonnage	Unrestricted Forecast Tonnage	Restricted Forecast Tonnage
2008					
Commuter (Ameriflight)	0.5	8,830	4,194	7,300	3,106
Mainline Jet (FedEx, UPS)	25.3	--	--	51,900	51,900
Totals	--	8,830	4,194	59,200	55,006
2015					
Commuter (Ameriflight)	0.5	8,830	4,194	7,300	3,106
Mainline Jet (FedEx, UPS)	25.2	--	--	63,800	63,800
Totals	--	8,830	4,194	71,100	66,906

Source: Jacobs Consultancy analysis 2007.

Table CC-7

LOST CARGO TONNAGE BY AIRLINE WITH NOISE-BASED CURFEW—2008 AND 2015
Bob Hope Airport

Air Carrier Category	Average Tonnage Per Operation	Reduced Operations	Reduced Tonnage	Unrestricted Forecast Tonnage	Restricted Forecast Tonnage
2008					
Commuter (Ameriflight)	0.5	--	--	7,300	7,300
Mainline Jet (FedEx, UPS)	25.3	832	18,945	51,900	32,955
Totals	--	832	18,945	59,200	40,255
2015					
Commuter (Ameriflight)	0.5	--	--	7,300	7,300
Mainline Jet (FedEx, UPS)	25.2	1,040	23,587	63,800	40,213
Totals	--	1,040	23,587	71,100	47,513

Source: Jacobs Consultancy analysis 2007.

6.0 SUMMARY OF THE RESTRICTED FORECASTS

A summary of the projected changes from the unrestricted all-cargo air carrier operations is presented in Table CC-8.

Table CC-8

SUMMARY OF ALL-CARGO RESTRICTED FORECAST
Bob Hope Airport

Curfew Alternative	Total All-Cargo Carrier Operations	Percent Reduction From Unrestricted	Total Cargo Short-Tons	Percent Reduction From Unrestricted
2008				
Unrestricted	16,855	-	59,200	-
Full Curfew	7,193	57%	36,061	39%
Departure Curfew	8,025	52%	55,006	7%
Noise-Based Curfew	16,023	5%	40,255	32%
2015				
Unrestricted	17,330	-	71,100	-
Full Curfew	7,460	57%	43,319	39%
Departure Curfew	8,500	51%	66,906	6%
Noise-Based Curfew	16,290	6%	47,513	33%

Source: Jacobs Consultancy analysis 2007.