D.1 FORECAST VERIFICATION AND DERIVIATIVES

THIS PAGE INTENTIONALLY LEFT BLANK

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

ENVIRONMENTAL IMPACT STATEMENT

AVIATION ACTIVITY FORECASTS

AND

DERIVATIVE DESIGN DAY FORECASTS

Prepared by:

Landrum & Brown, Incorporated
11279 Cornell Park Drive
Cincinnati, Ohio 45242

January 30, 2007

TABLE OF CONTENTS

PAGE

AVIATION ACTIVITY FORECASTS

TABLES

PAGE

EXHIBITS

PAGE

AVIATION ACTIVITY FORECASTS

1. PURPOSE AND CONTEXT

The Federal Aviation Administration (FAA) is preparing an Environmental Impact Statement (EIS) for the Fort Lauderdale-Hollywood International Airport (FLL) to study the proposed expansion of Runway 9R/27L, connecting and parallel taxiways, and associated facilities. The 2004 Terminal Area Forecast (TAF) was initially used as the basis for the EIS analysis years.

For enplaned passengers the TAF aggregates domestic and international activity and shows summary totals only for the categories of air carrier airlines and commuter carriers. Historical and projected aircraft operations are shown for air carrier, air taxi and commuter, general aviation, and military categories. General aviation and military activity is also split between itinerant and local. The TAF presents only annual levels of activity.

During scoping for the EIS, a comment was submitted that questioned looking only at the forecast demand for FLL without considering the possibility that forecast demand was double counted at the Southeast Florida airports collectively (FLL plus Palm Beach International (PBI) and Miami International (MIA) airports). Given the close proximity of the three airports, a prospective visitor is most likely to choose his/her flight to South Florida based upon factors such as price, flight times, and convenience, rather than the particular destination airport. MIA is served by most of the major U.S. passenger carriers, only four recognized low cost carriers (LCC), and dozens of foreign flag airlines. PBI is also served by most of the major U.S. carriers and several LCCs, including the three largest: AirTran Airways, jetBlue Airways, and Southwest Airlines.

In response to this scoping comment, Landrum & Brown was asked by the FAA to undertake a review to assess whether the TAFs for FLL, MIA, and PBI collectively provide a reasonable forecast of aviation activity for the Southeast Florida region, and whether the projected market share of South Florida traffic assigned to FLL is reasonable.

A multi-linear regression model was developed to project regional domestic originating passenger demand. This model is based on established economic principles and accepted econometric modeling theory. The model used personal income, a dummy variable for non-socioeconomic factors, and local ticket price (yield) as inputs to generate a demand based, unconstrained domestic passenger forecast. The results of the regression analysis were compared to the collective TAF domestic originating passenger forecasts for the South Florida region.

The regression model projected domestic originations for South Florida to be significantly lower than the sum of the domestic portion of the three TAFs. The regression model and results were shared with the APO. The APO used a more regional approach in developing the 2006 TAF, which was released in January 2007.

The 2006 TAF for FLL projected lower enplanements and aircraft operations than the 2004 TAF. This lower forecast reflects the maturing of JetBlue service at FLL, the reintegration of Song into Delta's mainline fleet, and recognition that the high growth rates experienced in 2003 through 2005 are not sustainable long term. This adjustment results in about a six year shift in demand volumes and associated delays.

A summary of the 2006 TAF is presented in **Table 1, *FAA 2006 Terminal Area Forecast***

Table 1
FAA 2006 TERMINAL AREA FORECAST
Fort Lauderdale-Hollywood International Airport

	Enplanements			Operations				
					Commuter &	General		
FFY	Air Carrier	Commuter	Total	Air Carrier	Air Taxi	Aviation	Military	Total
2000	7,288,034	365,665	7,653,699	143,950	54,560	87,787	797	287,094
2001	8,071,530	331,186	8,402,716	158,528	58,050	82,594	601	299,773
2002	7,572,587	313,391	7,885,978	147,874	64,076	62,958	565	275,473
2003	8,073,136	334,777	8,407,913	153,827	67,994	61,074	591	283,486
2004	9,254,940	478,231	9,733,171	168,884	68,002	70,825	632	308,343
2005	10,296,137	665,758	10,961,895	183,252	80,552	71,955	352	336,111
2006 [1/]	9,749,292	594,517	10,343,809	178,916	64,507	56,686	370	300,479
2012	11,602,758	647,790	12,250,548	209,315	68,392	63,800	370	341,877
2020	14,553,267	859,631	15,412,898	257,027	76,438	74,701	370	408,536
Average Annual Growth Rates								
00-06	5.0%	8.4%	5.1%	3.7%	2.8%	-7.0%	-12.0%	0.8%
06-12	2.9%	1.4%	2.9%	2.6%	1.0%	2.0%	0.0%	2.2%
12-20	2.9%	3.6%	2.9%	2.6%	1.4%	2.0%	0.0%	2.3%
06-20	2.9%	2.7%	2.9%	2.6%	1.2%	2.0%	0.0%	2.2%

1/ FFY2006 enplanements are estimated.
Source: FAA 2006 Terminal Area Forecast

The following sections present the annual enplanement and aircraft operations forecasts from the 2006 TAF for FLL, the average seats per departure and load factor assumptions, projected aircraft fleet mix, and the associated derivative forecasts. Average annual day flight schedules were developed by Landrum & Brown for use in the noise and air quality analyses for the years 2004 (existing baseline), 2012 (future baseline), and 2020. Peak month average day flight schedules were also developed for use in modeling operational delays in 2012 and 2020.

2. HISTORICAL TRAFFIC

Fort Lauderdale is a major tourist destination and cruise ship port. In addition, FLL is also used as a connection point for airline passengers to many of the nearby Caribbean Islands. FLL is served by a wide variety of scheduled air carriers and regional airlines, as well as many charter airlines. Enplaned passengers (departing passengers) have increased at an average rate of 5.1 percent annually from 2000 to 2006. As shown in ***Table 2, Historical Aviation Activity*****,** between FFY2000 and FFY2005, air carrier and commuter enplanements averaged annual growth of 7.2 percent and 12.7 percent, respectively. In FFY (Federal Fiscal Year) 2006, enplanements at FLL declined year-over-year, due, in large part, to Delta's system-wide decision to disband its low-fare brand Song and reduce its Delta Connection activity at FLL. As a result, air carrier enplanements declined 5.3 percent in FFY2006, while commuter enplanements declined 10.7 percent. Aircraft operations grew at an average rate of 0.8 percent annually between FFY2000 and FFY2006. It is worth noting, the growth in aircraft operations at FLL was the net effect of a decline in general aviation activity which somewhat offset a net gain in commercial activity at FLL, over the six-year period.

Table 2
HISTORICAL AVIATION ACTIVITY
Fort Lauderdale-Hollywood International Airport

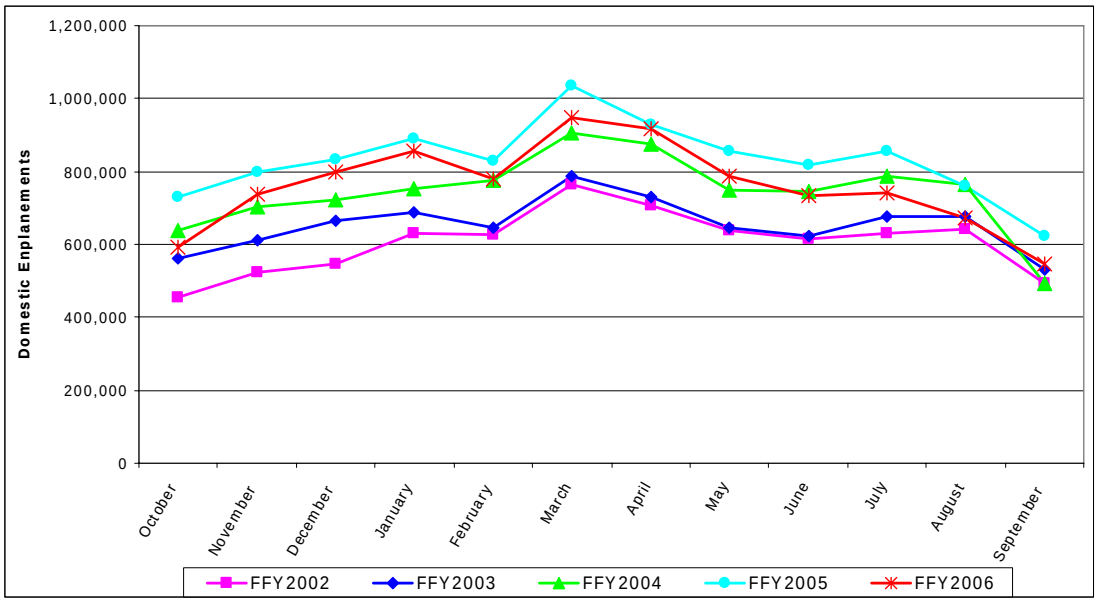
	Enplanements			Operations				
FFY	Air Carrier	Commuter	Total	Air Carrier	Cmtr. & Air Taxi	General Aviation	Military	Total
2000	7,288,034	365,665	7,653,699	143,950	54,560	87,787	797	287,094
2001	8,071,530	331,186	8,402,716	158,528	58,050	82,594	601	299,773
2002	7,572,587	313,391	7,885,978	147,874	64,076	62,958	565	275,473
2003	8,073,136	334,777	8,407,913	153,827	67,994	61,074	591	283,486
2004	9,254,940	478,231	9,733,171	168,884	68,002	70,825	632	308,343
2005	10,296,137	665,758	10,961,895	183,252	80,552	71,955	352	336,111
2006 [1/]	9,749,292	594,517	10,343,809	178,916	64,507	56,686	370	300,479
Average Annual Growth Rates								
00-05	7.2%	12.7%	7.4%	4.9%	8.1%	-3.9%	-15.1%	3.2%
05-06	-5.3%	-10.7%	-5.6%	-2.4%	-19.9%	-21.2%	5.1%	-10.6%

1/ FFY2006 enplanements are estimated. Aircraft operations based on an analysis of ATADS data are considered to be actual.

Source: FAA 2006 Terminal Area Forecast

Exhibit 1, *Domestic Enplaned Passengers* shows a month-over-month comparison of domestic enplaned passengers for FFY2002 through FFY2006. Domestic enplanements increased in each month from 2003 to 2005 compared to the prior year, with the exception of September 2004. In FFY2006, domestic enplanements have tracked below FFY2005 levels.

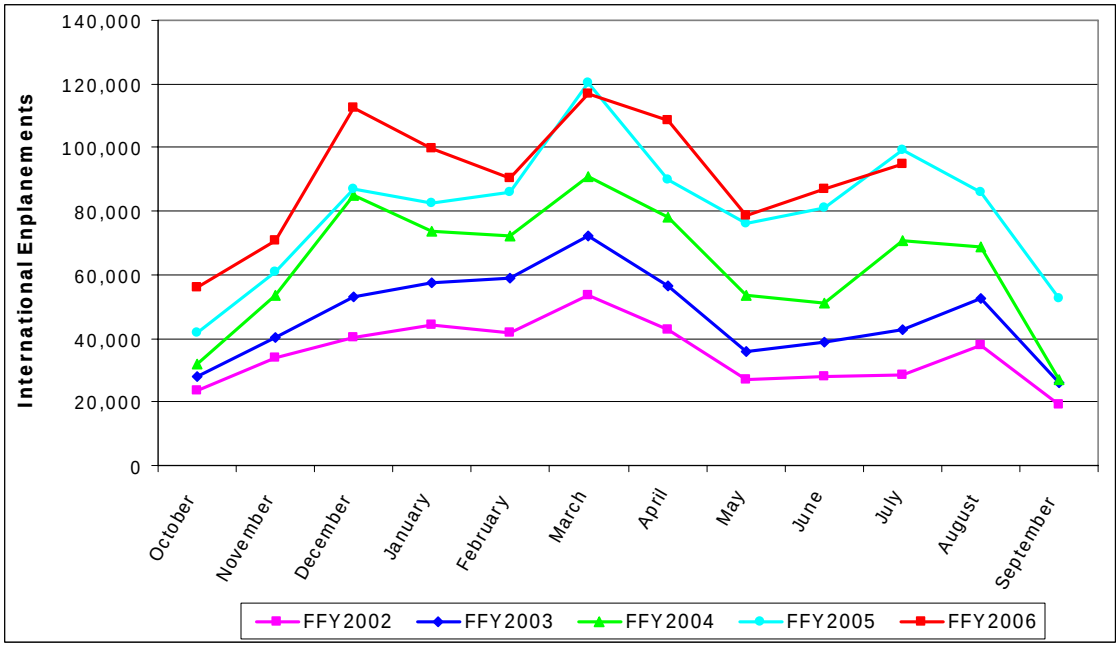
Exhibit 1
DOMESTIC ENPLANED PASSENGERS
Fort Lauderdale-Hollywood International Airport



Source: US DOT Schedule T100.

Exhibit 2, ***International Enplaned Passengers*** shows a month-over-month comparison of international enplaned passengers for FFY2002 through FFYTD 2006 (October 2005 through July 2006). International enplanements have increased each month compared to the prior year, with the exception of March and July 2006.

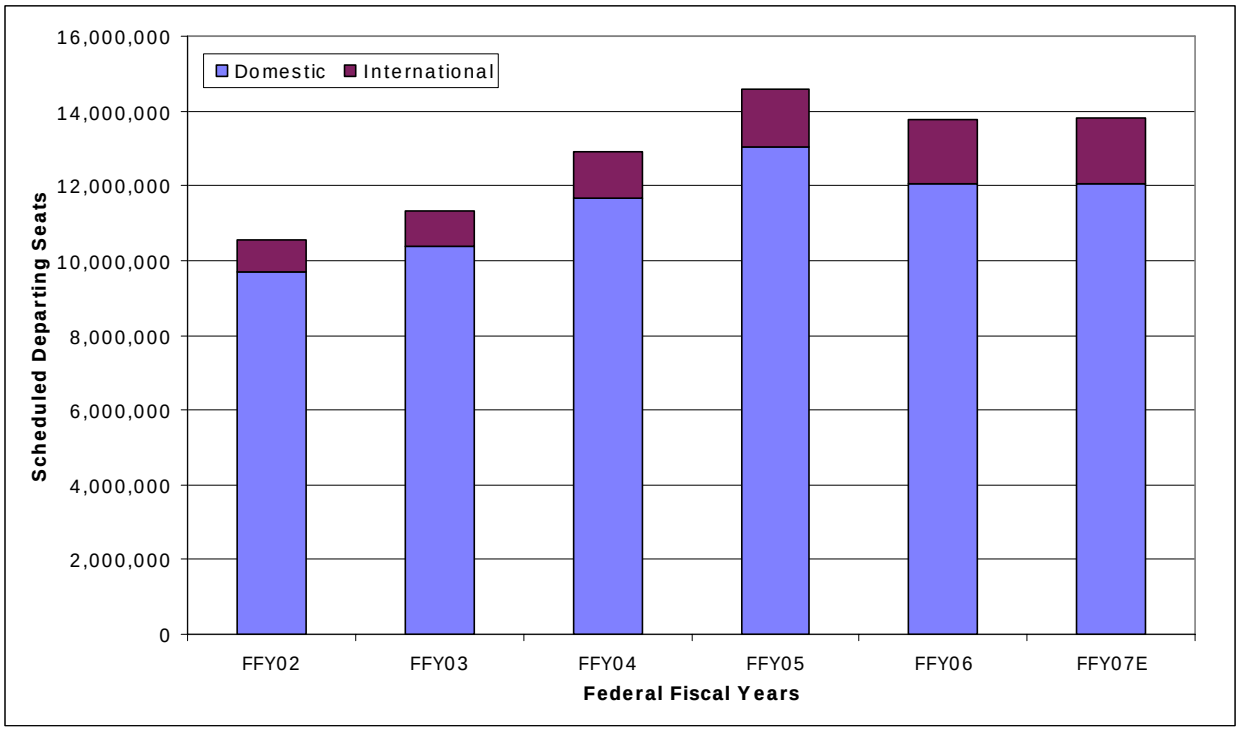
Exhibit 2
INTERNATIONAL ENPLANED PASSENGERS
Fort Lauderdale-Hollywood International Airport



Source: US DOT, Schedule T100.

Exhibit 3, Scheduled Departing Passengers Seats shows the scheduled departing passenger seats from the Airport for FFY2002 through FFY2006, along with an estimate for FFY2007. The large volume of available seats supports the increasing underlying demand for travel to southern Florida. The reduction in capacity experienced at the Airport in FFY2006 seems to be a short term event as airline schedules filed, thus far, for FFY2007 would suggest capacity will increase, albeit very marginally.

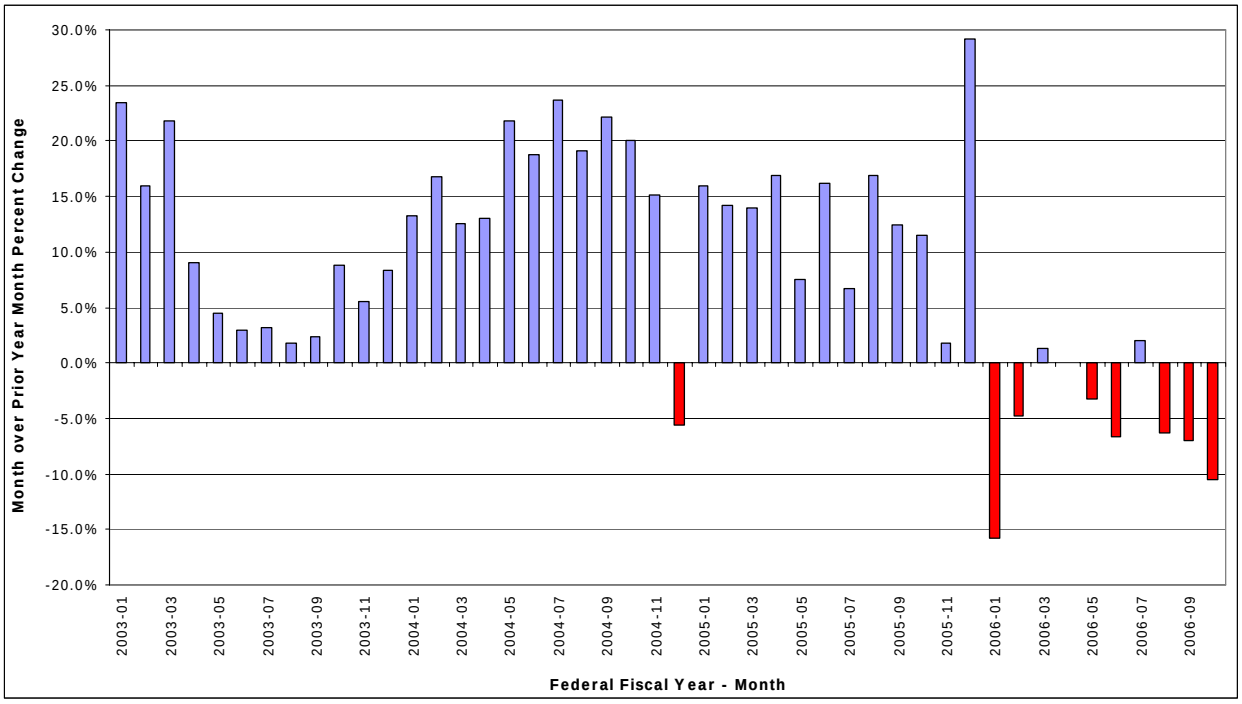
Exhibit 3
SCHEDULED DEPARTING PASSENGER SEATS
Fort Lauderdale-Hollywood International Airport



Source: Official Airline Guide

Exhibit 4, *Percent Increase in Total Enplaned Passengers Month Compared to Prior Year Month* presents the monthly percentage increase in total enplaned passengers compared to the same month of the prior year. Between FFY2003 and FFY2005 there was virtually uninterrupted growth in monthly enplanement activity. Indeed, 24 of the 36 months during this period experienced double digit increases in enplanements. In the first 10 months of FFY2006, enplanements generally tracked below 2005 levels resulting in 7 months with lower passenger volumes than the previous year.

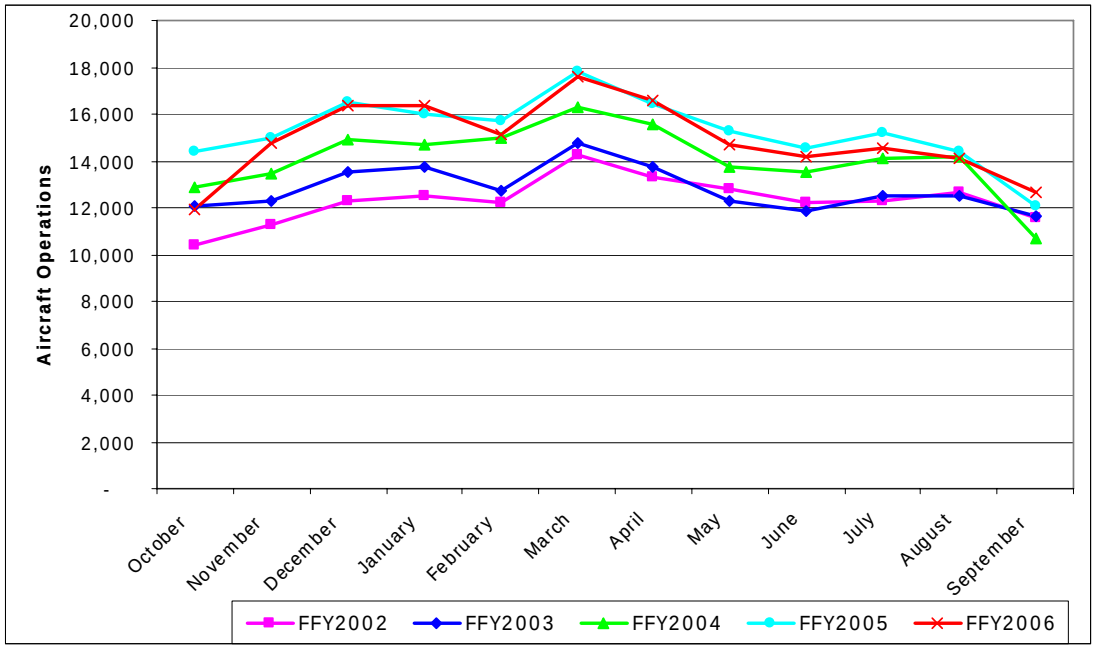
Exhibit 4
PERCENT INCREASE IN TOTAL ENPLANED PASSENGERS
MONTH COMPARED TO PRIOR YEAR MONTH
Fort Lauderdale-Hollywood International Airport



Source: US DOT T100 data.

Exhibit 5, *Air Carrier Aircraft Operations* shows a month-over-month comparison of air carrier operations for FFY2002 through FFY2006. Air carrier operations increased from 143,950 operations in 2000 to 183,252 operations in FFY2005, averaging growth of 4.9 percent per year. While most passenger airlines operating air carrier equipment increased their frequency of operations at FLL during this period; JetBlue, Spirit, and Southwest in particular accounted for much of the growth in air carrier operations. In FFY2006, air carrier operations declined to 178,916 operations, representing a drop of 2.4 percent over FFY2005. Annual commuter and air taxi operations have increased at an average annual rate of 2.8 percent from 2000 to 2006, from 54,560 to 64,507. Annual fluctuations in air carrier and commuter activity during this time period were due to Delta's decisions as to how it serves the FLL market with its regional Delta Connection partners. General aviation/military activity declined from 2000 to 2003 – from 87,787 to 61,074 operations. General aviation and military traffic rebounded in 2004 and 2005, increasing to 70,825 and 71,955 respectively. General aviation/military operations then declined to 56,686 operations in 2006.

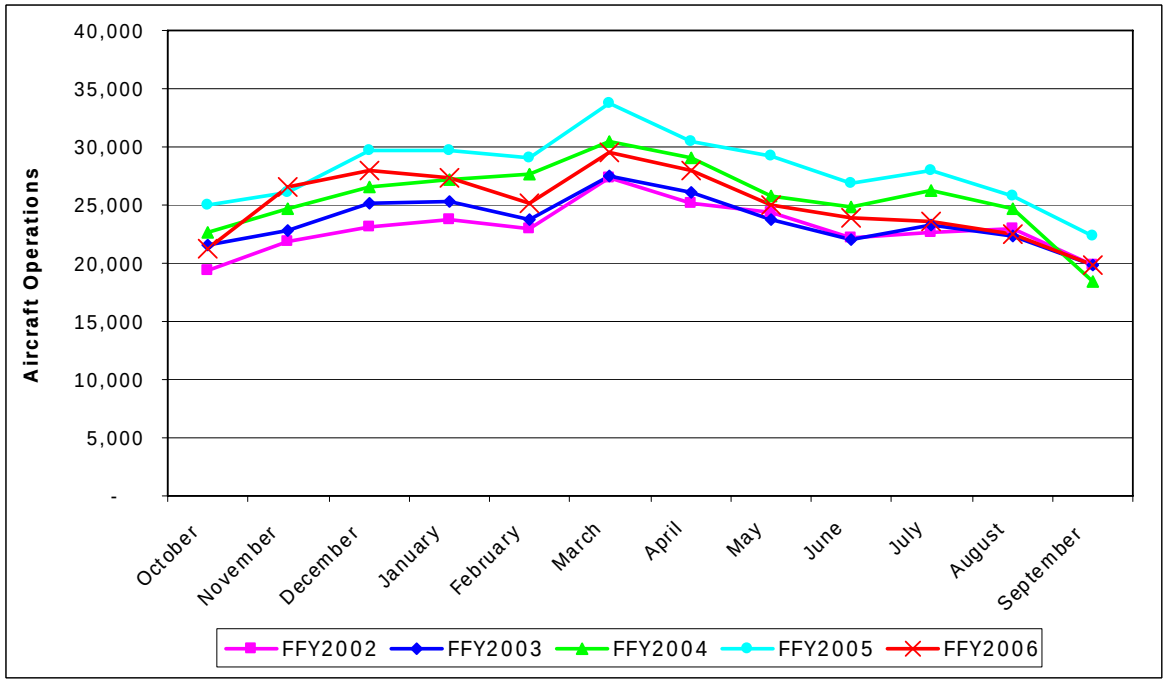
Exhibit 5
AIR CARRIER AIRCRAFT OPERATIONS
Fort Lauderdale-Hollywood International Airport



Source: FAA, ATADS.

Exhibit 6, *Total Aircraft Operations* presents a month-over-month comparison of total aircraft operations for federal fiscal years 2002 through 2006.

Exhibit 6
TOTAL AIRCRAFT OPERATIONS
Fort Lauderdale-Hollywood International Airport



Source: US DOT ATADS data.

3. TAF FORECAST METHODOLOGY

This section presents the methodology employed by the FAA to develop the TAF annually.[1]

U.S. Airports Methodology

Aviation activity forecasts for FAA-towered and contract-towered airports are developed by the FAA using historical relationships between airport passenger demand and/or activity measures with local and national factors influencing aviation activity. Each estimate is examined for its reasonableness and consistency by comparisons with historical trends of airport activity. If forecasts deviate from their expected trend, the FAA uses other statistical techniques to forecast the series. Other methods may include the use of regression analysis and the use of growth rates developed separately from the TAF. The TAF may incorporate estimates prepared by local authorities and/or recent FAA-approved airport master plans, when the forecast staff economists conclude that the methods used to develop these forecasts are acceptable.

In addition, the 35 airports in FAA's Operational Evolution Plan (OEP) as well as eight secondary commercial service airports in the large hub cities, receive a more in-depth review by FAA economists. The analyses of these hub city airports include additional consideration for the effect of local economic variables (such as income and employment) and the growth of originating and connecting traffic, as well as the price of flying to and from that airport. The hub forecasts also include assumptions regarding the seating capacity and load factors[2] for commercial aircraft operating out of the airport. The recent substantial changes in aviation activity necessitated increased efforts to develop the near-term forecasts for the large hub airports. These efforts included the use of airport authority statistics to estimate baseline passenger levels; the use of future Official Airline Guide (OAG) schedules to project near-term departures and seats; and the use of month-over-month trends in enplanements per departure to project near-term enplanement and activity levels.

The TAF assumes unconstrained demand for aviation services based upon local and national economic conditions, as well as conditions within the aviation industry. In other words, an airport's forecast is developed independent of the ability of the airport and the air traffic control system to furnish the capacity required to meet demand. However, if the airport historically functions under constrained conditions, such as FLL, the FAA forecast may reflect those constraints since they are embedded in historical data. In statistical terms, the relationships between economic growth data and data representing growth in aviation activity reflect those constraints.

For all FAA-towered airports and non-FAA facilities with air carrier or commuter passenger service, the TAF corresponds to prevailing local and national trends. For non-FAA facilities, which rely solely on Form 5010 data for general aviation activity

[1] U. S. Department of Transportation, Federal Aviation Administration, FAA-APO-05-1, Terminal Area Forecast Summary, Fiscal Years 2006-2025.
[2] Number of passengers divided by the number of available seats.

levels, operations levels are held constant unless otherwise specified by a local or regional FAA official.

FLL Methodology

It is understood the FAA used a regression model to forecast FLL domestic air carrier originating enplanements for the period through 2020. The regression used historical domestic originating data from 1984 to 2005 and population, FLL real yield (average ticket prices), and a dummy variable as independent variables. The FAA used a trend analysis to project domestic commuter enplanements.

The FAA used the *U.S. International Enplanements By Entity* forecast to project international enplanements for FLL. The U.S. International forecast divides the world into 4 entities: Atlantic, Latin, Pacific, and Canada. The TAF forecast for FLL disaggregated international enplanements into the appropriate international entity and applied the national growth rate. It should be noted FLL does not have a measurable share of the Pacific entity.

4. ANNUAL FORECASTS

FAA 2006 TAF

The published forecast of enplaned passengers presented in the TAF aggregates domestic and international activity and shows summary totals for the categories of air carrier airlines and commuter carriers. Annual totals of historical and projected aircraft operations are shown for air carrier, air taxi and commuter, general aviation, and military categories. General aviation and military activity is also split between itinerant and local. The TAF presents only annual levels of activity.

The FAA 2006 TAF provides projections through Federal Fiscal Year[3] (FFY) 2025. The FAA 2006 TAF for FLL is shown in **Table 3, *FAA 2006 Terminal Area Forecast***. The horizon years selected for the EIS are FFY2012 and FFY2020. As a result FAA TAF forecast data presented herein is through FFY2020. Annual enplanements are forecast to increase at an average annual growth rate of 2.9 percent from FFY2006 to FFY2020. Annual operations are projected to increase by 2.2 percent annually from FFY2006 to FFY2012 and by 2.3 percent annually from FFY2012 to FFY2020.

[3] The Federal Fiscal Year runs from October through September.

Table 3
FAA 2006 TERMINAL AREA FORECAST
Fort Lauderdale-Hollywood International Airport

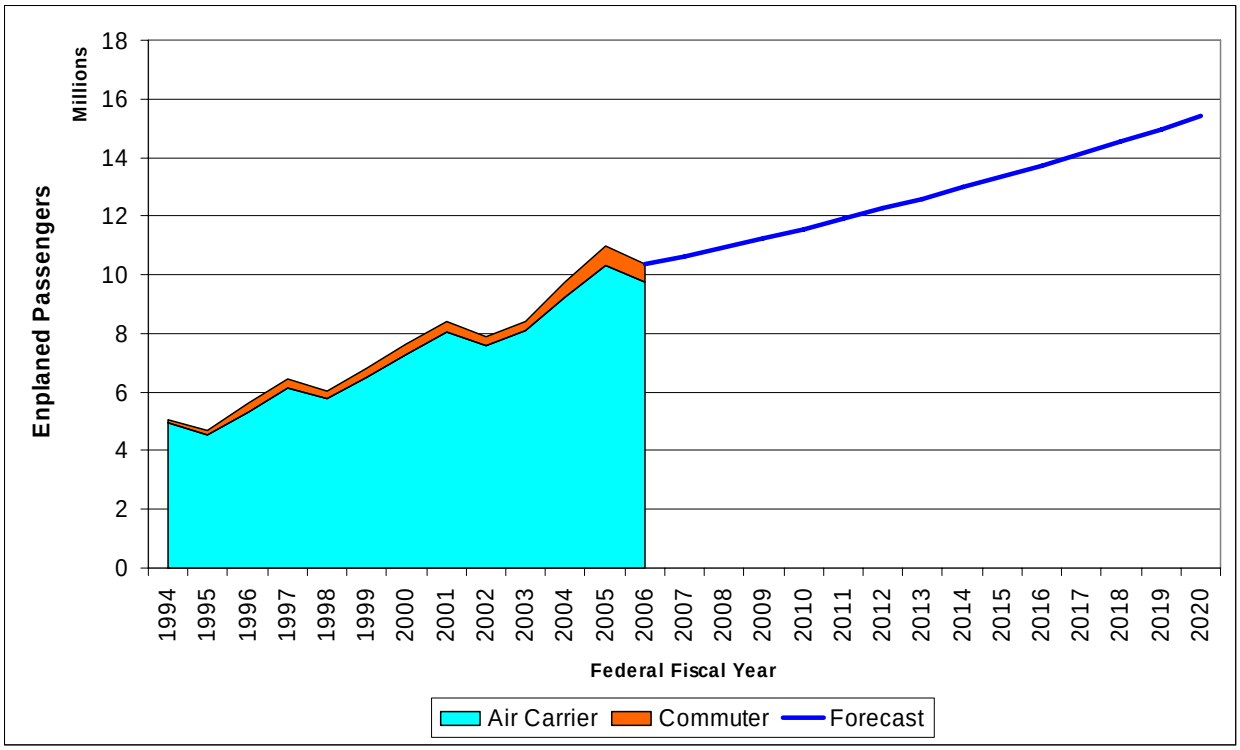
	Enplanements			Operations				
					Commuter &	General		
FFY	Air Carrier	Commuter	Total	Air Carrier	Air Taxi	Aviation	Military	Total
2000	7,288,034	365,665	7,653,699	143,950	54,560	87,787	797	287,094
2001	8,071,530	331,186	8,402,716	158,528	58,050	82,594	601	299,773
2002	7,572,587	313,391	7,885,978	147,874	64,076	62,958	565	275,473
2003	8,073,136	334,777	8,407,913	153,827	67,994	61,074	591	283,486
2004	9,254,940	478,231	9,733,171	168,884	68,002	70,825	632	308,343
2005	10,296,137	665,758	10,961,895	183,252	80,552	71,955	352	336,111
2006 [1/]	9,749,292	594,517	10,343,809	178,916	64,507	56,686	370	300,479
2012	11,602,758	647,790	12,250,548	209,315	68,392	63,800	370	341,877
2020	14,553,267	859,631	15,412,898	257,027	76,438	74,701	370	408,536
Average Annual Growth Rates								
00-06	5.0%	8.4%	5.1%	3.7%	2.8%	-7.0%	-12.0%	0.8%
06-12	2.9%	1.4%	2.9%	2.6%	1.0%	2.0%	0.0%	2.2%
12-20	2.9%	3.6%	2.9%	2.6%	1.4%	2.0%	0.0%	2.3%
06-20	2.9%	2.7%	2.9%	2.6%	1.2%	2.0%	0.0%	2.2%

1/ FFY2006 enplanements are estimated.

Source: FAA 2006 Terminal Area Forecast

Exhibit 7, *FAA 2006 Terminal Area Forecast-Enplaned Passengers* presents historical passenger enplanements for the period FFY1994 through estimated FFY2006 and the FAA 2006 TAF forecast for the period FFY2007 through FFY2020.

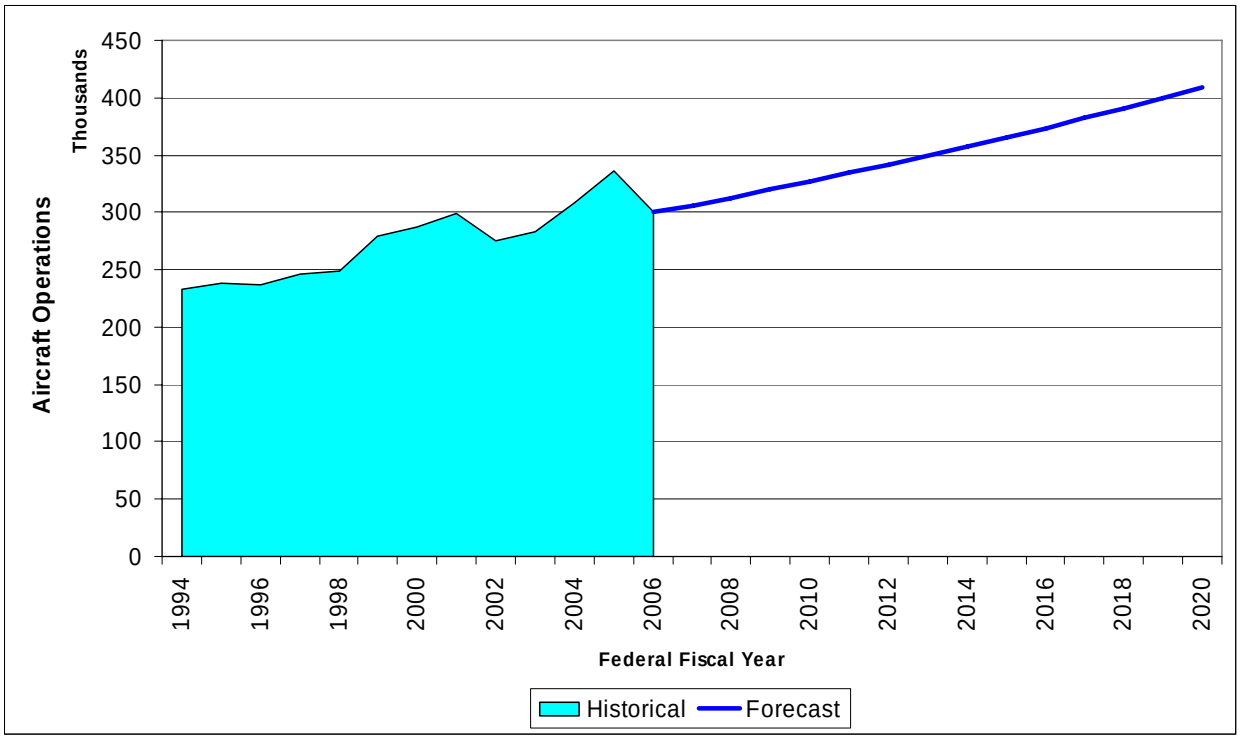
Exhibit 7
FAA 2006 TERMINAL AREA FORECAST – ENPLANED PASSENGERS
Fort Lauderdale-Hollywood International Airport



Source: FAA 2006 Terminal Area Forecast

Exhibit 8, *FAA 2006 Terminal Area Forecast – Aircraft Operations* presents historical total aircraft operations for the period FFY1994 through estimated FFY2006 and the FAA 2006 TAF forecast for the period FFY2007 through FFY2020.

Exhibit 8
FAA 2006 TERMINAL AREA FORECAST – AIRCRAFT OPERATIONS
Fort Lauderdale-Hollywood International Airport



Source: FAA 2006 Terminal Area Forecast

Development of Derivative Forecasts

Additional analysis beyond the annual forecast provided by the TAF was necessary to furnish the required level of detail for the EIS. The TAF does not provide detailed information on domestic versus international passenger activity or the appropriate categorization of operations (i.e., domestic air carrier, international air carrier, commuter, charter, and cargo) needed in the EIS analysis. In order to develop the supplemental detail required for FLL enplanements and operations, U.S. DOT, Schedule T-100 and *Official Airline Guide* (OAG) data were used.

In FFY2006, it is estimated 90.0 percent of FLL air carrier enplanements were domestic and 10.0 percent were international. Over the forecast period, the domestic portion of air carrier enplanements is expected to decline somewhat to 87.3 percent of air carrier enplanements by FFY2020. Consequently, international air carrier enplanements are projected to account for 12.7 percent of FLL air carrier enplanements by FFY2020. The resulting forecast is shown in **Table 4, *Annual Enplanements Forecast***. Resulting domestic air carrier enplanements are forecast to grow from 8.8 million in FFY2006 to 10.3 million in FFY2012 and to 12.7

million by FFY2020. This represents an average annual growth of 2.7 percent over the forecast period. International air carrier enplanements are forecast to average growth of 4.7 percent per year, increasing from just under 1.0 million enplanements in FFY2006 to 1.9 million enplanements in FFY2020. Commuter enplanements are projected to grow from 594,500 in FFY2006 to 859,600 in FFY2020, an average annual growth rate of 2.7 percent.

Table 4
Annual Enplanements Forecast
Fort Lauderdale-Hollywood International Airport

FFY	Domestic Air Carrier	International Air Carrier	Commuter	Total
2006	8,770,181	979,111	594,517	10,343,809
2012	10,250,950	1,351,808	647,790	12,250,548
2020	12,701,911	1,851,356	859,631	15,412,898
2006-2012	2.6%	5.5%	1.4%	2.9%
2012-2020	2.7%	4.0%	3.6%	2.9%
2006-2020	2.7%	4.7%	2.7%	2.9%

Sources: FAA 2006 Terminal Area Forecast and Landrum & Brown analysis

The forecast passenger aircraft operations are calculated based upon the forecast enplaned passengers and the projected enplanements per departure. The projected enplanements per departure are the product of the assumed average seats per departure (ASPD) and the average load factor. The ASPD represents the airport-wide average of the seating capacity (gauge) of the passenger aircraft serving the Airport. The ASPD and load factor assumptions underlying the TAF for each sector are represented in **Table 5, *Average Gauge (ASPD) and Load Factor Assumptions***. The ASPD and load factor assumptions are based on historical trends and patterns and are considered reasonable for FLL.

Table 5
AVERAGE GAUGE (ASPD) AND LOAD FACTOR ASSUMPTIONS
Fort Lauderdale-Hollywood International Airport

	Domestic Air Carrier			International Air Carrier			Commuter		
FFY	ASPD	L.F.	Enp/Dep	ASPD	L.F.	Enp/Dep	ASPD	L.F.	Enp/Dep
2006	151	75.9%	114	138	68.0%	94	30	66.8%	20
2012	151	76.5%	116	145	68.7%	99	38	71.0%	27
2020	154	76.5%	118	149	68.3%	102	43	73.8%	31

Notes: ASPD=average seats per departure; L.F.=load factor

Information obtained from the OAG, U.S. DOT Schedule T-100, and the FAA provided the necessary detail to separate the forecast of air carrier and air taxi/commuter operations into more specific operations categories. The previous three years of air carrier data (2004-2006) was used to categorize air carrier operations into domestic, international, charter, and cargo. The data from 2004-2006 was also used to differentiate between commuter and air taxi operations. These time periods, along with historical data developed in previous iterations of the derivative forecast, provide an appropriate indication of current and future trends and are the most appropriate basis for distributing operations among categories for the FFY2012 and FFY2020 operations forecast. **Table 6, *Aircraft Operations Categories*,** shows the resulting percentages.

Table 6
Aircraft Operations Categories
Fort Lauderdale-Hollywood International Airport

	Percent of Operations			
Category	**FFY 2004**	**FFY 2006**	**FFY 2012**	**FFY 2020**
Air Carrier Operations				
Domestic Passenger Air Carrier	86.6%	84.4%	83.6%	82.9%
International Passenger Air Carrier	8.8%	11.6%	13.0%	14.0%
Charter	1.3%	1.2%	1.0%	1.1%
All-cargo	3.3%	2.8%	2.4%	2.0%
Total Air Carrier Operations	100.0%	100.0%	100.0%	100.0%
Commuter / Air Taxi Operations				
Commuter[1/]	65.2%	72.7%	73.0%	73.5%
Air Taxi	34.8%	27.3%	27.0%	26.5%
Total Commuter / Air Taxi Operation	100.0%	100.0%	100.0%	100.0%

1/ Commuter category includes commuter air cargo operations.
Sources: FAA, 2006 TAF; OAG; U.S. DOT, Schedule T-100, and Landrum & Brown analysis.

Applying the percentages in the above table to the 2012 and 2020 FAA TAF operations forecast results in an annual operations forecast for each category. This forecast is shown in **Table 7, *Annual Operations Forecasts***. Domestic passenger air carrier operations are forecast to increase from 150,990 in 2006 to 212,983 in 2020. International passenger air carrier operations are projected to grow from 20,786 in 2006 to 35,984 in 2020. Commuter operations are forecast to increase from 46,887 in 2006 to 56,182 in 2020. General aviation operations are projected to grow from 56,686 in 2006 to 74,701 by 2020.

Table 7
Annual Operations Forecasts
Fort Lauderdale-Hollywood International Airport

Category	FFY 2004	FFY 2006	FFY 2012	FFY 2020
Air Carrier Operations				
Domestic Passenger Air Carrier	146,310	150,990	174,890	212,983
International Passenger Air Carrier	14,884	20,786	27,211	35,984
Charter	2,190	2,190	2,190	2,920
All-cargo	5,500	4,950	5,024	5,141
Subtotal	168,884	178,916	209,315	257,027
Commuter / Air Taxi Operations				
Commuter[1/]	44,312	46,887	49,926	56,182
Air Taxi	23,690	17,620	18,466	20,256
Subtotal	68,002	64,507	68,392	76,438
General Aviation / Military Operations				
General Aviation	70,825	56,686	63,800	74,701
Military	632	370	370	370
Subtotal	71,457	57,056	64,170	75,071
Total Operations	308,343	300,479	341,877	408,536

1/ Commuter category includes commuter air cargo operations.
Sources: FAA; OAG; U.S. DOT, Schedule T-100, and Landrum & Brown analysis.

5. SCHEDULED PASSENGER AVERAGE SEATS PER DEPARTURE AND LOAD FACTOR PROJECTIONS

In order to develop average annual day flight schedules, it is necessary to understand the relationship between annual departures and enplanements at FLL. The ratio of enplanements per departure for 2006, 2012, and 2020 was obtained by dividing the annual enplanements by the annual departures (half the annual operations) presented in Section 4. The enplanements per departure ratio is a function of two factors: load factor and average seats per departure (ASPD or gauge). The relationship is shown in the equation below.

Enplanements Per Departure = Average Load Factor * ASPD

The determination of the forecast average load factor and ASPD allows a fleet mix forecast to be developed. The fleet mix forecast is needed to develop the average annual day flight schedules.

Projections of average load factors and ASPD were developed for the scheduled passenger activity at FLL, as shown in **Table 8, *Average Seats Per Departure and Load Factor Assumptions***. The calculations of future load factors and ASPD were guided by calculated FAA TAF assumptions, along with analysis of U.S. DOT, T-100 data. The FFY2006 gauge information was obtained from the OAG. The domestic air carrier ASPD is projected to increase from 151 in 2006 to 154 in 2020. The international air carrier ASPD is forecast to increase from 138 in 2006 to 149 in 2020. The commuter ASPD (both international and domestic) is projected to increase from 30 in 2006 to 43 in 2020.

Table 8
Average Seats Per Departure and Load Factor Assumptions
Fort Lauderdale-Hollywood International Airport

	FFY2006	FFY2012	FFY2020
Seats/Departure			
Domestic Air Carrier	151	151	154
International Air Carrier	138	145	149
Commuter	30	38	43
Load Factor			
Domestic Air Carrier	75.9%	76.5%	76.5%
International Air Carrier	68.0%	68.7%	68.3%
Commuter	66.8%	71.0%	73.8%
Enplanements/Departure			
Domestic Air Carrier	114	116	118
International Air Carrier	94	99	102
Commuter	20	27	31

Sources: FAA; OAG; U.S. DOT, Schedule T-100, and Landrum & Brown analysis.

Domestic air carrier load factors are forecast to increase somewhat from 75.9 percent in 2006 to 76.5 percent in 2020. International air carrier load factors are expected to remain relatively constant at approximately 68 percent. Commuter load factors are forecast to increase from 66.8 percent in 2006 to 73.8 percent by 2020.

6. FLEET MIX FORECAST

To determine the appropriate 2012 and 2020 air carrier and commuter fleet mix, the FLL historical fleet mix for 2000-2006[4] was reviewed. In addition, each airline's current fleet and future orders and options, was consulted for most of the airlines at FLL. The fleet mix was developed to match the forecast ASPD targets presented in Section 4, *Annual Forecasts*. The resulting aircraft fleet mix produced for the scheduled passenger sector for 2012 and 2020 is shown in **Table 9, *Forecast Scheduled Air Carrier Passenger Fleet Mix*** and **Table 10, *Forecast Scheduled Commuter Passenger Fleet Mix***

The passenger air carrier fleet is made up of large regional jets and turboprops, narrow-body jet aircraft, and wide-body jet aircraft. Large regional jets and turboprops refer to those aircraft that exceed the FAA's 60-seat definition of commuter aircraft and include models such as the Embraer E170 and E190. Narrowbody aircraft refer to traditional commercial airliners with a single aisle in the passenger cabin. Examples include the Airbus 319, Boeing 737-400, Boeing 737-700, Embraer 135, and the McDonald Douglas 80 (MD80). Widebody aircraft refer to commercial airliners with more than one aisle in the passenger cabin. Examples of widebody aircraft include the Boeing 747, 767 and 777; the Lockheed L-1011; the McDonnell Douglas DC-10; and Airbus Industrie's A300 and A310.

Large regional jet and turboprop aircraft accounted for around two percent of the domestic air carrier fleet in 2006. Narrowbody (single aisle) aircraft such as the Boeing 737, Airbus 320, or MD80 represented approximately 77 percent of the 2006 domestic air carrier fleet at FLL. The Boeing 757 aircraft, considered a narrowbody aircraft, was separated from the narrowbody category for this analysis made up 19 percent and widebody (double aisle) aircraft made up the remaining two percent of the 2006 domestic air carrier fleet. By 2020, widebody aircraft are forecast to increase to 6 percent of the domestic air carrier fleet. Boeing 757 aircraft are projected to make up 15 percent, narrowbody aircraft will make up 74 percent, and large regional jets and turboprops will account for five percent of the domestic air carrier fleet.

The dominant aircraft in the international air carrier fleet at FLL in 2006 was the Airbus 319 – making up 28 percent of the 2006 fleet. The A319 is used by Spirit, US Airways, Air Canada, and SkyService airlines. Scheduled international air carrier service from FLL is to markets in Canada, the Caribbean, and northern South America. The A319 is forecast to remain the dominant aircraft in FLL's international fleet throughout the forecast period, retaining a 28 percent share of the fleet in 2020. It is projected that the MD80 will be eliminated from the international fleet beyond 2012.

Commuter aircraft with less than 30 seats dominated the 2006 FLL commuter fleet, representing over 61 percent of the total. Regional jets made up 35 percent of the

[4] Source: Official Airline Guide (OAG)

existing commuter fleet, and the DH7/DH8 made up four percent. By 2020, regional jets are forecast to increase to 66 percent of the commuter fleet.

Table 9
Forecast Scheduled Air Carrier Passenger Fleet Mix
Fort Lauderdale-Hollywood International Airport

	Number	Percent of Operations		
Aircraft	of Seats	FFY 2006	FFY 2012	FFY 2020
Domestic Air Carrier				
CR7/E70	70	1.7%	2.6%	2.0%
B732	100	0.5%	0.0%	0.0%
E90	100	0.0%	1.4%	3.0%
DC9	100	0.5%	0.0%	0.0%
B717	113	5.0%	3.7%	1.3%
B735	119	0.6%	0.0%	0.0%
B73G	129	14.7%	17.5%	22.7%
A319	130	9.0%	11.0%	11.1%
B733	135	8.1%	5.5%	0.0%
MD80	140	8.2%	1.8%	0.0%
B734	144	2.0%	0.9%	0.0%
A32s	150	3.0%	2.8%	2.2%
B737	150	0.0%	0.0%	0.0%
738/73H	152	3.8%	8.3%	8.9%
A320	155	16.6%	16.6%	16.5%
B727	156	0.0%	0.0%	0.0%
B739	167	1.4%	2.8%	3.6%
A321	187	3.4%	5.5%	7.6%
B757	190	19.1%	15.6%	15.1%
B767	217	2.4%	4.0%	6.0%
Total		100.0%	100.0%	100.0%
ASPD		150.6	151.3	153.9
International Air Carrier				
AT7	64	12.0%	7.0%	3.0%
CR7/E70	73	0.7%	1.2%	1.5%
E90	93	1.4%	2.8%	4.5%
B735	118	0.5%	0.8%	0.0%
B737	118	6.6%	6.6%	6.6%
B73S	120	1.8%	0.8%	0.0%
B733	126	0.2%	0.0%	0.0%
A319	129	28.2%	28.7%	28.2%
B73G	136	3.7%	4.1%	4.2%
A32s	138	0.2%	0.0%	0.0%
B734	144	0.1%	0.0%	0.0%
738/73H	148	2.6%	5.7%	8.3%
MD80	150	8.3%	2.5%	0.0%
A320	156	16.6%	16.4%	17.4%
B757	170	3.0%	4.1%	5.0%
A321	187	10.5%	12.3%	13.3%
B767	214	2.1%	3.5%	3.2%
A310	259	1.0%	3.5%	4.8%
A330	363	0.6%	0.0%	0.0%
Total		100.0%	100.0%	100.0%
ASPD		138.0	144.5	149.1

Sources: FAA; OAG; U.S. DOT, Schedule T-100; and Landrum & Brown analysis.

Table 10
Forecast Scheduled Commuter Passenger Fleet Mix
Fort Lauderdale-Hollywood International Airport

Aircraft	Number of Seats	Percent of Operations FFY 2006	FFY 2012	FFY 2020
Commuter				
CNA	8	6.8%	1.3%	0.5%
BEC	11	1.0%	0.0%	0.0%
BE1	19	32.6%	18.0%	6.1%
EM2	30	20.7%	21.1%	16.0%
ER3	37	15.9%	15.1%	15.5%
CRJ/ERJ	50	18.9%	33.6%	50.4%
DH7/DH8	50	4.2%	10.9%	11.5%
Total		100.0%	100.0%	100.0%
ASPD		30.4	37.7	42.7

Sources: FAA; OAG; U.S. DOT, Schedule T-100; and Landrum & Brown analysis.

Data obtained from the Broward County Aviation Department's Airport Noise and Operations Management System[5] (ANOMS) was used to obtain the fleet mix for charter, air taxi, cargo, general aviation, and military operations. A forecast fleet mix was developed for these categories based on industry trends. Although FFY2004 is shown as the baseline for this data, where appropriate, more current data regarding fleet mix has been used to support the development of the 2012 and 2020 fleet. The 2004, 2012, and 2020 charter, air taxi, cargo, general aviation, and military fleet mix is shown in **Table 11, *Forecast Non-Scheduled Fleet Mix***.

The future charter fleet is expected to be made up of Airbus 320, Airbus 319, and Boeing 757 aircraft.

The C208 Cessna Caravan accounted for 18 percent of the 2004 cargo fleet, narrowbody aircraft (including Boeing 757 aircraft) represented 64 percent, and widebody aircraft comprised the remaining 18 percent of the 2004 cargo fleet. By 2020, Caravans are projected to account for 22 percent of the cargo fleet. Narrowbodies and widebodies are projected to represent 56 percent and 22 percent of the cargo fleet, respectively, by 2020.

The non-scheduled air taxi fleet is made up of larger general aviation aircraft and corporate jets. The fleet mix of this segment is not expected to change significantly during the forecast period.

The 2004 general aviation fleet consisted of 33.7 percent single engine piston aircraft, 18.9 percent multi engine piston aircraft, 34.7 percent corporate jets, 11.6 percent turbo props, and 1.1 percent military aircraft. By 2020, a shift to a higher proportion of corporate jet and turboprop aircraft is expected. The 2020 general aviation fleet at FLL is forecast to consist of 29.1 percent single engine piston aircraft, 18.4 percent multi engine piston aircraft, 36.9 percent corporate jets, and 14.6 percent turboprop aircraft. Military operations are projected to remain at approximately one percent of the segment total.

[5] The FLL ANOMS system collects radar data for operations arriving, departing, and enroute through FLL airspace. The data collected includes runway use, aircraft type, time of arrival or departure, airline, and flight track location.

Table 11
Forecast Non-Scheduled Fleet Mix
Fort Lauderdale-Hollywood International Airport

	Percent of Operations		
Aircraft	**FFY2004**	**FFY2012**	**FFY2020**
Charter			
319	0.0%	33.3%	25.0%
320	0.0%	33.3%	50.0%
722	33.3%	0.0%	0.0%
738	66.7%	0.0%	0.0%
757	0.0%	33.3%	25.0%
Total	100.0%	100.0%	100.0%
Cargo			
757	9.1%	11.1%	11.1%
727-200	18.2%	11.1%	11.1%
72F	18.2%	11.1%	11.1%
ABF	9.1%	11.1%	11.1%
C208	18.1%	22.2%	22.2%
D8F	9.1%	11.1%	11.1%
D9F	9.1%	11.1%	11.1%
DC-10-10	9.1%	11.1%	11.1%
Total	100.0%	100.0%	100.0%
Air Taxi			
AT7	3.4%	4.0%	3.7%
BE20	6.9%	4.0%	3.7%
BE40	3.4%	0.0%	0.0%
C414	3.4%	4.0%	3.7%
C525	3.4%	4.0%	3.7%
C560	6.9%	4.0%	7.4%
C750	6.9%	4.0%	3.7%
CNA	3.4%	4.0%	3.7%
G73	27.6%	24.0%	25.9%
H25	6.9%	8.0%	7.4%
LJ45	3.4%	8.0%	7.4%
LJ60	3.4%	8.0%	7.4%
METROIII	13.8%	16.0%	14.8%
PA31	6.9%	8.0%	7.4%
Total	100.0%	100.0%	100.0%
General Aviation / Military			
Single Engine Piston	33.7%	27.3%	29.1%
Multi Engine Piston	18.9%	18.2%	18.4%
Corporate Jets	34.7%	38.6%	36.9%
Turbo Prop	11.6%	14.8%	14.6%
Military	1.1%	1.1%	1.0%
Total	100.0%	100.0%	100.0%

Sources: ANOMS data; U.S. DOT, Schedule T-100; and Landrum & Brown analysis

7. POTENTIAL NEW MARKETS

In order to determine if there are any new cities that are likely to be served non-stop from FLL in the future, a market analysis was completed. Passenger demand by market was compared to the type of service (non-stop or connecting) that is currently offered to each market from FLL.

The top 40 domestic airports providing origin and destination (O&D) service to/from FLL for the period July 2005 to June 2006 were obtained from the U.S. Department of Transportation. As Fort Lauderdale is principally a resort destination, this list represents the source cities of visitors to FLL. Therefore, it is a reasonable indicator of demand by market. The top 40 markets from FLL were compared to OAG data to determine which cities had non-stop service. This comparison is shown in **Table 12, *Top 40 FLL Domestic O&D Airports With Service to Fort Lauderdale-Hollywood International Airport***.

The analysis found that three of the top 40 domestic O&D markets do not have non-stop service. Two of those cities are on the west coast—Seattle (SEA) and San Diego (SAN). Additional west coast service from FLL was deemed unlikely within the forecast horizon because SFO and SEA are not hub cities and there is not sufficient demand to support non-stop (point-to-point) service from a market such as FLL. Buffalo (BUF) is a good candidate for non-stop service from FLL because there is sufficient passenger demand of 194 daily passengers each way.

Table 12
Top 40 FLL Domestic O&D Airports With Service to Fort Lauderdale-Hollywood International Airport

Rank	Airport	Annual Passengers[1/]	Non-Stop Service	Rank	Airport	Annual Passengers[1/]	Non-Stop Service
1	LGA	1,664,800	YES	21	PIT	225,680	YES
2	JFK	1,332,450	YES	22	MCO	220,900	YES
3	EWR	1,038,450	YES	23	ISP	213,010	YES
4	BOS	823,910	YES	24	PVD	201,720	YES
5	PHL	685,160	YES	25	CLE	198,220	YES
6	ATL	614,940	YES	26	PHX	179,840	YES
7	ORD	541,910	YES	27	CLT	179,530	YES
8	BWI	473,390	YES	28	BNA	174,190	YES
9	DTW	449,040	YES	29	IAH	159,230	YES
10	LAX	436,160	YES	30	IND	157,180	YES
11	TPA	393,850	YES	31	STL	157,050	YES
12	DCA	371,170	YES	32	ACY	153,100	YES
13	MDW	353,390	YES	33	RDU	150,090	YES
14	SJU	337,340	YES	34	MSP	144,220	YES
15	LAS	329,490	YES	**35**	**BUF**	**141,950**	**NO**
16	JAX	309,630	YES	36	MCI	141,730	YES
17	IAD	300,990	YES	37	MKE	122,590	YES
18	DFW	287,310	YES	**38**	**SEA**	**115,830**	**NO**
19	BDL	282,630	YES	39	CMH	110,670	YES
20	DEN	258,710	YES	**40**	**SAN**	**105,350**	**NO**

1/ July 2005 to June 2006

Sources: U.S. DOT; Air Passenger origin-Destination Survey and Official Airline Guide (OAG).

8. AVERAGE DAY SCHEDULES

Profiles of 24-hour scheduled and unscheduled operations were developed for FLL for 2004, 2012, and 2020. The profiles of operations are daily flight schedules that reflect the likely conditions associated with the 2004, 2012, and 2020 levels of activity at these airports. Daily profiles were prepared for an average annual day for each year as required for the EIS analysis. While a design day schedule was not prepared for 2006, the estimated average daily totals are presented as a data point.

Average day operations by category for each year are presented in **Table 13, *Average Annual Day Operations Forecasts***. Average day operations were calculated by dividing annual operations by 365/366, the number of days in a given year. The 2004 average day schedule has 838 operations. The 2012 schedule has 937 operations, and the 2020 schedule has 1,119 operations.

Table 13
Average Annual Day Operations Forecasts
Fort Lauderdale-Hollywood International Airport

Category	FFY 2004	FFY 2006	FFY 2012	FFY 2020
Air Carrier Operations				
Domestic Passenger Air Carrier	402	414	479	584
International Passenger Air Carrier	26	57	75	99
Charter	6	6	6	8
All-cargo	24	14	14	14
Subtotal	458	490	573	704
Commuter/Air Taxi Operations				
Commuter[1]	130	128	137	154
Air Taxi	58	48	51	55
Subtotal	188	177	187	209
General Aviation/Military Operations				
General Aviation	190	155	175	205
Military	2	1	1	1
Subtotal	192	156	176	206
Total Operations	838	823	937	1,119

[1/] Commuter includes air cargo operations.
Sources: FAA; OAG; U.S. DOT, Schedule T-100, and Landrum & Brown analysis.

Baseline 2004 Flight Schedule

The 2004 average day flight schedule was created based on the OAG schedule for March 17, 2004 and ANOMS data from July 2003 to June 2004.[6] The scheduled passenger activity was obtained from the OAG. According to the OAG, there were 470 air carrier flights and 132 commuter flights scheduled on March 17. The appropriate number of flights were removed from the March 17 OAG data to match the average annual day counts presented in **Table 13, *Average Annual Day Operations Forecasts***.

The scheduled passenger traffic was supplemented with unscheduled activity – charter, air taxi, cargo, general aviation, and military flights – from the ANOMS data. The characteristics of the unscheduled activity, including fleet mix and times of operation, in the 2003 and 2004 ANOMS data were reviewed to determine the appropriate flights to include in the average day schedule in order to best represent an average day at FLL.

Future Flight Schedule Assumptions

The following assumptions were used to create the average day flight schedules for 2012 and 2020:

- The 2004 average day flight schedule was used as a basis for the future schedules.
- March 2007 OAG flight schedules were reviewed to understand changes in the scheduled passenger profile over the past two to three years.
- The fleet mix in the 2012 and 2020 average day flight schedules is based on the fleet mix presented in **Section 5, *Scheduled Passenger Average Seats per Departure and Load Factor Projections*.**
- The one potential new non-stop market identified in **Section 7, *Potential New Markets***, was included in the 2012 and 2020 average day flight schedules.
- The existing 2004 hourly distribution for the scheduled passenger activity was largely maintained in off-peak hours in the 2012 and 2020 average day flight schedules. In contrast, activity in the arrival and departure peak hours was not increased proportionately to the 2004 schedule. Activity was flattened slightly in these peak hours[7] to reflect how some airlines are changing scheduled flights into their hubs from spoke airports such as FLL.
- The 2004 hourly distribution of cargo, general aviation, and military activity was used as a base for the forecast years. That distribution was maintained proportionally with some flattening of peak hours to develop the 2012 and 2020 hourly distributions.

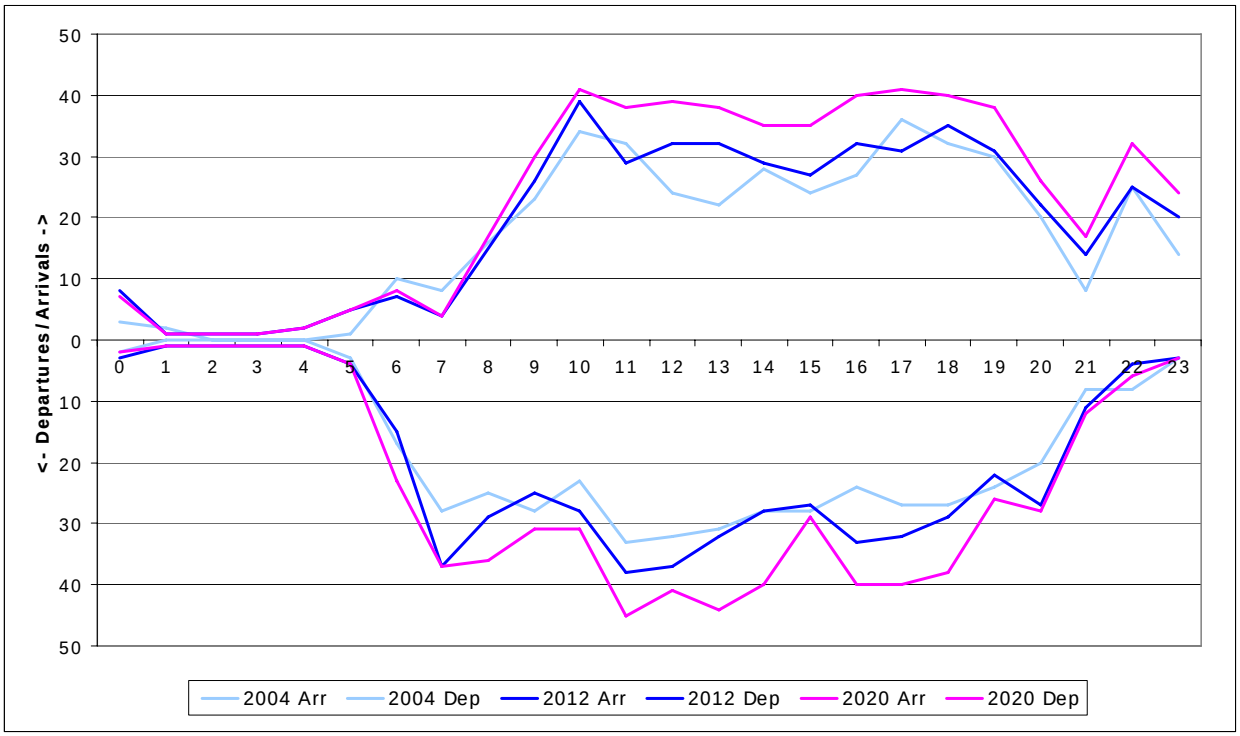
[6] A full 12 months of airport data was needed for the EIS analysis. The FAA issued its Notice to Proceed for this project on July 29, 2004. Data collection and inventory tasks were initiated at that time, hence the decision to use July 2003 to June 2004 as the 12-month period for data collection and analysis.

[7] A peak hour is the hour in a 24-hour period that has the most operations compared to all other hours of the day.

Hourly Distribution of Activity

The resulting hourly distributions of activity for the 2004, 2012, and 2020 average day schedules are shown in **Exhibit 9, *Hourly Flight Distributions***.

Exhibit 9
HOURLY FLIGHT DISTRIBUTIONS
Fort Lauderdale-Hollywood International Airport



The 2004 arrival peak hour occurs at 1700 and has 36 arrivals. By 2012, the arrival peak hour shifts to 1000 and has 39 arrivals. In 2020, the 1000 peak hour has 41 arrivals (the 1700 hour also has 41 arrivals). The arrival peak hour shifts due to the number of general aviation versus air carrier operations in each hour. The peak hour for air carrier arrivals in 2004 is 1000. Air carrier operations grew at a faster rate than general aviation operations causing the peak hour for all arrivals to shift to 1000.

The departure peak hour in the 2004 average day flight schedule occurs at 1100 and has 33 departures. In 2012, this hour has 38 departures and the 2020 flight schedule has 45 departures.

The noise analysis prepared for the EIS takes into consideration the number of operations that occur during daytime hours versus nighttime hours. Nighttime hours are defined as 10:00 p.m. (2200) to 6:59 a.m. (0659). The day-night split of operations in each schedule is shown in **Table 14, *Day-Night Split***. In 2004, 89 percent of total operations occurred during daytime hours. This split is expected to remain constant through 2020. Virtually all international flights currently operate only during daytime hours. This pattern is expected to continue.

Table 14
DAY-NIGHT SPLIT
Fort Lauderdale-Hollywood International Airport

Number of Average Annual Day Operations

	FFY 2004		FFY 2012		FFY 2020	
Category	**Day**	**Night**	**Day**	**Night**	**Day**	**Night**
Air Carrier	394	64	503	75	620	90
Commuter/Air Taxi	183	5	178	4	200	4
General Aviation	171	19	150	24	176	28
Military	2	0	2	0	2	0
Total	**750**	**88**	**833**	**103**	**998**	**122**

Percent of Average Annual Day Operations

	FFY 2004		FFY 2012		FFY 2020	
Category	**Day**	**Night**	**Day**	**Night**	**Day**	**Night**
Air Carrier	86%	14%	87%	13%	87%	13%
Commuter/Air Taxi	97%	3%	98%	2%	98%	2%
General Aviation	90%	10%	86%	14%	86%	14%
Military	100%	0%	100%	0%	100%	0%
Total	**89%**	**11%**	**89%**	**11%**	**89%**	**11%**

Sources: FAA 2006 Terminal Area Forecast; Official Airline Guide (OAG); Landrum & Brown Analysis

Terminal Assignments

The air quality models used in the EIS analysis require knowledge of where each aircraft in the schedules is parked at the airport. Actual data from FLL's Gate Management System (GMS) for 2003 and 2004 was used to assign each flight in the 2004 schedule to a concourse or parking location on the airport. The assumptions used to provide concourse assignments are shown in **Table 15, *Concourse/Parking Location Assumptions***. These same assumptions were used to assign flights in the 2012 and 2020 average day schedules to a concourse or parking location, taking into account any concourse changes between FFY2004 and FFY2006. No terminal expansion was assumed. No analysis was completed to assess the ability of the existing terminals to accommodate the increased 2012 and 2020 activity.

Table 15
CONCOURSE / PARKING LOCATION ASSUMPTIONS
Fort Lauderdale-Hollywood International Airport

Airline	Airline Code	Concourse Assignments
Island Express	2S	Commuter Terminal
Gulf Stream International	3M	Concourse C
Cape Air	9K	Commuter Terminal
Song	A471	Concourse D
TED (United)	A492	Concourse F
American Airlines	AA	Concourses F & H
Air Canada	AC	Concourse H
Avianca	AV	Concourse H
jetBlue	B6	Concourses B & C
Flying Boat/Chalk's International	CI	Commuter Terminal
Continental Airlines	CO	Concourse C
Delta Airlines	DL	Concourse D
Frontier Airlines	F9	Concourse B
AirTran Airways	FL	Concourse E
America West Airlines	HP	Concourse E
Air Jamaica	JM	Concourse H
Cayman Airways	KX	Concourse H
Lynx Air International	LA	Commuter Terminal
Spirit Airlines	NK	Concourse H
Northwest Airlines	NW	Concourse C
Comair	OH	Concourse D
Executive Airlines	OW	Concourse F
Florida Coastal	PA	Concourse H
Chautauqua	RP	Concourse D
Jetsgo Corporation	SG	Concourse F
Air Transat	XX	Concourse H
ATA Airlines	TZ	Concourse F
Brendan Airways	U5	Concourse B
United Airlines	UA	Concourse F
Bahamasair Holdings	UP	Concourse F
US Airways	US	Concourse E
Southwest	WN	Concourse B
Air Sunshine	YI	Commuter Terminal
Midwest Airlines	YX	Concourse D
Air Partners, Inc.	AP	FBO Apron
Miscellaneous Air Taxi Flights	n/a	FBO Apron
Miami Air	n/a	FBO Apron & Concourse B
Planet	n/a	FBO Apron
General Aviation Flights	n/a	FBO Apron
United Parcel Service (UPS)	5X	Cargo Apron
Air Transport International	8C	Cargo Apron
Federal Express	FX	Cargo Apron
Mountain Air Cargo	MA	Cargo Apron
Menlo Worldwide Forwarding	MF	Cargo Apron
ABX Air	GB	Cargo Apron

Sources: BCAD, FLL GMS data for 2003 and 2004, OAG.

9. PEAK MONTH AVERAGE DAY (PMAD)

For purposes of analyzing and modeling delay at FLL, the AAD schedules for 2012 and 2020 were converted to peak month average day (PMAD) schedules. This conversion was based on an analysis of monthly operations activity between FFY2004 and FFY2006. During this three year period, peak month operations have accounted for approximately 10 percent of annual operations. As a result, PMAD operations at FLL have been almost 17 percent higher than AAD operations between FFY2004 and FFY2006. The targets used to develop the PMAD schedules by operating category are shown in **Table 16**, ***Peak Month Average Day Operations.***

Table 16
Peak Month Average Day Operations
Fort Lauderdale-Hollywood International Airport

Category	FFY 2012	FFY 2020
Air Carrier Operations		
Domestic Passenger Air Carrier	552	664
International Passenger Air Carrier	86	112
All-cargo	16	18
Subtotal	654	794
Commuter / Air Taxi Operations		
Commuter[1]	156	172
Air Taxi	62	66
Subtotal	218	238
General Aviation / Military Operations		
General Aviation	198	234
Military	2	2
Subtotal	200	236
Total Operations	1,072	1,268

[1/] Commuter includes air cargo operations.
Sources: FAA; OAG; U.S. DOT, Schedule T-100, and Landrum & Brown analysis.

10. SUMMARY

The FAA determined that its 2006 TAF was the appropriate forecast for evaluating the Airport Sponsor's Proposed Project and alternatives in the EIS. The FAA's 2006 TAF provides annual totals of historical and projected aircraft operations for air carrier, air taxi and commuter, general aviation, and military categories. General aviation and military activity were split between itinerant and local operations. The FAA's 2006 TAF also provides annual passenger totals for air carrier and commuter activity. From this forecast, Landrum & Brown developed detailed derivative data, including flight schedules, for use in the EIS analysis of years 2012 and 2020.