

DISCUSSION OUTLINE

Prepared by:
Ricondo & Associates, Inc.

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AGENDA

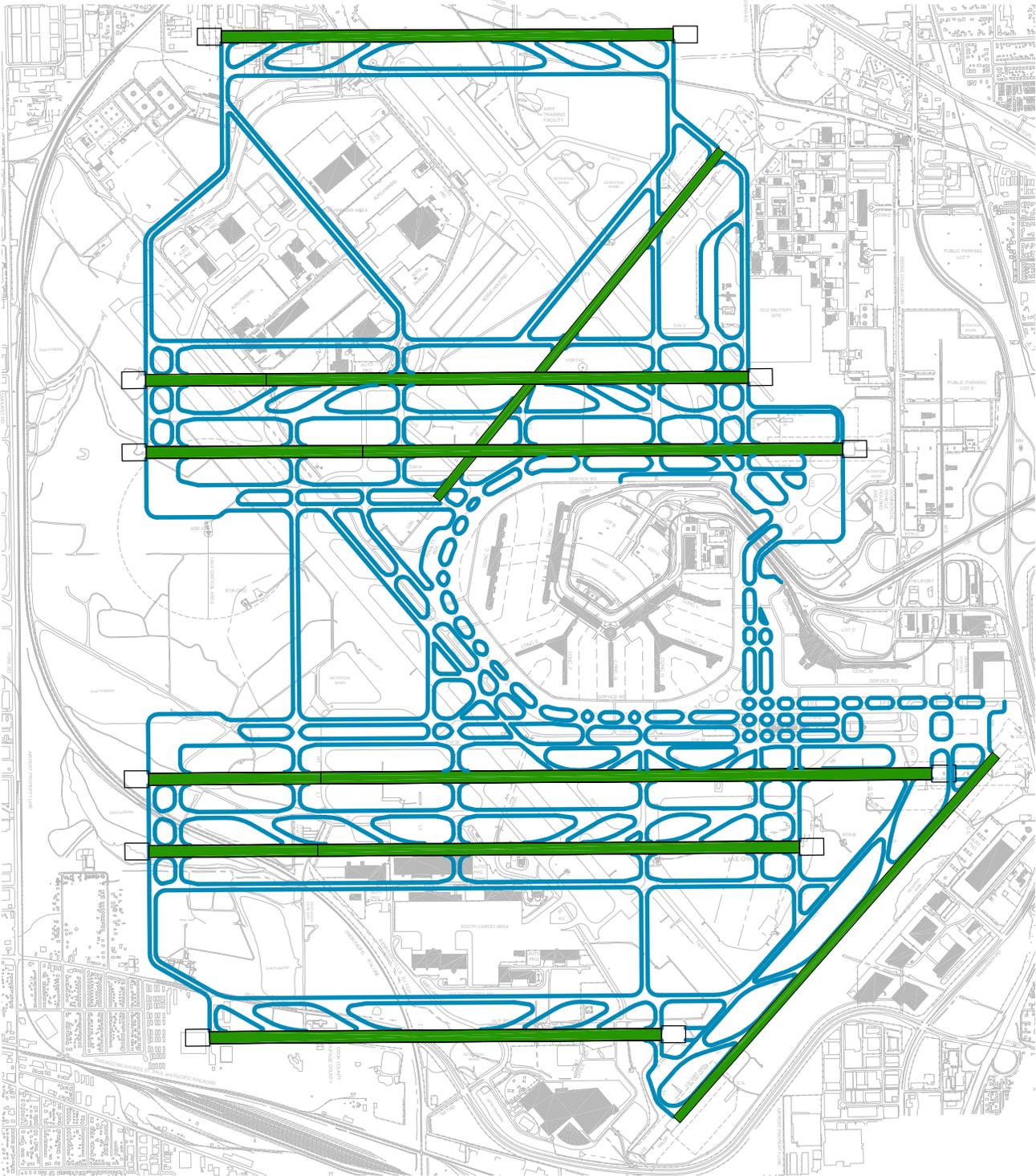
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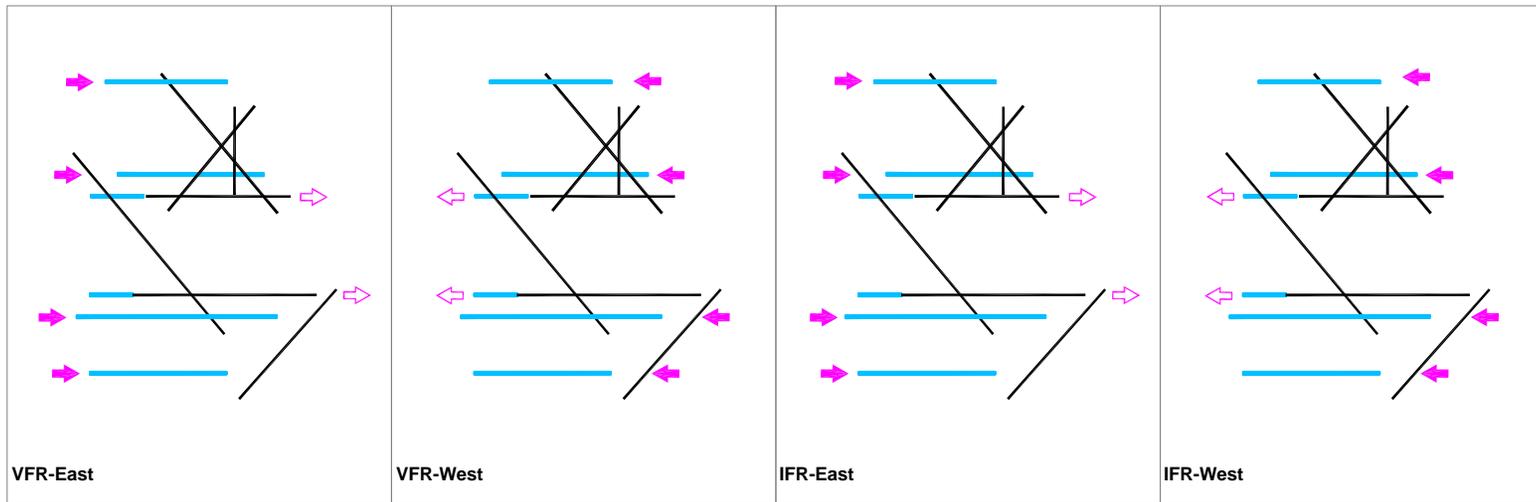
I. INTRODUCTION

1. This document provides basic technical information relative to the runway concept proposed by the City/State for the future development of Chicago O'Hare International Airport. This information is intended exclusively to assist in the review and refinement of the Concept by providing a common base to initiate discussions from, as well as to stimulate ideas and comment.
2. While most of the information presented here was developed previously, some more recent refinements and additional information are included. The taxiway network shown for the Concept has been revised from the illustrative layout depicted in the materials presented when the Concept was unveiled by the City. Similarly, information relative to recent aircraft operations characteristics and forecasts developed by the Federal Aviation Administration are also presented to assist in the selection of planning activity levels to be used in the analyses.
3. It is important to recognize that the information presented here has not been reviewed by FAA, airport users, O'Hare operations staff, or other parties with relevant expertise. The information is, in fact, being used to begin this review and input process.

II. BASE CONCEPT DESCRIPTION

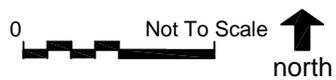
1. Exhibit II-1 depicts the general runway layout concept proposed by the City/State for O'Hare. This layout consists of six runways in the 9/27 orientation and two in the 4/22 orientation.
2. Exhibit II-2 shows the runway operating configurations used to estimate the operating capacity of the runway system. VFR configurations were defined to consist of two flows (east and west) and generally provided for arrivals in the outboard runways and departures in the inboard runways. In periods of high departure demand, additional departure capacity was assumed to be provided by the use of the outboard runways. IFR operations were assumed to consist of similar operating configurations based on current criteria. However, it is important to recognize that there is currently no approved runway separation criterion to conduct quadruple independent approaches under IFR conditions. The FAA has approved the use of quadruple independent IFR approaches at Dallas/Ft. Worth International Airport using the runway separations ultimately to be provided at that facility. The O'Hare runway concept uses different runway separations, most notably for the south runway. Therefore, use the runway concept to conduct quadruple independent IFR approaches will require a prior FAA determination.
3. Exhibits II-3 and II-4 show possible taxi flows for each of the operating configurations. Possible routings, directions of flow, and queuing areas are depicted.



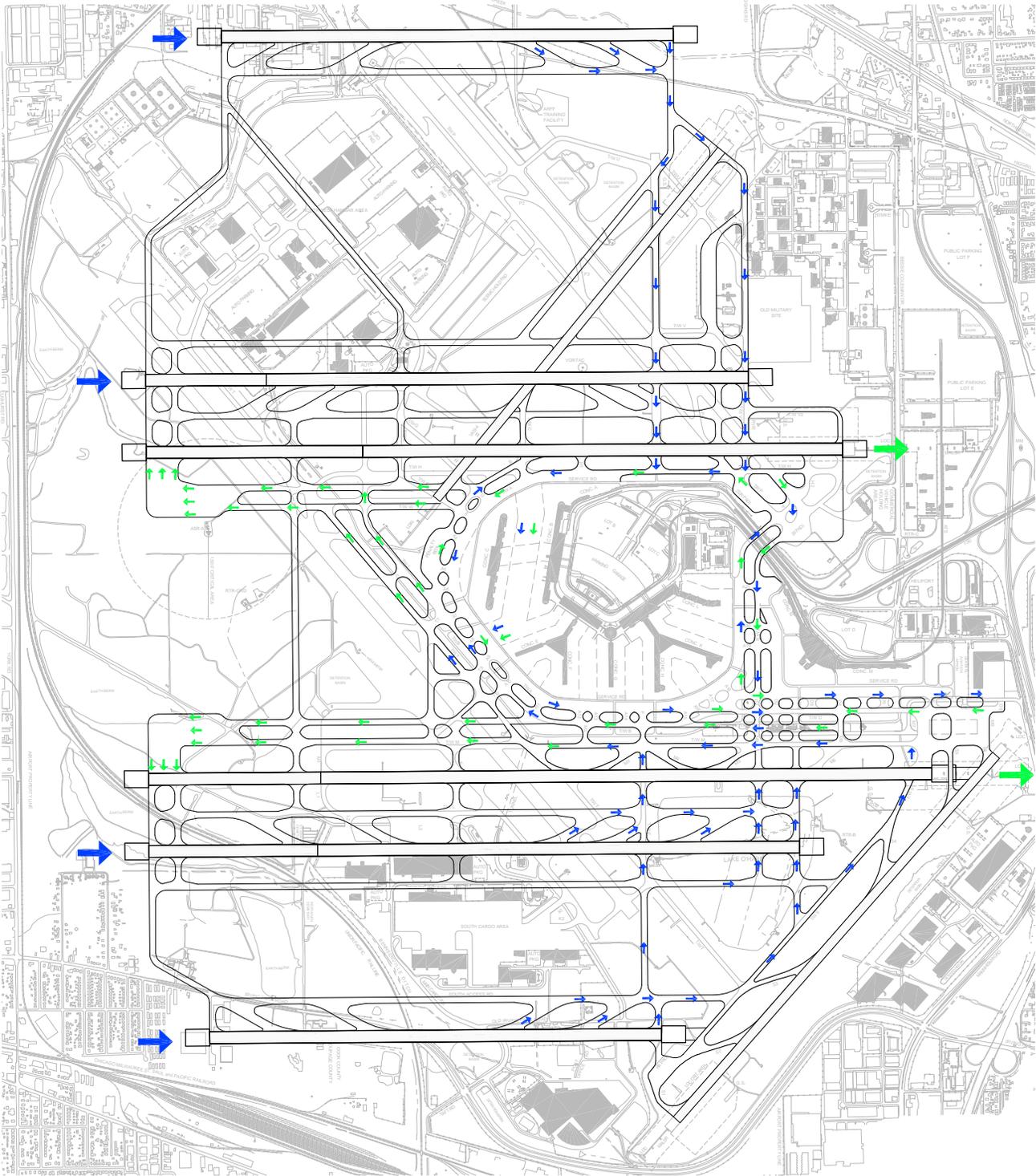


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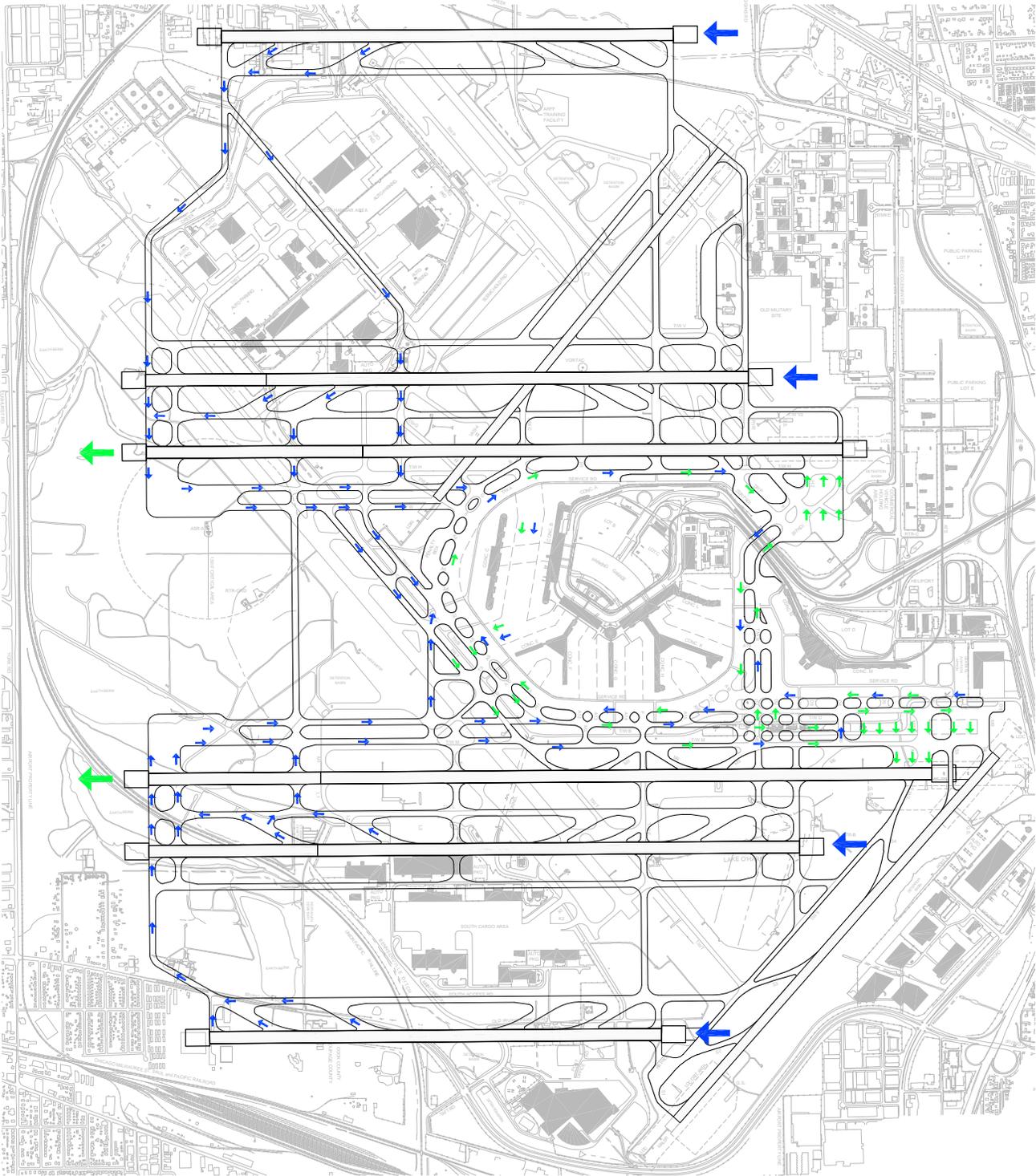
Exhibit II-2



RUNWAY OPERATING CONFIGURATIONS



**Possible Taxiway Flows
East Flow**



**Possible Taxiway Flows
West Flow**

III. WIND COVERAGE

1. Aircraft are limited in their abilities to land and depart in wind conditions that pose crosswind and tailwind components to their operation. Thus, depending on the wind conditions at a specific airport, runways oriented in various directions are provided to ensure the ability of aircraft to operate with reasonable reliability in all weather conditions.
2. The modernization concept for O'Hare proposes the closure of runways in the 14/32 and 18/36 direction, thus limiting the available runway directions to 9/27 and 4/22. In order to assess the implications of this decision, wind data for O'Hare International Airport was analyzed to ascertain the percentage of wind coverage provided under the proposed concept. Additionally, coverages provided under the proposed configuration were compared to those provided under a configuration of runways in the 9/27 and 14/32 directions.
3. FAA Advisory Circular 150/5300-13 Airport Design establishes recommendations for runway wind coverages and for allowable crosswind components for the various aircraft categories. Generally, larger aircraft with higher approach speeds are capable of operating in higher crosswind conditions. Table III-1 presents aircraft operations at O'Hare experienced in the year 2000 by allowable crosswind grouping. As shown, the majority of aircraft at the Airport have allowable crosswind components of 16 knots or greater based on FAA criteria. It is important to recognize that crosswind criteria discussed here is based exclusively on FAA guidelines. This criteria may not reflect individual airline operating practices or pilot preferences, which will need to be addressed.
4. Initial wind analyses were conducted by Ricondo & Associates for the last ten-year period. Subsequent analyses conducted by Landrum & Brown for the period 1976 to 2000 produced similar results. For purposes of the following discussion, the Landrum & Brown analyses are presented since they cover a longer period of time. Wind data covering the period 1976 through 2000 was analyzed by Landrum & Brown to assess the coverages under various allowable crosswind components. Only the hours between 6:00 a.m. and 12:00 midnight were considered in the analysis, in order to reflect the Airport's primary operating hours.
5. Table III-2 presents wind coverages for the existing airfield configuration, the combined RW 4/22 and RW 9/27 configurations, and the combined RW 14/32 and RW 9/27 configurations (due to its limited use, information is not presented for RW 18/36). In addition, RW 9/27 coverage under all-weather conditions is provided. As shown, under all crosswind conditions RW 9/27 coupled with RW 4/22 provides better coverage than RW 9/27 coupled with RW 14/32. Exhibits III-1 through III-3 graphically depict the crosswind coverages under the various wind and weather conditions. If necessary, the wind information can be analyzed further to evaluate specific concerns.

**Table III-1
Aircraft Operations by Allowable Crosswind
2000**

<u>Aircraft Group</u>	<u>General Description</u>	<u>Sample Aircraft</u>	<u>Allowable Crosswind</u>	<u>Annual Operations</u>	<u>Percent of Ops</u>
A-I and B-I	Small General Aviation	Cessna 172, Piper 310	10.5	5,454	1%
A-II and B-II	GA and Small Turboprop	Bae 31, EMB 120	13	49,790	6%
A-III, B-III, and C-I through D-III	RJ and Narrow Body jets	B733, A320, CRJ	16	670,670	76%
A-IV through D-VI	Wide Body Jets	B763, B747, B777	20	147,788	17%
Unidentified				9,464	1%
				883,166	100%

Source: Landrum & Brown, Inc. Operations by category compiled from O'Hare ANOMS for year 2000.

Note: Aircraft groupings and wind limitations based on FAA Advisory Circular 150.5300-13.

**Table III-2
Runway Coverages
O'Hare International Airport**

All Weather

<u>Crosswind</u>	<u>9-27</u>	<u>9-27 & 14-32</u>	<u>9-27 & 4-22</u>	<u>All Existing Runways</u>
10.5	83.75%	91.56%	96.09%	99.40%
13	92.31%	96.41%	98.66%	99.89%
16	97.20%	98.95%	99.68%	99.98%
20	99.40%	99.82%	99.96%	100.00%

IFR

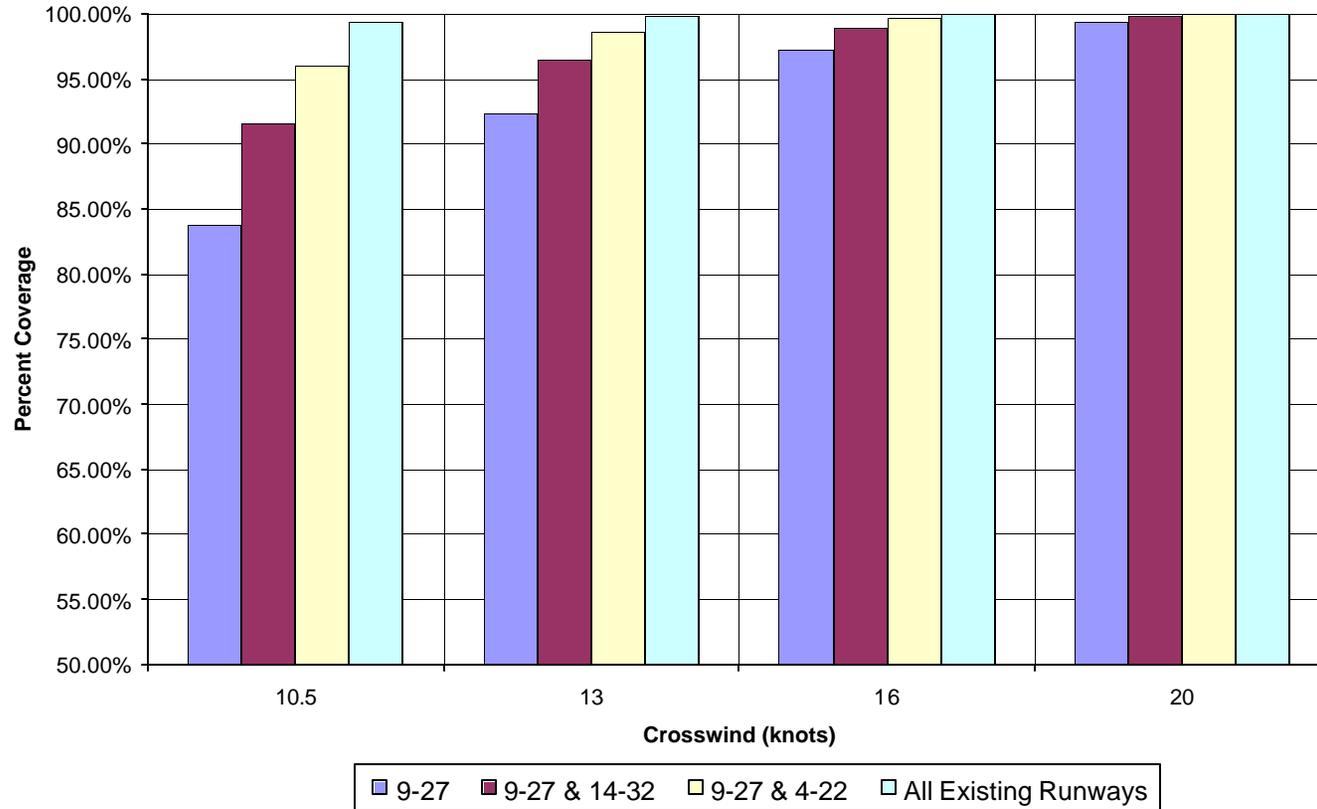
<u>Crosswind</u>	<u>9-27 & 14-32</u>	<u>9-27 & 4-22</u>	<u>All Existing Runways</u>
10.5	89.81%	95.14%	99.42%
13	95.23%	98.09%	99.90%
16	98.44%	99.48%	99.98%
20	99.66%	99.92%	100.00%

VFR

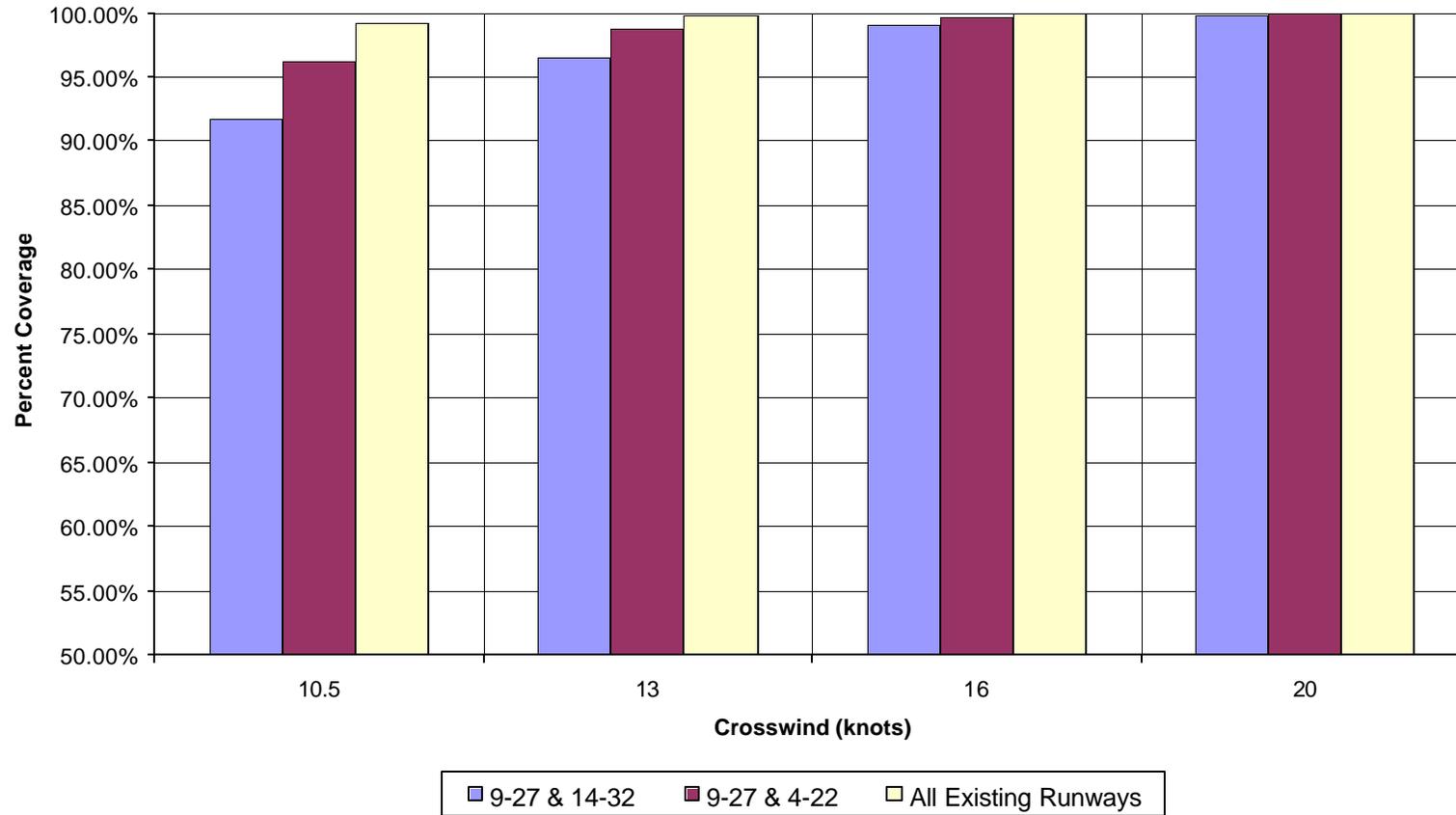
<u>Crosswind</u>	<u>9-27 & 14-32</u>	<u>9-27 & 4-22</u>	<u>All Existing Runways</u>
10.5	91.74%	96.19%	99.21%
13	96.53%	98.72%	99.81%
16	99.00%	99.70%	99.98%
20	99.84%	99.96%	100.00%

Source: Landrum & Brown, Inc. Based on NOAA data for 1976-2000; hours 06:00 to 24:00.

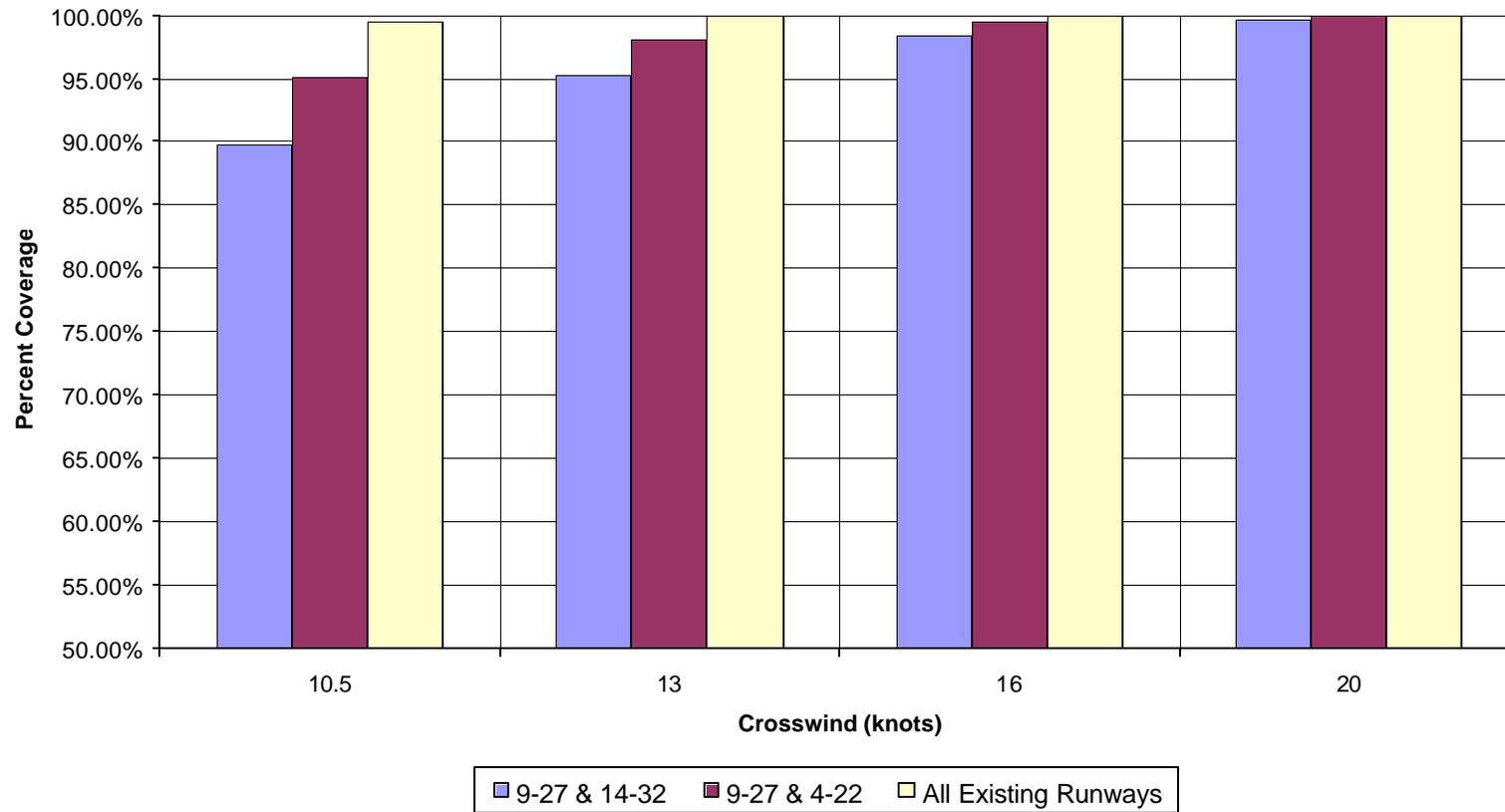
**Exhibit III-1
O' Hare International Airport
All-Weather**



**Exhibit III-2
O'Hare International Airport
VFR Weather**



**Exhibit III-3
O'Hare International Airport
IFR Weather Coverage**



IV. ANALYSIS APPROACH

1. It is anticipated that analyses to be conducted in the refinement of the runway concept will include both subjective and objective evaluations of different factors. Various techniques and tools will be used to obtain the necessary technical input. In some cases, computer simulation analyses will be conducted to assist in assessing some of the operational implications of particular ideas. In other cases, graphic or analytical analyses will be used. Similarly, in most cases information will be required regarding demand levels imposed on the airfield. This section provides background information on those items.
2. The Total Airspace and Airport Modeler (TAAM) Plus has been selected by the City for use in simulation analyses for the Airport. Produced by The Preston Group, a Boeing Aircraft Corporation subsidiary, the model is capable of, but not limited to, considering the following procedural issues:
 - Separation standards such as wake turbulence, runway separation criteria and in-trail separations
 - Airline operations criteria such as aircraft/airline specific gate assignments, pushback procedures, arrival/departure schedule linking, etc.
 - Airfield operation standards such as runway crossing patterns, hold pads, restricted use taxiways, runway queue balancing, etc.

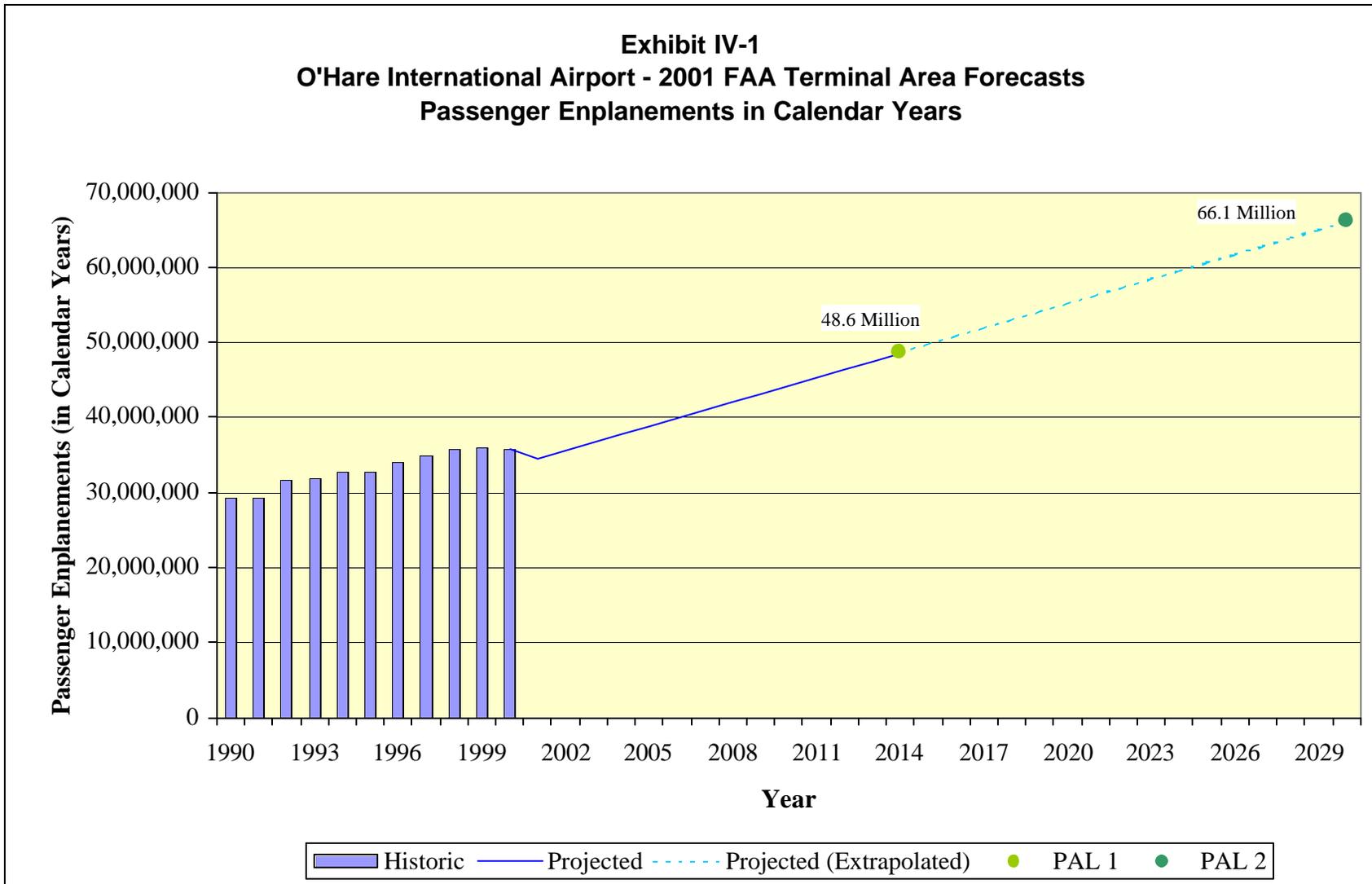
The model can also be used to evaluate airspace operations and multiple airport environments.

3. The results of the simulation would include statistical data on aircraft movements, departure and arrival delays, runway utilization and also would include animations of aircraft movements through the airfield/airspace system. TAAM is currently being used for airfield and airspace assessments by the Federal Aviation Administration (FAA) National Airspace Redesign (NAR) team, American, Continental and Delta Airlines, and Boeing Air Traffic Management (ATM). Additionally, the Chicago Department of Aviation is using TAAM in support of the World Gateway Program.
4. Initial setup of simulation software and hardware has begun. The conference room of the Operational Control Center (OCC) has been converted for use by the simulation team. An inventory of existing procedures and data collection will include briefings (to be scheduled) from representatives FAA Chicago O'Hare Airport Traffic Control Tower (ATCT), FAA Chicago Terminal Radar Approach Control (TRACON) facility, and various Airport stakeholders. Data collection activities, including but not be limited to, pushback times, runway occupancy times, runway exit usage, and runway crossing times by aircraft type will be collected in the field.

5. The simulation of existing conditions would include two calibration experiments that would ensure that TAAM was replicating as close an approximation to real airfield operations as possible. Initial TAAM databases developed for the World Gateway Program will be utilized for economy and planning consistency and updated where required. It is envisioned that one calibration experiment would involve a day in which the airfield operated on a single runway configuration and in Visual Meteorological Conditions (VMC) that would allow triple approaches during periods of peak arrival demand. For purposes of calibrating the model, it is important that for the calibration day VMC conditions be prevalent throughout the National Airspace System (NAS) as much as possible. The second calibration experiment would involve a day in which the airfield operated on a single runway configuration and in Instrument Meteorological Conditions (IMC). The simulation results would be compared and contrasted with the actual operating statistics of the calibration days. Additionally animation of the simulation results would be presented to ATCT, TRACON and airline representatives for review. Based on feedback received from these sources, adjustments to simulation parameters would be made.
6. Experiments that define baseline-operating conditions of the airfield would be constructed using the calibrated model. Baseline experiments are anticipated to include Plan B, Plan X and Plan W. These configurations would be simulated under VMC conditions that would allow triple visual approaches during periods of peak arrival demand. Additionally, these operating configurations would be modeled under marginal VMC conditions where triple approaches would be accomplished through the use of simultaneous ILS approaches. IMC experiments would include two configurations operating in Category I (CAT I) ILS weather conditions. One configuration would utilize simultaneous ILS approaches to Runways 09L and 09R, while another configuration would model simultaneous ILS approaches to Runways 27L and 27R. A single CAT III ILS weather condition experiment would be conducted modeling simultaneous ILS approaches to Runways 14L and 14R. An existing demand level and up to two additional planning activity levels (PALs) would be simulated. It is anticipated that instrument operations at major satellite airports such as DuPage, Pal-Waukee, Midway and Meigs would be included in the simulations so as to develop a baseline assessment to compare and contrast with potential impacts the redesigned airfield may have on the surrounding airspace and procedures.
7. Simulation modeling will assist in evaluating refined future airfield geometries. TAAM is capable of, but not limited to, assessing alternative runway crossing points or routings, alternative runway use plans, the airfield viability for irregular operations such as Severe Weather Avoidance Plans, the operational effects of alternative runway lengths or the operational effects of alternative taxiway configurations. The structure of the airspace supporting the future airfield would be provided from direct input received from the appropriate branches of the FAA. It must be recognized, however, that simulation modeling is a tool for analysis that does not replace the need for professional input and judgments.
8. Activity information is necessary in order to support simulation and other analyses. The FAA's Terminal Area Forecasts (TAF's) were used as the basis for defining Planning Activity Levels (PAL's) for O'Hare International Airport (ORD). The most current TAF's were derived during 2001 and finalized after September 11, 2001. Therefore, although the TAF

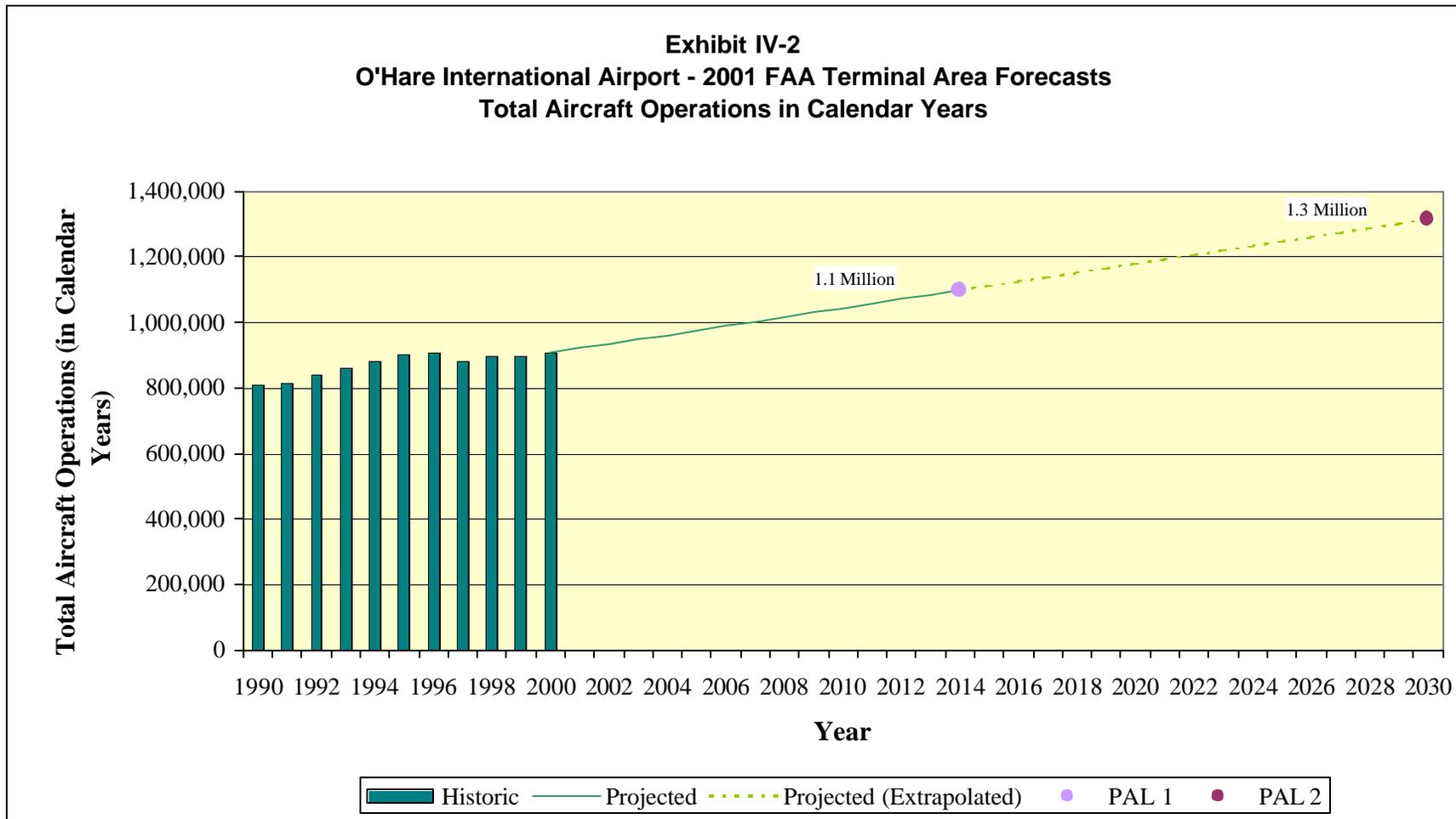
projections were posted following the tragic events that unfolded on September 11, the TAF's activity projections do not consider the near-term demand impacts resulting from the September 11 terrorist attacks nor the longer-term industry effects these events may have on air travel demand and airport and airline operating patterns.

9. The FAA TAF's were converted to calendar year projections. In addition, these FAA forecasts were extrapolated through the year 2030 using a trend analysis for the calendar year 2002 through 2014 activity projections. The TAF projections (converted to calendar years) are further discussed in the following paragraphs.
10. The TAF enplanement projections (in calendar years) are graphically depicted in **Exhibit IV-1**. As shown, the TAF projections reflect passenger enplanements at ORD growing to approximately 48.6 million in calendar year 2014, representing an average annual growth rate of 1.4 percent from 2002 through 2014. An extrapolation of the TAF's as described above results in annual passenger enplanements reaching approximately 66.1 million in the year 2030, representing an average annual growth rate of 1.2 percent from 2002 through 2030.
11. For purposes of future planning analyses, TAF's passenger enplanement projections are represented by future demand thresholds referenced hereafter as Planning Activity Levels (PAL's). PAL's are defined to correspond to a future level of activity. The PAL's will be further detailed through the derivative forecasts and the development of a design day schedule to provide an analytical description of the operating characteristics associated with that threshold of passenger and/or aircraft activity. For now, the PAL's have only been defined in terms of an annual volume of activity.
12. For purposes of the facility planning and programming analyses, two PAL's have been identified. These PAL's, namely PAL 1 and PAL 2, generally correspond to the activity levels and characteristics associated with the mid-point and the end-point of the period through 2030. Exhibit IV-1 illustrates graphically the PAL 1 and PAL 2 enplanement volumes.



Sources: Airport Management Records (Historic); 2001 FAA Terminal Area Forecasts; Ricondo & Associates, Inc.

13. The TAF projections of total aircraft operations (in calendar years) are depicted graphically in **Exhibit IV-2**. The TAF projections estimate total aircraft operations at ORD will grow to approximately 1.1 million in calendar year 2014, representing an average annual growth rate of approximately 1.5 percent from 2002 through 2014. An extrapolation of the TAF's using a trend analysis as described above results in total aircraft operations reaching approximately 1.3 million in the year 2030, representing an annual growth rate of 2.2 percent from 2002 through 2030.



Sources: Airport Management Records (Historic); 2001 FAA Terminal Area Forecasts; Ricondo & Associates, Inc.

14. As with the passenger enplanement projections, two PAL's are suggested to define aircraft activity levels for use in the planning analyses. Like the PAL's defined above, PAL 1 and PAL 2 for aircraft operations also correspond to the traffic volumes and demand characteristics associated with the mid-point (i.e., 1.1 million annual operations) and the end-point (i.e., 1.3 million annual operations) of the period through 2030. Exhibit IV-2 illustrates graphically the PAL 1 and PAL 2 demand thresholds.
15. Assuming concurrence in the use of PAL's, detailed demand characteristics will be derived for each of these PAL's. Specifically, passenger activity will be categorized as either domestic or international and originating, terminating, or connecting. Similarly, the PAL's for aircraft operations will be categorized as air carrier, air taxi, general aviation, cargo, or military. The PAL's will also be defined in terms of annual, peak month, peak month average day (PMAD), and peak hour activity volumes, and aircraft operating schedules will be defined for the corresponding PMAD's.

V. DESIGN DAY

1. This section provides a summary of historical activity for ORD for purposes of analyzing demand patterns and fluctuations in air traffic that exist due to seasonal service provided by airport users. In addition, a preliminary assessment of air carrier activity trends during 2001 is provided to help understand the effects that the current economic slowdown and the September 11, 2001 terrorist attacks have had on the aviation industry as a whole, and specifically on activity volumes and traffic patterns at ORD. This initial assessment of historic airport activity was limited to the review of total aircraft operations served at ORD from 1990 through November 2001. Traffic patterns in 2000 and 2001 were analyzed in further detail to identify recent operating trends and to understand some of the near-term effects that appear to be associated with the current economic environment and the events that unfolded on September 11th.
2. A key objective of this discussion is to gain agreement on whether a pre-September 11 or a post-September 11 airline schedule of activity for ORD should serve as the Design Day schedule for the airfield simulation modeling effort as well as provide a basis for determining future patterns of activity to be reflected in the PAL's. The information that follows should assist in understanding some of the key differences that exist between the pre- and post-September 11,2001 airline schedules.

Annual Distribution of Traffic

Table V-1 summarizes the total aircraft operations served by ORD from 1990 through 2000. The historic aircraft activity has been summarized by month for each year in order to understand how aircraft operations have historically been distributed throughout the year. While this data does not clearly articulate the seasonality patterns that exist among scheduled and unscheduled carriers, as well as seasonal service to some domestic or international destinations, the distribution of total aircraft activity presented is effective in illustrating the relatively even distribution of traffic that has historically been experienced at ORD during the last decade. It must be recognized that the peaking distributions during this period of time may be as indicative of restrictions associated with the High Density Rule (HDR) as they are of market characteristics. As shown in Table V-1, total aircraft operations in the peak month have averaged 8.8 percent of total annual aircraft operations. For the 11-year period, August has on average represented the peak month.

Tables V-2 and V-3 provides a breakdown of domestic air carrier departures for 2000 and 2001, respectively. For each year, the peak month has been shaded in yellow. As shown, October represented the peak month in 2000 for domestic air carrier departures. In 2001, August was the peak month for domestic departures, even though it is difficult to confirm whether August would have still been the peak month if the September 11 events had not occurred. In addition to the overall peak month, the peak month of activity for each carrier has been shaded in blue. These two tables provide a dual purpose: (1) they illustrate seasonal fluctuations in air service provided by each carrier, and (2) they demonstrate changes in air service frequencies resulting from the economic slowdown experienced since early 2001 and noticeably evident following the September 11 terrorist attacks.

Table V-2
O'Hare International Airport
Year 2000 - Monthly Departures by Carrier
Domestic Activity

Air Carrier	Designation	JAN (31-DAYS)	FEB (28-DAYS)	MAR (31-DAYS)	APR (30-DAYS)	MAY (31-DAYS)	JUNE (30-DAYS)	JULY (31-DAYS)	AUG (31-DAYS)	SEPT (30-DAYS)	OCT (31-DAYS)	NOV (30-DAYS)	DEC (31-DAYS)
AER LINGUS	EI	0	0	0	0	0	0	0	0	0	0	0	0
AEROFLOT	SU	0	0	0	0	0	0	0	0	0	0	0	0
AEROMEXICO	AM	0	0	0	0	0	0	0	0	0	0	0	0
AIR CANADA	AC	0	0	0	0	0	0	0	0	0	0	0	0
AIR FRANCE	AF	0	0	0	0	0	0	0	0	0	0	0	0
AIR INDIA	AI	0	0	0	0	0	0	0	0	0	0	0	0
AIR JAMAICA	JM	0	0	0	0	0	0	0	0	0	0	0	0
AIR WISCONSIN AIR/UNITED EXPRESS	ZW	1,112	1,362	1,649	1,540	1,591	1,726	1,909	1,966	1,970	2,292	2,192	2,192
AIRPLUS COMET	2Z	0	0	0	0	0	0	0	0	0	0	0	0
ALASKA AIRLINES	AS	0	0	0	0	0	26	31	31	30	31	29	31
ALITALIA	AZ	0	0	0	0	0	0	0	0	0	0	0	0
ALL NIPPON AIRWAYS	NH	0	0	0	0	0	0	0	0	0	0	0	0
ALLEGRO AIR	LL	0	0	2	0	0	0	0	0	0	0	0	0
AMERICAN TRANS AIR	TZ	38	57	68	68	44	47	40	46	51	58	48	58
AMERICA WEST	HP	236	213	213	196	200	200	207	232	200	209	214	222
AMERICAN	AA	8,099	7,708	8,741	8,387	8,557	8,332	8,916	9,007	8,501	9,048	8,663	7,881
ATLANTIC COAST/UNITED EXPRESS	DH	721	778	930	875	885	895	1,047	1,046	990	1,165	1,371	1,115
AUSTRIAN AIR	OS	0	0	0	0	0	0	0	0	0	0	0	0
BRITISH AIRWAYS	BA	0	0	0	0	0	0	0	0	0	0	0	0
CANADA INTERNATIONAL	CP	0	0	0	0	0	0	0	0	0	0	0	0
CASINO EXPRESS	XP	2	4	4	4	4	4	6	0	4	5	1	3
COMAIR	OH	0	0	0	0	0	16	19	16	18	18	56	55
CONTINENTAL EXPRESS	IN	77	77	88	79	82	78	78	77	79	87	81	70
CONTINENTAL	CO	533	536	582	546	561	555	566	594	540	581	552	492
DELTA	DL	754	700	818	769	768	771	759	796	751	812	686	660
EL AL	LY	12	7	5	9	4	8	8	1	4	5	11	9
IBERIA	IB	0	0	0	0	0	0	0	0	0	0	0	0
JAPAN AIRLINES	JL	0	0	0	0	0	0	0	0	0	0	0	0
KLM	KL	0	0	0	0	0	0	0	0	0	0	0	0
KOREAN	KE	0	0	0	0	0	0	0	0	0	0	0	0
KUWAIT AIRWAYS	KA	0	0	0	0	0	0	0	0	0	0	0	0
LOT-POLISH	LO	0	0	0	0	0	0	0	0	0	0	0	0
LUFTHANSA	LH	0	0	0	0	0	0	0	0	0	0	0	0
MESA AIRLINES	YV	0	0	0	0	0	0	46	89	86	96	119	110
MEXICANA	MX	0	0	0	0	0	0	0	0	0	0	0	0
NORTHWEST	NW	758	717	801	745	791	755	831	810	761	837	762	658
ROYAL JORDANIAN	RJ	0	0	0	0	0	0	0	0	10	0	0	0
RYAN INTERNATIONAL	II	18	10	21	7	2	2	4	4	4	4	7	21

Source: Airport Management Records
Compiled by: Ricondo & Associates, Inc.

Table V-2
O'Hare International Airport
Year 2000 - Monthly Departures by Carrier
Domestic Activity

Air Carrier	Designation	JAN (31-DAYS)	FEB (28-DAYS)	MAR (31-DAYS)	APR (30-DAYS)	MAY (31-DAYS)	JUNE (30-DAYS)	JULY (31-DAYS)	AUG (31-DAYS)	SEPT (30-DAYS)	OCT (31-DAYS)	NOV (30-DAYS)	DEC (31-DAYS)
SABENA	SN	0	0	0	0	0	30	0	0	0	0	0	0
SCANDINAVIAN	SK	0	0	0	0	0	0	0	0	0	0	0	0
SPIRIT AIRLINES	SK	0	0	0	0	0	0	0	0	0	0	130	132
SWISSAIR	SR	0	0	0	0	0	0	0	0	0	0	0	0
TAROM	RO	0	0	0	0	8	0	0	0	0	0	0	0
TRANS WORLD AIRLINES	TW	303	305	315	296	303	297	303	320	319	316	297	281
TRANSMERIDIAN	22	11	18	31	29	31	10	9	51	31	72	63	15
TURKISH AIRLINES	TK	0	0	0	0	0	0	0	0	0	0	0	0
U.S. AIR	AL	599	571	641	595	611	588	630	636	611	645	623	587
UNITED	UA	11,357	11,020	12,658	11,711	11,688	11,404	11,505	11,549	11,607	12,533	11,267	10,535
VIRGIN ATLANTIC	VA	0	0	0	0	0	0	0	0	0	0	0	0
CHAMPION AIR	MG	0	0	0	1	0	0	0	0	0	0	0	0
SUN COUNTRY	SY	2	6	4	6	0	0	0	0	0	35	51	48
NATIONAL AIR	N7	0	0	0	0	0	0	0	0	2	0	0	0
NORTH AMERICAN AIRLINES	NA	0	0	0	0	0	0	0	0	0	0	17	15
SINGAPORE PASSENGER AIRLINES	SA	0	0	0	0	0	0	0	0	0	0	0	0
TRANS STATE AIRLINES	9N	211	38	0	0	0	0	0	0	0	0	0	0
MIAMI AIR INTERNATIONAL	GL	0	0	0	4	0	0	0	0	0	0	0	0
TRADEWINDS	IK	0	0	0	0	0	0	0	2	1	2	0	0
UFS INC./UNITED EXPRESS	U2	293	80	0	0	0	0	0	0	0	0	0	0
TOTAL ¹		25,136	24,207	27,571	25,867	26,130	25,744	26,914	27,273	26,570	28,851	27,240	25,190
Average Daily Departures		811	865	889	862	843	858	868	880	886	931	908	840

¹Express One not included

Peak Month (All Activity)
Peak Month (Individual Carrier)

Table V-3
O'Hare International Airport
Year 2001 - Monthly Departures by Carrier
Domestic Activity

Air Carrier	Designation	JAN (31-DAYS)	FEB (28-DAYS)	MAR (31-DAYS)	APR (30-DAYS)	MAY (31-DAYS)	JUNE (30-DAYS)	JULY (31-DAYS)	AUG (31-DAYS)	SEPT (30-DAYS)	OCT (31-DAYS)	NOV (30-DAYS)	DEC (31-DAYS)
AER LINGUS	EI	0	0	0	0	0	0	0	0	0	0	0	N/A
AEROFLOT	SU	0	0	0	0	0	0	0	0	0	0	0	N/A
AEROMEXICO	AM	0	0	0	0	0	0	0	0	0	0	0	N/A
AIR CANADA	AC	0	0	0	0	0	0	0	0	0	0	0	N/A
AIR FRANCE	AF	0	0	0	0	0	0	0	0	0	0	0	N/A
AIR INDIA	AI	0	0	0	0	0	0	0	0	0	0	0	N/A
AIR JAMAICA	JM	0	0	0	0	0	0	0	0	0	0	0	N/A
AIR WISCONSIN AIR/UNITED EXPRESS	ZW	2,039	1,861	2,136	2,287	2,882	2,754	2,897	2,821	2,156	2,527	2,471	N/A
AIRPLUS COMET	2Z	0	0	0	0	0	0	0	0	0	0	0	N/A
ALASKA AIRLINES	AS	30	28	31	30	31	29	31	31	27	31	30	N/A
ALITALIA	AZ	0	0	0	0	0	0	0	0	0	0	0	N/A
ALL NIPPON AIRWAYS	NH	0	0	0	0	0	0	0	0	0	0	0	N/A
ALLEGRO AIR	LL	3	0	0	1	0	0	0	0	0	0	0	N/A
AMERICAN TRANS AIR	TZ	64	74	76	76	56	44	42	37	10	2	4	N/A
AMERICA WEST	HP	239	214	244	235	241	235	246	246	197	216	228	N/A
AMERICAN	AA	8,647	7,745	8,735	8,727	9,167	8,785	9,343	9,229	6,287	6,427	7,403	N/A
ATLANTIC COAST/UNITED EXPRESS	DH	1,277	1,086	1,232	1,260	1,283	1,353	1,894	1,944	1,411	1,951	2,567	N/A
AUSTRIAN AIR	OS	0	0	0	0	0	0	0	0	0	0	0	N/A
BRITISH AIRWAYS	BA	0	0	0	0	0	0	0	0	0	0	0	N/A
CANADA INTERNATIONAL	CP	0	0	0	0	0	0	0	0	0	0	0	N/A
CASINO EXPRESS	XP	2	3	2	1	2	2	2	2	1	3	1	N/A
COMAIR	OH	57	51	43	0	0	0	47	93	75	97	107	N/A
CONTINENTAL EXPRESS	IN	79	72	87	78	86	86	104	112	63	56	135	N/A
CONTINENTAL	CO	563	495	459	560	572	542	619	665	422	435	425	N/A
DELTA	DL	660	644	739	678	699	672	838	871	593	583	608	N/A
EL AL	LY	14	12	13	12	8	12	12	15	7	10	11	N/A
IBERIA	IB	0	0	0	0	0	0	0	0	0	0	0	N/A
JAPAN AIRLINES	JL	0	0	0	0	0	0	0	0	0	0	0	N/A
KLM	KL	0	0	0	0	0	0	0	0	0	0	0	N/A
KOREAN	KE	0	0	80	0	0	0	0	0	0	0	0	N/A
KUWAIT AIRWAYS	KA	0	0	0	0	0	0	0	0	0	0	0	N/A
LOT-POLISH	LO	0	0	0	0	0	0	0	0	0	0	0	N/A
LUFTHANSA	LH	0	0	0	0	0	0	0	0	0	0	0	N/A
MESA AIRLINES	YV	121	102	121	115	120	111	146	140	94	96	82	N/A
MEXICANA	MX	0	0	0	0	0	0	0	0	0	0	0	N/A
NORTHWEST	NW	800	727	826	796	858	807	838	840	632	593	658	N/A
ROYAL JORDANIAN	RJ	0	0	0	0	0	0	0	0	0	0	0	N/A
RYAN INTERNATIONAL	II	16	11	17	16	5	6	4	2	2	0	2	N/A

Source: Airport Management Records
Compiled by: Ricondo & Associates, Inc.

Table V-3
O'Hare International Airport
Year 2001 - Monthly Departures by Carrier
Domestic Activity

Air Carrier	Designation	JAN (31-DAYS)	FEB (28-DAYS)	MAR (31-DAYS)	APR (30-DAYS)	MAY (31-DAYS)	JUNE (30-DAYS)	JULY (31-DAYS)	AUG (31-DAYS)	SEPT (30-DAYS)	OCT (31-DAYS)	NOV (30-DAYS)	DEC (31-DAYS)
SABENA	SN	0	0	0	0	0	0	0	0	0	0	0	N/A
SCANDINAVIAN	SK	0	0	0	0	0	0	0	0	0	0	0	N/A
SPIRIT AIRLINES	SK	145	140	173	90	188	183	246	248	160	124	162	N/A
SWISSAIR	SR	0	0	0	0	0	0	0	0	0	0	0	N/A
TAROM	RO	0	0	0	0	0	0	0	0	0	0	0	N/A
TRANS WORLD AIRLINES	TW	218	278	312	298	317	306	315	319	264	318	277	N/A
TRANSMERIDIAN	22	8	12	13	3	7	7	2	4	8	5	12	N/A
TURKISH AIRLINES	TK	0	0	0	0	0	0	0	0	0	0	0	N/A
U.S. AIR	AL	633	554	624	599	627	615	643	657	483	523	622	N/A
UNITED	UA	11,603	10,451	11,796	11,560	12,144	11,763	12,218	12,219	8,519	10,029	9,349	N/A
VIRGIN ATLANTIC	VA	0	0	0	0	0	0	0	0	0	0	0	N/A
CHAMPION AIR	MG	0	1	1	3	0	2	4	0	0	1	0	N/A
SUN COUNTRY	SY	0	47	56	51	54	56	57	58	58	32	31	N/A
NATIONAL AIR	N7	0	0	0	0	56	59	62	62	54	62	61	N/A
NORTH AMERICAN AIRLINES	NA	0	0	0	0	10	0	0	0	0	0	0	N/A
SINGAPORE PASSENGER AIRLINES	SA	0	0	0	0	0	0	0	0	12	0	0	N/A
TOTAL ¹		27,218	24,608	27,816	27,476	29,413	28,429	30,610	30,615	21,535	24,121	25,246	N/A
Average Daily Departures		878	879	897	916	949	948	987	988	718	778	842	N/A

¹Express One not included

N/A: Not Available

Peak Month (All Activity)

Peak Month (Individual Carrier)

A review of the 2001 fourth quarter traffic reports also indicates that a quicker rebound in activity volumes seems to have been experienced among the air carrier's commuter/regional partners (e.g., United Express, Comair, and Continental Express). By October 2001, most of these commuter/regional carriers had re-established the level of monthly operations that were being provided prior to September 11.

Similarly, **Tables V-4 and V-5** provide a breakdown of international air carrier departures for 2000 and 2001, respectively. Peak month activity (in this case, July for both years) is denoted by the yellow shading. In addition, the peak month of activity for each carrier has been shaded in blue.

Table V-4
O'Hare International Airport
Year 2000 - Monthly Departures by Carrier
International Activity

Air Carrier	Designation	JAN (31-DAYS)	FEB (28-DAYS)	MAR (31-DAYS)	APR (30-DAYS)	MAY (31-DAYS)	JUNE (30-DAYS)	JULY (31-DAYS)	AUG (31-DAYS)	SEPT (30-DAYS)	OCT (31-DAYS)	NOV (30-DAYS)	DEC (31-DAYS)
AER LINGUS	EI	27	24	27	26	28	39	40	40	36	28	26	24
AEROFLOT	SU	8	8	9	13	14	12	14	13	13	13	13	13
AEROMEXICO	AM						8	10	8	5	4	6	9
AIR CANADA	AC	468	431	482	609	644	551	637	648	626	647	506	380
AIR FRANCE	AF	85	64	71	89	88	83	86	82	83	72	54	50
AIR INDIA	AI	13	12	13	13	13	13	13	12	13	14	12	14
AIR JAMAICA	JM	30	29	28	30	31	30	31	31	30	31	30	31
AIR WISCONSIN AIR/UNITED EXPRESS	ZW												
AIRPLUS COMET	2Z											4	5
ALASKA AIRLINES	AS												
ALITALIA	AZ	40	42	44	44	43	45	47	44	42	44	44	44
ALL NIPPON AIRWAYS	NH	31	29	31	30	31	30	31	31	30	31	30	31
ALLEGRO AIR	LL			4	3		14						
AMERICAN TRANS AIR	TZ	40	47	52	48	18	21	24	22	19	18	24	27
AMERICA WEST	HP												
AMERICAN	AA	877	832	902	906	917	984	1,072	1,080	1,023	1,043	911	937
ATLANTIC COAST/UNITED EXPRESS	DH												
AUSTRIAN AIR	OS			6	30	31	30	31	31	29	31	30	28
BRITISH AIRWAYS	BA	62	57	62	60	62	58	62	62	59	61	59	56
CANADA INTERNATIONAL	CP	183	176	186	180	186	264	190	186	175	193	254	225
CASINO EXPRESS	XP												
COMAIR	OH												
CONTINENTAL EXPRESS	IN												
CONTINENTAL	CO												
DELTA	DL												
EL AL	LY	19	22	23	16	13	17	23	21	14	8	6	11
IBERIA	IB	30	29	31	30	31	30	31	31	30	31	30	28
JAPAN AIRLINES	JL	67	67	70	72	76	73	75	76	72	75	69	70
KLM	KL	31	30	30	30	31	30	31	31	30	31	30	31
KOREAN	KE	60	79	89	83	80	71	74	75	79	74	72	67
KUWAIT AIRWAYS	KA	9	7	9	8	9	9	9	9	8	9	9	8
LOT-POLISH	LO	25	24	25	36	48	51	54	52	38	34	40	42
LUFTHANSA	LH	62	58	68	90	93	91	93	93	89	89	60	59
MESA AIRLINES	YV												
MEXICANA	MX	212	198	216	226	255	249	264	267	224	232	231	262
NORTHWEST	NW												
ROYAL JORDANIAN	RJ	9	8	9	8	11	13	14	14		9	9	9
RYAN INTERNATIONAL	II		108	121	100	3						48	85

Source: Airport Management Records
Compiled by: Ricondo & Associates, Inc.

**Table V-4
O'Hare International Airport
Year 2000 - Monthly Departures by Carrier
International Activity**

Air Carrier	Designation	JAN (31-DAYS)	FEB (28-DAYS)	MAR (31-DAYS)	APR (30-DAYS)	MAY (31-DAYS)	JUNE (30-DAYS)	JULY (31-DAYS)	AUG (31-DAYS)	SEPT (30-DAYS)	OCT (31-DAYS)	NOV (30-DAYS)	DEC (31-DAYS)
SABENA	SN	26	24	26	26	29		31	31	30	30	30	31
SCANDINAVIAN	SK	61	58	61	60	60	60	62	61	57	61	59	52
SPIRIT AIRLINES	SK												
SWISSAIR	SR	27	24	27	30	30	30	31	30	30	31	30	31
TAROM	RO	7	5	9	8		9	8	9	9	8	7	8
TRANS WORLD AIRLINES	TW												
TRANSMERIDIAN	22	42	37	62	38	39	65	70	57	44	46	33	35
TURKISH AIRLINES	TK	13	12	14	13	13	17	18	17	17	18	21	23
U.S. AIR	AL												
UNITED	UA	628	591	534	607	641	589	645	637	610	636	687	742
VIRGIN ATLANTIC	VA	29	28	31	29	31	30	32	31	30	31	30	30
CHAMPION AIR	MG												
SUN COUNTRY	SY	3	3	5	3								
NATIONAL AIR	N7												
NORTH AMERICAN AIRLINES	NA												
SINGAPORE PASSENGER AIRLINES	SA												
BRITISH MIDLAND	BD												
LAKER AIRWAYS	7Z				2								
MIAMI AIR INTERNATIONAL	GL				2								
TRADEWINDS	IK							2	2		2		
OMNI AIR INTERNATIONAL	OI												
TOTAL		3,224	3,163	3,377	3,598	3,599	3,616	3,855	3,834	3,594	3,685	3,504	3,498
Average Daily Departures		104	113	109	120	116	121	124	124	120	119	117	117

Peak Month (All Activity)
Peak Month (Individual Carrier)

Table V-5
O'Hare International Airport
Year 2001 - Monthly Departures by Carrier
International Activity

Air Carrier	Designation	JAN (31-DAYS)	FEB (28-DAYS)	MAR (31-DAYS)	APR (30-DAYS)	MAY (31-DAYS)	JUNE (30-DAYS)	JULY (31-DAYS)	AUG (31-DAYS)	SEPT (30-DAYS)	OCT (31-DAYS)	NOV (30-DAYS)	DEC (31-DAYS)
AER LINGUS	EI	25	24	28	31	44	48	47	50	38	38	26	N/A
AEROFLOT	SU	12	12	12	13	14	12	14	13	10	4	0	N/A
AEROMEXICO	AM	8	8	7	10	8	11	17	16	10	6	4	N/A
AIR CANADA	AC	506	436	461	621	717	694	722	717	520	531	577	N/A
AIR FRANCE	AF	55	47	58	71	74	75	82	70	47	48	50	N/A
AIR INDIA	AI	13	12	13	13	13	13	14	13	9	8	8	N/A
AIR JAMAICA	JM	31	28	31	30	31	29	31	31	26	29	30	N/A
AIR WISCONSIN AIR/UNITED EXPRESS	ZW	0	0	0	0	0	0	0	0	0	0	0	N/A
AIRPLUS COMET	ZZ	4	4	5	4	0	0	0	0	0	0	0	N/A
ALASKA AIRLINES	AS	0	0	0	0	0	0	0	0	0	0	0	N/A
ALITALIA	AZ	45	40	44	43	44	43	45	41	35	40	42	N/A
ALL NIPPON AIRWAYS	NH	31	28	31	30	31	30	31	31	27	31	29	N/A
ALLEGRO AIR	LL	3	3	13	0	13	15	44	37	18	18	11	N/A
AMERICAN TRANS AIR	TZ	34	42	51	46	24	17	17	16	6	0	0	N/A
AMERICA WEST	HP	0	0	0	0	0	0	0	0	0	0	0	N/A
AMERICAN	AA	937	852	974	936	995	1,025	1,093	1,091	953	813	719	N/A
ATLANTIC COAST/UNITED EXPRESS	DH	0	0	0	0	0	0	0	0	0	0	0	N/A
AUSTRIAN AIR	OS	15	0	16	29	31	30	31	31	25	18	0	N/A
BRITISH AIRWAYS	BA	61	55	62	60	61	60	62	62	44	62	60	N/A
CANADA INTERNATIONAL	CP	247	218	180	0	0	0	0	0	0	0	0	N/A
CASINO EXPRESS	XP	0	0	0	0	0	0	0	0	0	0	0	N/A
COMAIR	OH	0	0	0	0	0	0	0	0	0	0	0	N/A
CONTINENTAL EXPRESS	IN	0	0	0	0	0	0	0	0	0	0	0	N/A
CONTINENTAL	CO	0	0	0	0	0	0	0	0	0	0	0	N/A
DELTA	DL	0	0	0	0	0	0	0	0	0	0	0	N/A
EL AL	LY	4	5	10	5	7	5	7	3	5	8	10	N/A
IBERIA	IB	31	27	31	30	31	30	31	31	30	30	30	N/A
JAPAN AIRLINES	JL	66	65	71	68	68	68	71	70	60	64	52	N/A
KLM	KL	31	28	31	30	31	30	31	31	26	31	30	N/A
KOREAN	KE	76	67	0	74	70	63	75	74	59	42	40	N/A
KUWAIT AIRWAYS	KA	9	8	9	9	9	8	9	9	7	7	5	N/A
LOT-POLISH	LO	42	39	45	39	53	50	52	53	45	47	24	N/A
LUFTHANSA	LH	62	56	48	90	91	91	93	92	77	64	60	N/A
MESA AIRLINES	YV	0	0	0	0	0	0	0	0	0	0	0	N/A
MEXICANA	MX	245	218	233	223	226	228	247	247	181	216	215	N/A
NORTHWEST	NW	0	0	0	0	0	0	0	0	0	0	0	N/A
ROYAL JORDANIAN	RJ	9	8	9	9	9	13	13	14	9	9	9	N/A
RYAN INTERNATIONAL	II	114	104	129	68	0	0	0	1	1	2	53	N/A

Source: Airport Management Records
Compiled by: Ricondo & Associates, Inc.

Table V-5
O'Hare International Airport
Year 2001 - Monthly Departures by Carrier
International Activity

Air Carrier	Designation	JAN (31-DAYS)	FEB (28-DAYS)	MAR (31-DAYS)	APR (30-DAYS)	MAY (31-DAYS)	JUNE (30-DAYS)	JULY (31-DAYS)	AUG (31-DAYS)	SEPT (30-DAYS)	OCT (31-DAYS)	NOV (30-DAYS)	DEC (31-DAYS)
SABENA	SN	31	28	30	30	31	30	31	31	23	30	0	N/A
SCANDINAVIAN	SK	61	55	61	60	61	59	62	62	50	62	59	N/A
SPIRIT AIRLINES	SK	0	0	0	0	0	0	0	0	0	0	0	N/A
SWISSAIR	SR	31	28	0	29	31	30	31	31	26	29	30	N/A
TAROM	RO	7	5	0	0	0	0	0	0	0	0	0	N/A
TRANS WORLD AIRLINES	TW	0	0	0	0	0	0	0	0	0	0	0	N/A
TRANSMERIDIAN	22	43	43	50	54	75	58	44	33	22	20	3	N/A
TURKISH AIRLINES	TK	22	20	22	22	21	24	26	27	20	13	13	N/A
U.S. AIR	AL	0	0	0	0	0	0	0	1	0	0	0	N/A
UNITED	UA	699	658	771	760	794	720	726	711	534	567	639	N/A
VIRGIN ATLANTIC	VA	29	28	31	29	31	30	30	31	26	1	0	N/A
CHAMPION AIR	MG	0	0	5	2	0	2	0	0	0	0	0	N/A
SUN COUNTRY	SY	0	0	0	0	0	0	0	0	7	13	12	N/A
NATIONAL AIR	N7	0	0	0	0	0	0	0	0	0	0	0	N/A
NORTH AMERICAN AIRLINES	NA	0	0	0	0	0	0	0	0	0	0	0	N/A
SINGAPORE PASSENGER AIRLINES	SA	0	0	0	0	0	0	0	13	0	13	13	N/A
BRITISH MIDLAND	BD	0	0	0	0	0	0	0	30	26	30	30	N/A
OMNI AIR INTERNATIONAL	OI	0	0	0	0	0	0	0	0	0	3	0	N/A
TOTAL		3,639	3,299	3,572	3,568	3,739	3,641	3,829	3,814	3,002	2,947	2,883	N/A
Average Daily Departures		117	118	115	119	121	121	124	123	100	95	96	N/A

N/A: Not Available

Peak Month (All Activity)

Peak Month (Individual Carrier)

Daily Distribution of Aircraft Operations

In addition to analyzing the monthly distributions of annual activity for ORD, the Airport’s daily distribution of air carrier departures was also evaluated. The air carrier schedules for three days were reviewed as part of this evaluation. The selection of the three daily schedules reflect the following:

- First, a pre-September 11, 2001 and a post-September 11, 2001 airline schedule were chosen in order to quantify the near-term effects the terrorist attacks may have had on daily traffic patterns at ORD. For this evaluation, August 31, 2001 (Friday) and November 30, 2001 (Friday) were randomly chosen.
- Second, the airline schedule for a day in 2000 was selected in order to assess changes in daily operating patterns that may have occurred between 2000 and 2001 as a result of a slowdown in the U.S. economy and/or less favorable financial performance by the airline industry. For this purpose, November 30, 2000 (Thursday) was randomly selected.
- The airline schedules for these three days provided a profile of activity for three distinct days within a one-year period.

Exhibit V-1 presents a graphical depiction of hourly arrivals at ORD during the three days analyzed. As shown, from November 2000 to November 2001 a significant decrease in the arrival peaks (primarily in the early morning and late evening hours, i.e. the “shoulder” hours) was experienced. In addition, a more pronounced arrival peak has emerged in the mid-morning hours. Similarly, the early afternoon and early evening arrival peaks have become less pronounced. The arrival peak volume for the three days analyzed are summarized below:

November 30, 2000	-	approximately 108 arrivals per hour
August 31, 2001	-	approximately 123 arrivals per hour
November 30, 2001	-	approximately 112 arrivals per hour

Exhibit V-2 presents a graphical depiction of hourly departures at ORD for the same three days described above. As with the daily arrival patterns, from November 2000 to November 2001, a significant decrease in the departure peaks (primarily in the early morning and late evening hours) was experienced. In addition, a more pronounced departure peak has emerged in the late-morning hours. Similarly, the evening departure peak has become less pronounced. The departure peak volume for the three days analyzed are summarized below:

November 30, 2000	-	approximately 117 departures per hour
August 31, 2001	-	approximately 118 departures per hour
November 30, 2001	-	approximately 120 departures per hour

Exhibit V-3 presents a graphical depiction of total hourly aircraft operations for the Airport during the three days described above. As noted above for arrival and departure activities, from November 2000 to November 2001 a significant decrease in the early morning and late evening arrival and departure peaks were experienced. The peak volumes of total aircraft operations for the three days analyzed are summarized below:

November 30, 2000	-	approximately 198 operations per hour
August 31, 2001	-	approximately 208 operations per hour
November 30, 2001	-	approximately 196 operations per hour

Exhibit V-1
O'Hare International Airport - Arrivals
November 30, 2000, August 31, 2001, and November 30, 2001, Sum of Previous Hour

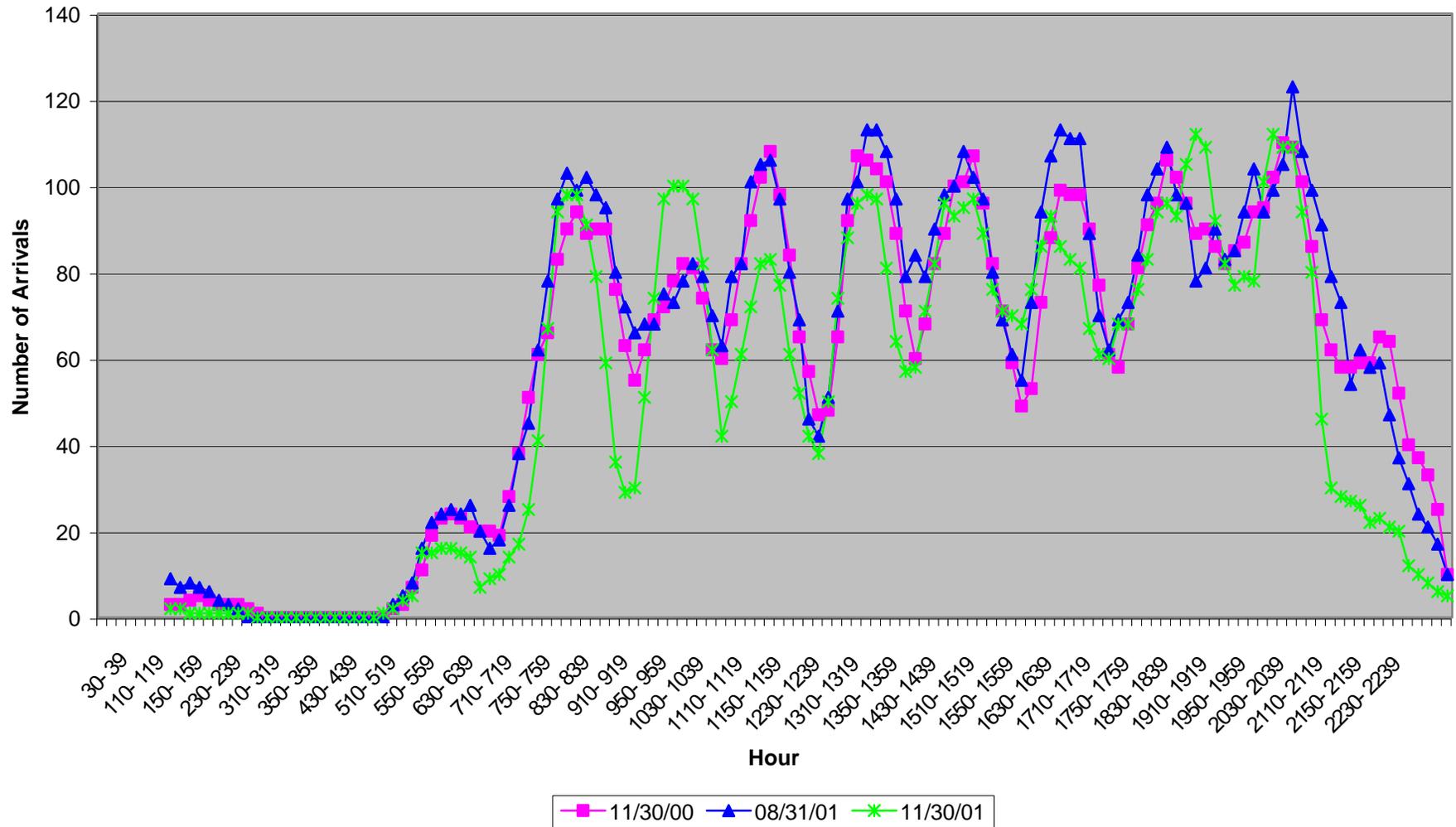


Exhibit V-2
O'Hare International Airport - Departures
November 30, 2000, August 31, 2001, and November 30, 2001, Sum of Previous Hour

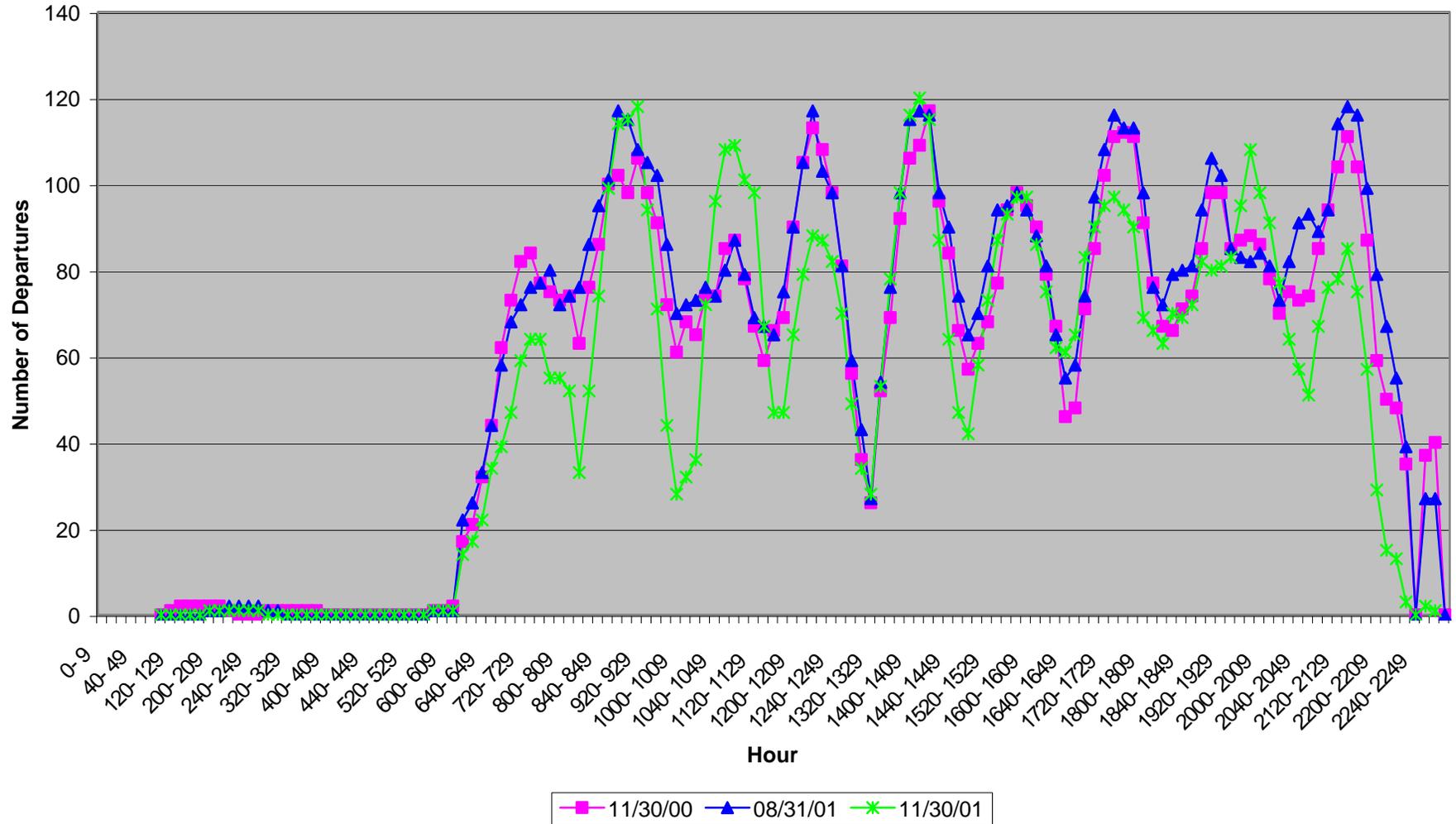
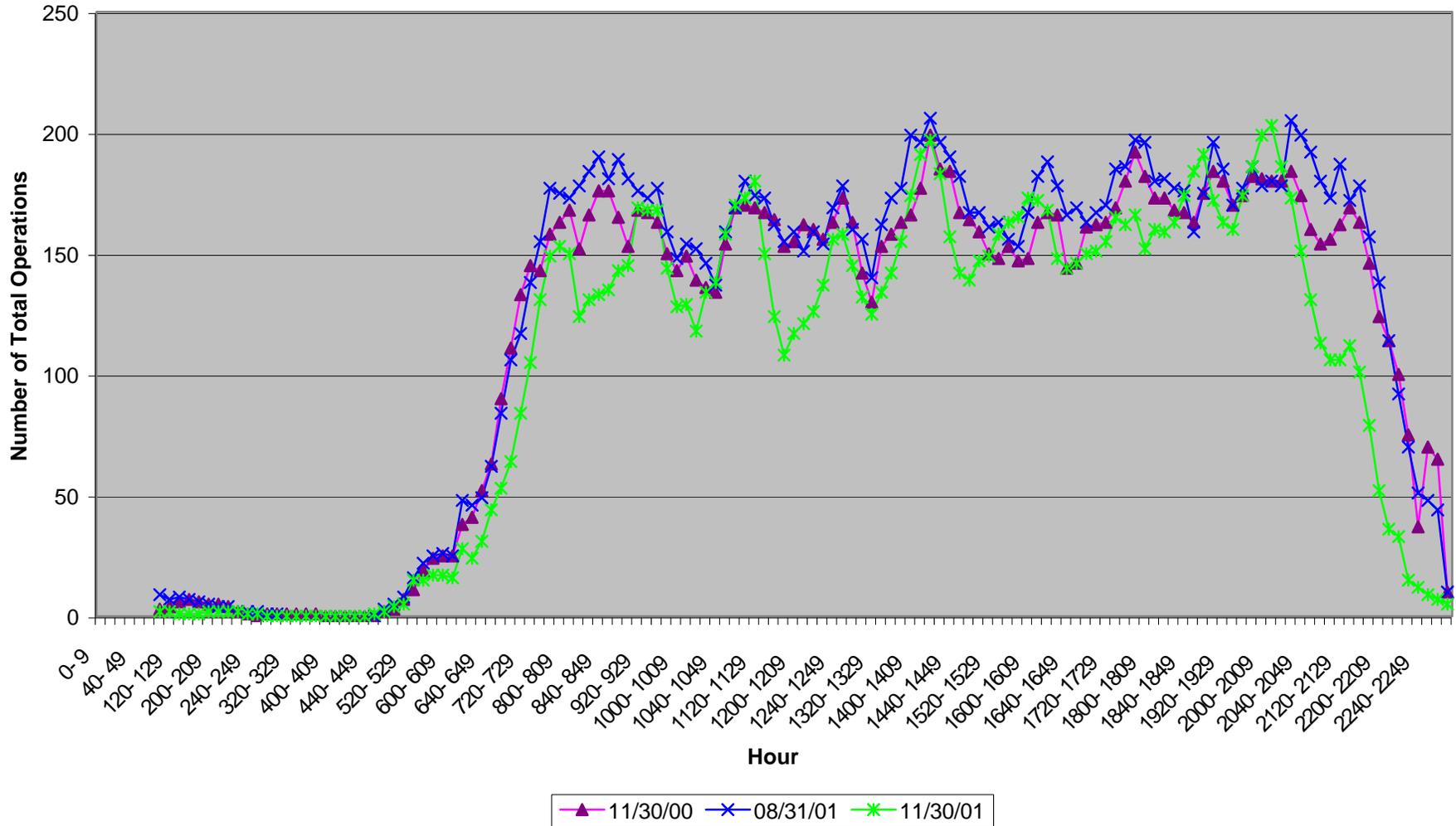


Exhibit V-3
O'Hare International Airport - Total Operations
November 30, 2000, August 31, 2001, and November 30, 2001, Sum of Previous Hour



Air Carrier Fleet Mix

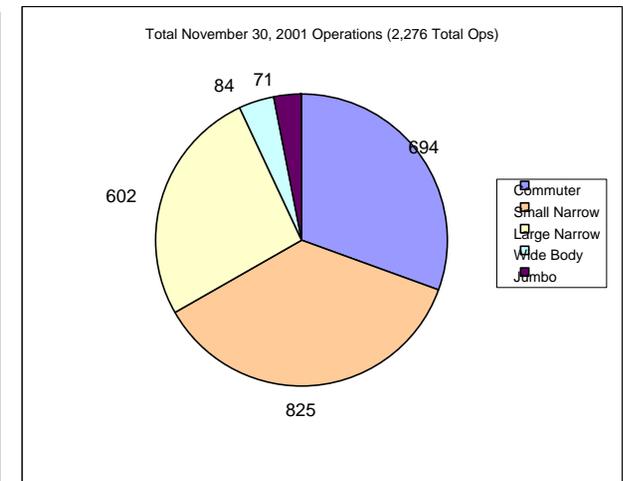
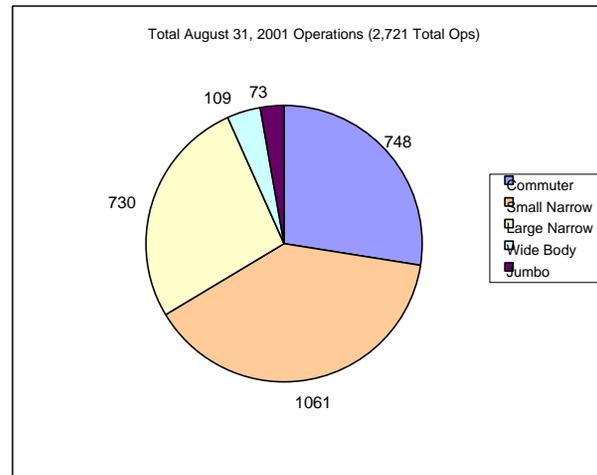
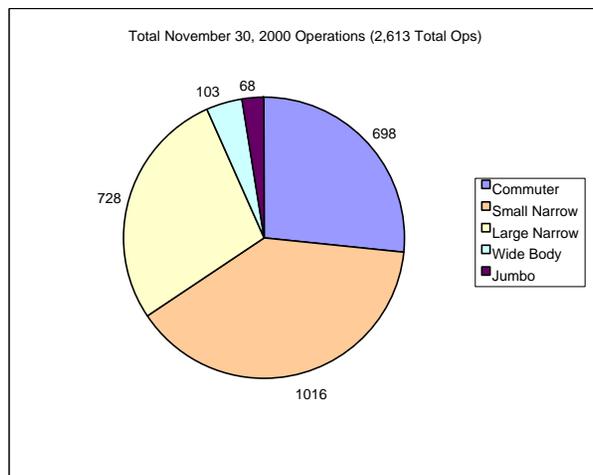
The September 11 events have undoubtedly represented the greatest single-day event to significantly impact the aviation industry in recent decades. While the effects of these events on the aviation industry are self-evident, most everyone is in agreement that air travel demand will rebound to the pre-September 11 levels. However, the operating characteristics of the airlines and airports nation-wide will be different. How different will these operating characteristics be and how quickly will air travel demand rebound to the pre-September 11 levels is not quite certain at this time. However, as each day passes the level of speculation associated with these two issues is decreasing.

As it relates to the aviation industry, it has been argued that the tragic events of September 11 resulted in a dramatic blow to an industry that was already facing financial challenges. Following September 11, many airlines were forced to implement business plans and strategic plans in order to reduce their operating expenses to levels that were comparable to the abruptly reduced revenues resulting from the sudden decreases in air travel demand. Some airline decisions geared towards streamlining costs are exemplified by the acceleration of the decommissioning of older aircraft from their operating fleets (e.g., B727, B737-200, DC-9, etc.). The reductions in air travel demand allowed for the decommissioning of these older aircraft earlier than originally planned and prior to the receipt of new aircraft orders (originally intended to serve as the replacement aircraft for the older fleets).

Therefore, although the September 11 events resulted in an immediate and abrupt decrease in air travel demand that, in due time, is expected to rebound, the effects of these events on airline fleet mixes appear more permanent. In fact, it can be argued that the effects of the September 11 events have accelerated a foreseeable transition in aircraft fleet mixes whereby the older, noisier, and shorter-range aircraft would be substituted by the modern, quieter, and in some instances, longer-range aircraft being manufactured by Boeing and Airbus Industries. In the case of many airlines, near-term reductions in air travel demand have allowed for the decommissioning of older aircraft prior to the delivery of new/replacement aircraft. The following paragraphs summarize the observations of historic data analyzed that support these apparent trends.

Like the daily peaking analyses previously presented, the airline fleet mixes that supported the airlines schedules for the three sampled days (i.e., November 30, 2000, August 31, 2001, and November 30, 2001) were analyzed. For purposes of this analysis, the aircraft fleets were arbitrarily grouped into five primary categories (taking into consideration seating capacity and seating configuration): Commuter/Regional, Small Narrow Body, Large Narrow Body, Wide Body, and Jumbo aircraft. **Exhibit V-4** provides a graphical depiction of the fleet mix composition for the three sample days using the five aircraft categories identified above. The total number of air carrier operations and the corresponding percentage of total air carrier operations are provided by aircraft category for each of the sample days analyzed. A listing of the representative aircraft for each category is also provided.

Exhibit V-4
O'Hare International Airport - Air Carrier Fleet Mix Comparisons
November 30, 2000, August 31, 2001, and November 30, 2001



Commuter

BEECHCRAFT 1900 (ALL SERIES)
BRITISH AEROSPACE 146 (ALL SER)
CANADAIER REGIONAL JET
DORNIER 328
EMBRAER 120 BRASILIA
EMBRAER EMB-145
EMBRAER RJ 135\140\145
EMBRAER RJ135
EMBRAER RJ140

Small Narrow Body

AIRBUS INDUSTRIE A319
AIRBUS INDUSTRIE A320
BOEING 727-200
BOEING 737 (PASSENGER\ALL SER)
BOEING 737 (SERIES 200\200C\20)
BOEING 737-300
BOEING 737-400
BOEING 737-500
FOKKER 100
MCDONNELL DOUGLAS DC9 (SER)
MCDONNELL DOUGLAS MD-90

Large Narrow Body

AIRBUS INDUSTRIE A330
AIRBUS INDUSTRIE A330-200
AIRBUS INDUSTRIE A330-300
BOEING 737-700
BOEING 737-800
BOEING 737-900
BOEING 757 (ALL SERIES)
MCDONNELL DOUGLAS DC9
SUPER 80

Wide Body

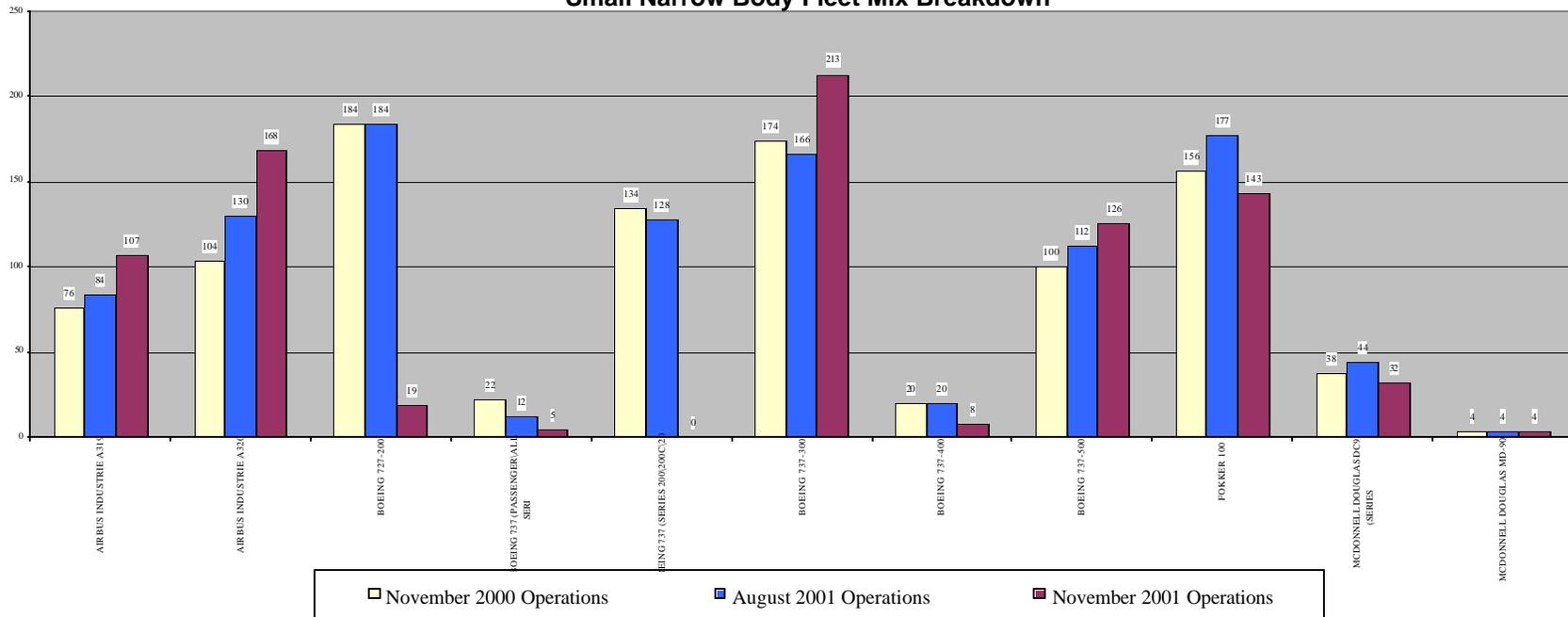
AIRBUS INDUSTRIE A300-600C
AIRBUS INDUSTRIE A 310 (ALL SERIES)
AIRBUS INDUSTRIE A340
AIRBUS INDUSTRIE A342
AIRBUS INDUSTRIE A343
BOEING 767 (ALL SERIES)
BOEING 767-200\200ER
BOEING 767-300\300ER
MCDONNELL DOUGLAS DC10
MCDONNELL DOUGLAS MD-11

Jumbo

BOEING 747 (MIXED CONFIG.)
BOEING 747 (PASSENGER\ALL SER)
BOEING 747-400
BOEING 777

Exhibit V-5 presents a more detailed inventory of the small narrow body aircraft fleet mix for the three sampled days. As expected, a significant decrease in the number of B727-200, B737-200, and to a lesser extent, F100 aircraft was evident in the post-September 11th airline schedule. During the same period, increased aircraft operations in the A319, A320, and somewhat surprisingly, in the B737-300 were also experienced. Smaller fluctuations in operations by other aircraft within this fleet category were also observed within three sampled days.

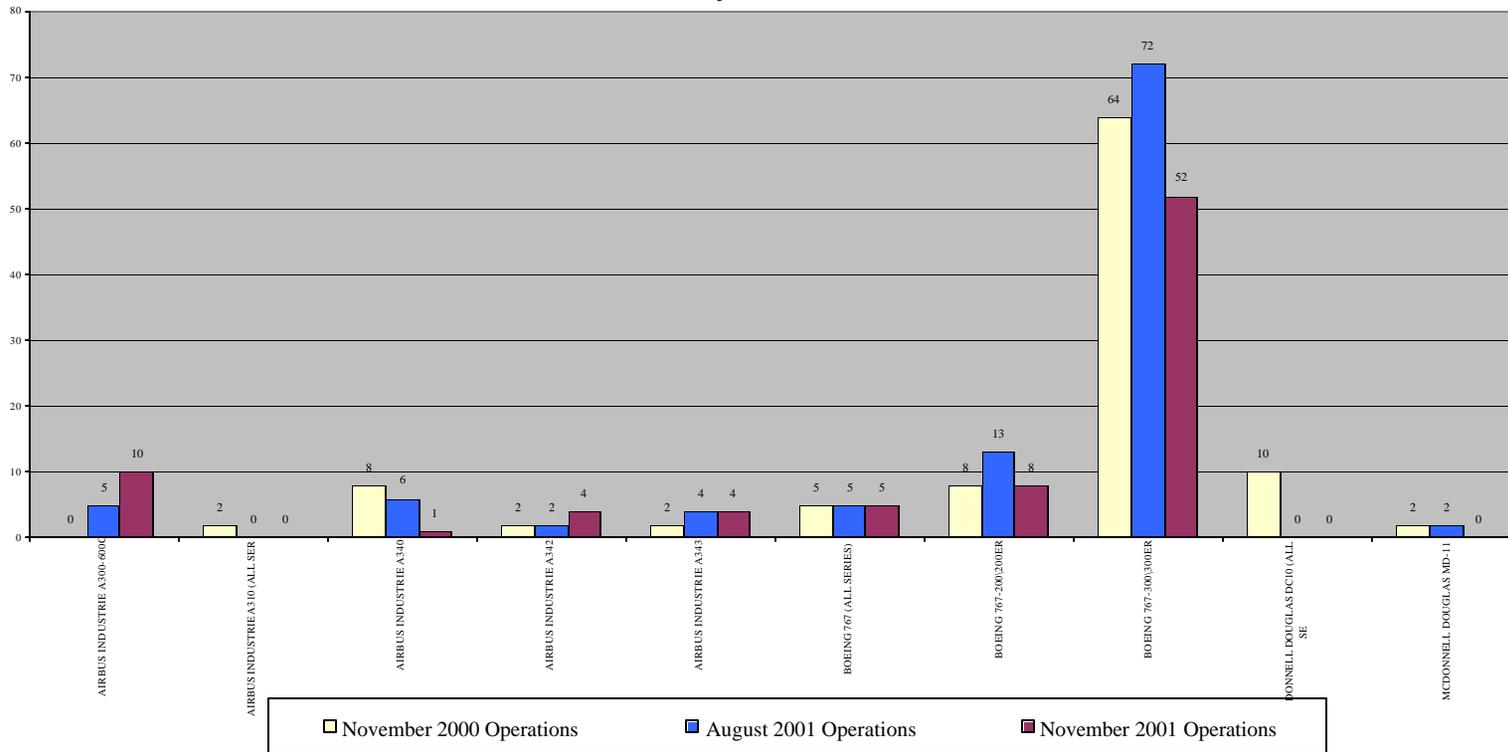
**Exhibit V-5
O'Hare International Airport
Small Narrow Body Fleet Mix Breakdown**



Source: Official Airline Guide
Compiled by: Ricondo & Associates, Inc.

Similarly, **Exhibit V-6** presents a detailed inventory of the wide body aircraft fleet mix for the three sampled days. As expected, a significant decrease in the number of B767-300 and DC10 aircraft was evident in the post-September 11th airline schedule.

**Exhibit V-6
O'Hare International Airport
Wide Body Fleet Mix Breakdown**



Source: Official Airline Guide
Compiled by: Ricondo & Associates, Inc.

SUMMARY

1. The information presented above related to annual traffic distribution, daily peaking characteristics, and aircraft fleet composition for ORD serve to provide an initial indication of apparent trends that have materialized during 2001 as a result of a slowdown in the U.S. economy and the terrorist attacks that occurred on September 11th. While it has been concluded by many that the effects of the September 11 attacks are near-term in nature (the length of which is yet unknown), with a majority of the decreased demand in air travel expected to gradually rebound in the months ahead, the timeline for the end to the current economic recession and the achievement of financial stability for many airlines is far less quantifiable. From a positive perspective, this type of dynamic stability has long presided within the aviation industry and has served as the cornerstone that supports flexible strategic growth plans and opportunistic business decisions for airports that are capable of being adjusted in order to respond to changing conditions and new operating environments.
2. For this meeting, the three sampled periods have been examined and summarized above to help identify whether a pre-September 11 or a post-September 11 airline schedule is more appropriate for the airfield simulation modeling and subsequent planning analyses. Once a decision on the most appropriate timeframe is made, a detailed baseline design day schedule will be developed using 2001 data. Since it is recognized that daily flight schedules change as charter/unscheduled operations fluctuate, it is possible that two alternate baseline schedules would be developed to ensure that ORD's varying operating patterns are properly modeled and considered as part of the simulation and planning analyses.

VI. NEXT STEPS

1. Once the information presented here is reviewed and suggestions for additional analyses and/or background information, operating practices to be evaluated, and/or physical refinements to the layout are identified, an action plan to undertake the necessary analyses will be defined. It is anticipated that this action plan will include definition of areas where specific, detailed input and/or analyses will be required from individuals with particular expertise. An interactive work effort is anticipated.