

June 2008  
Monthly Report



## Airport Noise Management System

Chicago O'Hare International Airport

City of Chicago  
Department of Aviation



Visit the Community Noise Resource Center  
on the Internet at

[www.flychicago.com](http://www.flychicago.com)



## Airport Noise Management System Monthly Report Report Descriptions

### Background

Installed in 1996, the Airport Noise Management System (ANMS) enables the City of Chicago to monitor the amount of noise being generated over the communities surrounding O'Hare by the aircraft operating at the Airport. The ANMS collects, analyzes and processes data from a number of sources of information including a network of 30 noise monitors around O'Hare, FAA radar data, weather data and calls to the noise hotline. Over 120,000 flights and 400,000 noise events are recorded by the ANMS each month for the Chicago Airport System. The City of Chicago and the O'Hare Noise Compatibility Commission utilize data from the ANMS to facilitate the development and management of noise abatement programs at the Airport. The following reports summarize pertinent monthly information from that data concerning the noise levels and operations at the Airport.

### Runway Use Report

O'Hare has seven runways that are all utilized at different times depending primarily upon the prevailing wind conditions on the airfield, as well as any runway maintenance. Aircraft performance requirements make it necessary for aircraft to depart and land into the wind for safety purposes.

The Runway Use Report presents the average percentage of use for each runway for the current month, the previous month and a 12-month average. The percentage of use for departures and arrivals is shown graphically for each runway. This data is for all hours of the day and for all aircraft types. Also shown is the runway use for the nighttime hours (10 p.m. to 7 a.m.).

Highlights for **June 2008** include:

#### Departures

Most used departure runway: **32L – 38%**  
22L departures increased by **11%** from May 2008  
9R departures decreased by **9%** from May 2008

#### Arrivals

Most used arrival runway: **22R - 27%**  
28 arrivals increased by **10%** from May 2008  
10 arrivals decreased by **13%** from May 2008

### Aircraft Noise Report

The Aircraft Noise Report summarizes noise measurements from each of the 30 noise monitors located around the Airport. The data presented summarizes the Day-Night Average Noise Levels (DNL's). DNL is a 24-hour time-averaged sound exposure level with a 10 decibel (dB) nighttime (10 p.m. to 7 a.m.) weighting to account for the lower background noise levels during the nighttime hours.

The data displays the measured aircraft DNL for each month and its comparison to the same month of the previous year, and it compares the current month to the 12-month average. The aircraft noise report identifies noise from the existing aircraft operations at O'Hare. The modeled values for each monitor are shown for 1997, 2000 and the OMP Full Build Out Noise Contours.

The aircraft noise levels for each monitor vary from month to month. This is primarily due to runways being utilized differently under changing wind conditions which effect where the aircraft fly.

### Aircraft Fleet Mix Report

The Aircraft Fleet Mix Report summarizes the number and type of aircraft operating at O'Hare International Airport during both all hours of the day and during the nighttime hours.

In 1990, Congress enacted legislation to eliminate all Stage 2 aircraft operating in the continental United States by the year 2000. In response, the FAA created a program to "phase-out" the older, louder Stage 2 aircraft over a ten-year period to achieve full compliance by the 2000 deadline. As of January 2000, all aircraft operating at O'Hare and within the United States were Stage 3. Stage 3 aircraft, such as the Boeing 757 (B757) and new Boeing 737's (B737) use a quieter type of engine that significantly reduces noise at the source. Also, a Stage 3 aircraft can be a previous Stage 2 aircraft with the engines retrofitted with a "Hush-kit" such as a Boeing 727 (B72Q), Boeing 737-200 (B73Q) and DC-9 (DC9Q). More than **98%** of the operations at O'Hare International Airport are originally certified as Stage 3 aircraft.

### Noise Hotline Report

The Department of Aviation maintains a toll-free noise hotline (**1-800-435-9569**) for citizens to express their concern about particular incidents or aircraft noise levels in general. The noise hotline report summarizes the number of calls received and where the callers were located. The tabular report lists the number of calls by community as well as the number of individual callers. The graph at the bottom of the page illustrates the nature of the complaint calls during the specified month.

Also shown are complaint calls by month displaying seasonal trends. The chart at the bottom of this page illustrates the trend in monthly complaint calls. Complaint totals for 2006 include all calls made to the O'Hare Noise Hotline. Complaint totals for 2007 and beyond only include calls made within the State of Illinois to the O'Hare Noise Hotline.

<b>Complaint Calls by Month</b>			
<b>Month</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
January	62	66	31
February	66	23	20
March	85	105	60
April	70	69	63
May	143	132	92
<b>June</b>	<b>143</b>	<b>166</b>	<b>140</b>
July	113	185	
August	158	145	
September	204	149	
October	112	133	
November	97	50	
December	109	25	
<b>Total Calls</b>	<b>1,362</b>	<b>1,248</b>	<b>406</b>

# Runway Use Report

Chicago O'Hare International Airport

Period: June 2008

Time of Day: All hours



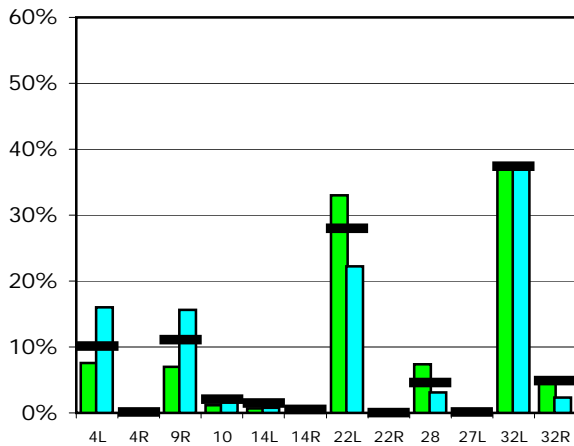
## Runway Use (All hours)

Source: Airport Noise Management System (ANMS)

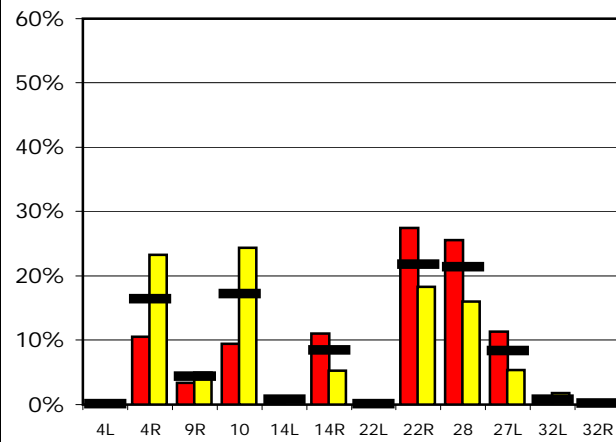
### Runway Utilization

		4L	4R	9R	10	14L	14R	22L	22R	28	27L	32L	32R
<b>Average Daily Departures</b>													
June 2008	<span style="color: green;">■</span>	96	0	89	15	9	12	419	0	94	0	477	58
May 2008	<span style="color: cyan;">■</span>	187	5	183	21	9	6	260	0	36	0	438	27
12 Month Avg.	<span style="color: black;">■</span>	119	1	131	24	18	6	331	0	53	1	442	58
<b>Average Daily Arrivals</b>													
June 2008	<span style="color: red;">■</span>	0	140	44	126	2	146	0	364	339	150	13	0
May 2008	<span style="color: yellow;">■</span>	3	287	62	300	0	65	0	225	197	66	21	5
12 Month Avg.	<span style="color: black;">■</span>	1	202	54	213	10	104	1	269	264	103	10	3

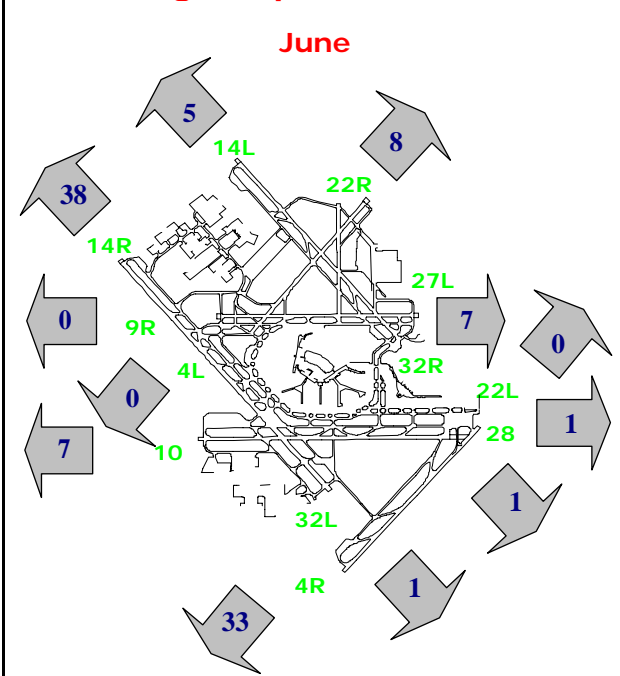
### Departures (All hours)



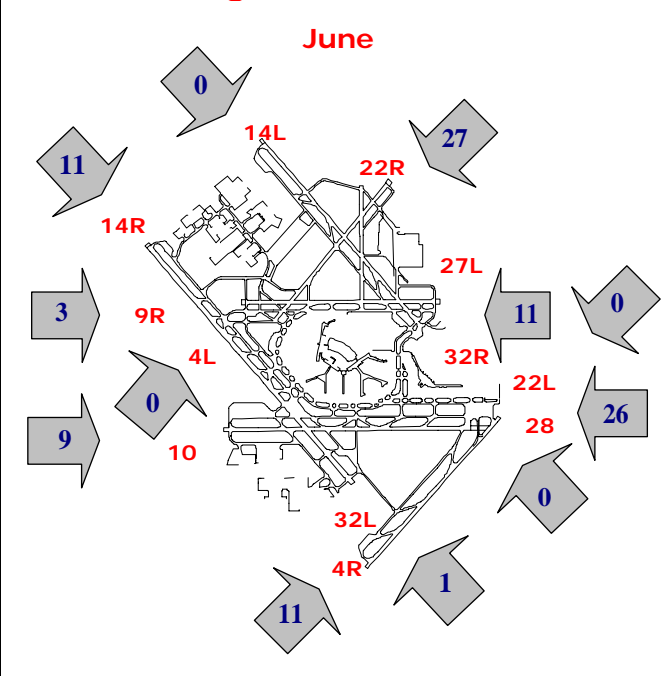
### Arrivals (All hours)



### Percentage Departure Utilization



### Percentage Arrival Utilization



# Runway Use Report

Chicago O'Hare International Airport

Period: June 2008

Time of Day: 10:00 p.m. to 7:00 a.m.



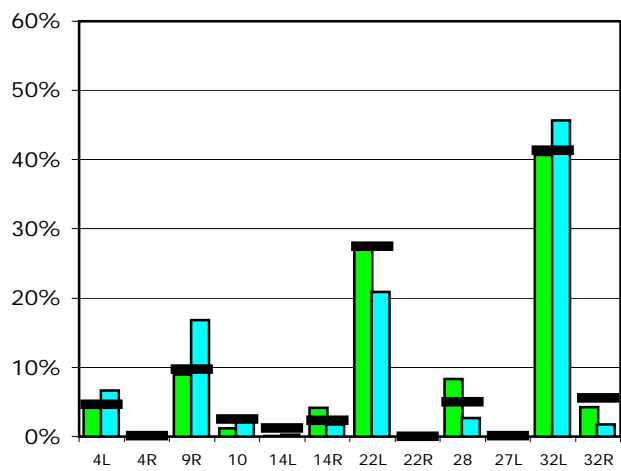
## Runway Use (10 p.m. to 7 a.m.)

Source: Airport Noise Management System (ANMS)

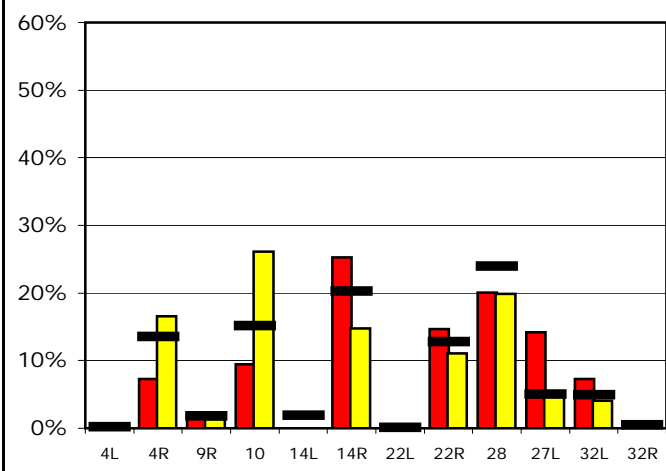
### Runway Utilization

	4L	4R	9R	10	14L	14R	22L	22R	28	27L	32L	32R
<b>Average Daily Departures</b>												
June 2008	7	0	12	2	0	6	36	0	11	0	54	6
May 2008	6	0	15	3	0	2	19	0	2	0	42	2
12 Month Avg.	5	0	11	3	1	3	31	0	6	0	46	6
<b>Average Daily Arrivals</b>												
June 2008	0	11	3	15	0	39	0	23	31	22	11	0
May 2008	0	21	2	33	0	19	0	14	25	7	5	1
12 Month Avg.	0	19	3	22	3	29	0	18	34	7	7	1

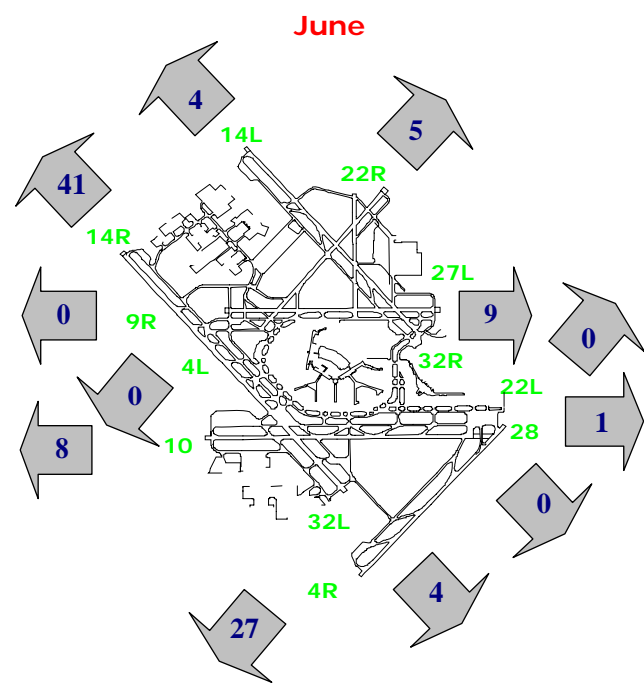
### Departures (10 p.m. to 7 a.m.)



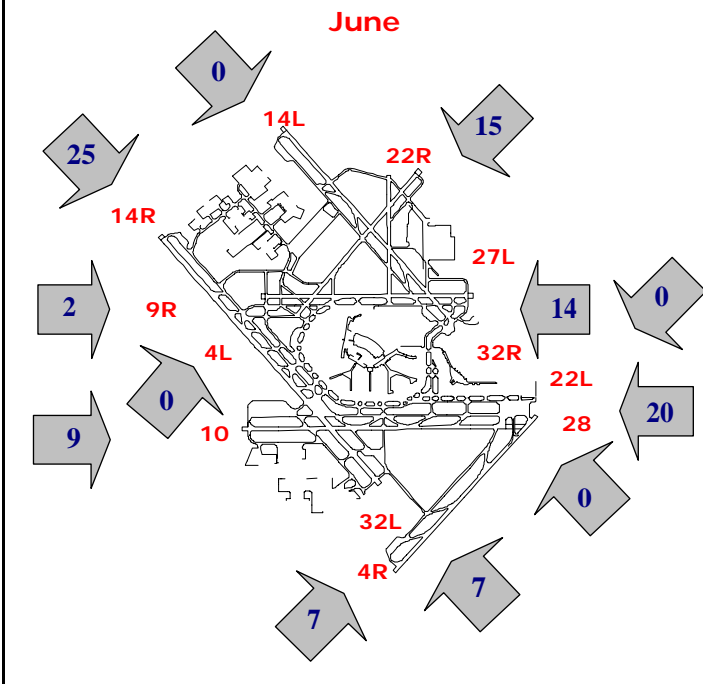
### Arrivals (10 p.m. to 7 a.m.)



### Percentage Departure Utilization



### Percentage Arrival Utilization





# Aircraft Noise Report

Chicago O'Hare International Airport

Period: June 2008

Metric: Aircraft DNL

RMT #	Community	Last 12 Months Monitored Noise Levels											Last Jun 07	12 Month Average vs 1997 <sup>2</sup>	Modeled 1997 Values	Modeled 2000 Values	Modeled OMP Full Build Out Values	
		Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr1 08	May1 08						Jun <sup>1</sup> 08
1	Arlington Heights	61.5	62.6	61.4	61.5	60.6	60.7	59.4	58.6	61.5	61.6	61.7	61.6	62.0	61.0	63.0	63.0	50.5
2	Melrose Park	56.5	56.3	53.8	55.8	58.3	54.1	53.8	52.4	52.9	54.7	55.7	55.7	55.6	55.0	63.4	61.0	50.3
3	Bensenville	57.7	59.1	60.4	59.0	58.6	60.4	62.7	59.2	58.4	59.8	59.5	61.3	67.6	59.7	71.3	67.3	64.9
4	Schiller Park	61.8	62.4	61.8	62.3	60.1	61.3	57.8	57.2	57.6	59.3	60.1	60.4	61.2	60.2	62.6	62.6	58.8
5	Chicago	59.2	57.9	58.7	59.0	58.9	57.8	59.7	56.4	56.7	57.7	58.7	59.5	57.8	58.3	60.8	59.8	61.9
6	Chicago	54.1	57.4	57.6	57.2	56.6	57.1	55.9	54.5	57.6	57.8	58.9	58.0	54.6	56.9	61.3	59.6	57.8
7	Des Plaines	57.4	58.9	58.9	59.6	59.5	59.3	59.5	58.3	60.9	57.4	58.0	57.9	58.1	58.8	65.4	62.0	48.5
8	Des Plaines	66.1	67.6	64.9	64.7	64.4	64.7	61.2	63.3	68.5	66.2	67.3	65.2	66.4	65.3	70.0	68.8	60.8
10	Rolling Meadows	58.5	58.4	58.0	61.1	59.1	60.0	59.1	56.3	58.7	59.4	59.7	60.6	56.8	59.1	59.0	60.8	48.9
11	Chicago	58.7	59.0	58.5	58.2	56.9	55.9	54.7	54.6	58.3	59.4	59.3	58.2	57.7	57.6	60.9	60.7	50.3
12	Elk Grove Village	57.1	58.1	56.8	58.1	60.9	54.1	58.5	56.4	58.2	58.5	60.7	62.0	66.1	58.3	66.7	62.1	57.6
13	Elk Grove Village	76.1	74.7	73.3	74.1	74.5	73.5	72.4	70.0	73.7	74.6	75.3	76.6	74.8	74.1	80.0	77.6	64.6
14	Elk Grove Village	62.4	62.9	62.3	62.5	61.5	60.8	59.4	59.5	62.3	62.3	63.5	63.1	62.8	61.9	67.6	65.7	54.5
15	Franklin Park	58.4	60.4	60.6	60.0	59.3	58.9	58.7	55.0	58.0	58.7	58.2	58.7	58.5	58.7	64.1	62.6	53.6
16	Franklin Park	70.7	71.2	71.0	71.2	67.8	71.4	71.6	67.2	70.6	65.8	72.4	70.3	69.8	70.1	72.2	72.1	63.4
17	Harwood Heights	64.5	63.3	62.3	64.7	65.9	66.2	66.4	65.1	64.4	65.4	65.4	65.6	66.2	64.9	66.4	65.4	57.9
19	Stone Park	59.8	59.1	59.6	60.5	59.9	59.0	59.4	57.8	57.5	58.1	59.8	61.0	59.0	59.3	64.7	61.7	51.6
20	Mount Prospect	61.9	62.4	61.0	62.8	62.1	60.6	60.1	60.0	61.7	62.1	61.1	60.0	61.6	61.3	63.5	62.4	49.1
21	Mount Prospect	56.4	56.8	55.5	55.6	53.7	54.0	51.3	52.8	56.2	55.7	56.3	54.3	56.5	54.9	59.6	58.6	53.6
22	Norridge	66.0	64.9	63.6	65.8	67.0	68.0	68.0	67.2	66.2	67.2	66.3	66.1	67.9	66.4	69.2	67.7	59.2
23	Northlake	64.7	64.7	64.3	66.0	64.1	64.9	63.5	61.9	62.4	64.3	62.4	65.1	64.6	64.0	73.5	69.1	59.6
24	Park Ridge	56.8	57.4	56.0	56.2	55.6	55.8	54.8	54.4	58.0	56.8	57.2	56.6	58.4	56.3	60.3	58.8	50.6
25	Park Ridge	57.7	60.2	59.6	59.6	61.2	61.3	59.6	60.5	61.3	64.1	61.4	61.4	58.9	60.7	69.1	61.8	66.7
26	Park Ridge	58.7	61.5	58.7	57.8	59.6	59.8	59.6	56.7	60.0	57.3	---	---	59.1	59.0	64.0	61.2	59.5
27	Rosemont	64.0	66.2	64.6	63.5	63.8	64.1	62.4	61.3	65.1	65.0	65.7	65.7	66.0	64.3	73.0	67.6	70.2
28	Schiller Park	77.0	74.3	73.7	75.9	77.3	78.5	79.3	78.2	76.1	77.2	76.3	76.7	80.2	76.7	79.6	78.7	67.9
32	Wood Dale	54.7	57.8	59.4	60.6	61.4	60.7	62.6	60.4	60.0	59.9	57.4	58.4	54.4	59.4	71.2	66.4	63.8
34	Elk Grove Village	60.1	57.5	59.1	57.5	57.7	58.7	59.2	59.6	61.2	60.3	58.2	58.4	58.7	59.0	66.3	61.2	61.4
35	Unincorporated Cook	63.5	62.2	61.7	63.7	63.4	63.6	65.6	62.4	62.7	64.3	64.5	66.6	61.5	63.7	70.8	65.4	54.7
37	Mount Prospect	53.3	55.7	55.2	51.8	55.4	52.4	52.3	51.8	54.0	54.7	55.3	54.4	54.0	53.9	55.1	57.0	50.5


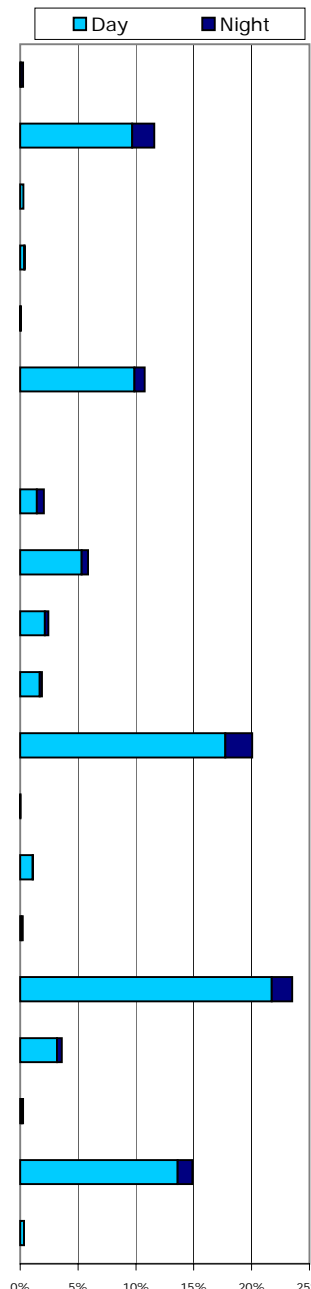


















--No data due to monitor malfunction.

- 1. **Red** represents an increase of 1 dB or more from the same month of the previous year (8 monitors). **Green** represents a decrease of 1dB or more from the same month of the previous year (8 monitors).
- 2. **Red** represents an increase of 1 dB or more from the modeled 1997 noise contour level (0 monitors). **Green** represents a decrease of 1dB or more from the modeled 1997 noise contour level (29 monitors).



**Aircraft Fleet Mix Report**  
 Chicago O'Hare International Airport  
 Period: June 2008



Jet Aircraft	Average Operations Per Day (All Hours)	Average Operations Per Night (10 p.m. - 7 a.m.)	Percent of Total All Hours	Percent of Total 10 p.m. - 7 a.m.	Percentage of Total
 A300	7	5	0.3%	1.8%	
 A320	294	49	11.6%	17.2%	
 A330	7	0	0.3%	0.0%	
 A340	11	1	0.4%	0.5%	
 B720	2	1	0.1%	0.5%	
 B737	273	23	10.8%	8.1%	
 B730	0	0	0.0%	0.0%	
 B747	52	16	2.1%	5.7%	
 B757	149	14	5.9%	5.1%	
 B767	62	8	2.5%	2.9%	
 B777	48	5	1.9%	1.8%	
 CARJ	507	59	20.1%	21.0%	
 DC80	1	1	0.0%	0.4%	
 DC90	29	2	1.1%	0.6%	
 DC10	6	3	0.2%	1.2%	
 E145	595	45	23.5%	15.9%	
 E170	92	11	3.6%	4.1%	
 MD11	7	4	0.3%	1.3%	
 MD80	377	33	14.9%	11.6%	
<b>Other Aircraft</b>	9	1	0.4%	0.3%	
<b>Total</b>	<b>2,527</b>	<b>283</b>	<b>100.0%</b>	<b>100.0%</b>	

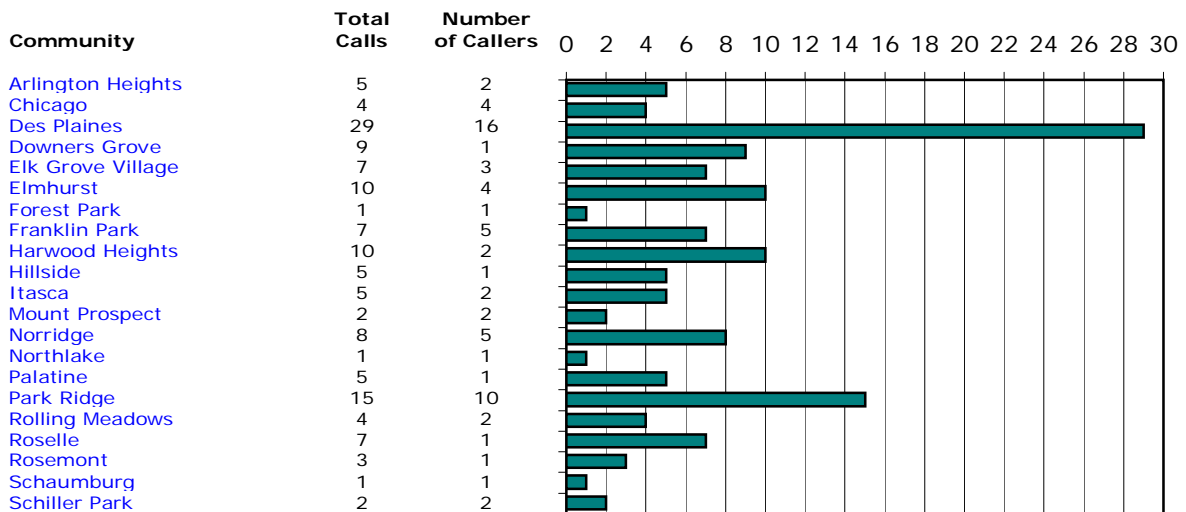


**Noise Hotline Report**  
Chicago O'Hare International Airport  
June 2008



**Monthly Hotline Calls by Community<sup>1</sup>**

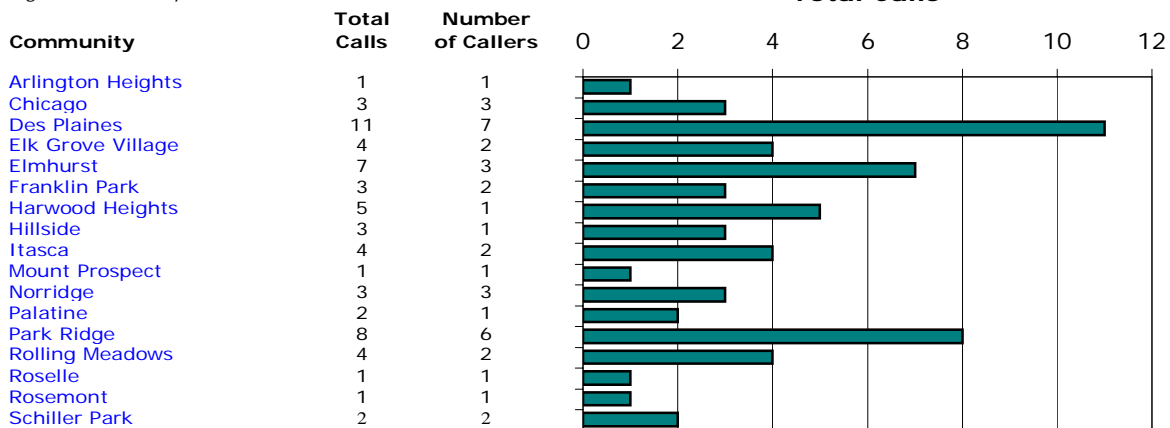
All Hours



**June 2008 Total** 140 67  
May 2008 Total 92 45

**Monthly Hotline Calls by Community<sup>1</sup>**

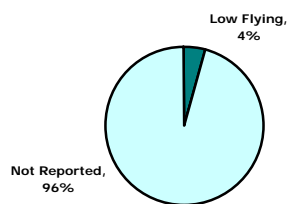
Nighttime - 10:00 p.m. - 7:00 a.m.



**June 2008 Total** 63 39  
May 2008 Total 31 22

**Nature of Hotline Call Noise Complaint**

All Hours



**Nature of Hotline Call Noise Complaint**

Nighttime - 10:00 p.m. - 7:00 a.m.



<sup>1</sup> Complaint calls made within the State of Illinois.