

**January 2015
Monthly Report**



Airport Noise Management System
Chicago O'Hare International Airport



Visit the O'Hare Noise Management webpage
on the Internet at

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 32 noise monitors around O'Hare, FAA radar data, weather data and noise complaints. Over 150,000 flights and 400,000 noise events are recorded by the ANMS each month for the Chicago Department of Aviation (CDA). 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 eight 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 daytime hours (7 a.m. to 10 p.m.) and for all aircraft types. Also shown is the runway use for the nighttime hours (10 p.m. to 7 a.m.). Percentage is a ratio whereas a percentage point is the difference between two percentages.

Highlights for **January 2015** include:

Departures

Most used departure runway: **28R – 56%**
32R departures increased by **1pp** from December 2014
10L departures decreased by **3pp** from December 2014

Arrivals

Most used arrival runway: **27L – 35%**
10L arrivals increased by **2pp** from December 2014
27R arrivals decreased by **3pp** from December 2014

pp = Percentage Points

Aircraft Noise Report

The Aircraft Noise Report summarizes noise measurements from each of the 32 noise monitors located around the Airport. The data presented summarizes the Day-Night Average Sound 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 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 **99%** of the operations at O'Hare International Airport are originally certified as Stage 3 aircraft.

Noise Complaint Report

The Chicago Department of Aviation (CDA) maintains a toll-free noise hotline (**1-800-435-9569**) and an on-line service at www.flychicago.com for citizens to express their concern about particular aircraft events or aircraft noise levels in general. The Noise Complaint Report summarizes the number of complaints received and where the complainants were located. The tabular report lists the number of complaints by community as well as the number of individual complainants. The graphs illustrate the nature of complaints during the specified month.

Also shown are complaints by month displaying seasonal trends. The chart at the bottom of this page illustrates the trend in monthly complaints. These totals only include complaints made within the State of Illinois to the O'Hare Noise Hotline toll-free number or on-line feature.

Complaints by Month									
Month	2007	2008	2009	2010	2011	2012	2013	2014	2015
January	66	31	860	907	1,349	5,635	1,357	6,321	39,500*
February	23	20	1,186	968	1,060	3,236	966	7,472	
March	105	60	1,069	1,222	1,209	2,175	1,402	11,145	
April	69	63	985	1,478	1,099	1,113	1,863	10,961	
May	132	92	1,235	1,168	1,192	1,210	1,881	21,436	
June	166	140	1,131	1,587	1,340	1,332	2,419	22,566	
July	185	138	1,466	1,077	849	1,074	2,280	27,956	
August	145	210	1,649	1,358	2,050	1,470	2,296	30,249	
September	149	151	1,883	1,290	3,120	993	2,124	32,532	
October	133	123	1,514	1,207	3,292	1,366	3,496	33,866	
November	50	271	825	1,234	3,443	877	4,763	30,748	
December	25	1,184	1,055	850	4,044	1,016	4,646	32,959	
Total Calls	1,248	2,483	14,858	14,346	24,047	21,497	29,493	268,211	39,500

*63% of the complaints in January came from 6 addresses.

Runway Use Report

Chicago O'Hare International Airport
 Period: January 2015
 Time of Day: 7:00 a.m. to 10:00 p.m.



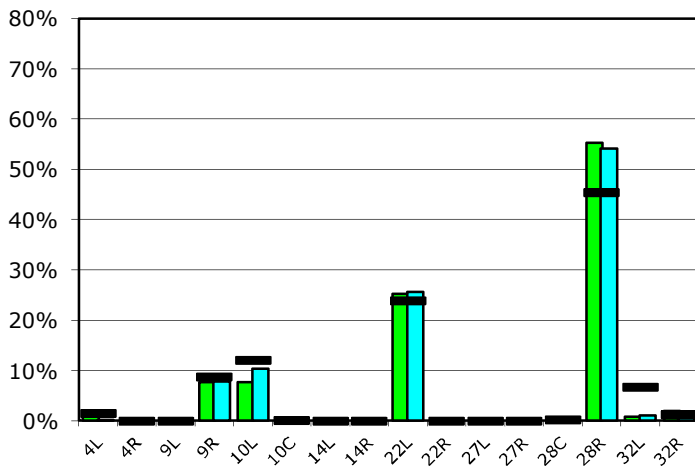
Runway Use (7 a.m. to 10 p.m.)

Source: Airport Noise Management System (ANMS)

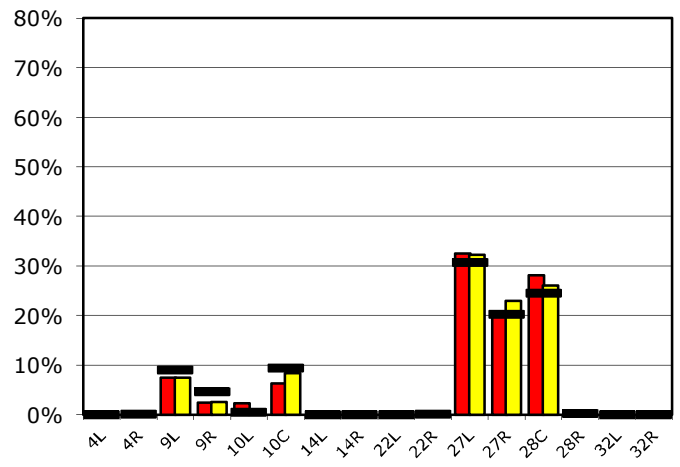
Runway Utilization

	4L	4R	9L	9R	10L	10C	14L	14R	22L	22R	27L	27R	28C	28R	32L	32R
Average Daily Departures																
January 2015	7	0	0	74	74	1	0	0	244	0	0	0	4	534	8	19
December 2014	1	0	0	83	109	0	0	0	270	0	1	0	0	570	11	9
12 Month Avg.	16	0	0	94	131	0	0	0	260	0	0	0	2	493	73	13
Average Daily Arrivals																
January 2015	0	0	68	23	21	58	0	0	3	3	298	183	258	4	0	0
December 2014	0	0	75	26	1	84	0	0	0	0	321	228	260	2	0	0
12 Month Avg.	0	1	94	48	5	98	0	0	1	1	319	211	255	3	0	0

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

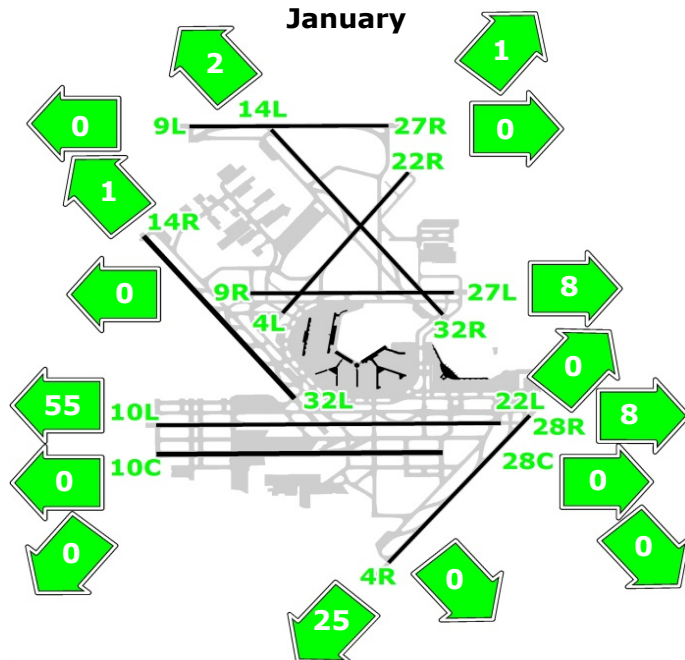


Arrivals (7 a.m. to 10 p.m.)



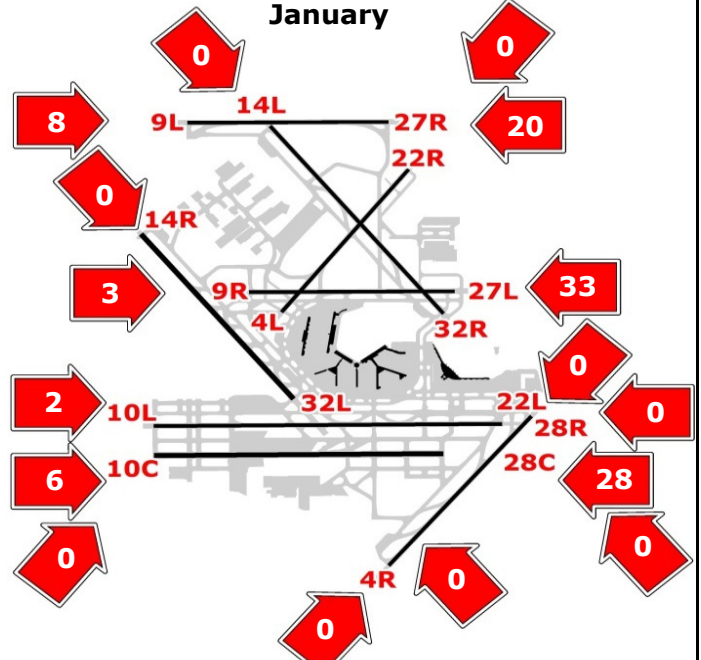
Percentage Departure Utilization

January



Percentage Arrival Utilization

January



Runway Use Report

Chicago O'Hare International Airport
 Period: January 2015
 Time of Day: 10:00 p.m. to 7:00 a.m.



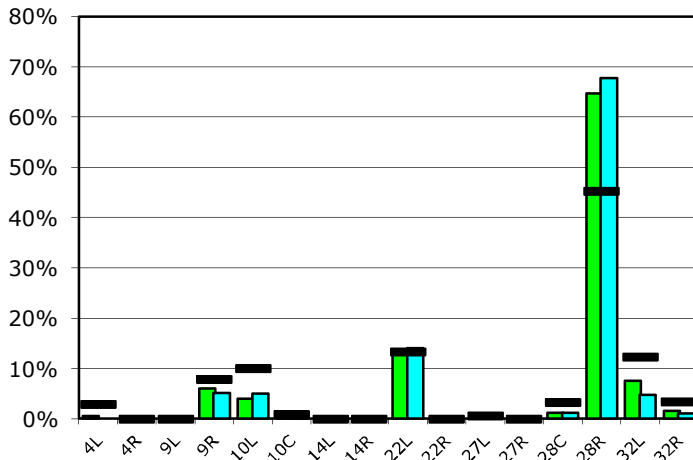
Runway Use (10 p.m. to 7 a.m.)

Source: Airport Noise Management System (ANMS)

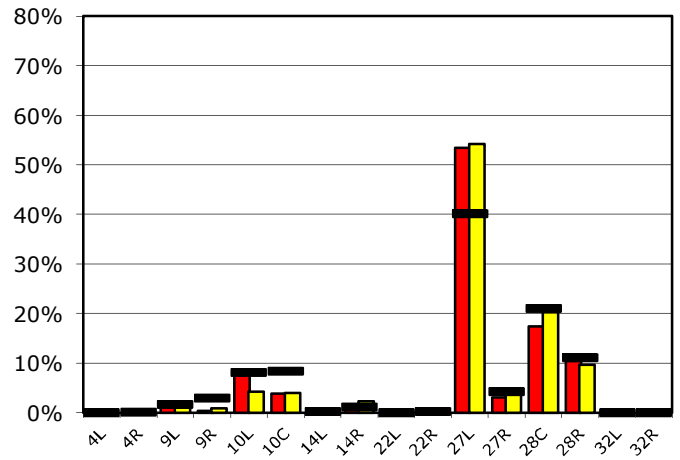
Runway Utilization

	4L	4R	9L	9R	10L	10C	14L	14R	22L	22R	27L	27R	28C	28R	32L	32R
Average Daily Departures																
January 2015	1	0	0	6	4	0	0	0	12	0	1	0	1	61	7	1
'December 2014	0	0	0	5	5	0	0	0	13	0	1	0	1	64	4	1
12 Month Avg.	3	0	0	9	11	1	0	0	15	0	1	0	4	50	14	4
Average Daily Arrivals																
January 2015	0	0	2	0	9	4	0	2	0	0	58	3	19	11	0	0
'December 2014	0	0	1	1	5	5	0	3	0	0	66	4	25	12	0	0
12 Month Avg.	0	0	2	4	11	11	0	1	0	0	52	5	27	14	0	0

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

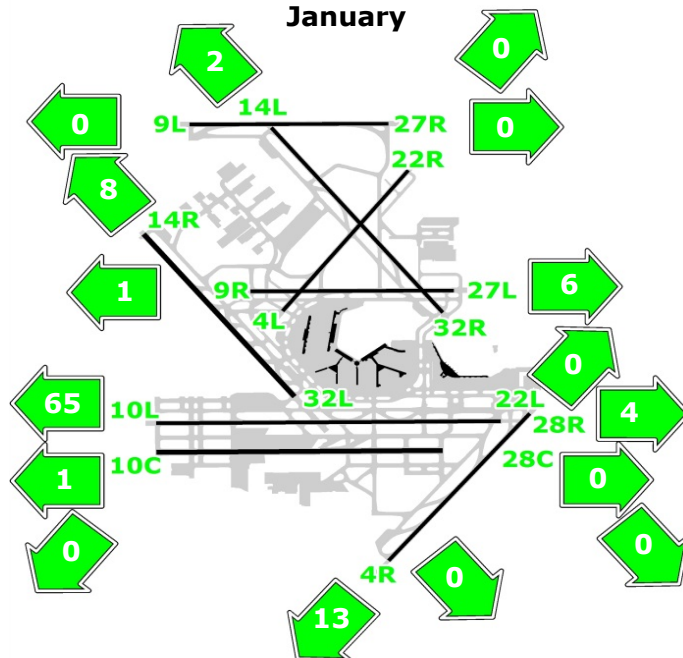


Arrivals (10 p.m. to 7 a.m.)



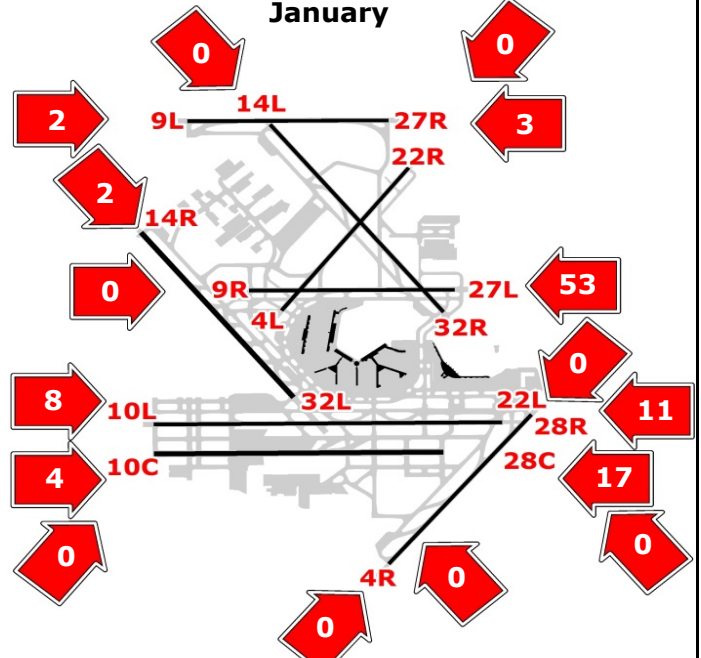
Percentage Departure Utilization

January



Percentage Arrival Utilization

January



Aircraft Noise Report

Chicago O'Hare International Airport

Period: January 2015

Metric: Aircraft DNL



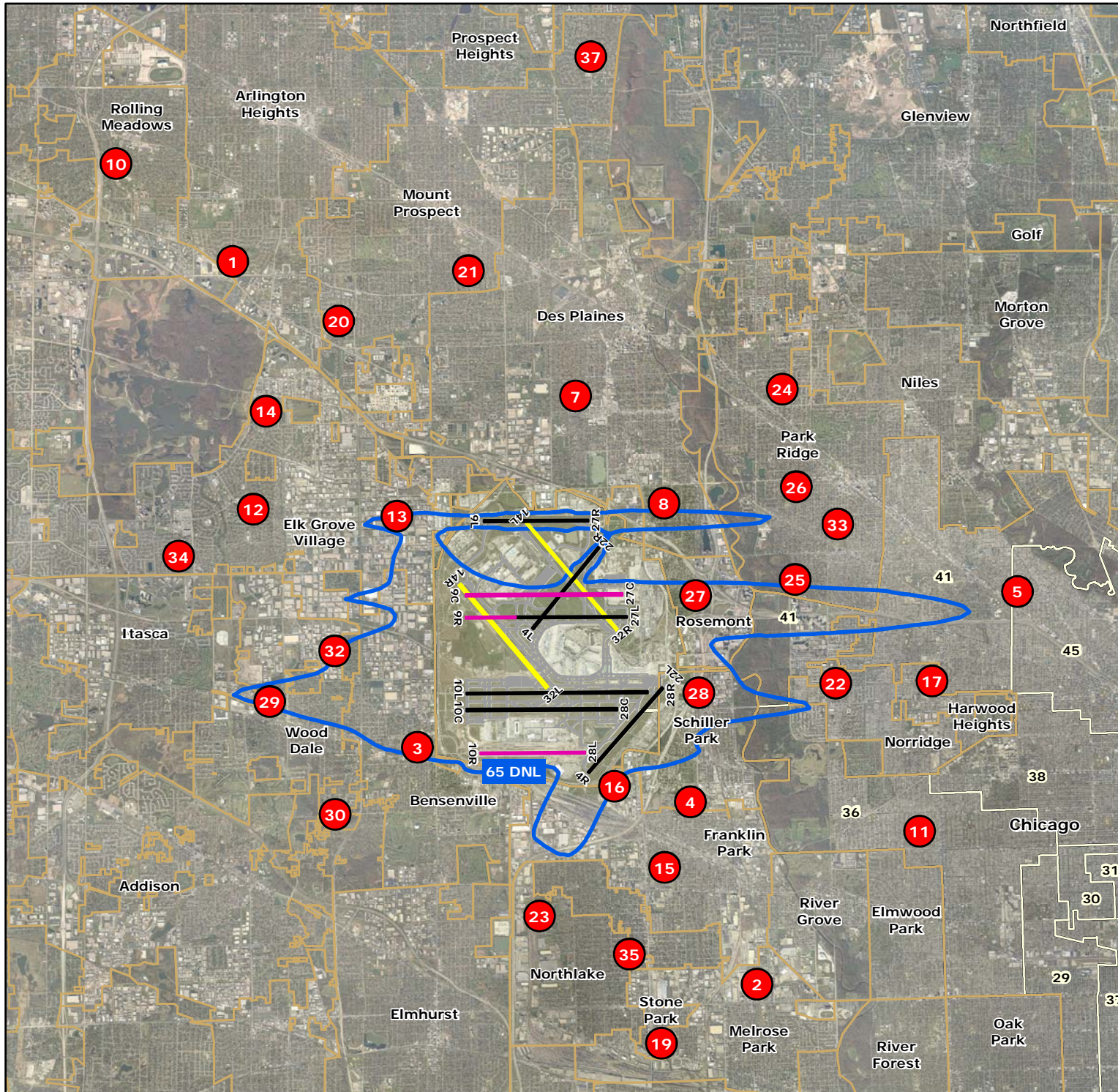
RMT #	Community	Last 12 Months Monitored Noise Levels											Last Jan 14	12 Month Average vs 1997 ²	Modeled 1997 Values	Modeled 2000 Values	Modeled OMP Build Out Values	
		Feb 14	Mar 14	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sep 14	Oct 14	Nov 14	Dec 14						Jan ¹ 15
1	Arlington Heights	53.0	55.4	55.1	56.3	51.7	52.2	52.1	55.4	51.6	51.9	52.0	51.4	52.3	53.6	63.0	63.0	50.5
2	Melrose Park	54.9	56.7	59.2	57.3	56.2	54.2	53.8	54.7	54.3	54.0	53.7	52.9	57.2	55.5	63.4	61.0	50.3
3	Bensenville	63.6	63.5	63.3	63.7	63.7	65.0	63.7	64.6	65.4	65.3	64.7	64.1	63.3	64.3	71.3	67.3	64.9
4	Schiller Park	54.8	57.1	58.2	58.1	56.5	58.9	55.4	55.1	55.3	52.0	53.2	51.4	55.8	56.1	62.6	62.6	58.8
5	Chicago	57.8	57.9	58.5	59.7	61.9	62.6	60.8	62.2	61.1	61.2	60.4	60.3	58.2	60.6	60.8	59.8	61.9
7	Des Plaines	51.1	54.2	53.9	54.6	52.3	53.5	54.7	55.6	57.3	53.0	50.9	52.7	49.3	54.0	65.4	62.0	48.5
8	Des Plaines	54.8	60.1	59.6	61.0	60.8	56.8	57.6	55.6	57.1	56.0	54.1	54.4	54.2	58.0	70.0	68.8	60.8
10	Rolling Meadows	47.9	51.1	52.1	52.3	58.9	51.8	50.6	52.3	50.7	48.5	50.0	49.5	46.0	52.4	59.0	60.8	48.9
11	Chicago	58.5	56.9	58.1	57.4	66.9	62.4	54.3	52.8	53.6	51.6	52.4	52.2	58.2	59.3	60.9	60.7	50.3
12	Elk Grove Village	56.3	58.5	59.3	60.5	61.8	61.1	59.6	--	63.3	59.9	64.7	62.5	57.8	61.3	66.7	62.1	57.6
13	Elk Grove Village	70.1	68.6	66.1	64.1	62.7	62.5	63.4	62.2	62.9	61.4	63.9	63.5	66.3	65.2	80.0	77.6	64.6
14	Elk Grove Village	55.6	58.0	57.3	59.0	53.4	53.9	55.2	55.3	54.9	57.7	54.9	56.2	55.7	56.3	67.6	65.7	54.5
15	Franklin Park	50.0	53.8	55.6	57.2	54.6	52.1	53.6	52.5	54.1	52.5	51.5	50.7	52.5	53.7	64.1	62.6	53.6
16	Franklin Park	60.3	63.1	62.3	63.6	65.1	65.4	64.4	64.6	66.7	66.0	65.5	64.8	61.6	64.6	72.2	72.1	63.4
17	Harwood Heights	58.8	60.5	60.0	61.4	63.3	63.6	64.0	64.5	63.8	63.7	63.3	62.6	60.7	62.8	66.4	65.4	57.9
19	Stone Park	51.1	56.1	53.9	56.3	57.1	56.6	56.6	56.6	56.7	54.3	51.7	51.8	50.9	55.4	64.7	61.7	51.6
20	Mount Prospect	57.5	59.8	56.9	--	56.2	60.2	57.1	54.1	51.9	53.0	51.1	51.1	56.2	56.4	63.5	62.4	49.1
21	Mount Prospect	44.8	45.6	45.5	48.7	47.6	48.5	47.5	50.2	48.7	51.6	47.7	49.5	44.5	48.4	59.6	58.6	53.6
22	Norridge	62.7	64.0	64.2	65.7	64.9	64.2	65.2	64.7	64.7	64.2	--	--	62.9	64.5	69.2	67.7	59.2
23	Northlake	59.2	61.7	60.6	61.2	62.8	64.1	63.7	62.7	64.6	63.3	63.8	62.9	58.5	62.8	73.5	69.1	59.6
24	Park Ridge	50.0	52.1	55.4	55.5	54.5	50.7	52.2	53.2	51.7	48.7	50.1	48.3	48.3	52.5	60.3	58.8	50.6
25	Park Ridge	56.2	59.8	60.9	61.4	61.4	59.5	60.0	60.7	61.7	60.2	60.3	59.6	56.3	60.3	69.1	61.8	66.7
26	Park Ridge	52.5	56.0	57.6	58.5	57.7	54.9	56.5	58.1	57.6	54.9	54.6	53.7	52.2	56.4	64.0	61.2	59.5
27	Rosemont	60.0	65.2	67.1	67.8	67.4	65.7	65.0	67.2	67.8	64.9	66.3	65.2	60.8	66.2	73.0	67.6	70.2
28	Schiller Park	73.6	73.8	74.6	75.7	74.3	71.9	74.3	73.9	74.4	74.5	74.5	73.6	73.6	74.2	79.6	78.7	67.9
29	Wood Dale	60.6	64.5	65.7	67.2	67.1	66.0	67.1	65.6	66.1	63.8	65.3	64.2	59.7	65.6	n/a	n/a	65.1
30	Wood Dale	56.7	58.6	57.8	57.8	56.0	56.8	55.5	56.1	57.5	57.8	57.4	56.5	--	56.8	n/a	n/a	58.5
32	Wood Dale	61.3	62.0	62.9	64.9	66.4	67.8	66.8	68.4	67.8	68.1	67.9	66.5	62.4	66.5	71.2	66.4	63.8
33	Park Ridge	58.6	60.5	61.4	62.2	63.0	62.7	62.2	62.5	63.4	62.5	62.0	60.3	58.4	62.0	n/a	n/a	61.9
34	Elk Grove Village	57.3	56.8	57.8	58.1	61.2	59.0	58.3	59.9	58.8	58.8	58.4	56.8	56.8	58.6	66.3	61.2	61.4
35	Unincorporated Cook	54.9	56.7	57.0	58.7	58.3	59.2	58.0	59.2	59.7	59.5	58.4	57.7	56.4	58.3	70.8	65.4	54.7
37	Mount Prospect	54.3	55.6	55.8	55.1	58.7	49.4	54.0	54.0	51.7	49.0	46.2	45.4	55.6	53.9	55.1	57.0	50.5

-- Data unavailable.

n/a - Not Applicable

1. **Red** represents an increase of 1 dB or more from the same month of the previous year (15 monitors). **Green** represents a decrease of 1dB or more from the same month of the previous year (7 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 (28 monitors).



Permanent Noise Monitor Locations

City of Chicago
Rahm Emanuel
Mayor


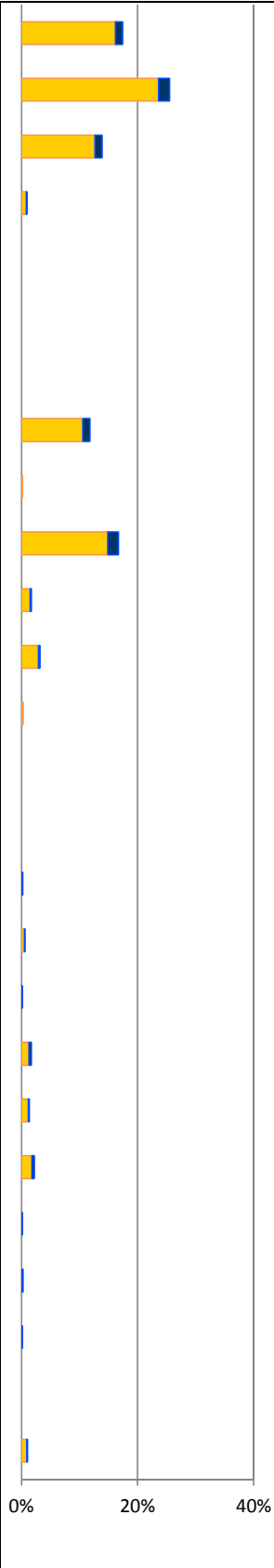



















Legend

-  Permanent Noise Monitors (32)
-  Existing Runways
-  Existing Runways to be Decommissioned
-  Future Runways
-  O'Hare Modernization Program Build-Out Noise Contour (65 DNL)
-  Chicago Ward Boundaries
-  Community Boundaries





Date: December 5, 2014
File: ORD_RMT_Vers2.mxd

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
Regional Aircraft					Day ■ Night ■
 CRJ200/700/900	364	25	17.4%	1.2%	
 E135/E145	534	40	25.5%	1.9%	
 E170	291	26	13.9%	1.2%	
 E190	9	1	0.0%	0.0%	
 C208	20	2	1.0%	0.1%	
Subtotal	1,218	94	57.8%	4.4%	
Narrow-Body Aircraft					
 A319/320/321	247	26	11.8%	1.2%	
 B717	4	0	0.2%	0.0%	
 B737	349	38	16.7%	1.8%	
 B757	36	4	1.7%	0.2%	
 MD80	67	6	3.2%	0.3%	
 MD90	6	0	0.3%	0.0%	
Subtotal	709	74	33.9%	3.5%	
Wide-Body Aircraft					
 A300	5	5	0.2%	0.2%	
 A330	12	1	0.6%	0.0%	
 A340	3	1	0.1%	0.0%	
 B747	36	9	1.7%	0.4%	
 B767	28	3	1.3%	0.1%	
 B777	47	9	2.2%	0.4%	
 B787	3	1	0.1%	0.0%	
 DC10	6	4	0.3%	0.2%	
 MD11	3	1	0.1%	0.0%	
Subtotal	143	34	6.8%	1.6%	
General Aviation	22	2	1.1%	0.1%	
Total	2,092	204	100%	10%	

Noise Complaint Report

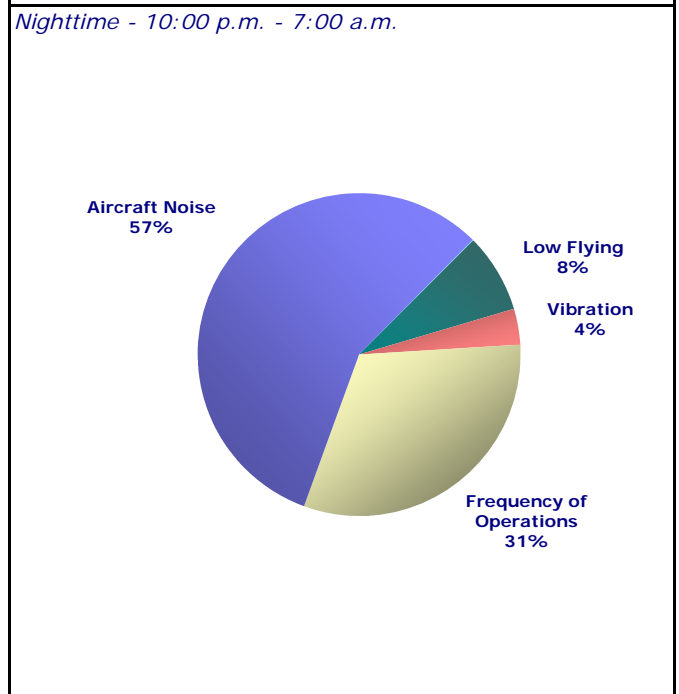
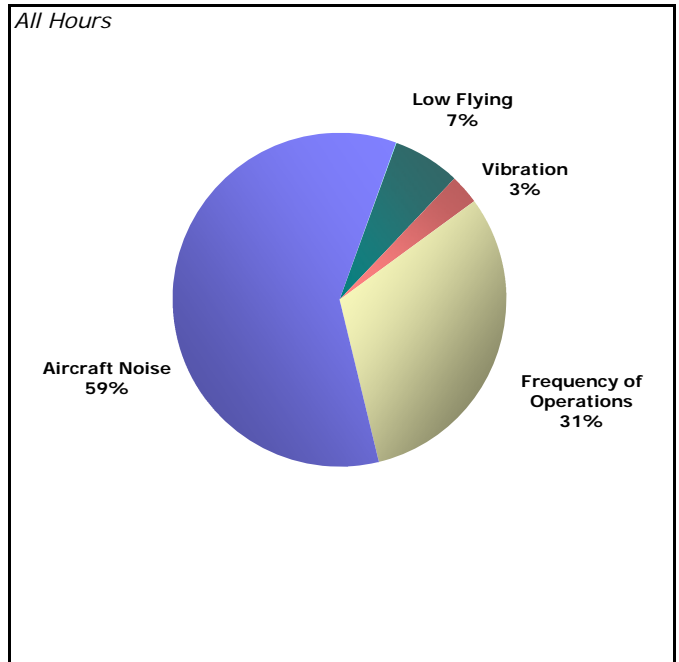
Chicago O'Hare International Airport
 Period: January 2015



Monthly Complaints by Community¹

Community	Complaints		Complainants	
	All Hours	Nighttime	All Hours	Nighttime
Addison	41	11	3	2
Arlington Heights	2	1	2	1
Bensenville ²	7,771	892	18	11
Berkeley	3	2	3	2
Bloomington	16	5	9	1
Carol Stream	1	--	1	--
Chicago ³	9,772	2,311	667	355
Ward 36	1	--	1	--
Ward 38	371	112	26	17
Ward 39	1,790	505	75	54
Ward 40	4,725	893	13	9
Ward 41	1,222	344	198	73
Ward 45	1,104	245	45	28
Ward Other	300	59	50	21
Ward Unknown	260	153	260	153
Des Plaines	19	11	6	2
Downers Grove	6	2	1	1
Elgin	1	1	1	1
Elk Grove Village ⁴	2,340	444	374	14
Elmhurst	7	5	3	2
Franklin Park	19	5	6	4
Glen Ellyn	66	13	5	1
Glencoe	7	--	1	--
Glenview	3	--	3	--
Hanover Park	3	--	2	--
Harwood Heights	56	29	5	5
Hillside	7	4	1	1
Itasca	613	142	25	10
Lincolnwood	14	7	4	3
Medinah	4	1	2	1
Mount Prospect	14	3	3	1
Niles	1	--	1	--
Norridge ⁵	11,373	988	32	26
Northbrook	22	2	3	2
Park Ridge	271	66	35	16
Roselle	1	--	1	--
Schaumburg	7	--	5	--
Schiller Park	77	28	29	14
St. Charles	4	0	1	--
Villa Park	1	1	1	1
West Chicago	88	21	5	2
Westchester	2	--	1	--
Wheaton	35	8	14	5
Wilmette	9	4	2	1
Winfield	13	3	11	3
Wood Dale ⁶	6,811	585	3,508	356

Nature of Noise Complaints



Notes:

1. Complaints made within the State of Illinois.
2. 5,677 of 7,771 complaints in Bensenville came from 1 address.
3. 4,306 of 9,772 complaints in Chicago came from 1 address.
4. 1,770 of 2,340 complaints in Elk Grove Village came from 1 address.
5. 11,155 of 11,373 complaints in Norridge came from 1 address.
6. 2,079 of 6,811 complaints in Wood Dale came from 2 addresses.

January 2015 Total	39,500	5,595	4,794	844
Previous Month Total	32,959	5,534	5,508	1,019



O'Hare Noise Hotline: 1-800-453-9569
www.flychicago.com