

# How Noise Contours are Generated

## User Inputs

### Inputs

- Airport Information
- Aircraft Flight Tracks
- Aircraft Fleet
- Number of Operations
- Runway Utilization
- Time of Day
- Aircraft Climb Profiles
- Departure Trip Length
- Meteorological Data
- Topographic Data

### Source

- ▶ Airport Layout Plan
- ▶ FAA Radar Data
- ▶ Tower, Airport Records, OAG
- ▶ Tower, Airport Records, OAG
- ▶ Radar/Wind Data, Airport Records
- ▶ Radar Data, OAG, Airport Records
- ▶ INM, Radar Data, Airline Records
- ▶ OAG
- ▶ Climatic Data, Airport Records
- ▶ Airport Layout Plan, U.S. Geological Survey



## Integrated Noise Model (INM)

### INM-Provided Information

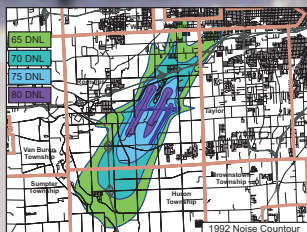
- Aircraft Noise Levels
- Aircraft Performance Data

### Types of Aircraft Noise Considered within INM

- Arrival
- Departure
- Flyover
- Reverse Thrust (Braking)
- Run-up Noise



## Output

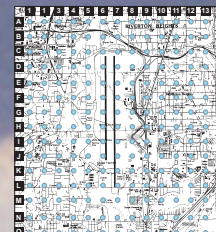


Noise Contours

SUMMARY OF GRID DATA - Comparative DNL and SEL Data  
With and Without NADP Close-In and Distort Procedures  
Chicago-Midway International Airport  
01/14/02

Line Number	Coordinates Points		DNLs and Changes				SELEs and Changes					
	X	Y	Standard	Close-In	Change	Distort	Change	Standard	Close-In	Change	Distort	Change
1	-15000	24000	49.1	49.0	-0.0	47.4	-1.7	86.4	84.2	-2.2	92.4	-4.0
2	-12000	24000	51.8	50.8	-0.8	49.5	-2.3	87.5	85.1	-2.4	93.6	-3.9
3	-9000	24000	51.8	50.6	-1.2	49.7	-2.1	102.5	97.1	-5.4	97.2	-5.3
4	-6000	24000	54.0	53.8	-0.2	53.7	-0.3	95.7	90.7	-5.0	91.5	-4.2
5	-3000	24000	58.2	59.1	0.9	59.1	0.0	88.7	89.7	1.0	89.7	0.0
6	0	24000	52.9	52.7	-0.2	52.4	-0.5	93.1	91.2	-1.9	88.8	-4.3
7	3000	24000	59.9	58.6	-1.3	58.4	-1.5	88.4	86.0	-2.4	84.7	-3.7
8	6000	24000	50.8	50.1	-0.7	49.3	-1.5	95.0	93.1	-1.9	90.8	-4.2
9	9000	21000	47.6	47.1	-0.5	46.0	-1.6	93.8	91.6	-2.0	89.3	-4.5
10	-12000	21000	51.5	50.7	-0.8	49.5	-2.0	98.8	95.9	-2.7	94.7	-3.9
11	-9000	21000	53.8	52.2	-1.7	52.0	-1.8	104.3	97.3	-7.0	103.1	-1.2
12	-6000	21000	54.9	54.2	-0.7	54.3	-0.6	101.8	94.9	-6.7	100.9	-0.7
13	-3000	21000	56.7	56.6	0.1	56.6	0.0	93.3	89.1	-4.2	92.3	-1.0
14	0	21000	53.1	52.8	-0.3	52.5	-0.6	93.5	91.0	-2.5	89.3	-4.2
15	3000	21000	55.2	54.6	-0.6	54.6	-0.6	93.9	89.9	-4.0	89.9	-4.0
16	6000	21000	50.7	50.0	-0.7	49.2	-1.5	94.6	92.3	-2.3	90.3	-4.3
17	9000	18000	47.2	46.4	-0.8	45.9	-1.3	93.9	89.5	-4.4	89.5	-4.4
18	-12000	18000	51.5	50.4	-1.1	49.7	-1.8	88.1	85.3	-2.8	83.8	-4.3
19	-9000	18000	44.7	52.8	8.1	52.5	7.8	101.6	97.6	-4.0	99.8	-1.8
20	-6000	18000	37.2	35.4	-1.8	35.3	-1.9	106.8	88.6	-18.2	106.0	-0.8

Tabular Reports



Grid Point Analysis



Note:  
OAG: Official Airlines Guide