

# 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, Official Airlines Guide (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

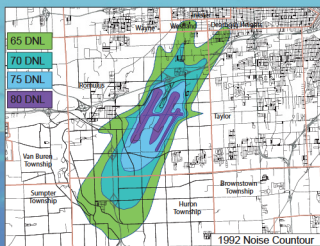
- Aircraft Noise Levels
- Aircraft Performance Data



### Types of Aircraft Noise Considered within INM

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

## Output

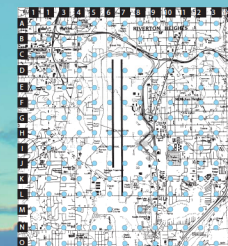


Noise Contours

SUMMARY OF GRID DATA - Comparative DNL and SEL Data  
With and Without NADP Close-in and Distant Procedures  
Chadron-Moham Community International Airport  
(1 of 6)

Row Number	Coordinate Points			DNLs and Changes			SELS and Changes						
	X	Y	Point	Standard	Change	Delta	Standard	Change	Delta				
1	-15000	24000	A08	45.1	45.5	-0.5	47.4	-3.7	95.4	94.1	-2.2	52.4	-4.0
2	-12000	24000	A09	51.6	50.8	-0.8	49.5	-2.1	97.5	95.1	-2.4	93.6	-3.9
3	-9000	24000	A10	51.9	50.6	-1.2	49.7	-2.1	102.5	97.1	-5.4	97.2	-5.3
4	-6000	24000	A11	54.0	53.8	-0.2	53.7	-0.3	95.7	90.7	-5.0	91.5	-4.2
5	-3000	24000	A12	59.2	59.1	-0.1	59.1	-0.1	88.7	88.1	-0.6	88.7	-0.6
6	0	24000	A13	52.9	52.7	-0.2	52.4	-0.5	93.1	91.2	-1.9	88.8	-4.3
7	3000	24000	A14	58.9	58.6	-0.3	58.4	-0.5	88.4	86.0	-2.4	84.7	-3.7
8	6000	24000	A15	50.8	50.1	-0.7	49.3	-1.5	95.0	93.1	-1.9	90.8	-4.2
9	-15000	21000	B08	47.6	47.1	-0.5	46.0	-1.6	93.6	91.6	-2.0	89.3	-4.3
10	-12000	21000	B09	51.5	50.7	-0.8	49.5	-2.0	99.8	95.9	-3.9	94.7	-5.1
11	-9000	21000	B10	53.9	52.2	-1.7	52.0	-1.9	104.3	97.3	-7.0	103.1	-1.2
12	-6000	21000	B11	54.9	54.2	-0.7	54.3	-0.6	101.6	94.9	-6.7	100.8	-0.7
13	-3000	21000	B12	58.7	58.9	0.1	58.6	-0.1	93.3	88.1	-5.2	82.3	-1.0
14	0	21000	B13	53.1	52.6	-0.5	52.5	-0.6	93.5	91.0	-2.5	89.3	-4.2
15	3000	21000	B14	59.2	58.8	-0.4	58.6	-0.6	99.8	96.9	-2.9	95.9	-3.9
16	6000	21000	B15	50.7	50.0	-0.7	49.2	-1.5	84.6	82.3	-2.3	80.3	-4.3
17	-15000	18000	C08	47.2	46.4	-0.8	45.9	-1.3	90.8	88.5	-2.3	85.5	-4.3
18	-12000	18000	C09	51.5	50.4	-1.1	49.7	-1.8	86.1	85.3	-0.8	83.8	-4.3
19	-9000	18000	C10	54.7	52.8	-1.9	52.5	-2.2	101.6	97.6	-4.0	99.8	-1.8
20	-6000	18000	C11	57.2	55.4	-1.8	56.3	-0.9	106.8	98.6	-8.2	100.0	-0.8

Tabular Reports



Grid Point Analysis



Note:  
OAG: Official Airlines Guide