# ONAL INTERNAT AIRPOR ENVE Δ

# DEN 2005 ANNUAL NOISE REPORT

JANUARY 31, 2006 5:30 PM

#### 2005 IN REVIEW

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There was one potential Class II violation during 2005. This was an improvement from the two potential violations registered in 2004. The location of the exceedance was in Area 3 at NEPS grid point (E,-1).

The 2005 65 LDN contour decreased slightly, particularly to the south. A slight increase was noted to the north compared to the 2004 65 LDN Contour. A small portion of the contour on the west side of the airport extended beyond the IGA baseline contour, but was completely contained within the boundary of the City and County of Denver.

Noise complaints for 2005 decreased by 26% as compared to 2004. There were 2,129 complaints registered during 2005, versus 2,859 during the previous year. The number of households which registered at least one complaint during the year decreased 32%, from 209 in 2004 to 142 in 2005. The 10 households which registered the highest numbers of complaints per household accounted for 61% of all complaints received.

**Total aircraft operations at Denver International** Airport for 2005 increased by 0.2% compared to 2004.

DEN's Jeppesen Terminal at dusk

The terminal roof's outer waterproof shell is made of a Teflon coated woven fiber glass: the inner membrane is made of uncoated woven fiber glass. The inner and outer roof membrane comprise 15 acres of material



#### LAND USE MAP ADOPTION

**Denver International Air**port Design and Planning has adopted a new land use planning contour. This contour is based on current modeling and reflects the noise impacts that may be expected from full development of Denver International Airport.

You may download a copy of this map on our website: www.flydenver.com . **Click on Airport Business** and then follow the Noise Management link to find the

ARAPAHOE COUNTY DEN Recommended Noise Contours for Land Use Planning

new map. The map is in PDF format for easier viewing and printing.

#### SPECIAL POINTS OF INTEREST:

1ST THROUGH 4TH

**OUARTER NEPS TABLES** AND CONTOUR MAPS

12-19

- 1 NEPS violation, see page 7.
- Operations are up, see page 8.
- Complaints are down, see pages 8.
- **Complaint location** map, see page 9.

Please direct any questions about this map to Tom Reed in our Design and Planning Office at 303.342.4498.

#### DEN AIRPORT NOISE AND OPERATIONS SYSTEM

The DEN Airport Noise and Operations Monitoring System (ANOMS) is a state-of-the-art computer system designed to enable the City and County of Denver to monitor aircraft noise in the vicinity of the airport. In addition to monitoring noise levels, the system calculates Noise Exposure Performance Standards. (NEPS) at 101 grid points in Adams County (see map on page 3 for NEPS locations).

The DEN ANOMS system monitors noise levels at 27 permanent and 4 portable noise monitoring terminals. These terminals are located throughout the Denver metro area (see map on page 3 for RMT locations).

The system also records the movement of all aircraft in the vicinity of DEN by utilizing FAA air traffic control radar data. This makes it possible to match actual flights with noise events.

In addition, the ANOMS system records weather information from three remote stations, which include a RACAL recording device to record pilot/controller radio transmissions.



Remote Monitoring Terminal (RMT) with a weather collecting station.

#### ARTSMAP

ARTSMAP is a specially designed noise modeling program that automatically creates noise contours. ARTSMAP is designed to create contours from actual radar flight tracks that our office receives from the FAA ARTS system which is sent via modem, eliminating the need for manual data manipulation. The ARTSMAP software is installed on a computer in the Noise Abatement Office. The program analyzes, views, reports, and stores

the data. Currently, ARTS-MAP is used at several major airports nationally. It allows the DEN Noise Abatement Office to perform noise data analysis, generate daily automated noise contours, receive detailed runway utilization, and airline fleet mix identification.

"ARTSMAP is designed to create contours from actual radar flight track data..."

#### LAND USE AND ZONING

Urban growth and development in the areas surrounding DEN, particularly non-compatible residential and other noisesensitive land uses, is of utmost concern to the City and County of Denver. The Noise Office has developed noise contours surrounding the airport, inside which certain types of land uses are not recommended. The 65 Ldn noise contour (average decibel level

with a 10 decibel penalty applied to nighttime operations) is a line inside which, under Federal guidelines, no residential development should occur.

The operational 65 Ldn noise contour for the airport, as created by ARTSMAP, is included in this report. However, for DEN, the 60 Ldn noise contour is used for compatible land use planning by the surrounding jurisdictions, in accordance with guidelines promulgated by the Denver Regional Council of Governments and the Denver/ Adams County Intergovernmental Agreement. Additional mapping for DEN that includes the applicable noise contours is available upon request.



DEN's Terminal tent roof view from the South.

#### DEN NOISE HOTLINE POLICY

The purpose of the DEN Noise Complaint Hotline is to provide an opportunity for individuals to express their concerns regarding noise generated by aircraft operating at DEN. Citizens are asked to leave their name, address and the date and time of their complaint on the hotline. Complaints are downloaded daily by our Noise Analysts and then transcribed into the ANOMS

system, where specific complaints can be matched to individual flight tracks. It is essential for all information to be entered correctly in order for the system to be effective.

Profanity will not be tolerated, and will result in the complaint not being registered. Any attempt to deliberately tie-up or abuse the Hotline may result in police action. Phone harassment is a state criminal offense and can carry a jail sentence and/or fine. Threats involving aircraft and/or the airport are a very serious matter and are a federal criminal offense. To make a threat, even jokingly, will result in a notification to the Denver Police Department and may involve an FBI investigation.



DEN's FAA Control Tower is located on C Concourse. It is 327 feet tall, or 33 stories high.

#### GLOSSARY OF TERMS

**Sound:** A rapid variation in air pressure, which is perceived by the ear and brain as sound.

**Noise:** Generally considered to be any sound, which is deemed undesirable by an individual.

<u>Decibel</u>: Sound is measured by its pressure or energy in terms of decibels. The decibel scale is logarithmic; when the decibel level increases by 6 dB, the measured sound is twice as loud.

Noise Abatement: A measure or action that minimizes the amount or impact of noise on the environs of an airport. Noise abatement measures include aircraft operating procedures and use or disuse of certain runways or flight tracks. These operating procedures are controlled by the FAA.

#### A-Weighted Sound Level (dBA):

A type of sound level measurement which reduces the effect of very high and very low frequencies in order to mimic the response of the human ear. Nearly all aircraft sound level measurement is conducted using A-weighting.

#### **Equivalent Continuous Sound**

Level (Leq): A measurement of the average sound energy experienced over a period of time. This average sound level is expressed in decibels, and includes a notation of the period of time, which it covers (such as Leq (24) for an average of the sound level over a 24-hour period).

Day Night Level (Ldn): Also referred to as DNL. Similar to a Leq measurement, but is conducted over at least a 24-hour time span and includes a 10dB nighttime penalty. For an Ldn calculation, all noise that occurs at night (defined as 10:00 pm to 7:00 am) is artificially increased for the public's increased sensitivity to noise during these hours.

Noise Contour: A line surrounding an airport that encloses a geographic region, which is ex-

posed to a particular Ldn level. These contour lines are nested in such a way that contours closer to the airport generally surround areas that experience higher noise levels than contours farther out. Annual Ldn contours are used to determine whether certain types of zoning or land uses are compatible with particular annual Ldn noise levels. 65 Ldn is considered by many federal agencies to be the level at which residential land use becomes incompatible.

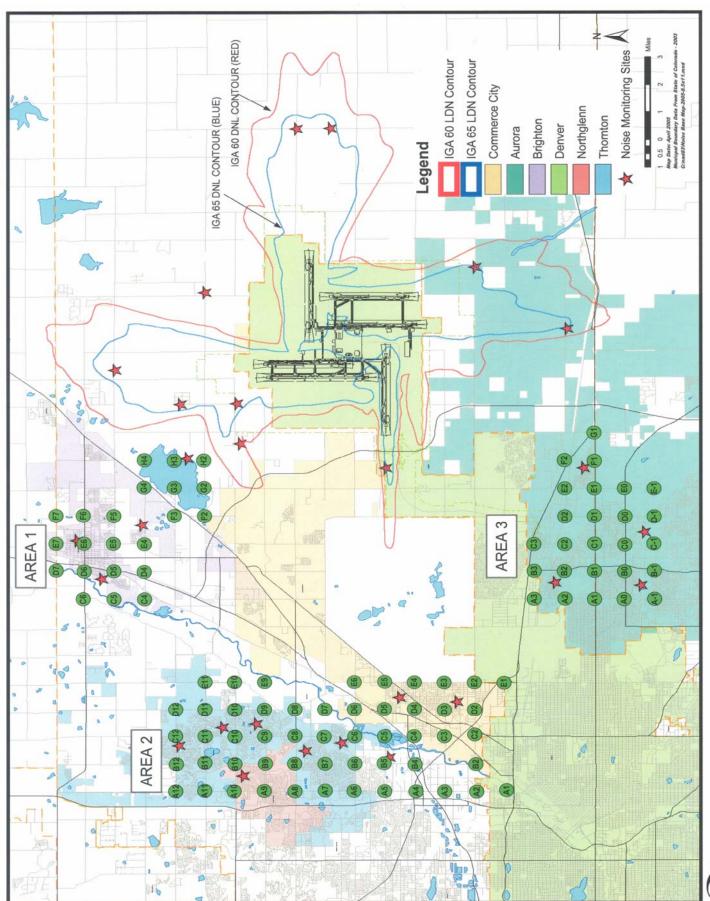
#### Remote Monitoring Terminal

(RMT): Consists of a noise level analyzer, a weatherproof microphone, a system controller, a power supply, and a dedicated telephone line to download noise data to the ANOMS system, all mounted in a weatherproof cabinet.



**DEN Arrival** 

# NOISE EXPOSURE PERFORMANCE STANDARDS (NEPS) GRID COORDINATES, IGA CONTOUR, AND REMOTE MONITORING TERMINAL (RMT) LOCATIONS

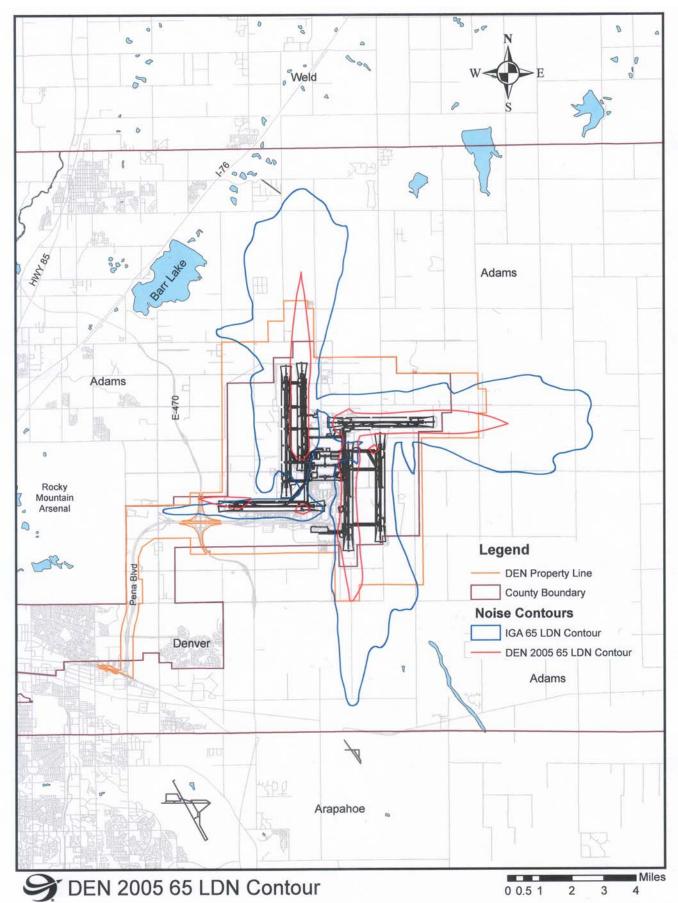


DEN Noise Exposure Points, IGA 60 and 65 LDN Contours, and Noise Monitoring Sites.

# 2005 Annual Contour and NEPS January 1, 2005 through December 31, 2005

Please Note: Does NOT include the impact of extraordinary weather to the NEPS values.

# 2005 ANNUAL - DEN 65 LDN CONTOUR



# 2005 ANNUAL — DENVER/ADAMS COUNTY IGA NEPS VALUES

	Area 2 2005								
Grid	IGA Annual	Calculated	Difference						
Points	Leq (24)	Leq (24)	Leq						
A,1	38.6	36.0	-2.6						
A,2	37.6	36.9	-0.7						
A,3	42.3	37.7	-4.6						
A,4	45.3	38.3	-7.0						
A,5	43.9	39.2	-4.8						
A,6	37.5	39.2	1.7						
A,7	37.7	39.7	2.0						
A,8	36.5	38.4	1.9						
A,9	36.3	36.2	-0.1						
A,10	37.6	35.4	-2.2						
A,11	39.2	35.4	-3.9						
A,12	41.2	35.0	-6.2						
B,2	39.5	37.2	-2.3						
B,4	42.5	39.0	-3.6 -3.2						
B,5	43.1 39.0	39.9 40.1	-3.2 1.1						
B,6 B,7	39.0	40.1	1.4						
B,8	38.0	38.6	0.6						
B,9	38.3	36.5	-1.8						
B,10	39.0	36.3	-2.7						
B,11	40.4	36.5	-3.9						
B,12	42.6	36.0	-6.7						
C,2	41.0	37.9	-3.1						
C,3	43.3	38.9	-4.4						
C,4	43.5	39.6	-3.9						
C,5	43.4	40.8	-2.6						
C,6	43.3	41.1	-2.2						
C,7	43.3	41.2	-2.1						
C,8	42.6	38.8	-3.8						
C,9	42.2	37.1	-5.1						
C,10	41.6	37.5	-4.1						
C,11	42.5	37.6	-5.0						
C,12	44.3	36.5	-7.8						
D,2	41.7	38.4	-3.3						
D,3	46.2	39.6	-6.6						
D,4	48.4	40.5	-7.9						
D,5	48.2	41.9	-6.4						
D,6	46.2	42.2	-4.0						
D,7	44.2	41.9	-2.3						
D,8	43.7	38.8	-4.9						
D,9	43.1	38.2	-4.9						
D,10	44.9	38.7	-6.3						
D,11	44.5	38.0	-6.5						
D,12	45.1	36.6	-8.5 4 0						
E,1 E,2	42.4 42.2	37.6 38.8	-4.8 -3.4						
E,2 E,3	46.7	40.4	-3.4 -6.3						
E,4	51.2	41.6	- <del>0.3</del> -9.6						
E,5	51.0	43.1	-7.9						
E,6	44.6	43.7	-1.0						
E,9	43.1	39.6	-3.5						
E,10	43.1	39.2	-3.9						
E,11	46.1	38.0	-8.1						

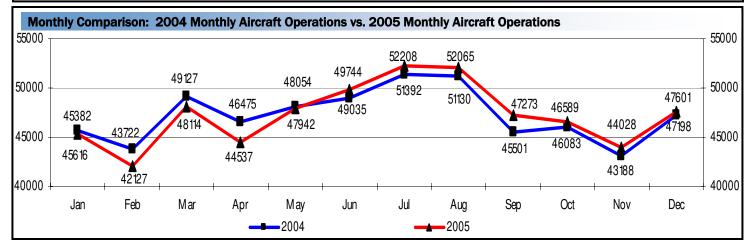
		Area 1 2005	
Grid	IGA Annual	Calculated	Difference
Points	Leq (24)	Leq (24)	Leq
C,4	44.2	35.9	-8.3
C,5	36.7	34.0	-2.7
C,6	36.0	33.2	-2.8
D,4	41.1	35.5	-5.6
D,5	34.2	34.6	0.4
D,6	36.0	34.2	-1.8
D,7	41.4	34.9	-6.6
E,4	38.3	35.5	-2.8
E,5	34.8	35.5	0.7
E,6	36.7	34.7	-2.0
E,7	41.4	34.7	-6.7
F,2	51.7	41.4	-10.3
F,3	43.7	37.7	-6.0
F,5	37.3	34.5	-2.8
F,6	38.5	34.5	-4.0
F,7	42.1	34.7	-7.4
G,2	51.2	42.1	-9.1
G,3	42.1	37.5	-4.6
G,4	40.2	35.0	-5.2
H,2	50.1	43.1	-7.0
H,3	46.0	38.0	-8.0
H,4	46.1	35.6	-10.5

	Area 3					
		2005				
Grid	IGA Annual	Calculated	Difference			
Points	Leq (24)	Leq (24)	Leq			
A,-1	38.9	32.5	-6.4			
A,0	39.6	32.8	-6.9			
A,1	43.2	33.3	-9.9			
A,2	45.7	34.3	-11.4			
A,3	45.6	35.6	-10.0			
B,-1	37.9	32.3	-5.6			
В,0	39.2	32.5	-6.7			
B,1	42.6	33.1	-9.6			
B,2	45.8	33.9	-11.9			
В,3	45.7	35.2	-10.5			
C,-1	36.7	33.0	-3.7			
C,0	37.1	33.0	-4.1			
C,1	39.5	33.3	-6.2			
C,2	44.8	34.2	-10.6			
C,3	46.5	35.4	-11.1			
D,-1	32.6	33.6	1.0			
D,0	33.3	33.7	0.4			
D,1	37.3	33.8	-3.5			
D,2	43.0	34.2	-8.8			
E,-1	31.4	33.6	2.2			
E,0	33.1	33.4	0.3			
E,1	36.2	33.4	-2.8			
E,2	40.6	34.2	-6.5			
F,1	36.5	33.1	-3.5			
F,2	39.4	33.9	-5.5			
G,1	42.5	34.4	-8.1			

# 2005 ANNUAL - DEN COMPLAINT AND OPERATIONAL STATISTICS

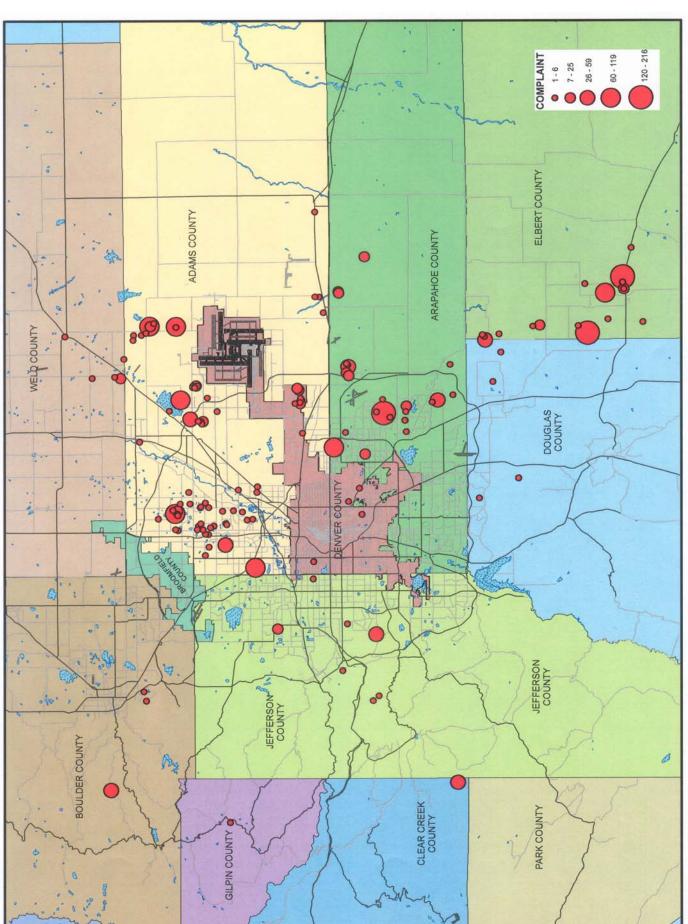
2005 Annual Nois	e Complair	nt Calls by	Commun	ity *	
Community*	No. of Calls 2005	No. of Callers 2005	No. of Calls 2004	No. of Calls 2003	Total Calls for 2005 by Community*  Westminster
Arvada	16	1	1	0	5% Thornton Arvada
Aurora	399	22	540	1,063	
Bailey	0	0	1	0	Parker 10% Watkins / 1%
Bennett	19	2	6	38	3%   1% / Aurora
Boulder	54	3	115	42	Northglenn 19%
Brighton	335	17	226	113	1% \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Broomfield	0	0	1	0	Bennett
Castle Rock	2	1	1	3	
Commerce City	230	17	258	91	170
Denver	39	13	53	77	2%
Elizabeth	500	10	495	243	
Englewood	0	0	0	1	Golden Boulder
Evergreen	59	1	151	136	1% 3%
Fort Collins	0	0	28	47	Evergreen
Fort Lupton	0	0	1	2	20/
Franktown	0	0	0	2	3% Brighton
Golden	12	4	4	2	16%
Henderson	2	1	14	63	Commerce City
Highlands Ranch	1	1	1	1	Elizabeth _ Denver 11%
Hudson	2	1	8	13	23%
Kiowa	1	1	0	1	
Lafayette	0	0	0	2	Ton Ton Complainants up All Others
Lakewood	47	2	120	511	Top Ten Complainants vs. All Others
Littleton	0	0	1	25	<u>15%</u>
Lochbuie	0	0	0	0	_14%
Louviers	0	0	1	13	
Nederland	0	0	4	64	39%— All 11%
Northglenn	28	9	16	5	Othora
Parker	54	8	161	1,246	Others 8%
Pine	0	0	0	1	
Thornton	203	20	473	325	5%
Watkins	27	5	27	21	3% 5%
Westminster	97	2	151	242	3/0-/
Wheatridge	2	1	1	1	3% / 10/
Overall Total	2,129	142	2,859	4,394	3% <sup>-/</sup> 4%
* See map on next page for lo			,	,	

<b>Monthly Comparison:</b>	2005	Noise	Com	olaint	Calls,	Daytir	ne vs.	Night	time				
Time Complaint Received	January	February	March	April	May	June	July	August	September	October	November	December	January through December Total
Day Hours (7:00 am to 9:59 pm)	64	131	240	206	172	173	193	311	188	114	35	46	1,873
Night Hours (10:00 pm to 6:59 am)	11	27	33	30	29	30	43	28	13	6	4	2	256
Total	75	158	273	236	201	203	236	339	201	120	39	48	2,129

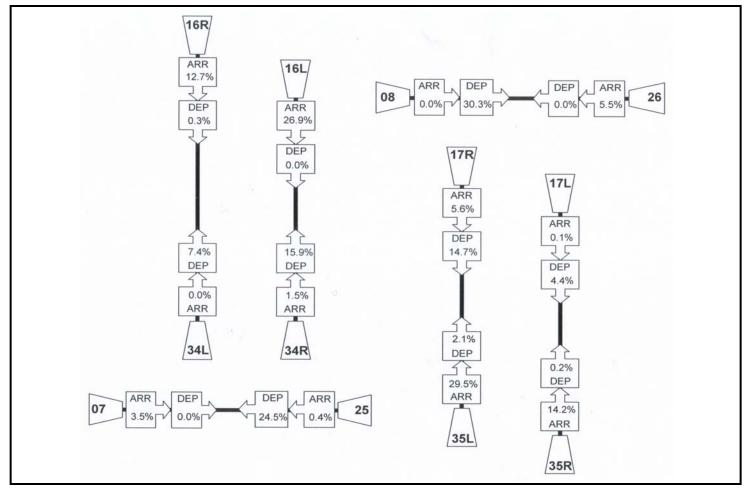


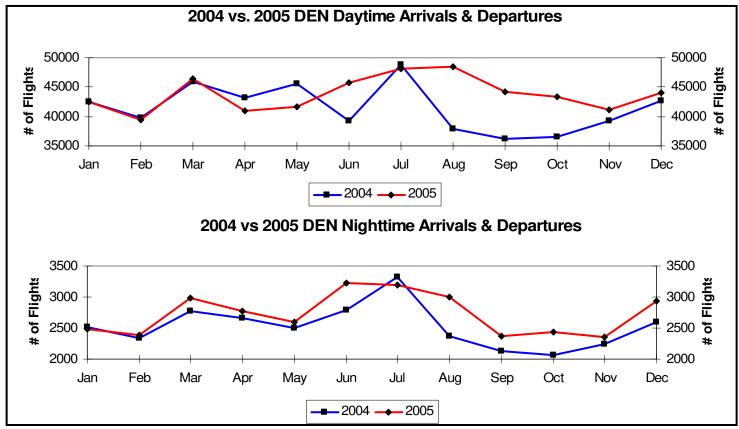
2005 DEN NOISE COMPLAINTS

# 2005 ANNUAL - DEN COMPLAINT AND OPERATIONAL STATISTICS



#### 2005 ANNUAL — DEN RUNWAY UTILIZATION

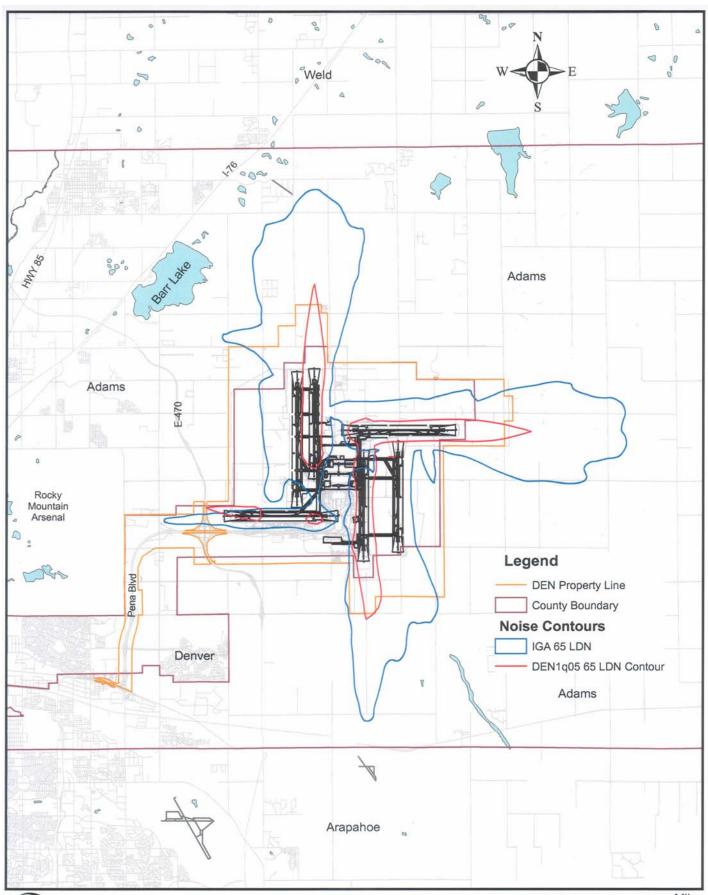




# Quarterly NEPS Tables and Contour Maps

- 1Q05: January 1, 2005 through March 31, 2005 (pages 12-13)
- 2Q05: April 1, 2005 through June 30, 2005 (pages 14-15)
- 3Q05: July 1, 2005 through September 30, 2005 (pages 16-17)
- 4Q05: October 1, 2005 through December 31, 2005 (pages 18-19)

# 1ST QUARTER 2005 - DEN 65 LDN CONTOUR



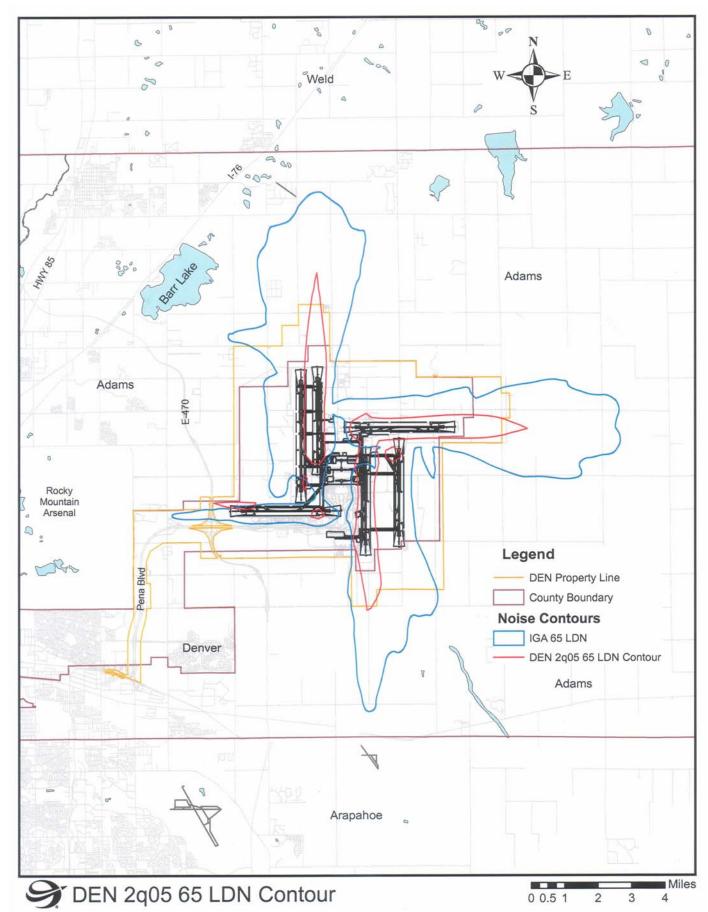
# 1ST QUARTER 2005 - DENVER/ADAMS COUNTY IGA NEPS VALUES

QUAR		Area 2	INVER, ADAM
		1Q05	
Grid	IGA Annual	Calculated	Difference
Points	Leq (24)	Leq (24)	Leq
A,1	38.6	36.2	-2.4
A,2	37.6	36.9	-0.7
A,3	42.3	37.9	-4.4
A,4	45.3	38.6	-6.7
A,5	43.9	39.1	-4.8
A,6	37.5	39.1	1.6
A,7	37.7	39.4	1.7
A,8	36.5	38.4	1.9
A,9	36.3	36.1	-0.2
A,10	37.6	34.9	-2.7
A,11	39.2	34.7	-4.5
A,12	41.2	34.2	-7.0
B,2	39.5	37.3	-2.2
B,4	42.5	39.2	-3.3
B,5	43.1	40.0	-3.1
B,6	39.0	39.9	0.9
B,7	39.0	40.1	1.1
B,8	38.0	38.6	0.6
B,9	38.3	36.3	-2.0
B,10	39.0	35.5	-3.5
B,11	40.4	35.6	-4.8
B,12	42.6	35.0	-7.6
C,2	41.0	37.9	-3.1
C,3	43.3	38.8	-4.5
C,4	43.5	39.9	-3.6
C,5	43.4	40.9	-2.6
C,6	43.3	40.8	-2.5
C,7	43.3	40.9	-2.5
C,8	42.6	38.7	-3.9
C,9	42.2	36.7	-5.5
C,10	41.6	36.5	-5.1
C,11	42.5	36.5	-6.0
C,12	44.3	35.6	-8.7
D,2	41.7	38.5	-3.3
D,3	46.2	39.5	-6.8
D,4	48.4	40.7	-7.7
D,5	48.2	41.9	-6.3
D,6	46.2	41.9	-4.4
D,7	44.2	41.5	-2.7
D,8	43.7	38.7	-5.0
D,9	43.1	37.4	-5.7
D,10	44.9	37.4	-7.5
D,11	44.5	37.2	-7.3
D,12	45.1	36.0	-9.1
É,1	42.4	38.2	-4.2
E,2	42.2	38.8	-3.4
E,3	46.7	40.2	-6.6
E,4	51.2	41.7	-9.5
E,5	51.0	43.1	-7.9
E,6	44.6	43.1	-1.5
E,9	43.1	38.4	-4.7
E,10	43.1	38.2	-4.9
E,11	46.1	37.6	-8.5

	Area 1						
	1Q05						
Grid	IGA Annual	Calculated	Difference				
Points	Leq (24)	Leq (24)	Leq				
C,4	44.2	35.1	-9.1				
C,5	36.7	33.2	-3.5				
C,6	36.0	32.3	-3.7				
D,4	41.1	34.8	-6.4				
D,5	34.2	33.7	-0.5				
D,6	36.0	33.3	-2.7				
D,7	41.4	34.2	-7.2				
E,4	38.3	35.2	-3.1				
E,5	34.8	35.3	0.5				
E,6	36.7	34.5	-2.2				
E,7	41.4	34.3	-7.1				
F,2	51.7	40.8	-10.9				
F,3	43.7	37.1	-6.6				
F,5	37.3	34.6	-2.8				
F,6	38.5	34.7	-3.8				
F,7	42.1	34.9	-7.2				
G,2	51.2	41.3	-9.9				
G,3	42.1	36.9	-5.2				
G,4	40.2	34.6	-5.6				
H,2	50.1	42.0	-8.1				
H,3	46.0	37.1	-8.9				
H,4	46.1	35.2	-10.9				

	Area 3						
	1Q05						
Grid	IGA Annual	Calculated	Difference				
Points	Leq (24)	Leq (24)	Leq				
A,-1	38.9	32.6	-6.3				
A,0	39.6	32.9	-6.7				
A,1	43.2	33.6	-9.6				
A,2	45.7	34.8	-10.9				
A,3	45.6	36.4	-9.2				
B,-1	37.9	32.4	-5.6				
B,0	39.2	32.5	-6.7				
B,1	42.6	33.1	-9.5				
B,2	45.8	34.1	-11.7				
B,3	45.7	35.9	-9.8				
C,-1	36.7	33.3	-3.4				
C,0	37.1	33.1	-4.0				
C,1	39.5	33.3	-6.2				
C,2	44.8	34.1	-10.7				
C,3	46.5	35.9	-10.6				
D,-1	32.6	33.6	1.0				
D,0	33.3	34.3	1.0				
D,1	37.3	34.2	-3.1				
D,2	43.0	34.2	-8.8				
E,-1	31.4	33.6	2.2				
E,0	33.1	33.4	0.3				
E,1	36.2	33.8	-2.4				
E,2	40.6	34.9	-5.8				
F,1	36.5	33.0	-3.5				
F,2	39.4	33.6	-5.8				
G,1	42.5	35.2	-7.3				

# 2ND QUARTER 2005 - DEN 65 LDN CONTOUR



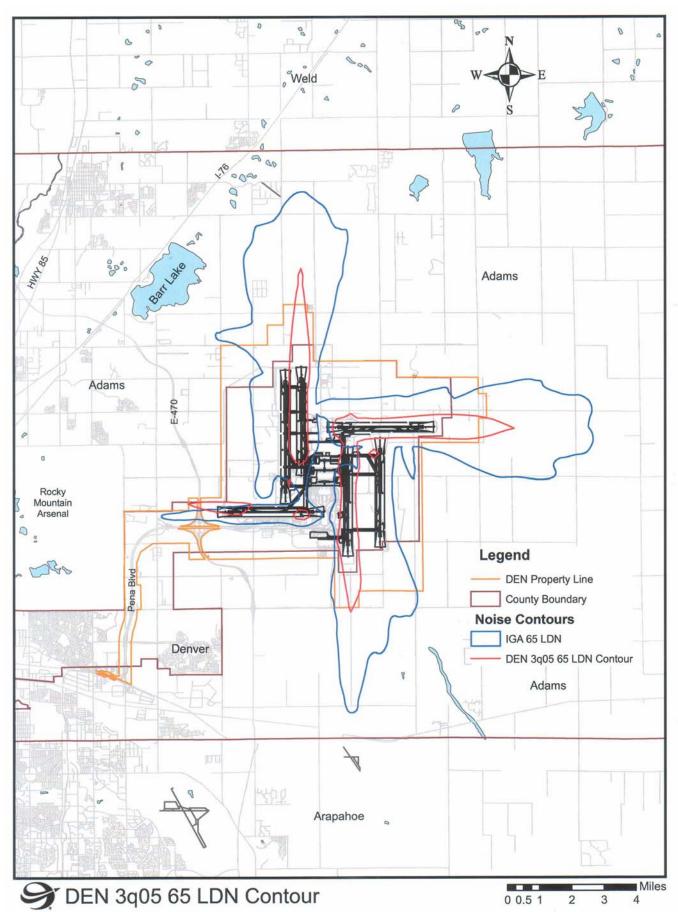
# 2ND QUARTER 2005 - DENVER/ADAMS COUNTY IGA NEPS VALUES

	Area 2 2Q05							
Grid Points	IGA Annual Leq (24)	Calculated Leq (24)	Difference Leq					
A,1	38.6	35.9	-2.8					
A,2	37.6	36.9	-0.7					
A,3	42.3	37.6	-4.7					
A,4	45.3	38.1	-7.2					
A,5	43.9	39.2	-4.8					
A,6	37.5	39.2	1.7					
A,7	37.7	39.3	1.6					
A,8	36.5	38.5	2.0					
A,9	36.3	36.4	0.1					
A,10	37.6	35.5	-2.1					
A,11	39.2	35.5	-3.7					
A,12	41.2	35.2	-6.0					
B,2	39.5	37.3	-2.2					
B,4	42.5	38.7	-3.8					
B,5	43.1	40.0	-3.2					
B,6	39.0	40.0	1.0					
B,7	39.0	40.1	1.1					
B,8	38.0	38.7	0.7					
B,9	38.3	36.8	-1.5					
B,10	39.0	36.4	-2.6					
B,11	40.4	36.6	-3.8					
B,12	42.6	36.1	-6.5					
C,2	41.0	37.8	-3.2					
C,3	43.3	39.0	-4.3					
C,4	43.5	39.5	-4.0					
C,5	43.4	40.9	-2.5					
C,6	43.3	41.0	-2.3					
C,7	43.3	40.9	-2.4					
C,8	42.6	38.8	-3.8					
C,9	42.2	37.3	-4.9					
C,10	41.6	37.6	-4.0					
C,11	42.5	37.6	-4.9					
C,12	44.3	36.7	-7.6					
D,2	41.7	38.3	-3.4					
D,3	46.2 48.4	39.7	-6.5 7.0					
D,4	48.4	40.5 42.1	-7.9 -6.1					
D,5 D,6	46.2	42.1	-6.1 -4.1					
D,6	44.2	41.7	-4.1 -2.5					
D,7	43.7	38.9	-2.5 -4.8					
D,9	43.1	38.3	-4.8					
D,10	44.9	38.7	-6.2					
D,11	44.5	38.1	-6.4					
D,12	45.1	36.8	-8.3					
E,1	42.4	37.4	-5.0					
E,2	42.2	38.8	-3.4					
E,3	46.7	40.6	-6.2					
E,4	51.2	41.6	-9.6					
E,5	51.0	43.4	-7.6					
E,6	44.6	43.4	-1.2					
E,9	43.1	39.6	-3.5					
E,10	43.1	39.3	-3.8					
E,11	46.1	38.1	-8.0					

	Area 1 2Q05						
Grid Points	IGA Annual Leq (24)	Calculated Leq (24)	Difference Leq				
C,4	44.2	36.2	-8.0				
C,5	36.7	34.4	-2.3				
C,6	36.0	33.5	-2.5				
D,4	41.1	35.9	-5.2				
D,5	34.2	34.9	0.7				
D,6	36.0	34.5	-1.5				
D,7	41.4	35.1	-6.3				
E,4	38.3	36.0	-2.3				
E,5	34.8	35.8	1.0				
E,6	36.7	34.9	-1.8				
E,7	41.4	34.9	-6.5				
F,2	51.7	41.7	-10.0				
F,3	43.7	38.2	-5.5				
F,5	37.3	34.9	-2.4				
F,6	38.5	34.8	-3.7				
F,7	42.1	34.9	-7.2				
G,2	51.2	42.6	-8.6				
G,3	42.1	38.4	-3.7				
G,4	40.2	35.9	-4.4				
H,2	50.1	44.1	-6.0				
H,3	46.0	39.2	-6.8				
H,4	46.1	36.6	-9.5				

	Area 3					
		2Q05				
Grid	IGA Annual	Calculated	Difference			
Points	Leq (24)	Leq (24)	Leq			
A,-1	38.9	33.0	-6.0			
A,0	39.6	32.9	-6.7			
A,1	43.2	33.4	-9.8			
A,2	45.7	34.2	-11.5			
A,3	45.6	35.4	-10.2			
B,-1	37.9	32.7	-5.2			
B,0	39.2	32.8	-6.4			
B,1	42.6	33.4	-9.2			
B,2	45.8	34.1	-11.7			
В,3	45.7	35.2	-10.5			
C,-1	36.7	33.3	-3.4			
C,0	37.1	33.3	-3.8			
C,1	39.5	33.6	-5.9			
C,2	44.8	34.4	-10.4			
C,3	46.5	35.2	-11.3			
D,-1	32.6	33.9	1.3			
D,0	33.3	33.8	0.5			
D,1	37.3	34.0	-3.3			
D,2	43.0	34.4	-8.6			
E,-1	31.4	33.9	2.5			
E,0	33.1	33.6	0.5			
E,1	36.2	33.7	-2.6			
E,2	40.6	34.2	-6.4			
F,1	36.5	33.4	-3.1			
F,2	39.4	34.1	-5.3			
G,1	42.5	34.5	-8.0			

# 3RD QUARTER 2005 - DEN 65 LDN CONTOUR



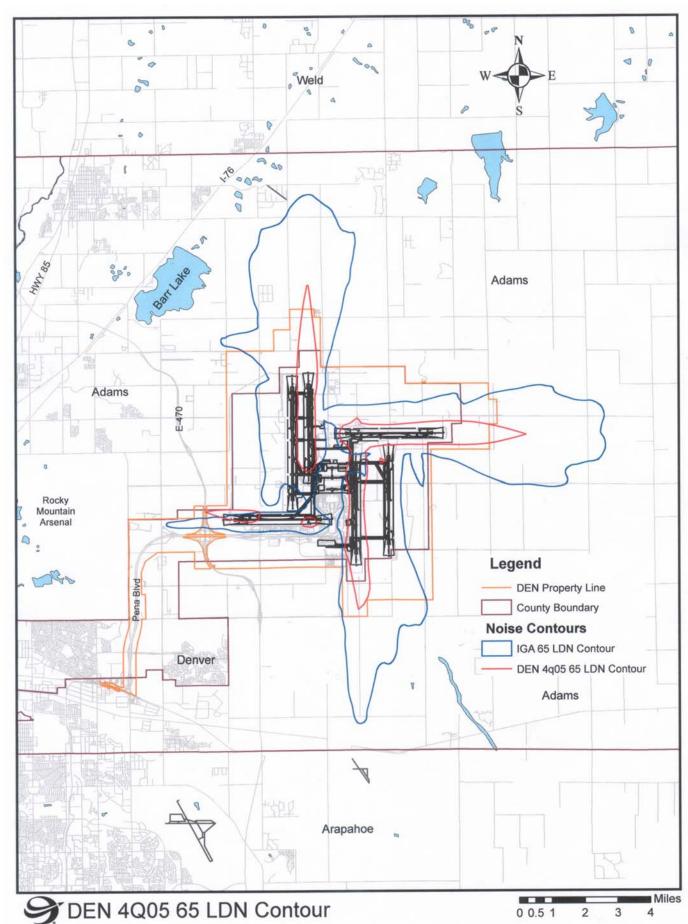
# 3RD QUARTER 2005 - DENVER/ADAMS COUNTY IGA NEPS VALUES

	Area 2 3Q05			
Grid	IGA Annual	Calculated	Difference	
Points	Leq (24)	Leq (24)	Leq	
A,1	38.6	36.3	-2.3	
A,2	37.6	37.3	-0.3	
A,3	42.3	38.3	-4.0	
A,4	45.3	38.9	-6.4	
A,5	43.9	39.8	-4.1	
A,6	37.5	40.1	2.6	
A,7	37.7	40.6	2.9	
A,8	36.5	39.1	2.6	
A,9	36.3	36.4	0.1	
A,10	37.6	36.1	-1.5	
A,11	39.2	36.5	-2.7	
A,12	41.2	36.2	-5.0	
B,2	39.5	37.6	-1.9	
B,4	42.5	39.5	-3.0	
B,5	43.1	40.5	-2.6	
B,6	39.0	41.0	2.0	
B,7	39.0	41.4	2.4	
B,8	38.0	39.1	1.1	
B,9	38.3	36.9	-1.4	
B,10	39.0	37.3	-1.7	
B,11	40.4	37.7	-2.7 -5.5	
B,12	42.6	37.1		
C,2	41.0	38.2	-2.8	
C,3	43.3	39.6	-3.7	
C,4	43.5	40.3	-3.3	
C,5	43.4	41.4	-2.0	
C,6	43.3	42.1	-1.2	
C,7	43.3	42.3	-1.1	
C,8	42.6	39.2	-3.4	
C,9	42.2	37.7	-4.5	
C,10	41.6	38.6	-3.0	
C,11	42.5	38.7	-3.8	
D,2	44.3	37.6	-6.8 -2.9	
D,2	46.2	40.3	-5.9	
D,4	48.4	41.2	-7.2	
D,5	48.2	42.5	-5.7	
D,6	46.2	43.4	-2.8	
D,7	44.2	43.0	-1.2	
D,8	43.7	39.3	-4.4	
D,9	43.1	39.0	-4.1	
D,10	44.9	39.8	-5.1	
D,11	44.5	39.0	-5.5	
D,12	45.1	37.5	-7.6	
E,1	42.4	37.9	-4.5	
E,2	42.2	39.4	-2.8	
E,3	46.7	41.1	-5.6	
E,4	51.2	42.4	-8.8	
E,5	51.0	43.7	-7.3	
E,6	44.6	45.0	0.4	
E,9	43.1	40.6	-2.5	
E,10	43.1	40.3	-2.8	
E,11	46.1	38.8	-7.3	

Area 1 3Q05			
Grid Points	IGA Annual Leq (24)	Calculated Leq (24)	Difference Leq
C,4	44.2	36.7	-7.5
C,5	36.7	34.6	-2.1
C,6	36.0	33.7	-2.3
D,4	41.1	36.2	-4.9
D,5	34.2	35.0	0.8
D,6	36.0	34.6	-1.4
D,7	41.4	35.0	-6.4
E,4	38.3	35.8	-2.5
E,5	34.8	35.7	0.9
E,6	36.7	34.7	-2.0
E,7	41.4	34.5	-6.9
F,2	51.7	43.1	-8.6
F,3	43.7	38.7	-5.0
F,5	37.3	34.4	-2.9
F,6	38.5	34.2	-4.3
F,7	42.1	34.5	-7.6
G,2	51.2	43.9	-7.3
G,3	42.1	38.8	-3.3
G,4	40.2	35.4	-4.8
H,2	50.1	44.7	-5.4
H,3	46.0	39.2	-6.8
H,4	46.1	36.1	-10.0

Area 3				
	3Q05			
Grid	IGA Annual	Calculated	Difference	
Points	Leq (24)	Leq (24)	Leq	
A,-1	38.9	32.5	-6.5	
A,0	39.6	32.9	-6.7	
A,1	43.2	33.5	-9.7	
A,2	45.7	34.4	-11.3	
A,3	45.6	35.4	-10.2	
B,-1	37.9	32.4	-5.5	
B,0	39.2	32.9	-6.3	
B,1	42.6	33.6	-9.1	
B,2	45.8	34.2	-11.6	
В,3	45.7	35.2	-10.6	
C,-1	36.7	33.3	-3.4	
C,0	37.1	33.5	-3.6	
C,1	39.5	33.9	-5.6	
C,2	44.8	34.7	-10.1	
C,3	46.5	36.1	-10.4	
D,-1	32.6	34.2	1.6	
D,0	33.3	34.2	0.9	
D,1	37.3	34.4	-2.9	
D,2	43.0	35.0	-8.0	
E,-1	31.4	34.1	2.7	
E,0	33.1	33.9	0.8	
E,1	36.2	33.9	-2.3	
E,2	40.6	34.5	-6.1	
F,1	36.5	33.6	-2.9	
F,2	39.4	34.5	-4.9	
G,1	42.5	34.4	-8.1	

# 4TH QUARTER 2005 - DEN 65 LDN CONTOUR



# 4TH QUARTER 2005 — DENVER/ADAMS COUNTY IGA NEPS VALUES

Area 2 4Q05			
Grid	IGA Annual	Calculated	Difference
Points	Leq (24)	Leq (24)	Leq
A,1	38.6	35.7	-3.0
A,2	37.6	36.2	-1.4
A,3	42.3	37.0	-5.3
A,4	45.3	37.7	-7.6
A,5	43.9	38.3	-5.6
A,6	37.5	38.6	1.1
A,7	37.7	39.1	1.4
A,8	36.5	37.9	1.4
A,9	36.3	35.6	-0.7
A,10	37.6	34.6	-3.0
A,11	39.2	34.4	-4.8
A,12	41.2	33.9	-7.3
B,2	39.5	36.7	-2.8
B,4	42.5	38.3	-4.2
B,5	43.1	39.1	-4.1
B,6	39.0	39.4	0.4
B,7	39.0	39.8	0.8
B,8	38.0	38.1	0.1
B,9	38.3	36.0	-2.3
B,10	39.0	35.7	-3.3
B,11	40.4	35.7	-4.7
B,12	42.6	35.2	-7.4
C,2	41.0	37.6	-3.4
C,3	43.3	38.2	-5.1
C,4	43.5	38.9	-4.6
C,5	43.4 43.3	39.9 40.2	-3.5 -3.1
C,6	43.3		-3.1 -2.7
C,7		40.6	-2.7 -4.2
C,8 C,9	42.6 42.2	38.4 36.8	-4.2 -5.5
C,10	41.6	37.1	-5.5 -4.5
-	42.5	36.9	-4.5 -5.6
C,11	44.3	35.8	-3.6 -8.5
C,12 D,2	41.7	37.8	-3.9
D,2	46.2	38.9	-7.3
D,3	48.4	39.5	-7.3 -8.9
D,4 D,5	48.2	40.7	-o.9 -7.5
D,5	46.2	41.3	-7.5 -4.9
D,8	44.2	41.4	-4.9 -2.8
D,7	43.7	38.5	-5.2
D,8	43.7	37.9	-5.2
D,10	44.9	38.3	-6.6
D,10	44.5	37.2	-7.3
D,12	45.1	35.6	-9.5
E,1	42.4	36.7	-5.7
E,2	42.2	37.9	-4.3
E,3	46.7	39.6	-7.1
E,4	51.2	40.5	-10.7
E,5	51.0	41.7	-9.3
E,6	44.6	42.6	-2.1
E,9	43.1	39.3	-3.8
E,10	43.1	38.8	-4.4
E,11	46.1	36.9	-9.2
		1	

Area 1 4Q05			
Grid Points	IGA Annual Leq (24)	Calculated Leq (24)	Difference Leq
C,4	44.2	35.3	-8.9
C,5	36.7	33.6	-3.1
C,6	36.0	32.8	-3.2
D,4	41.1	35.1	-6.0
D,5	34.2	34.5	0.3
D,6	36.0	34.2	-1.8
D,7	41.4	35.0	-6.5
E,4	38.3	35.1	-3.2
E,5	34.8	35.5	0.7
E,6	36.7	34.8	-1.9
E,7	41.4	35.1	-6.3
F,2	51.7	39.2	-12.5
F,3	43.7	36.0	-7.7
F,5	37.3	34.2	-3.1
F,6	38.5	34.3	-4.2
F,7	42.1	34.6	-7.5
G,2	51.2	39.8	-11.4
G,3	42.1	35.6	-6.5
G,4	40.2	33.8	-6.4
H,2	50.1	40.9	-9.2
H,3	46.0	35.9	-10.1
H,4	46.1	34.1	-12.0

Area 3 4Q05			
Grid	IGA Annual	Calculated	Difference
Points	Leq (24)	Leq (24)	Leq
A,-1	38.9	31.8	-7.1
A,0	39.6	32.1	-7.5
A,1	43.2	32.7	-10.5
A,2	45.7	33.7	-12.0
A,3	45.6	34.9	-10.8
B,-1	37.9	31.4	-6.5
B,0	39.2	31.7	-7.5
B,1	42.6	32.1	-10.5
B,2	45.8	33.0	-12.8
В,3	45.7	34.3	-11.4
C,-1	36.7	31.8	-4.9
C,0	37.1	31.9	-5.2
C,1	39.5	32.2	-7.3
C,2	44.8	33.1	-11.7
C,3	46.5	33.9	-12.6
D,-1	32.6	32.6	0.0
D,0	33.3	32.6	-0.8
D,1	37.3	32.6	-4.7
D,2	43.0	33.0	-10.0
E,-1	31.4	32.7	1.3
E,0	33.1	32.3	-0.8
E,1	36.2	32.2	-4.0
E,2	40.6	32.7	-7.9
F,1	36.5	32.1	-4.4
F,2	39.4	33.1	-6.3
G,1	42.5	33.3	-9.2

#### **DEN IS TEN!**

February 27, 1995. It was called Push Night. A winter storm threatened. At Denver's worn and venerable Stapleton Airport, the airlines had cut back flight schedules and were keeping skeleton crews. In the evening dusk, lines of tugs hauled equipment northward in the largest logistical movement of the time outside of a full-scale military mobilization.

The last flight out of Stapleton left at 9:00 p.m. that evening, a Continental DC-10 bound non-stop for London's Gatwick Airport. The following morning at 6:00 a.m. a United Airlines Boeing 737 from Colorado Springs landed at the first major built-from-the-ground-up airport in the United States since the 1970s—Denver International Airport (DEN).

Shortly thereafter, in a driving snowstorm that would have nearly halted operations at the now-closed Stapleton Airport, three aircraft landed simultaneously in near-zero visibility on DEN's three parallel Category IIIb ILS (Instrument Landing System) runways, a feat that had never before been accomplished at any airport in the world.

Denver International Airport celebrated it's 10th year of operation on February 28, 2005. Since the first flight arrived on a snowy morning over 350 million passengers have flown through DEN. Denver International Airport currently ranks as the fifth-busiest airport in North America and the 10th-busiest in the world.

**Source:** Sunday, February 27th, 2005 Special Feature to the Denver Post and the Rocky Mountain News.





#### VISION

Working together, we will be the world's finest airport.

#### MISSION

Enhancing economic prosperity and quality of life in the Denver region by connecting its people and products to the world.

Leading the aviation industry in safety, service, convenience, efficiency, innovative practices, aesthetics and financial strength.

Please visit <u>www.flydenver.com</u> for other DEN Noise Office Reports and information.

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