



DEN 2004 Annual Noise Report



Annual Report News

There were two potential Class II violations during 2004. This was an improvement from the three potential violations registered in 2003. One exceedance was located in NEPS Area 2, with the other located in Area 3.

The 65 L_{dn} contour decreased in overall size very slightly, particularly to the east, south, and west. 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 2004 **decreased by 35%** as compared to 2003. There were 2,859 complaints registered during 2004, versus 4,394 during the previous year. The number of households which registered at least one complaint during the year increased slightly, from 191 in 2003 to 209 in 2004. The 10 households which registered the highest numbers of complaints per household accounted for just under half (49%) of all complaints received.

Total aircraft operations at Denver International Airport for 2004 increased 11.1% compared to 2003.

DEN Airport Noise and Operations Monitoring 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.

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, ARTSMAP 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.

Land Use/Zoning



Urban growth and development in the areas surrounding DEN, particularly non-compatible residential and other noise-sensitive 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 L_{dn} 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 L_{dn} noise contour for the airport, as created by ARTSMAP, is included in this report. However, for DEN, the 60 L_{dn} 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.



DENVER INTERNATIONAL
AIRPORT

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. We have five methods for registering complaints; they include calling the Hotline at (303) 342-2380, or toll free 1-800-417-2988, they may be faxed to (303) 342-2366, or sent to our email address Noise.Office@diadenver.net, or by using our new online form on our website <http://flydenver.com/biz/noise/complain.asp> just click on the *Complaint* tab to get to the online form.

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.



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.

Decibel: 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 exposed 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.



Questions / Comments

We have tried to make it easier for you to contact the Noise Abatement Office. If you have any questions or comments, please feel free to contact us by using any of the methods listed below.



DEN Noise Abatement Office Computer Room

Phone: (303) 342-2000

Fax: (303) 342-2366

Email: Noise.Office@diadenver.net

Website: www.flydenver.com
Click on Airport Business and then click on Noise Management.

Mailing Address:

Denver International Airport
Noise Office
8500 Peña Boulevard
Airport Office Building, 6th Floor
Denver, CO 80249

Noise Complaint Hotline:

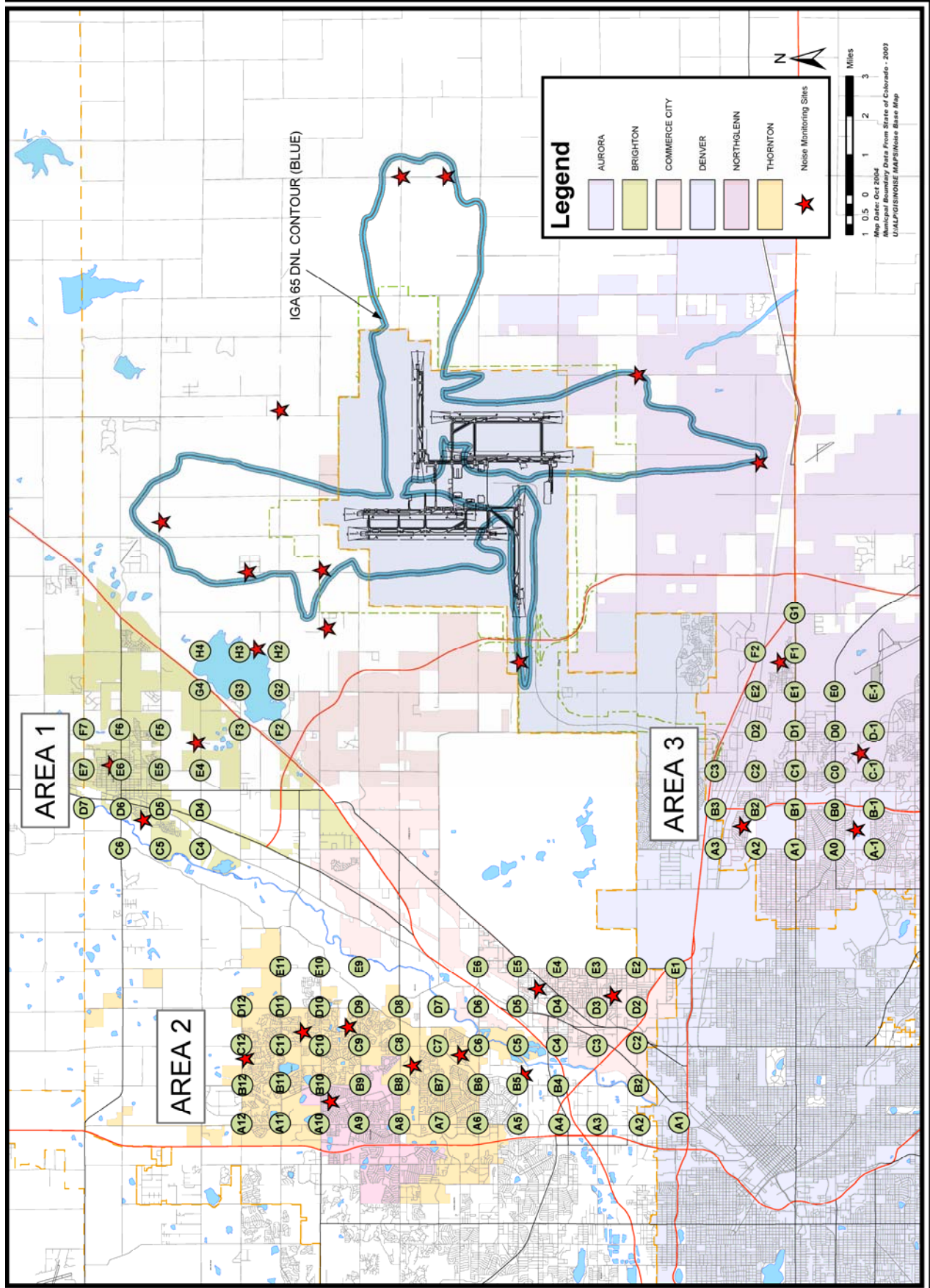
(303) 342-2380

Toll Free 1-800-417-2988



DENVER INTERNATIONAL
AIRPORT

Noise Exposure Performance Standards (NEPS) Grid Coordinates, IGA Contour, and Remote Monitoring Terminals (RMT) Locations

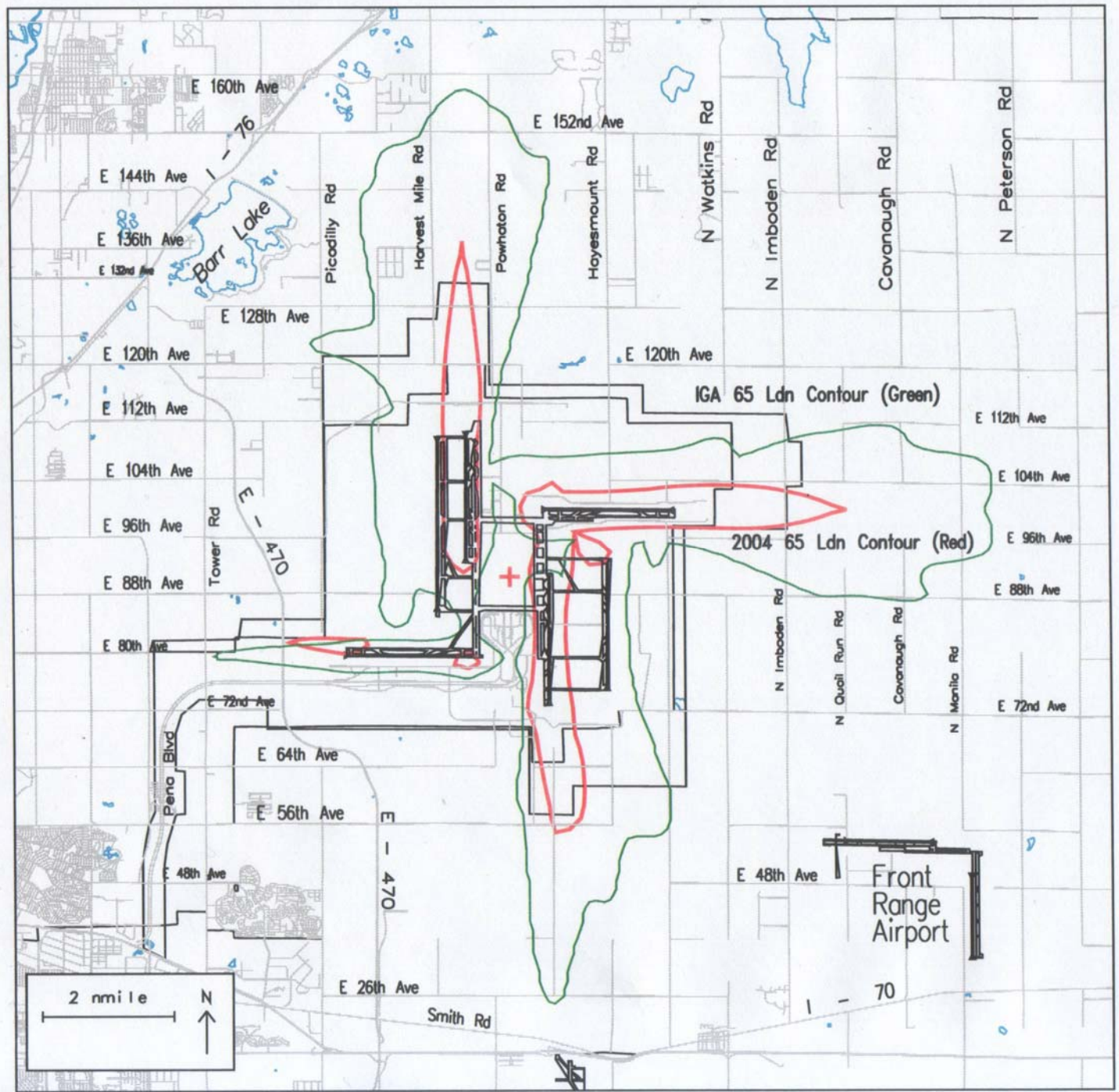


DEN 2004 Annual

January 1, 2004 – December 31, 2004

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

2004 Annual – DEN 65 Ldn Contour



2004 - Denver/Adams County IGA NEPS Values

| Area 2 | | | |
|-------------|---------------------|---------------------|----------------|
| 2004 Annual | | | |
| Grid Points | IGA Annual Leq (24) | Calculated Leq (24) | Difference Leq |
| A,1 | 38.6 | 36.6 | -2.0 |
| A,2 | 37.6 | 37.1 | -0.6 |
| A,3 | 42.3 | 37.7 | -4.6 |
| A,4 | 45.3 | 38.5 | -6.8 |
| A,5 | 43.9 | 39.3 | -4.6 |
| A,6 | 37.5 | 39.3 | 1.8 |
| A,7 | 37.7 | 39.7 | 2.0 |
| A,8 | 36.5 | 38.8 | 2.3 |
| A,9 | 36.3 | 36.6 | 0.3 |
| A,10 | 37.6 | 35.3 | -2.3 |
| A,11 | 39.2 | 35.0 | -4.2 |
| A,12 | 41.2 | 34.5 | -6.7 |
| B,2 | 39.5 | 37.5 | -2.1 |
| B,4 | 42.5 | 39.0 | -3.5 |
| B,5 | 43.1 | 40.0 | -3.1 |
| B,6 | 39.0 | 40.0 | 1.0 |
| B,7 | 39.0 | 40.5 | 1.5 |
| B,8 | 38.0 | 38.9 | 0.9 |
| B,9 | 38.3 | 36.6 | -1.7 |
| B,10 | 39.0 | 35.9 | -3.1 |
| B,11 | 40.4 | 35.9 | -4.5 |
| B,12 | 42.6 | 35.4 | -7.2 |
| C,2 | 41.0 | 38.1 | -2.9 |
| C,3 | 43.3 | 38.8 | -4.5 |
| C,4 | 43.5 | 39.6 | -3.9 |
| C,5 | 43.4 | 40.9 | -2.5 |
| C,6 | 43.3 | 40.9 | -2.5 |
| C,7 | 43.3 | 41.2 | -2.1 |
| C,8 | 42.6 | 39.0 | -3.6 |
| C,9 | 42.2 | 37.0 | -5.2 |
| C,10 | 41.6 | 37.0 | -4.6 |
| C,11 | 42.5 | 37.1 | -5.4 |
| C,12 | 44.3 | 36.4 | -7.9 |
| D,2 | 41.7 | 38.7 | -3.0 |
| D,3 | 46.2 | 39.5 | -6.7 |
| D,4 | 48.4 | 40.4 | -8.0 |
| D,5 | 48.2 | 41.9 | -6.3 |
| D,6 | 46.2 | 41.9 | -4.3 |
| D,7 | 44.2 | 41.9 | -2.3 |
| D,8 | 43.7 | 39.1 | -4.6 |
| D,9 | 43.1 | 38.0 | -5.1 |
| D,10 | 44.9 | 38.4 | -6.5 |
| D,11 | 44.5 | 38.1 | -6.4 |
| D,12 | 45.1 | 37.1 | -8.0 |
| E,1 | 42.4 | 38.4 | -4.1 |
| E,2 | 42.2 | 39.1 | -3.1 |
| E,3 | 46.7 | 40.3 | -6.5 |
| E,4 | 51.2 | 41.3 | -9.9 |
| E,5 | 51.0 | 43.2 | -7.9 |
| E,6 | 44.6 | 43.2 | -1.4 |
| E,9 | 43.1 | 39.6 | -3.5 |
| E,10 | 43.1 | 39.5 | -3.6 |
| E,11 | 46.1 | 38.6 | -7.5 |

| Area 1 | | | |
|-------------|---------------------|---------------------|----------------|
| 2004 Annual | | | |
| Grid Points | IGA Annual Leq (24) | Calculated Leq (24) | Difference Leq |
| C,4 | 44.2 | 36.3 | -7.9 |
| C,5 | 36.7 | 34.2 | -2.5 |
| C,6 | 36.0 | 33.1 | -2.9 |
| D,4 | 41.1 | 35.7 | -5.4 |
| D,5 | 34.2 | 34.4 | 0.2 |
| D,6 | 36.0 | 33.7 | -2.3 |
| D,7 | 41.4 | 34.3 | -7.1 |
| E,4 | 38.3 | 36.4 | -1.9 |
| E,5 | 34.8 | 36.2 | 1.4 |
| E,6 | 36.7 | 35.5 | -1.2 |
| E,7 | 41.4 | 35.1 | -6.3 |
| F,2 | 51.7 | 41.4 | -10.3 |
| F,3 | 43.7 | 38.6 | -5.1 |
| F,5 | 37.3 | 36.3 | -1.1 |
| F,6 | 38.5 | 36.4 | -2.1 |
| F,7 | 42.1 | 36.6 | -5.5 |
| G,2 | 51.2 | 42.0 | -9.3 |
| G,3 | 42.1 | 38.6 | -3.5 |
| G,4 | 40.2 | 36.3 | -3.9 |
| H,2 | 50.1 | 43.0 | -7.1 |
| H,3 | 46.0 | 38.9 | -7.2 |
| H,4 | 46.1 | 36.6 | -9.5 |

| Area 3 | | | |
|-------------|---------------------|---------------------|----------------|
| 2004 Annual | | | |
| Grid Points | IGA Annual Leq (24) | Calculated Leq (24) | Difference Leq |
| A,-1 | 38.9 | 33.1 | -5.8 |
| A,0 | 39.6 | 33.4 | -6.2 |
| A,1 | 43.2 | 34.1 | -9.1 |
| A,2 | 45.7 | 35.6 | -10.2 |
| A,3 | 45.6 | 36.9 | -8.7 |
| B,-1 | 37.9 | 33.1 | -4.8 |
| B,0 | 39.2 | 33.1 | -6.1 |
| B,1 | 42.6 | 33.8 | -8.8 |
| B,2 | 45.8 | 35.1 | -10.7 |
| B,3 | 45.7 | 36.9 | -8.8 |
| C,-1 | 36.7 | 33.5 | -3.3 |
| C,0 | 37.1 | 33.6 | -3.5 |
| C,1 | 39.5 | 34.1 | -5.4 |
| C,2 | 44.8 | 35.2 | -9.6 |
| C,3 | 46.5 | 37.0 | -9.5 |
| D,-1 | 32.6 | 34.1 | 1.5 |
| D,0 | 33.3 | 34.1 | 0.8 |
| D,1 | 37.3 | 34.5 | -2.8 |
| D,2 | 43.0 | 35.4 | -7.6 |
| E,-1 | 31.4 | 34.2 | 2.8 |
| E,0 | 33.1 | 34.0 | 0.9 |
| E,1 | 36.2 | 34.5 | -1.7 |
| E,2 | 40.6 | 35.7 | -4.9 |
| F,1 | 36.5 | 34.1 | -2.4 |
| F,2 | 39.4 | 36.0 | -3.4 |
| G,1 | 42.5 | 34.8 | -7.7 |

2004 – DEN Complaint Statistics

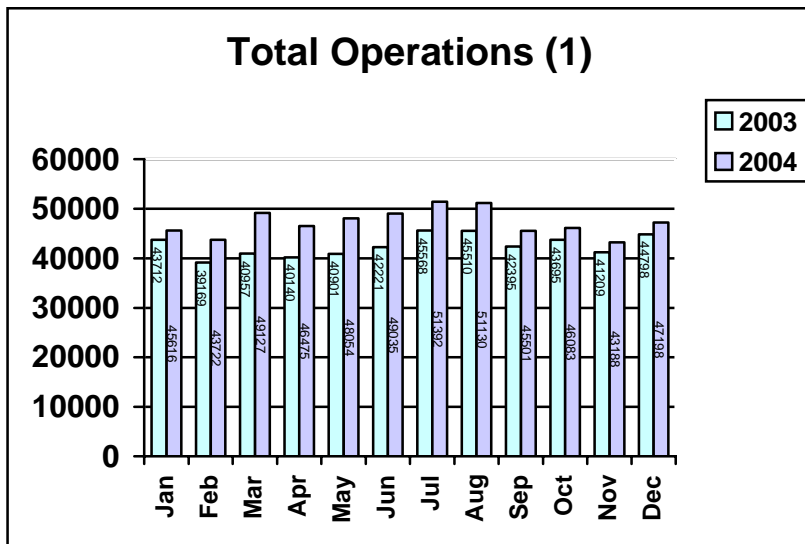
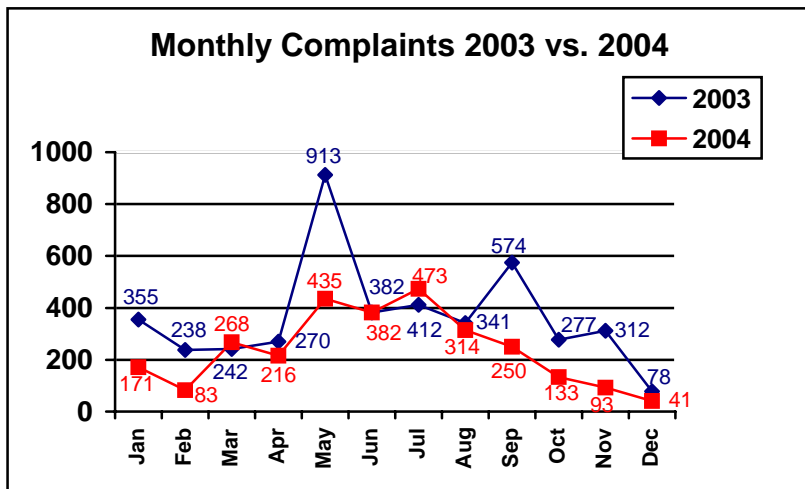
| Number of Complaints | 2003 | 2004 |
|--|-------------|---------|
| Total number of noise complaints | 4,394 | 2,859 |
| Total number of hotline callers/households | 191/191 | 209/209 |
| Max # of complaints by an individual/household | 1,151/1,151 | 279/279 |

| Breakdown by time of day | 2003 | % | 2004 | % |
|----------------------------------|--------------|------------|--------------|------------|
| Day Hours (7:00 am – 9:59 pm) | 3,647 | 83 | 2,515 | 87 |
| Night Hours (10:00 pm – 6:59 am) | 747 | 17 | 344 | 13 |
| All Hours | 4,394 | 100 | 2,859 | 100 |

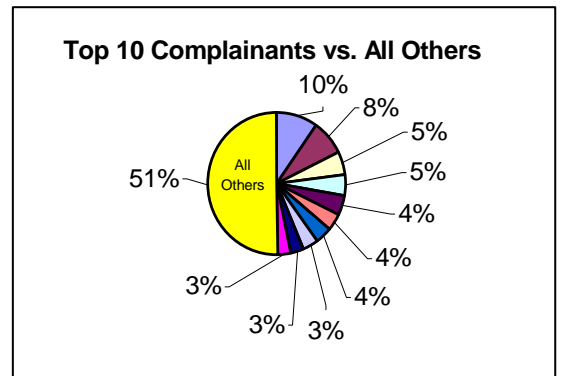
| Breakdown By Month | | | | | | | |
|--------------------|------------|--------------|-----|--------------|-----|------------|-----|
| 1q04 | | 2q04 | | 3q04 | | 4q04 | |
| January | 171 | April | 216 | July | 473 | October | 133 |
| February | 83 | May | 435 | August | 314 | November | 93 |
| March | 268 | June | 382 | September | 250 | December | 41 |
| Total | 522 | 1,033 | | 1,037 | | 267 | |

| City | City Total | Households | Max # * |
|-----------------|--------------|------------|--------------|
| Arvada | 1 | 1 | 1 |
| Aurora | 540 | 24 | 152 |
| Bailey | 1 | 1 | 1 |
| Bennett | 6 | 2 | 4 |
| Boulder | 115 | 5 | 49 |
| Brighton | 226 | 21 | 67 |
| Broomfield | 1 | 1 | 1 |
| Castle Rock | 1 | 1 | 1 |
| Commerce City | 258 | 19 | 112 |
| Conifer | 0 | 0 | 0 |
| Denver | 53 | 27 | 6 |
| Elizabeth | 495 | 8 | 279 |
| Englewood | 0 | 0 | 0 |
| Estes Park | 0 | 0 | 0 |
| Evergreen | 151 | 2 | 87 |
| Federal Heights | 0 | 0 | 0 |
| Fort Collins | 28 | 1 | 28 |
| Fort Lupton | 1 | 1 | 1 |
| Franktown | 0 | 0 | 0 |
| Golden | 4 | 2 | 2 |
| Henderson | 14 | 6 | 5 |
| Highlands Ranch | 1 | 1 | 1 |
| Hudson | 8 | 5 | 3 |
| Kiowa | 0 | 0 | 0 |
| Lafayette | 0 | 0 | 0 |
| Lakewood | 120 | 3 | 116 |
| Larkspur | 0 | 0 | 0 |
| Littleton | 1 | 1 | 1 |
| Lochbuie | 0 | 0 | 0 |
| Lonetree | 0 | 0 | 0 |
| Louisville | 0 | 0 | 0 |
| Louviers | 1 | 1 | 1 |
| Lyons | 0 | 0 | 0 |
| Morrison | 0 | 0 | 0 |
| Nederland | 4 | 1 | 4 |
| Northglenn | 16 | 5 | 7 |
| Parker | 161 | 16 | 98 |
| Pine | 0 | 0 | 0 |
| Sedalia | 0 | 0 | 0 |
| Superior | 0 | 0 | 0 |
| Thornton | 473 | 44 | 226 |
| Watkins | 27 | 3 | 24 |
| Westminster | 151 | 6 | 124 |
| Wheatridge | 1 | 1 | 1 |
| Windsor | 0 | 0 | 0 |
| Total | 2,859 | 209 | 1,402 |

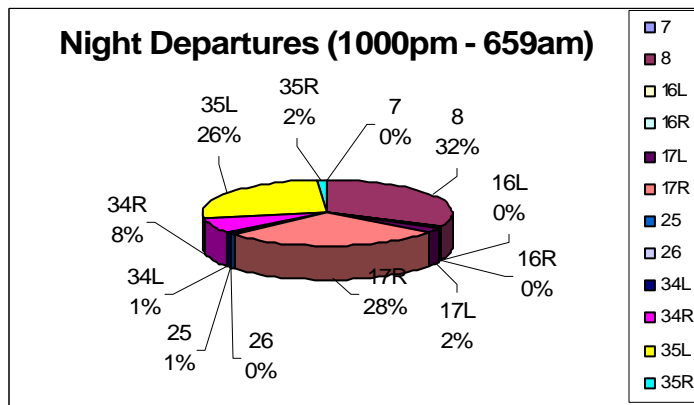
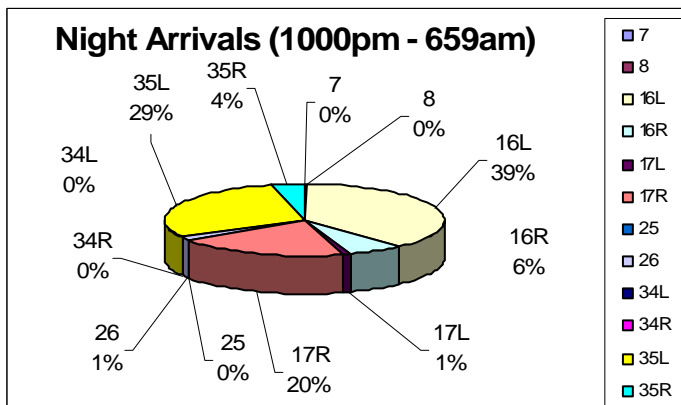
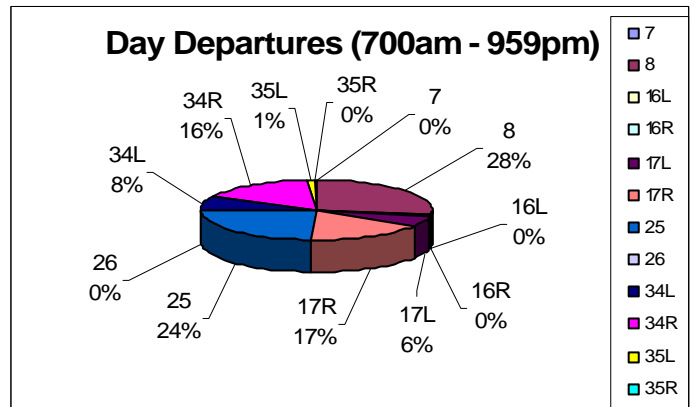
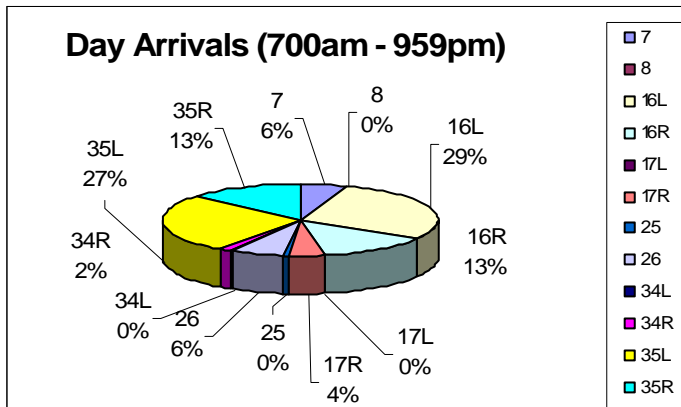
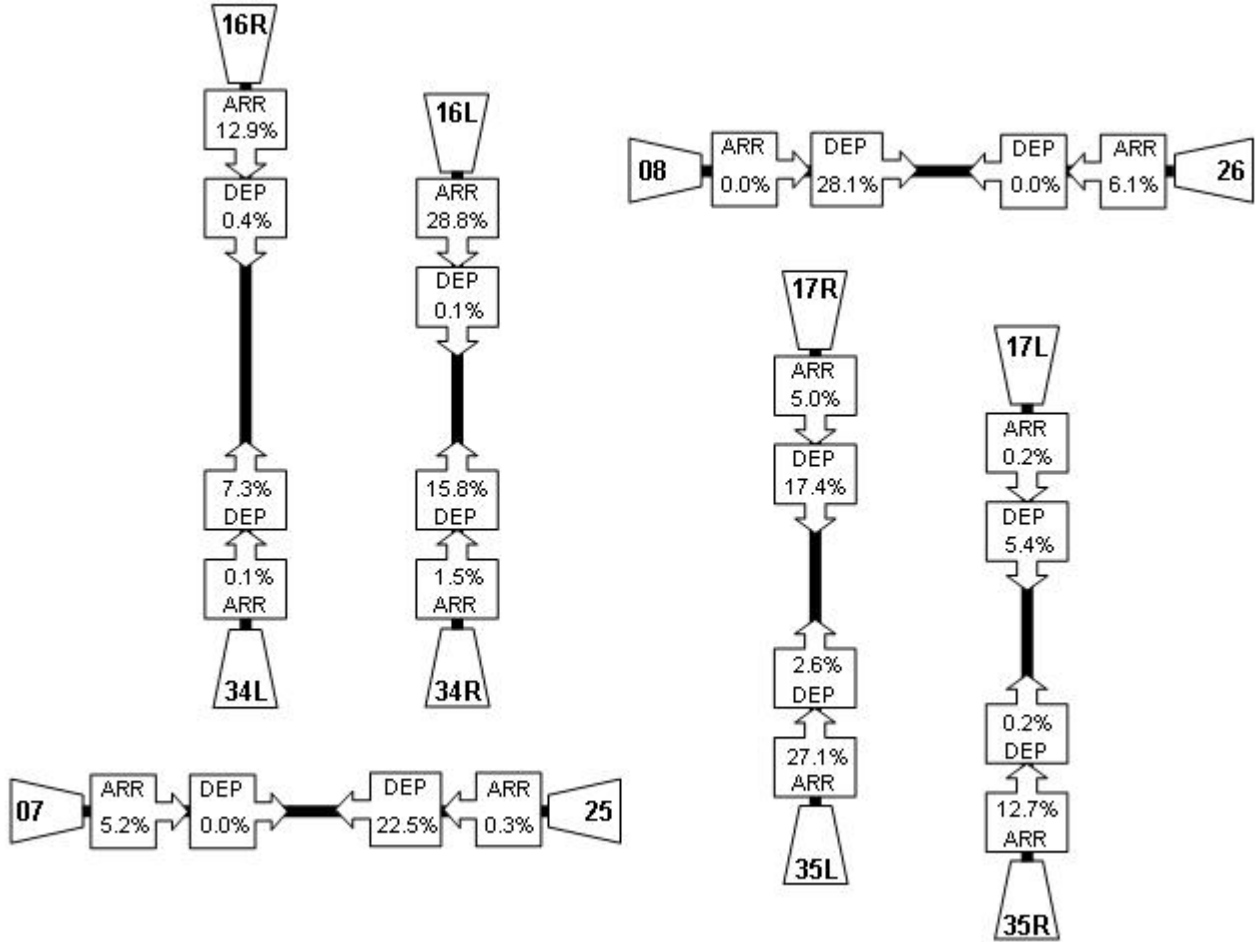
* This column further breaks down the household category by depicting the highest number of complaints from an individual household.



(1) Total Operations includes Air Carrier, General Aviation, Military, and Air Taxi. Source: Federal Aviation Administration



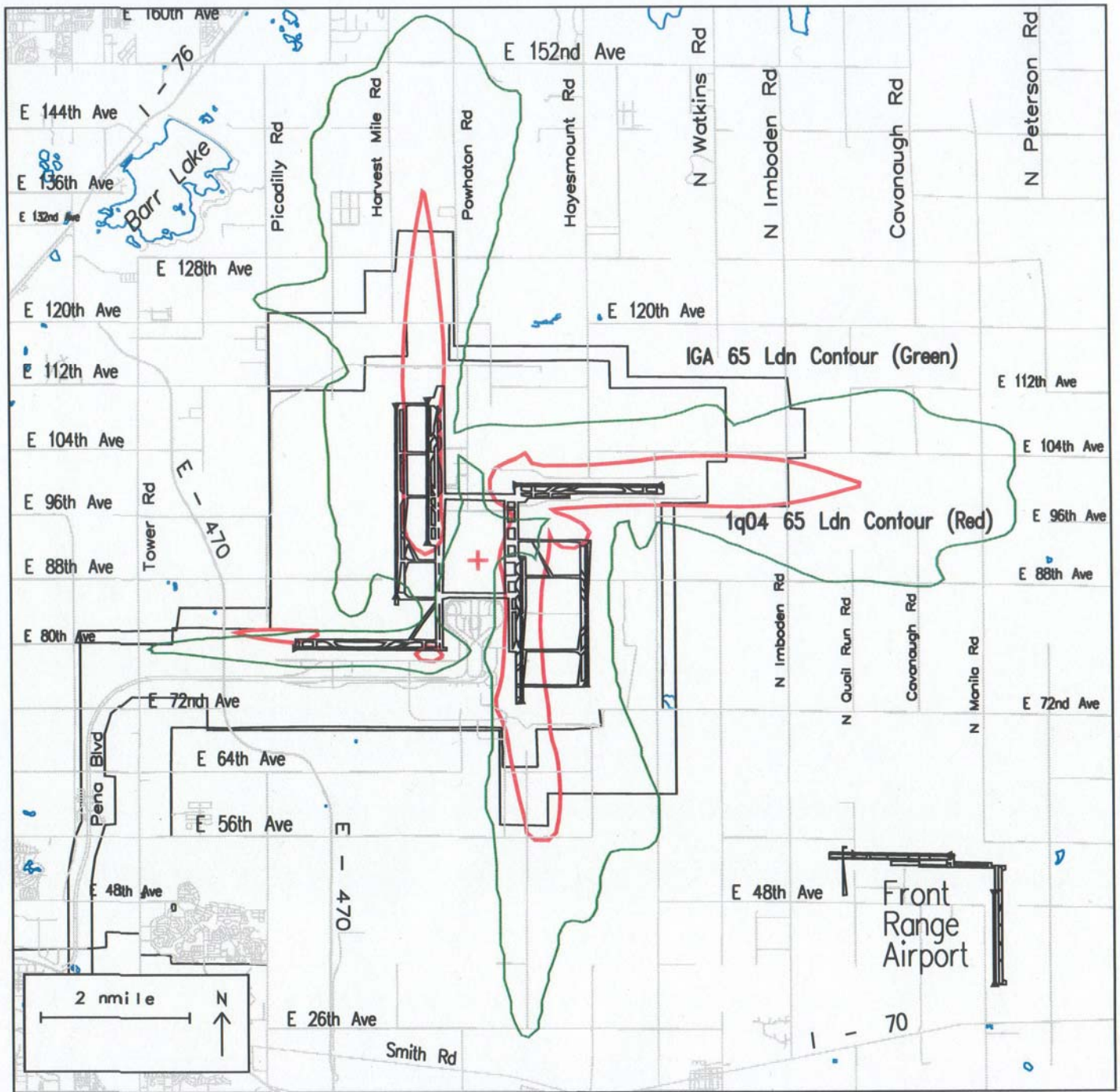
2004 - Runway Utilization



First Quarter 2004

January 1, 2004 – March 31, 2004

1st Quarter 2004 - 65 Ldn Contour



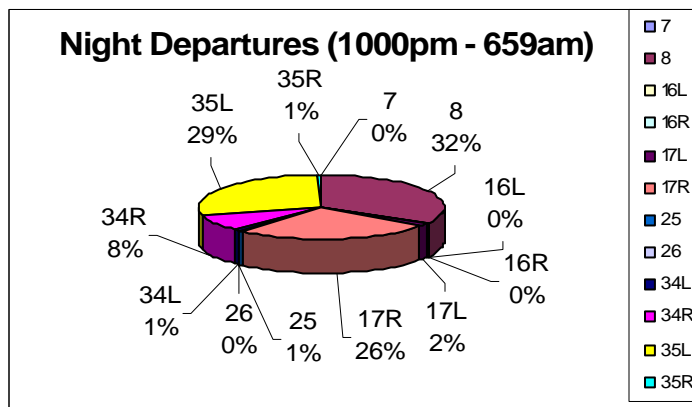
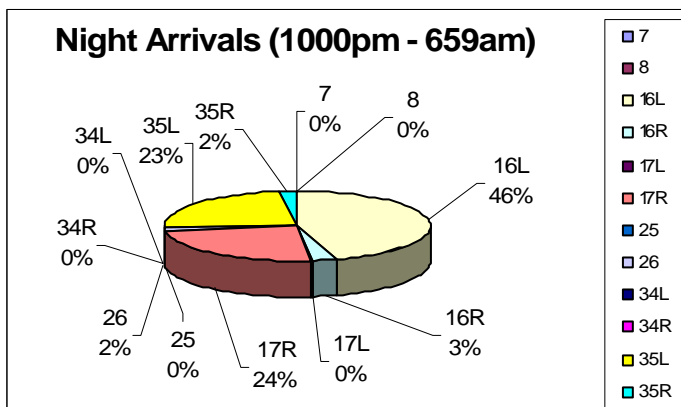
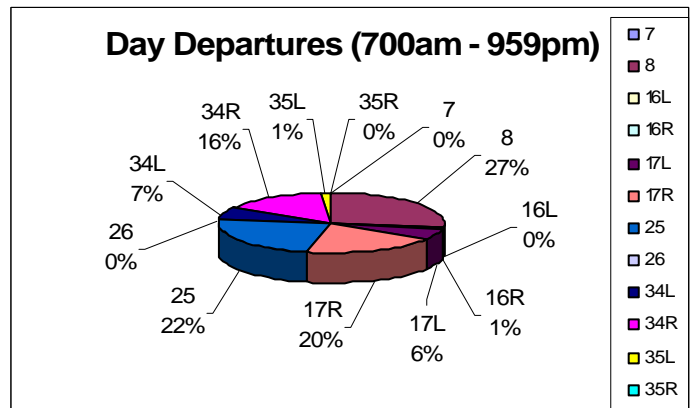
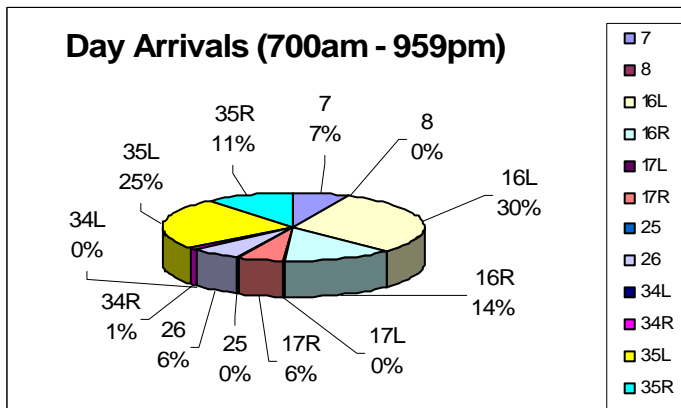
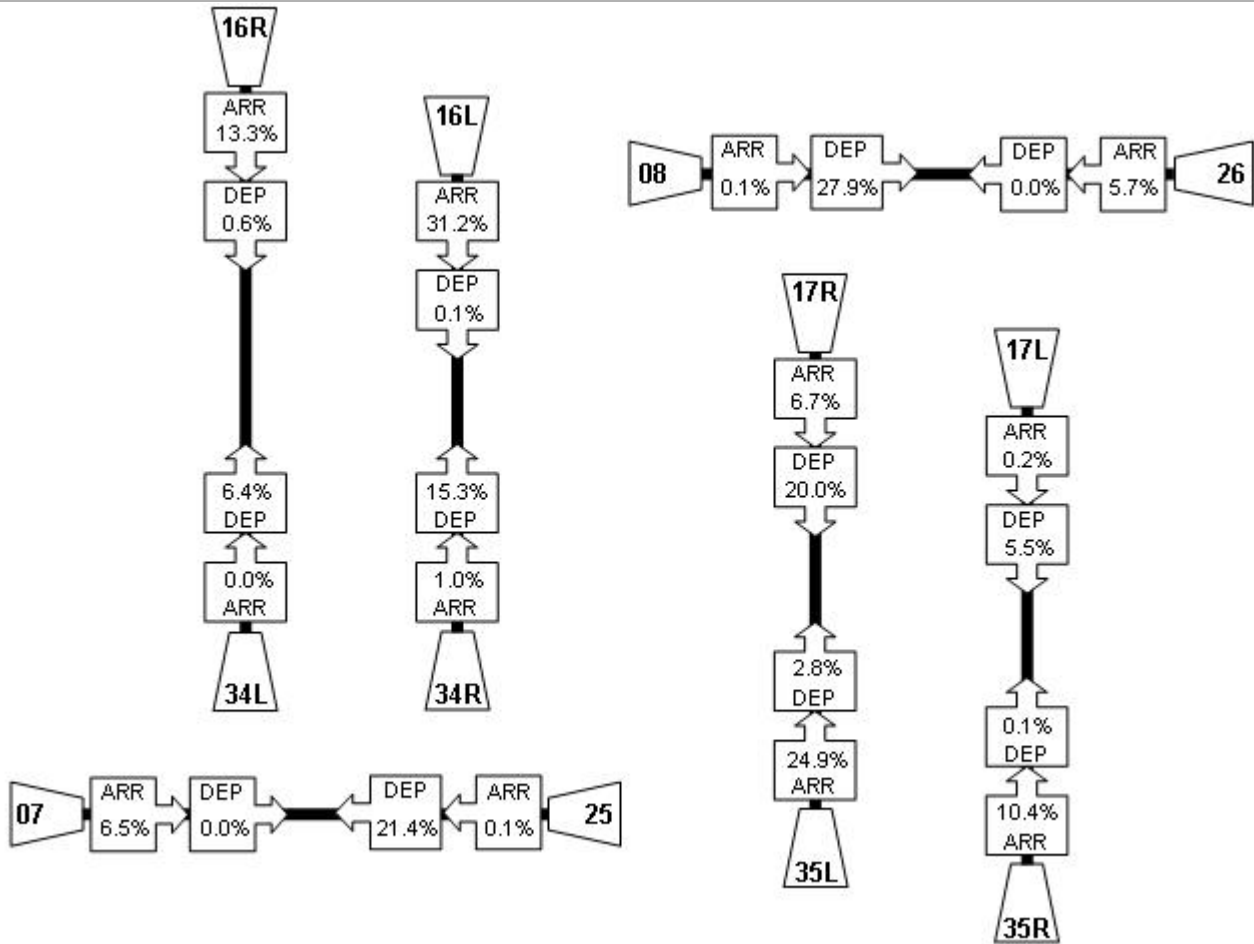
1st Quarter 2004 - Denver/Adams County IGA NEPS Values

| Area 2 | | | |
|------------------------------|---------------------|---------------------|----------------|
| 1 st Quarter 2004 | | | |
| Grid Points | IGA Annual Leq (24) | Calculated Leq (24) | Difference Leq |
| A,1 | 38.6 | 37.0 | -1.6 |
| A,2 | 37.6 | 37.3 | -0.3 |
| A,3 | 42.3 | 37.9 | -4.4 |
| A,4 | 45.3 | 38.5 | -6.8 |
| A,5 | 43.9 | 39.3 | -4.6 |
| A,6 | 37.5 | 39.2 | 1.7 |
| A,7 | 37.7 | 39.4 | 1.7 |
| A,8 | 36.5 | 38.5 | 2.0 |
| A,9 | 36.3 | 36.3 | 0.0 |
| A,10 | 37.6 | 35.1 | -2.5 |
| A,11 | 39.2 | 34.6 | -4.6 |
| A,12 | 41.2 | 34.0 | -7.2 |
| B,2 | 39.5 | 37.7 | -1.8 |
| B,4 | 42.5 | 39.0 | -3.5 |
| B,5 | 43.1 | 40.1 | -3.0 |
| B,6 | 39.0 | 39.9 | 0.9 |
| B,7 | 39.0 | 40.2 | 1.2 |
| B,8 | 38.0 | 38.7 | 0.7 |
| B,9 | 38.3 | 36.5 | -1.8 |
| B,10 | 39.0 | 35.9 | -3.2 |
| B,11 | 40.4 | 35.6 | -4.8 |
| B,12 | 42.6 | 35.1 | -7.6 |
| C,2 | 41.0 | 38.3 | -2.7 |
| C,3 | 43.3 | 38.9 | -4.4 |
| C,4 | 43.5 | 39.7 | -3.8 |
| C,5 | 43.4 | 41.0 | -2.4 |
| C,6 | 43.3 | 40.6 | -2.7 |
| C,7 | 43.3 | 40.8 | -2.5 |
| C,8 | 42.6 | 38.8 | -3.8 |
| C,9 | 42.2 | 37.0 | -5.2 |
| C,10 | 41.6 | 37.0 | -4.6 |
| C,11 | 42.5 | 37.0 | -5.5 |
| C,12 | 44.3 | 36.2 | -8.1 |
| D,2 | 41.7 | 38.9 | -2.8 |
| D,3 | 46.2 | 39.5 | -6.8 |
| D,4 | 48.4 | 40.3 | -8.1 |
| D,5 | 48.2 | 42.0 | -6.2 |
| D,6 | 46.2 | 41.6 | -4.6 |
| D,7 | 44.2 | 41.5 | -2.7 |
| D,8 | 43.7 | 38.8 | -4.9 |
| D,9 | 43.1 | 37.9 | -5.2 |
| D,10 | 44.9 | 38.3 | -6.6 |
| D,11 | 44.5 | 38.0 | -6.5 |
| D,12 | 45.1 | 36.9 | -8.2 |
| E,1 | 42.4 | 38.9 | -3.5 |
| E,2 | 42.2 | 39.2 | -3.0 |
| E,3 | 46.7 | 40.0 | -6.7 |
| E,4 | 51.2 | 41.0 | -10.2 |
| E,5 | 51.0 | 43.3 | -7.7 |
| E,6 | 44.6 | 42.8 | -1.8 |
| E,9 | 43.1 | 39.3 | -3.8 |
| E,10 | 43.1 | 39.3 | -3.8 |
| E,11 | 46.1 | 38.5 | -7.6 |

| Area 1 | | | |
|------------------------------|---------------------|---------------------|----------------|
| 1 st Quarter 2004 | | | |
| Grid Points | IGA Annual Leq (24) | Calculated Leq (24) | Difference Leq |
| C,4 | 44.2 | 36.1 | -8.1 |
| C,5 | 36.7 | 34.0 | -2.7 |
| C,6 | 36.0 | 32.8 | -3.3 |
| D,4 | 41.1 | 35.3 | -5.8 |
| D,5 | 34.2 | 34.3 | 0.1 |
| D,6 | 36.0 | 33.5 | -2.6 |
| D,7 | 41.4 | 34.0 | -7.4 |
| E,4 | 38.3 | 36.4 | -1.9 |
| E,5 | 34.8 | 36.3 | 1.5 |
| E,6 | 36.7 | 35.5 | -1.3 |
| E,7 | 41.4 | 35.1 | -6.4 |
| F,2 | 51.7 | 40.6 | -11.1 |
| F,3 | 43.7 | 38.3 | -5.4 |
| F,5 | 37.3 | 36.5 | -0.8 |
| F,6 | 38.5 | 36.7 | -1.8 |
| F,7 | 42.1 | 36.9 | -5.2 |
| G,2 | 51.2 | 41.4 | -9.8 |
| G,3 | 42.1 | 38.3 | -3.8 |
| G,4 | 40.2 | 36.2 | -4.0 |
| H,2 | 50.1 | 42.3 | -7.8 |
| H,3 | 46.0 | 38.6 | -7.4 |
| H,4 | 46.1 | 36.3 | -9.8 |

| Area 3 | | | |
|------------------------------|---------------------|---------------------|----------------|
| 1 st Quarter 2004 | | | |
| Grid Points | IGA Annual Leq (24) | Calculated Leq (24) | Difference Leq |
| A,-1 | 38.9 | 33.2 | -5.7 |
| A,0 | 39.6 | 33.7 | -5.9 |
| A,1 | 43.2 | 34.5 | -8.7 |
| A,2 | 45.7 | 36.3 | -9.5 |
| A,3 | 45.6 | 37.9 | -7.7 |
| B,-1 | 37.9 | 32.9 | -5.1 |
| B,0 | 39.2 | 33.1 | -6.1 |
| B,1 | 42.6 | 33.9 | -8.7 |
| B,2 | 45.8 | 35.8 | -10.0 |
| B,3 | 45.7 | 37.8 | -7.9 |
| C,-1 | 36.7 | 33.3 | -3.4 |
| C,0 | 37.1 | 33.5 | -3.6 |
| C,1 | 39.5 | 34.2 | -5.4 |
| C,2 | 44.8 | 35.9 | -8.9 |
| C,3 | 46.5 | 37.8 | -8.8 |
| D,-1 | 32.6 | 33.8 | 1.2 |
| D,0 | 33.3 | 34.0 | 0.7 |
| D,1 | 37.3 | 34.4 | -2.9 |
| D,2 | 43.0 | 36.1 | -6.9 |
| E,-1 | 31.4 | 34.0 | 2.6 |
| E,0 | 33.1 | 33.8 | 0.7 |
| E,1 | 36.2 | 34.3 | -1.9 |
| E,2 | 40.6 | 36.1 | -4.5 |
| F,1 | 36.5 | 33.9 | -2.6 |
| F,2 | 39.4 | 36.1 | -3.3 |
| G,1 | 42.5 | 34.9 | -7.6 |

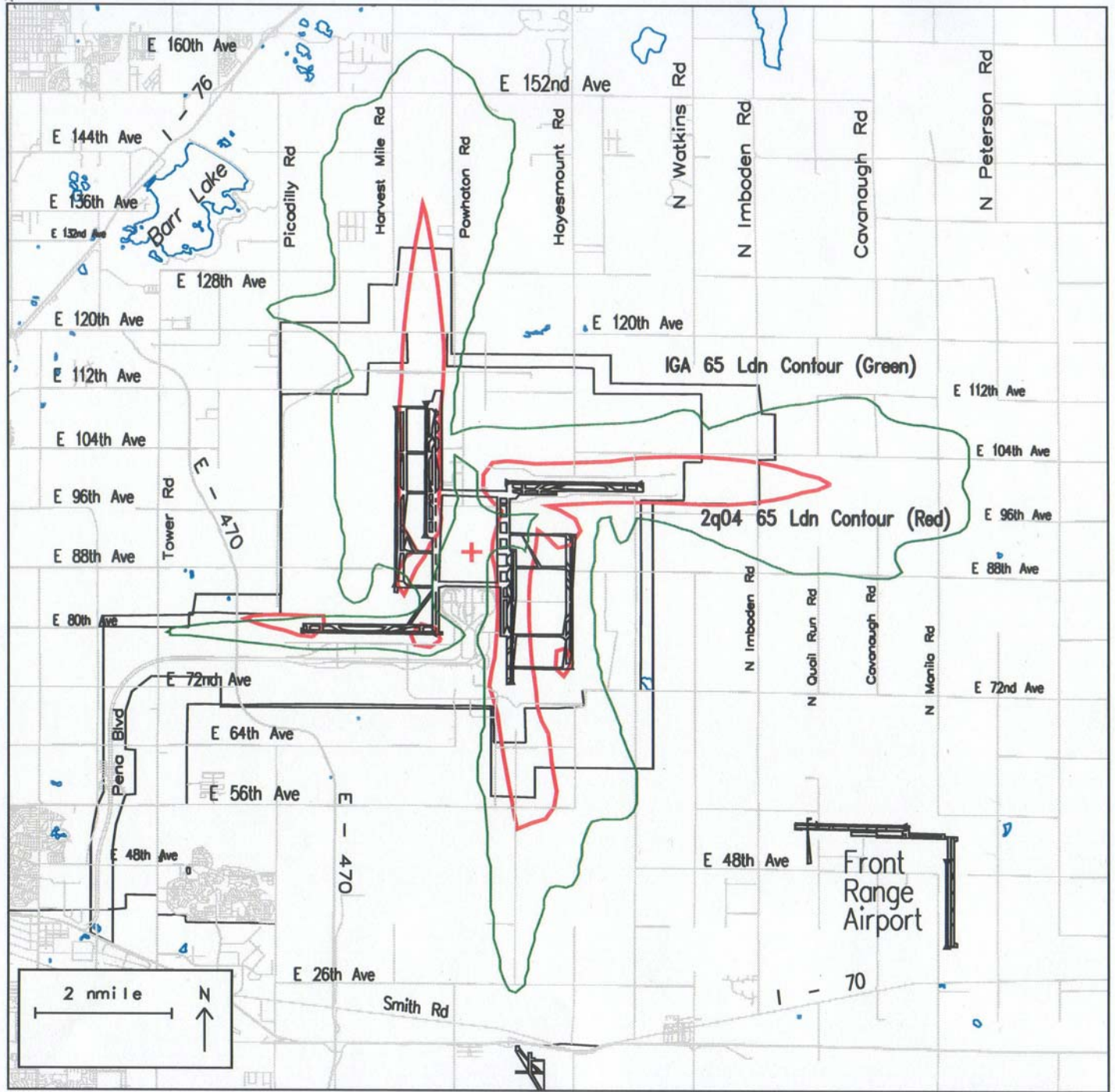
1st Quarter 2004 - Runway Utilization



Second Quarter 2004

April 1, 2004 – June 30, 2004

2nd Quarter 2004 - 65 Ldn Contour



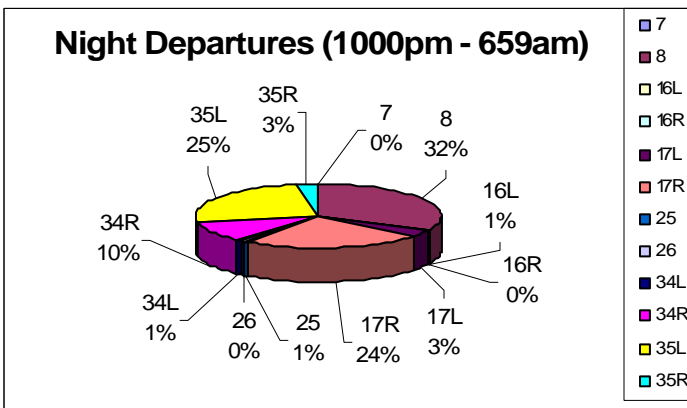
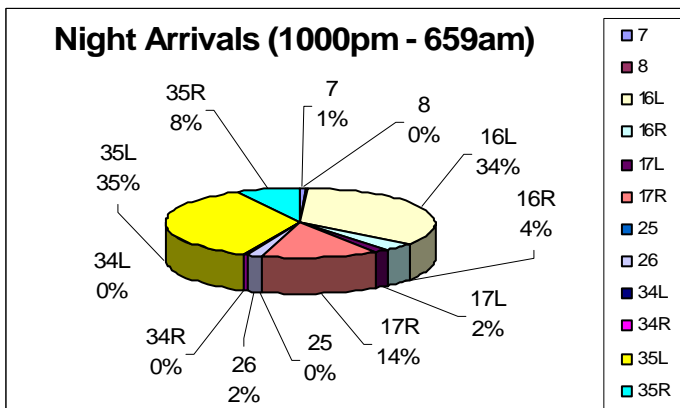
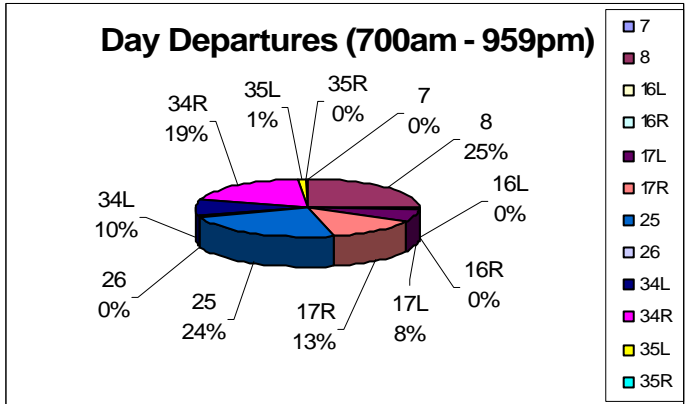
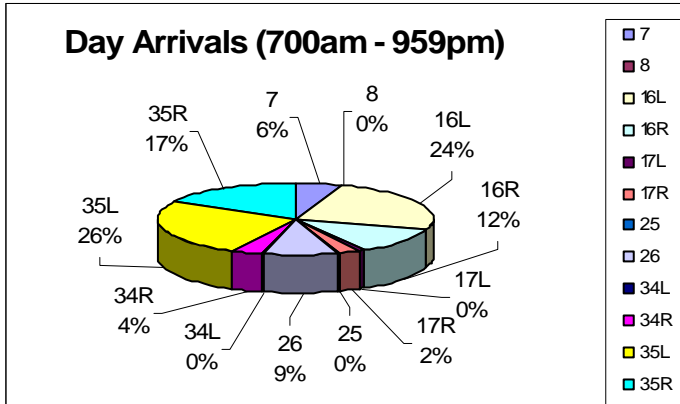
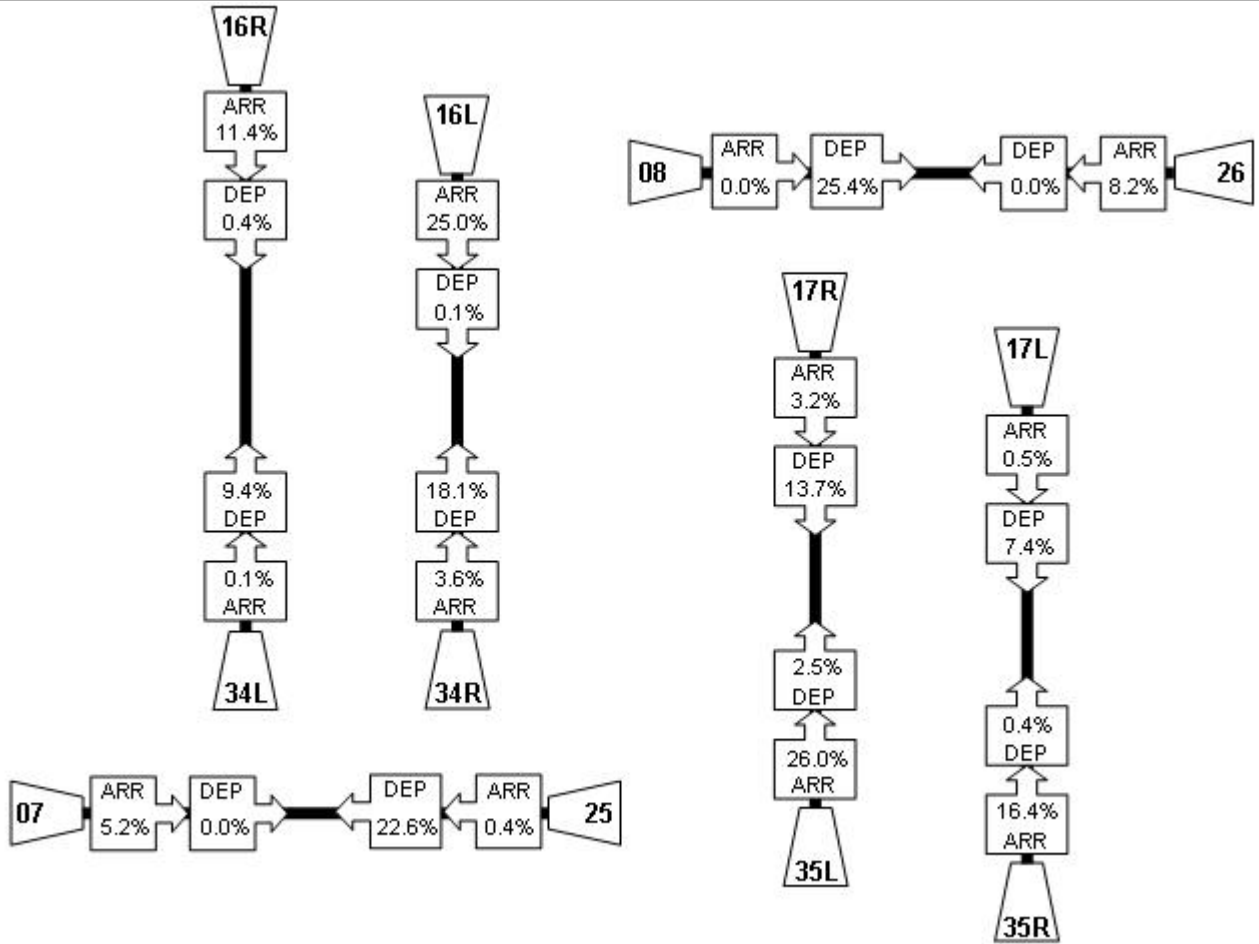
2nd Quarter 2004 - Denver/Adams County IGA NEPS Values

| Area 2 | | | |
|------------------------------|---------------------|---------------------|----------------|
| 2 nd Quarter 2004 | | | |
| Grid Points | IGA Annual Leq (24) | Calculated Leq (24) | Difference Leq |
| A,1 | 38.6 | 36.5 | -2.1 |
| A,2 | 37.6 | 37.2 | -0.4 |
| A,3 | 42.3 | 38.1 | -4.2 |
| A,4 | 45.3 | 38.7 | -6.6 |
| A,5 | 43.9 | 39.5 | -4.4 |
| A,6 | 37.5 | 39.4 | 1.9 |
| A,7 | 37.7 | 39.8 | 2.1 |
| A,8 | 36.5 | 38.9 | 2.4 |
| A,9 | 36.3 | 36.6 | 0.3 |
| A,10 | 37.6 | 35.4 | -2.2 |
| A,11 | 39.2 | 35.2 | -4.0 |
| A,12 | 41.2 | 34.9 | -6.4 |
| B,2 | 39.5 | 37.7 | -1.8 |
| B,4 | 42.5 | 39.3 | -3.2 |
| B,5 | 43.1 | 40.3 | -2.9 |
| B,6 | 39.0 | 40.1 | 1.1 |
| B,7 | 39.0 | 40.6 | 1.6 |
| B,8 | 38.0 | 39.0 | 1.0 |
| B,9 | 38.3 | 36.7 | -1.6 |
| B,10 | 39.0 | 36.0 | -3.0 |
| B,11 | 40.4 | 35.9 | -4.5 |
| B,12 | 42.6 | 35.6 | -7.0 |
| C,2 | 41.0 | 38.5 | -2.6 |
| C,3 | 43.3 | 39.2 | -4.2 |
| C,4 | 43.5 | 39.9 | -3.7 |
| C,5 | 43.4 | 41.1 | -2.3 |
| C,6 | 43.3 | 41.1 | -2.2 |
| C,7 | 43.3 | 41.3 | -2.0 |
| C,8 | 42.6 | 39.2 | -3.4 |
| C,9 | 42.2 | 37.2 | -5.0 |
| C,10 | 41.6 | 37.0 | -4.6 |
| C,11 | 42.5 | 37.1 | -5.4 |
| C,12 | 44.3 | 36.4 | -7.9 |
| D,2 | 41.7 | 39.2 | -2.6 |
| D,3 | 46.2 | 40.0 | -6.2 |
| D,4 | 48.4 | 40.6 | -7.8 |
| D,5 | 48.2 | 42.2 | -6.0 |
| D,6 | 46.2 | 42.2 | -4.0 |
| D,7 | 44.2 | 42.1 | -2.1 |
| D,8 | 43.7 | 39.3 | -4.4 |
| D,9 | 43.1 | 38.0 | -5.1 |
| D,10 | 44.9 | 38.2 | -6.7 |
| D,11 | 44.5 | 38.0 | -6.5 |
| D,12 | 45.1 | 37.2 | -7.9 |
| E,1 | 42.4 | 38.5 | -3.9 |
| E,2 | 42.2 | 39.5 | -2.7 |
| E,3 | 46.7 | 41.0 | -5.7 |
| E,4 | 51.2 | 41.7 | -9.5 |
| E,5 | 51.0 | 43.4 | -7.6 |
| E,6 | 44.6 | 43.4 | -1.2 |
| E,9 | 43.1 | 39.5 | -3.7 |
| E,10 | 43.1 | 39.2 | -3.9 |
| E,11 | 46.1 | 38.5 | -7.7 |

| Area 1 | | | |
|------------------------------|---------------------|---------------------|----------------|
| 2 nd Quarter 2004 | | | |
| Grid Points | IGA Annual Leq (24) | Calculated Leq (24) | Difference Leq |
| C,4 | 44.2 | 36.4 | -7.8 |
| C,5 | 36.7 | 34.3 | -2.4 |
| C,6 | 36.0 | 33.1 | -3.0 |
| D,4 | 41.1 | 35.9 | -5.2 |
| D,5 | 34.2 | 34.4 | 0.2 |
| D,6 | 36.0 | 33.7 | -2.3 |
| D,7 | 41.4 | 34.4 | -7.0 |
| E,4 | 38.3 | 36.7 | -1.7 |
| E,5 | 34.8 | 36.2 | 1.4 |
| E,6 | 36.7 | 35.2 | -1.5 |
| E,7 | 41.4 | 35.0 | -6.4 |
| F,2 | 51.7 | 42.1 | -9.6 |
| F,3 | 43.7 | 39.2 | -4.6 |
| F,5 | 37.3 | 36.2 | -1.1 |
| F,6 | 38.5 | 36.1 | -2.4 |
| F,7 | 42.1 | 36.2 | -5.9 |
| G,2 | 51.2 | 42.7 | -8.5 |
| G,3 | 42.1 | 39.6 | -2.5 |
| G,4 | 40.2 | 37.0 | -3.3 |
| H,2 | 50.1 | 44.1 | -6.0 |
| H,3 | 46.0 | 40.2 | -5.8 |
| H,4 | 46.1 | 37.4 | -8.7 |

| Area 3 | | | |
|------------------------------|---------------------|---------------------|----------------|
| 2 nd Quarter 2004 | | | |
| Grid Points | IGA Annual Leq (24) | Calculated Leq (24) | Difference Leq |
| A,-1 | 38.9 | 33.8 | -5.1 |
| A,0 | 39.6 | 34.1 | -5.5 |
| A,1 | 43.2 | 34.5 | -8.7 |
| A,2 | 45.7 | 35.5 | -10.2 |
| A,3 | 45.6 | 36.6 | -9.0 |
| B,-1 | 37.9 | 33.8 | -4.1 |
| B,0 | 39.2 | 33.8 | -5.4 |
| B,1 | 42.6 | 34.2 | -8.4 |
| B,2 | 45.8 | 34.9 | -10.9 |
| B,3 | 45.7 | 36.3 | -9.4 |
| C,-1 | 36.7 | 34.2 | -2.6 |
| C,0 | 37.1 | 34.2 | -3.0 |
| C,1 | 39.5 | 34.5 | -5.0 |
| C,2 | 44.8 | 35.2 | -9.6 |
| C,3 | 46.5 | 36.5 | -10.0 |
| D,-1 | 32.6 | 34.6 | 2.0 |
| D,0 | 33.3 | 34.5 | 1.2 |
| D,1 | 37.3 | 34.7 | -2.6 |
| D,2 | 43.0 | 35.2 | -7.8 |
| E,-1 | 31.4 | 34.7 | 3.3 |
| E,0 | 33.1 | 34.4 | 1.3 |
| E,1 | 36.2 | 34.5 | -1.7 |
| E,2 | 40.6 | 35.3 | -5.3 |
| F,1 | 36.5 | 34.7 | -1.8 |
| F,2 | 39.4 | 35.4 | -4.0 |
| G,1 | 42.5 | 35.0 | -7.5 |

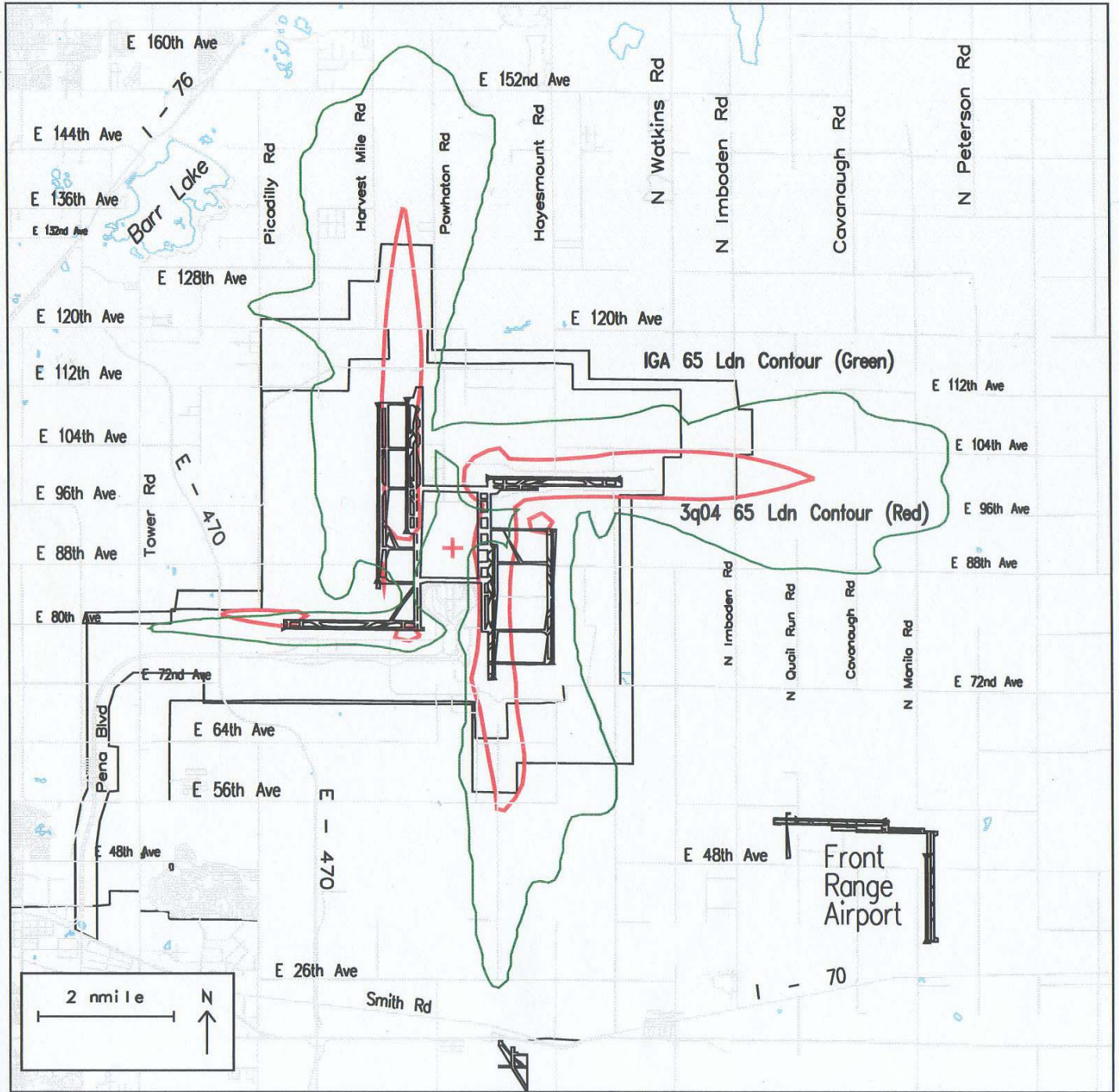
2nd Quarter 2004 – DEN Runway Utilization



Third Quarter 2004

July 1, 2004 – September 30, 2004

3rd Quarter 2004 – DEN 65 Ldn Contour



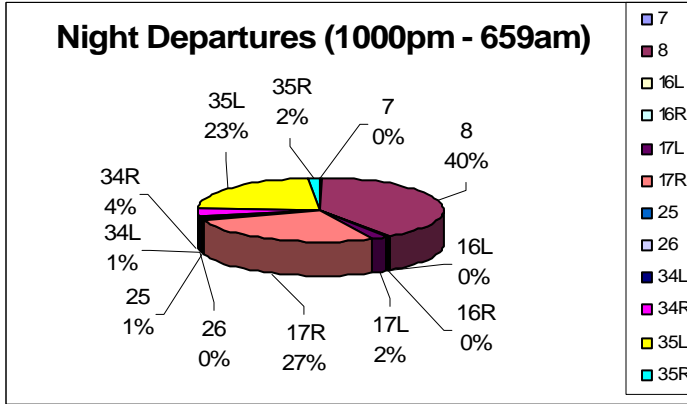
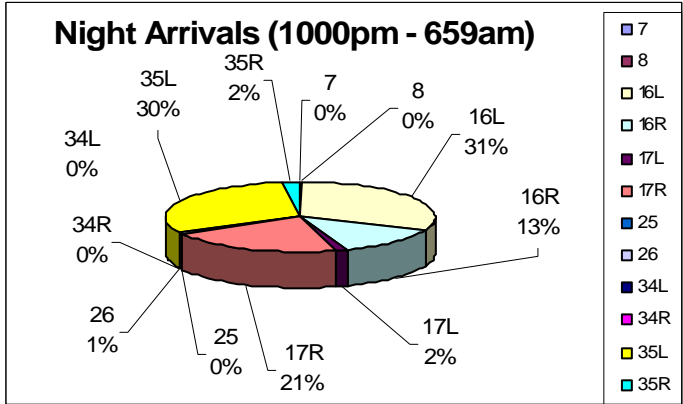
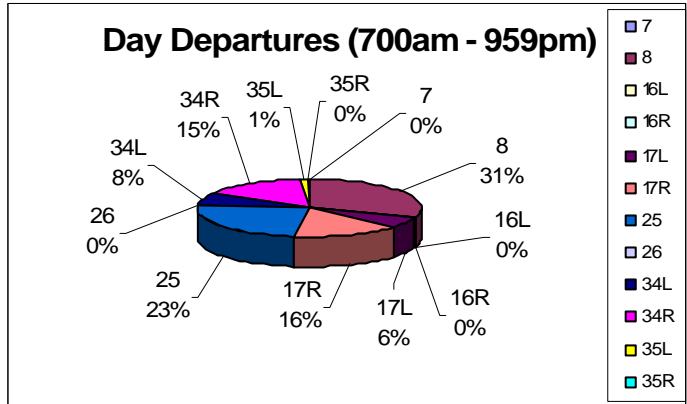
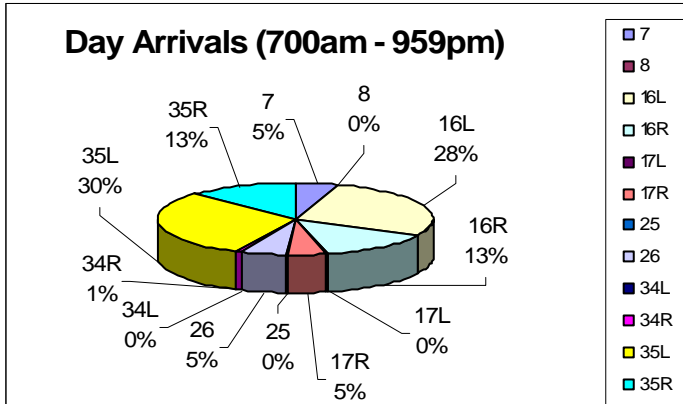
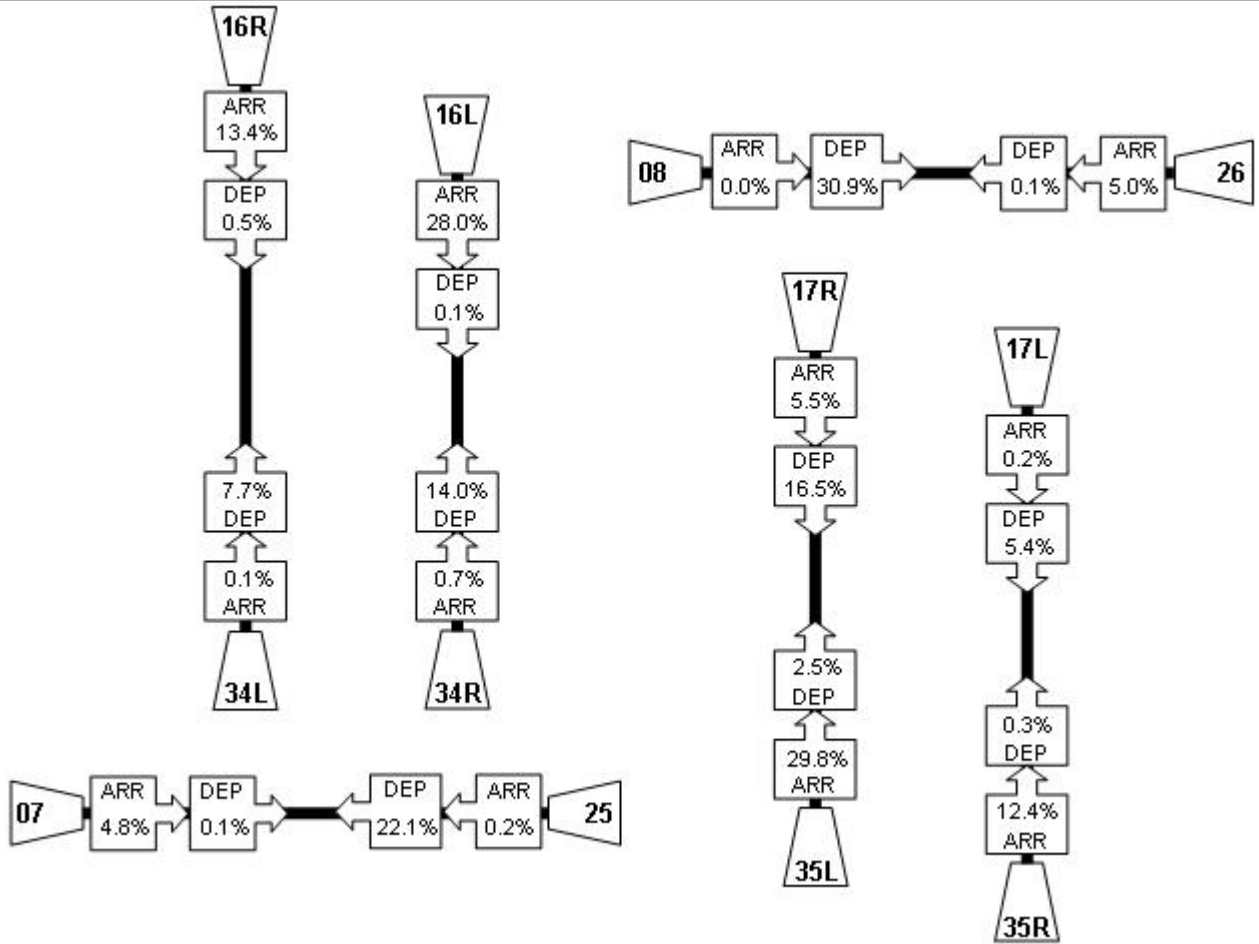
3rd Quarter 2004 - Denver/Adams County IGA NEPS Values

| Area 2 | | | |
|------------------------------|---------------------|---------------------|----------------|
| 3 rd Quarter 2004 | | | |
| Grid Points | IGA Annual Leq (24) | Calculated Leq (24) | Difference Leq |
| A,1 | 38.6 | 36.9 | -1.8 |
| A,2 | 37.6 | 37.3 | -0.3 |
| A,3 | 42.3 | 37.8 | -4.5 |
| A,4 | 45.3 | 38.5 | -6.8 |
| A,5 | 43.9 | 39.5 | -4.4 |
| A,6 | 37.5 | 39.7 | 2.2 |
| A,7 | 37.7 | 40.4 | 2.7 |
| A,8 | 36.5 | 39.6 | 3.1 |
| A,9 | 36.3 | 37.4 | 1.1 |
| A,10 | 37.6 | 35.8 | -1.8 |
| A,11 | 39.2 | 35.5 | -3.7 |
| A,12 | 41.2 | 35.1 | -6.1 |
| B,2 | 39.5 | 37.7 | -1.8 |
| B,4 | 42.5 | 39.1 | -3.5 |
| B,5 | 43.1 | 40.3 | -2.8 |
| B,6 | 39.0 | 40.5 | 1.5 |
| B,7 | 39.0 | 41.1 | 2.1 |
| B,8 | 38.0 | 39.5 | 1.5 |
| B,9 | 38.3 | 36.9 | -1.5 |
| B,10 | 39.0 | 36.3 | -2.7 |
| B,11 | 40.4 | 36.5 | -3.9 |
| B,12 | 42.6 | 36.1 | -6.5 |
| C,2 | 41.0 | 38.3 | -2.7 |
| C,3 | 43.3 | 39.1 | -4.2 |
| C,4 | 43.5 | 39.8 | -3.7 |
| C,5 | 43.4 | 41.1 | -2.3 |
| C,6 | 43.3 | 41.5 | -1.8 |
| C,7 | 43.3 | 41.9 | -1.4 |
| C,8 | 42.6 | 39.4 | -3.2 |
| C,9 | 42.2 | 37.3 | -4.9 |
| C,10 | 41.6 | 37.5 | -4.1 |
| C,11 | 42.5 | 37.8 | -4.7 |
| C,12 | 44.3 | 37.1 | -7.2 |
| D,2 | 41.7 | 38.8 | -2.9 |
| D,3 | 46.2 | 39.7 | -6.5 |
| D,4 | 48.4 | 40.7 | -7.8 |
| D,5 | 48.2 | 42.2 | -6.0 |
| D,6 | 46.2 | 42.6 | -3.6 |
| D,7 | 44.2 | 42.7 | -1.5 |
| D,8 | 43.7 | 39.4 | -4.3 |
| D,9 | 43.1 | 38.3 | -4.8 |
| D,10 | 44.9 | 39.1 | -5.8 |
| D,11 | 44.5 | 38.8 | -5.7 |
| D,12 | 45.1 | 37.7 | -7.4 |
| E,1 | 42.4 | 38.2 | -4.2 |
| E,2 | 42.2 | 39.2 | -3.0 |
| E,3 | 46.7 | 40.6 | -6.1 |
| E,4 | 51.2 | 41.7 | -9.5 |
| E,5 | 51.0 | 43.5 | -7.5 |
| E,6 | 44.6 | 43.9 | -0.7 |
| E,9 | 43.1 | 40.2 | -3.0 |
| E,10 | 43.1 | 40.3 | -2.8 |
| E,11 | 46.1 | 39.3 | -6.8 |

| Area 1 | | | |
|------------------------------|---------------------|---------------------|----------------|
| 3 rd Quarter 2004 | | | |
| 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 | 36.0 | -5.1 |
| D,5 | 34.2 | 34.7 | 0.5 |
| D,6 | 36.0 | 34.2 | -1.8 |
| D,7 | 41.4 | 34.8 | -6.7 |
| E,4 | 38.3 | 36.5 | -1.8 |
| E,5 | 34.8 | 36.4 | 1.6 |
| E,6 | 36.7 | 35.7 | -1.0 |
| E,7 | 41.4 | 35.4 | -6.0 |
| F,2 | 51.7 | 42.3 | -9.4 |
| F,3 | 43.7 | 38.9 | -4.8 |
| F,5 | 37.3 | 36.4 | -0.9 |
| F,6 | 38.5 | 36.6 | -1.9 |
| F,7 | 42.1 | 36.6 | -5.5 |
| G,2 | 51.2 | 42.9 | -8.3 |
| G,3 | 42.1 | 38.6 | -3.5 |
| G,4 | 40.2 | 36.3 | -3.9 |
| H,2 | 50.1 | 43.8 | -6.3 |
| H,3 | 46.0 | 39.0 | -7.0 |
| H,4 | 46.1 | 36.9 | -9.2 |

| Area 3 | | | |
|------------------------------|---------------------|---------------------|----------------|
| 3 rd Quarter 2004 | | | |
| Grid Points | IGA Annual Leq (24) | Calculated Leq (24) | Difference Leq |
| A,-1 | 38.9 | 32.9 | -6.0 |
| A,0 | 39.6 | 33.2 | -6.4 |
| A,1 | 43.2 | 33.8 | -9.4 |
| A,2 | 45.7 | 35.1 | -10.6 |
| A,3 | 45.6 | 36.2 | -9.4 |
| B,-1 | 37.9 | 33.0 | -4.9 |
| B,0 | 39.2 | 33.0 | -6.2 |
| B,1 | 42.6 | 33.6 | -9.0 |
| B,2 | 45.8 | 34.9 | -10.9 |
| B,3 | 45.7 | 36.6 | -9.1 |
| C,-1 | 36.7 | 33.5 | -3.2 |
| C,0 | 37.1 | 33.8 | -3.3 |
| C,1 | 39.5 | 34.1 | -5.5 |
| C,2 | 44.8 | 35.0 | -9.8 |
| C,3 | 46.5 | 36.7 | -9.8 |
| D,-1 | 32.6 | 34.5 | 1.9 |
| D,0 | 33.3 | 34.5 | 1.2 |
| D,1 | 37.3 | 34.8 | -2.5 |
| D,2 | 43.0 | 35.4 | -7.6 |
| E,-1 | 31.4 | 34.5 | 3.1 |
| E,0 | 33.1 | 34.5 | 1.4 |
| E,1 | 36.2 | 35.1 | -1.1 |
| E,2 | 40.6 | 35.7 | -4.9 |
| F,1 | 36.5 | 34.4 | -2.1 |
| F,2 | 39.4 | 36.6 | -2.8 |
| G,1 | 42.5 | 35.0 | -7.5 |

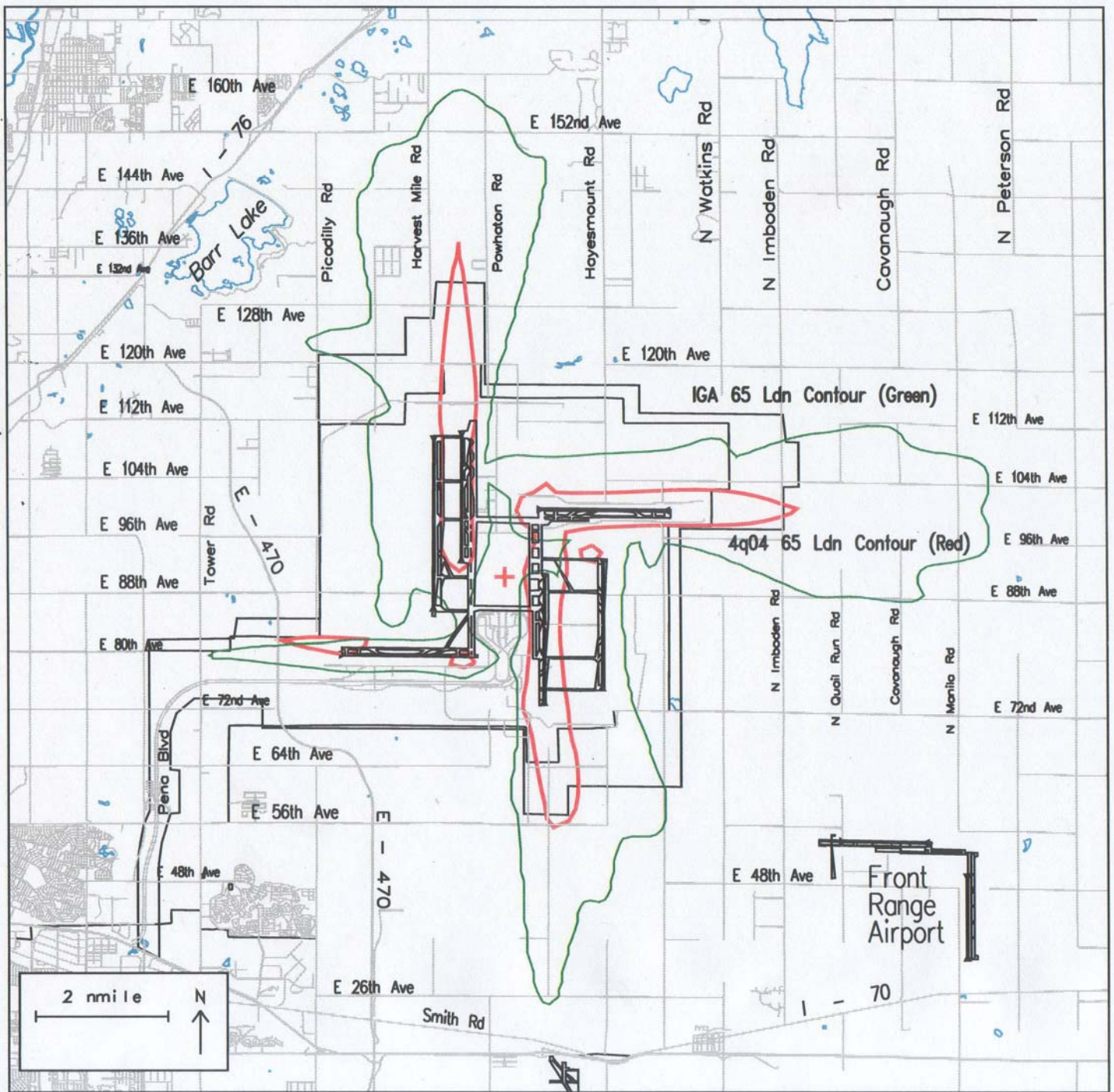
3rd Quarter 2004 – DEN Runway Utilization



Fourth Quarter 2004

October 1, 2004 – December 31, 2004

4th Quarter 2004 – DEN 65 Ldn Contour



4th Quarter 2004 - Denver/Adams County IGA NEPS Values

| Area 2 | | | |
|------------------------------|---------------------|---------------------|----------------|
| 4 th Quarter 2004 | | | |
| Grid Points | IGA Annual Leq (24) | Calculated Leq (24) | Difference Leq |
| A,1 | 38.6 | 35.9 | -2.7 |
| A,2 | 37.6 | 36.4 | -1.2 |
| A,3 | 42.3 | 37.3 | -5.0 |
| A,4 | 45.3 | 38.2 | -7.1 |
| A,5 | 43.9 | 38.8 | -5.1 |
| A,6 | 37.5 | 38.7 | 1.2 |
| A,7 | 37.7 | 39.2 | 1.5 |
| A,8 | 36.5 | 38.4 | 1.9 |
| A,9 | 36.3 | 36.1 | -0.2 |
| A,10 | 37.6 | 34.7 | -2.9 |
| A,11 | 39.2 | 34.4 | -4.8 |
| A,12 | 41.2 | 33.9 | -7.3 |
| B,2 | 39.5 | 36.9 | -2.6 |
| B,4 | 42.5 | 38.8 | -3.7 |
| B,5 | 43.1 | 39.6 | -3.6 |
| B,6 | 39.0 | 39.4 | 0.4 |
| B,7 | 39.0 | 40.0 | 1.0 |
| B,8 | 38.0 | 38.6 | 0.6 |
| B,9 | 38.3 | 36.4 | -1.9 |
| B,10 | 39.0 | 35.4 | -3.6 |
| B,11 | 40.4 | 35.4 | -5.0 |
| B,12 | 42.6 | 34.9 | -7.7 |
| C,2 | 41.0 | 37.4 | -3.6 |
| C,3 | 43.3 | 38.2 | -5.1 |
| C,4 | 43.5 | 39.4 | -4.1 |
| C,5 | 43.4 | 40.3 | -3.1 |
| C,6 | 43.3 | 40.3 | -3.0 |
| C,7 | 43.3 | 40.7 | -2.6 |
| C,8 | 42.6 | 38.8 | -3.8 |
| C,9 | 42.2 | 36.7 | -5.5 |
| C,10 | 41.6 | 36.6 | -5.0 |
| C,11 | 42.5 | 36.6 | -5.9 |
| C,12 | 44.3 | 35.9 | -8.4 |
| D,2 | 41.7 | 37.8 | -3.9 |
| D,3 | 46.2 | 38.7 | -7.5 |
| D,4 | 48.4 | 40.0 | -8.4 |
| D,5 | 48.2 | 41.3 | -6.9 |
| D,6 | 46.2 | 41.3 | -4.9 |
| D,7 | 44.2 | 41.5 | -2.7 |
| D,8 | 43.7 | 38.9 | -4.8 |
| D,9 | 43.1 | 37.7 | -5.4 |
| D,10 | 44.9 | 38.0 | -6.9 |
| D,11 | 44.5 | 37.7 | -6.8 |
| D,12 | 45.1 | 36.7 | -8.4 |
| E,1 | 42.4 | 37.8 | -4.6 |
| E,2 | 42.2 | 38.4 | -3.8 |
| E,3 | 46.7 | 39.3 | -7.4 |
| E,4 | 51.2 | 40.9 | -10.3 |
| E,5 | 51.0 | 42.6 | -8.4 |
| E,6 | 44.6 | 42.6 | -2.0 |
| E,9 | 43.1 | 39.2 | -3.9 |
| E,10 | 43.1 | 39.2 | -4.0 |
| E,11 | 46.1 | 38.2 | -7.9 |

| Area 1 | | | |
|------------------------------|---------------------|---------------------|----------------|
| 4 th Quarter 2004 | | | |
| Grid Points | IGA Annual Leq (24) | Calculated Leq (24) | Difference Leq |
| C,4 | 44.2 | 35.8 | -8.4 |
| C,5 | 36.7 | 34.0 | -2.7 |
| C,6 | 36.0 | 33.0 | -3.0 |
| D,4 | 41.1 | 35.3 | -5.8 |
| D,5 | 34.2 | 34.3 | 0.0 |
| D,6 | 36.0 | 33.6 | -2.4 |
| D,7 | 41.4 | 34.1 | -7.3 |
| E,4 | 38.3 | 36.0 | -2.3 |
| E,5 | 34.8 | 35.9 | 1.1 |
| E,6 | 36.7 | 35.2 | -1.5 |
| E,7 | 41.4 | 34.9 | -6.5 |
| F,2 | 51.7 | 40.5 | -11.2 |
| F,3 | 43.7 | 37.9 | -5.8 |
| F,5 | 37.3 | 36.0 | -1.3 |
| F,6 | 38.5 | 36.1 | -2.4 |
| F,7 | 42.1 | 36.3 | -5.8 |
| G,2 | 51.2 | 41.0 | -10.2 |
| G,3 | 42.1 | 37.7 | -4.4 |
| G,4 | 40.2 | 35.7 | -4.5 |
| H,2 | 50.1 | 41.7 | -8.4 |
| H,3 | 46.0 | 37.8 | -8.2 |
| H,4 | 46.1 | 36.0 | -10.1 |

| Area 3 | | | |
|------------------------------|---------------------|---------------------|----------------|
| 4 th Quarter 2004 | | | |
| Grid Points | IGA Annual Leq (24) | Calculated Leq (24) | Difference Leq |
| A,-1 | 38.9 | 32.4 | -6.5 |
| A,0 | 39.6 | 32.8 | -6.8 |
| A,1 | 43.2 | 33.7 | -9.6 |
| A,2 | 45.7 | 35.2 | -10.5 |
| A,3 | 45.6 | 36.5 | -9.1 |
| B,-1 | 37.9 | 32.4 | -5.5 |
| B,0 | 39.2 | 32.4 | -6.8 |
| B,1 | 42.6 | 33.2 | -9.4 |
| B,2 | 45.8 | 34.6 | -11.2 |
| B,3 | 45.7 | 36.3 | -9.4 |
| C,-1 | 36.7 | 33.0 | -3.7 |
| C,0 | 37.1 | 32.9 | -4.2 |
| C,1 | 39.5 | 33.5 | -6.0 |
| C,2 | 44.8 | 34.7 | -10.1 |
| C,3 | 46.5 | 36.5 | -10.0 |
| D,-1 | 32.6 | 33.6 | 1.0 |
| D,0 | 33.3 | 33.9 | 0.6 |
| D,1 | 37.3 | 34.1 | -3.2 |
| D,2 | 43.0 | 34.8 | -8.2 |
| E,-1 | 31.4 | 33.7 | 2.3 |
| E,0 | 33.1 | 33.5 | 0.4 |
| E,1 | 36.2 | 34.1 | -2.1 |
| E,2 | 40.6 | 35.4 | -5.2 |
| F,1 | 36.5 | 33.3 | -3.2 |
| F,2 | 39.4 | 35.3 | -4.1 |
| G,1 | 42.5 | 34.2 | -8.3 |

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