DEN Noise Report

January 1, 2020 — December 31, 2020

Results

January 1, 2020 — December 31, 2020

The number of potential Class II NEPS violations registered between January 1 through December 31, 2020 was zero. There were two potential Class II NEPS violations during 2019 in Area 3 at point A, 1 and E, 2. Please see pages 3 and 5 for Denver International Airport (DEN) NEPS information. There is one instance where the actual 2020 Annual 65 LDN contour extends beyond the IGA 65 LDN contour, but it is completely contained within the DEN Boundary and the City and County of Denver Boundary. Please see page 4 for the DEN contour map.

The number of households registering at least one complaint decreased from 56 in 2019 to 39 for 2020.   Three households registered a combined 69 percent of the total complaints for 2020. The number of complaints decreased by 29 percent during 2020 as compared to the same period in 2019 (1693 vs. 2389 in 2019). Please see page 6 for complete complaint and runway utilization data, and page 7 for a household location map.

To access the DEN 2020 Annual Noise Report, as well as other reports and information please go to: https://www.flydenver.com/business-and-community/noise-and-airspace/.

FAA Noise Complaints and Inquiries

The FAA's mission is to ensure the safe and efficient use of our nation's airspace. You can review FAA's noise complaint and inquiry policy to learn how FAA processes noise complaints and inquiries.

FAA Noise Portal

To send a complaint directly to the FAA about noise from aircraft operations at your community airport, please go to the following webpage: FAA Noise Portal.

DEN Noise Complaint Submissions

To submit a noise complaint to the DEN Noise Office please go to the following webpage: DEN Noise Complaints.

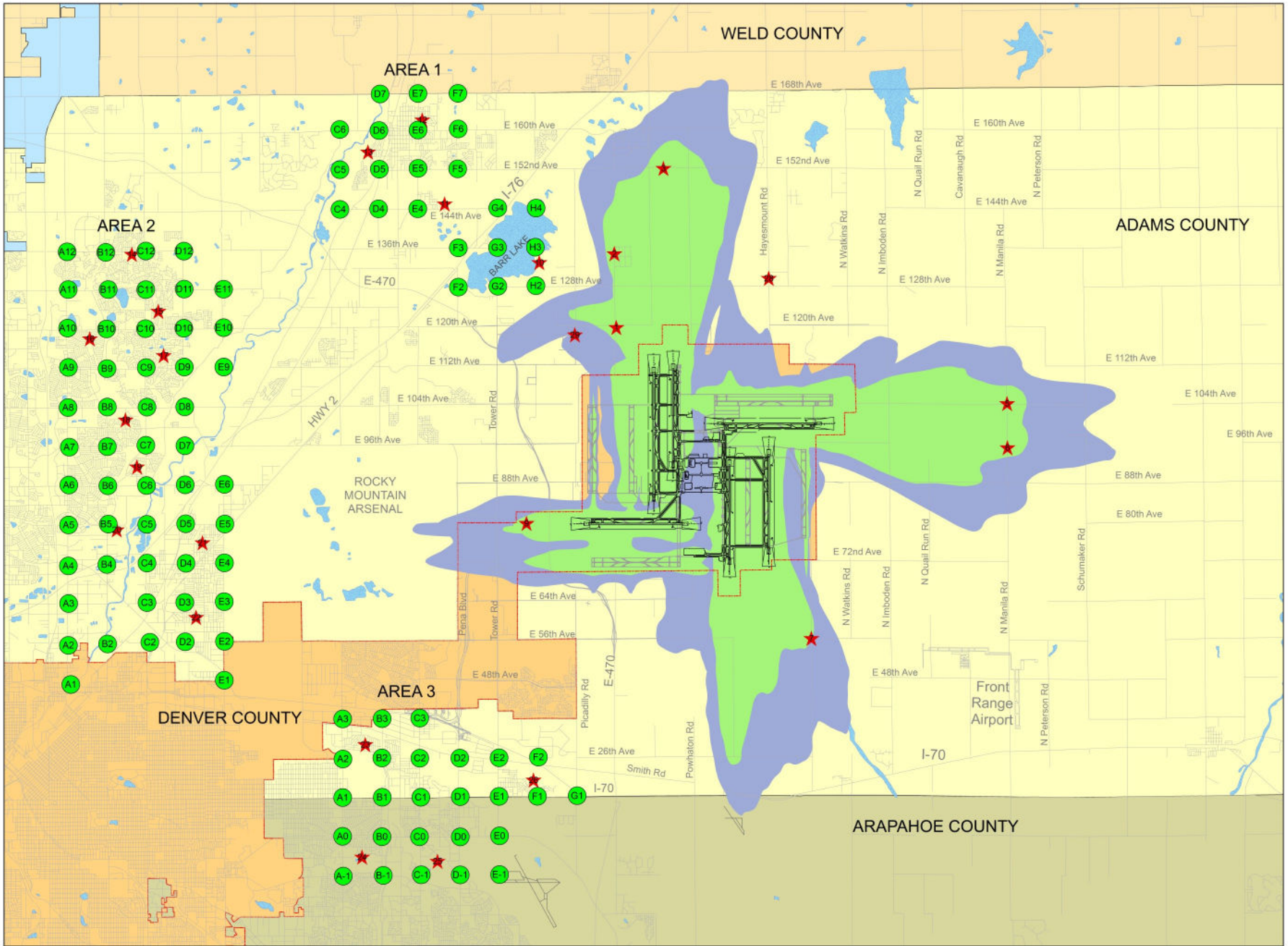### NOMS for Airports

The DEN Noise and Operations Monitoring System (SYMPHONY EnvironmentalVue NOMS) 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.

The DEN NOMS for Airports monitors noise levels at 26 permanent and one 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.

Denver International Airport Recommended Noise Contours for Land Use Planning

NOTE: These contours reflect the noise impacts that may be expected from full development of Denver International Airport. They are based on current modeling and differ slightly from the IGA Composite Contours.

Noise Exposure Performance Standards (NEPS) Grid Coordinates, Land Use Contour, and Remote Monitoring Terminal (RMT) Locations

0 1.25 2.5 5 7.5 10 Miles

N
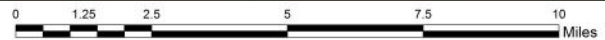
Prepared By Annie Christensen, DEN Noise Officer 10/2017

60 LDN Contour
65 LDN Contour
NEPS Locations
Noise Monitoring Terminals
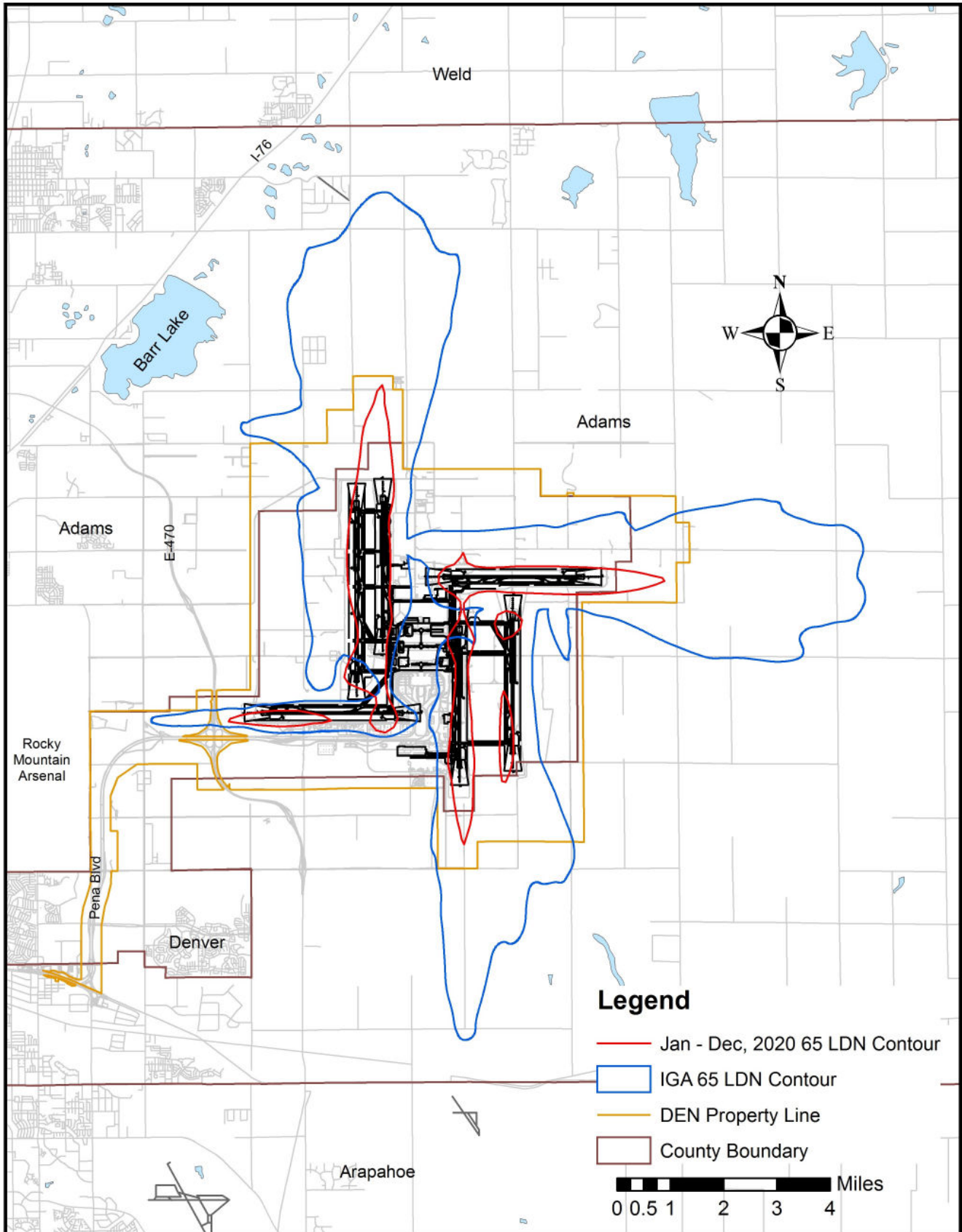
DEN January 1 - December 31, 2020 Contour

Area 2					**Area 1**		
	Jan-Dec 2020					Jan-Dec 2020		
Grid	IGA Annual	Calculated	Difference		Grid	IGA Annual	Calculated	Difference
Points	Leq (24)	Leq (24)	Leq		Points	Leq (24)	Leq (24)	Leq
A,1	38.6	36.7	-1.9	C,4	44.2	34.5	-9.8
A,2	37.6	34.7	-3.0	C,5	36.7	33.6	-3.1
A,3	42.3	35.8	-6.5	C,6	36.0	33.5	-2.5
A,4	45.3	38.8	-6.5	D,4	41.1	33.5	-7.6
A,5	43.9	39.5	-4.4	D,5	34.2	33.4	-0.8
A,6	37.5	36.0	-1.5	D,6	36.0	33.7	-2.3
A,7	37.7	32.7	-5.0	D,7	41.4	35.2	-6.2
A,8	36.5	32.3	-4.2	E,4	38.3	31.9	-6.4
A,9	36.3	33.6	-2.7	E,5	34.8	33.1	-1.7
A,10	37.6	35.4	-2.2	E,6	36.7	31.0	-5.7
A,11	39.2	38.5	-0.7	E,7	41.4	31.6	-9.8
A,12	41.2	38.1	-3.1	F,2	51.7	36.1	-15.6
B,2	39.5	35.7	-3.8	F,3	43.7	32.0	-11.7
B,4	42.5	39.3	-3.3	F,5	37.3	29.9	-7.4
B,5	43.1	40.4	-2.7	F,6	38.5	29.7	-8.8
B,6	39.0	36.6	-2.4	F,7	42.1	30.4	-11.7
B,7	39.0	33.2	-5.8	G,2	51.2	35.9	-15.3
B,8	38.0	33.0	-5.0	G,3	42.1	31.3	-10.8
B,9	38.3	34.2	-4.1	G,4	40.2	29.3	-10.9
B,10	39.0	36.2	-2.8	H,2	50.1	37.0	-13.1
B,11	40.4	39.5	-0.9	H,3	46.0	31.6	-14.4
B,12	42.6	38.2	-4.4	H,4	46.1	30.1	-16.0

Area 3			
	Jan-Dec 2020		
Grid	IGA Annual	Calculated	Difference
Points	Leq (24)	Leq (24)	Leq
C,2	41.0	37.0	-4.0
C,3	43.3	36.1	-7.2
C,4	43.5	39.6	-3.9
C,5	43.4	41.2	-2.2
C,6	43.3	37.2	-6.1
C,7	43.3	33.8	-9.5
C,8	42.6	33.6	-9.0
C,9	42.2	35.1	-7.1
C,10	41.6	37.6	-4.0
C,11	42.5	40.1	-2.4
C,12	44.3	38.0	-6.3
D,2	41.7	38.4	-3.4
D,3	46.2	36.6	-9.6
D,4	48.4	39.5	-8.9
D,5	48.2	42.0	-6.2
D,6	46.2	37.7	-8.5
D,7	44.2	34.4	-9.8
D,8	43.7	34.6	-9.1
D,9	43.1	36.3	-6.8
D,10	44.9	39.1	-5.8
D,11	44.5	40.3	-4.2
D,12	45.1	38.1	-7.0
E,1	42.4	41.5	-0.9
E,2	42.2	40.0	-2.2
E,3	46.7	37.7	-9.0
E,4	51.2	39.7	-11.5
E,5	51.0	42.9	-8.1
E,6	44.6	38.4	-6.2
E,9	43.1	38.5	-4.6
E,10	43.1	40.2	-2.9
E,11	46.1	40.7	-5.4

The following is the Area 3 table (right side):

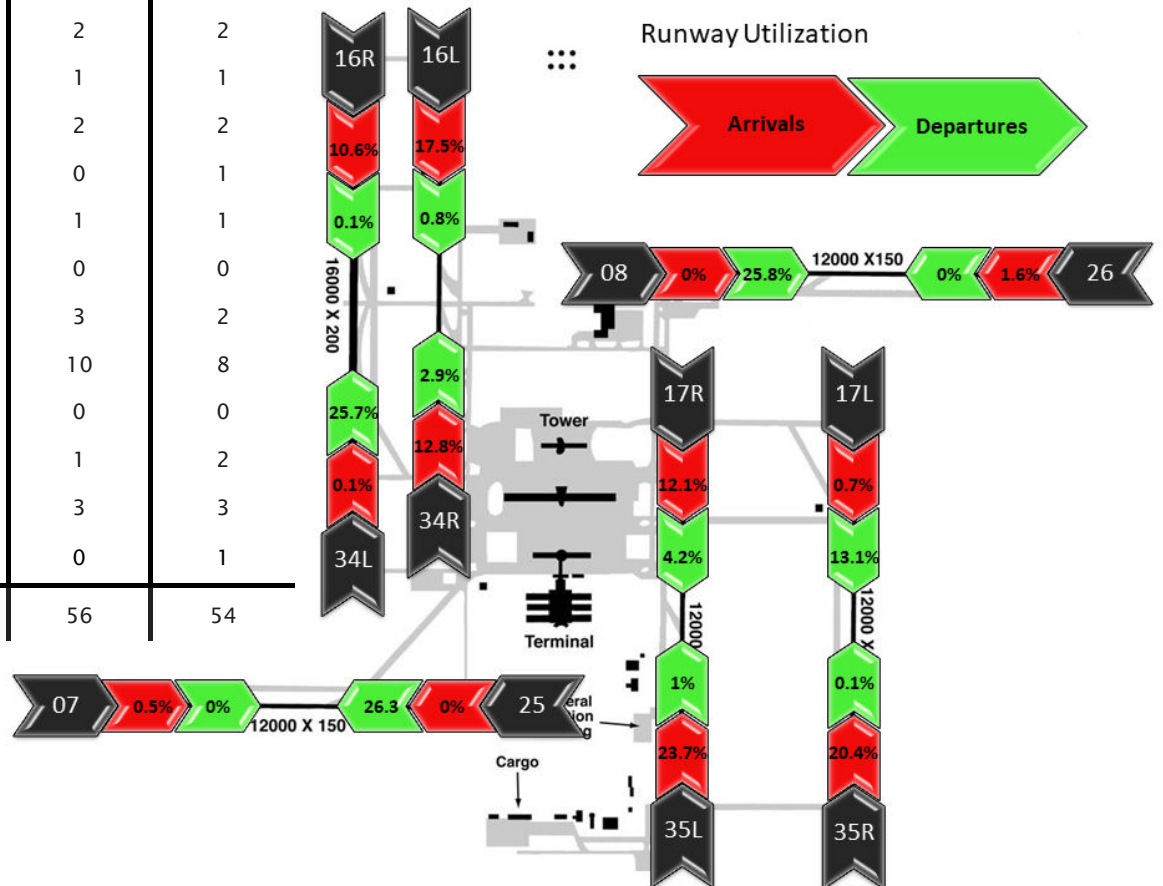| Grid Points	IGA Annual Leq (24)	Calculated Leq (24)	Difference Leq
A,-1	38.9	31.2	-7.7
A,0	39.6	32.1	-7.5
A,1	43.2	33.3	-9.9
A,2	45.7	35.2	-10.6
A,3	45.6	36.9	-8.7
B,-1	37.9	31.5	-6.4
B,0	39.2	32.4	-6.8
B,1	42.6	33.7	-8.9
B,2	45.8	35.5	-10.3
B,3	45.7	36.6	-9.1
C,-1	36.7	34.1	-2.7
C,0	37.1	34.3	-2.8
C,1	39.5	34.8	-4.7
C,2	44.8	36.2	-8.6
C,3	46.5	36.8	-9.7
D,-1	32.6	32.8	0.1
D,0	33.3	32.0	-1.3
D,1	37.3	33.0	-4.3
D,2	43.0	35.7	-7.3
E,-1	31.4	30.9	-0.5
E,0	33.1	30.3	-2.8
E,1	36.2	32.2	-4.0
E,2	40.6	36.0	-4.6
F,1	36.5	32.1	-4.4
F,2	39.4	36.9	-2.6
G,1	42.5	32.2	-10.3

2020 Noise Complaint Calls by Community

Community	No. of Households 2020	No. of Households 2019	No. of Households 2018
Arvada	1	1	0
Aurora	11	10	10
Boulder	0	3	6
Brighton	4	6	4
Broomfield	0	3	0
Castle Rock	1	0	1
Centennial	1	0	0
Commerce City	3	2	1
Denver	3	4	2
Elizabeth	1	3	3
Englewood	0	0	1
Evergreen	1	1	2
Golden	2	0	0
Franktown	0	0	1
Hudson	0	2	2
Indian Hills	0	1	1
Keenesburg	2	2	2
Lakewood	0	0	1
Lochbuie	0	1	1
Louisville	0	0	0
Nederland	2	3	2
Parker	5	10	8
Pine	0	0	0
Strasburg	1	1	2
Thornton	1	3	3
Westminster	0	0	1
Overall Total	**39**	**56**	**54**

Top 3 Complainants vs. All Others

All Others
31% of Total Complaints

1 Strasburg Resident
46% of Total Complaints

1 Aurora Resident
11% of Total Complaints

1 Commerce City Resident
12% of Total Complaints
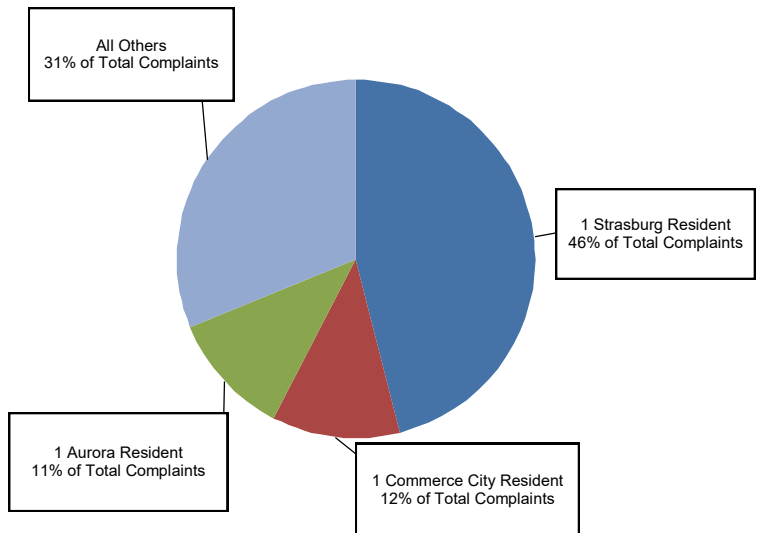
Runway Utilization (% of Total Flight Operations)

Runway Utilization

Arrivals   Departures

Runway	Arrivals	Departures
16R	10.6%	0.1%
16L	17.5%	0.8%
08	0%	25.8%
26	1.6%	0%
34R	12.8%	2.9%
34L	0.1%	25.7%
17R	12.1%	4.2%
17L	0.7%	13.1%
07	0.5%	0%
25	0%	26.3%
35L	23.7%	1%
35R	20.4%	0.1%

16000 X 200
12000 X 150
12000 X 150

Tower
Terminal
Cargo

January 1 - December 31, 2020 Noise Complaint Household Locations

Household

NEPS Point

7

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 Officers and then transcribed into the NOMS 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.

Only one inquiry per call will be accepted. Multiple times and ranges of times will not be accepted, all aircraft operational inquires need to be reported within one week of the occurrence. Abusive language or comments will not be tolerated. Threats involving aircraft and or the airport will result in notification of the proper authorities. Please note, all calls are recorded and recordings are subject to disclosure under the Federal Freedom of Information Act and the Colorado Open Records Act.

https://www.flydenver.com/business-and-community/noise-and-airspace/

DEN NOISE OFFICE — AOB, 6TH FLOOR, NW CORNER — 8500 PEÑA BOULEVARD
DENVER, CO — 80249-6340 — 303.342.2000 t — 303.342.2366 f
303.342.2380 noise hotline — 800.417.2988 toll free noise hotline

DEN