



CENTENNIAL  
AIRPORT®

CENTENNIAL AIRPORT

# MAY 2025 NOISE REPORT



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## 2. DEFINITIONS

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**A-weighted Sound Level** – A measure of sound level with weighted frequency characteristics that correspond to human subjective response to noise.

**Arrival** – The act of an aircraft approaching and landing at an airport.

**Ambient Noise Level** – The level of noise that is all-encompassing within a given environment for which a single source cannot be determined. It is usually a composite of sounds from many and varied sources near to and far from the noise monitor.

**Community Noise Event Level (CNEL)** – The average sound level over a 24-hour period, with a penalty of 10dB for nighttime hours between 10:00 PM and 7:00 AM.

**Day Night Average Sound Level (DNL)** – A measure of the average noise level over a 24-hour day. It is the 24-hour, logarithmic (or energy) average, A-weighted sound pressure level with a 10-decibel penalty applied to the nighttime event levels that occur between 10:00 PM and 7:00 AM.

**Decibel (dB)** – A logarithmic quantity reflecting the ratio of the sound pressure of the source to a reference pressure. This results in a sound pressure level of about 0 dB for the quietest sounds that we can detect and sound pressure levels of about 120 dB for the loudest sounds that can be heard without pain.

**Departure** – The act of an aircraft taking flight and leaving the airport.

**Energy-Averaged Sound Pressure Level (Leq)** – The value or level of a steady, non-fluctuating sound that represents the same sound energy as the actual time-varying sound evaluated over the same time period.

**Flight Track** – The path along the ground followed by an aircraft in flight.

**Instrument Flight Rules (IFR)** Rules and regulations established by the FAA to govern flight under conditions in which flight by outside visual reference is not safe. IFR flight depends upon flying by reference to instruments, and navigation is accomplished by reference to electronic signals. It is also a term used by pilots and controllers to indicate the type of flight plan an aircraft is flying, such as an IFR or VFR flight plan.

**Local Operations** – Operations in the local traffic pattern or within sight of the airport; flight in local practice areas within a 20 mile radius; execute simulated instrument approaches or low airport passes.

**Maximum Noise Level (L<sub>max</sub>)** – The peak noise level for a single noise event.

**Noise Exposure** – The cumulative sound energy affecting a person over a specified period of time.

**Overflight** – Aircraft flight originating and terminating outside the area that transits the airspace without landing.

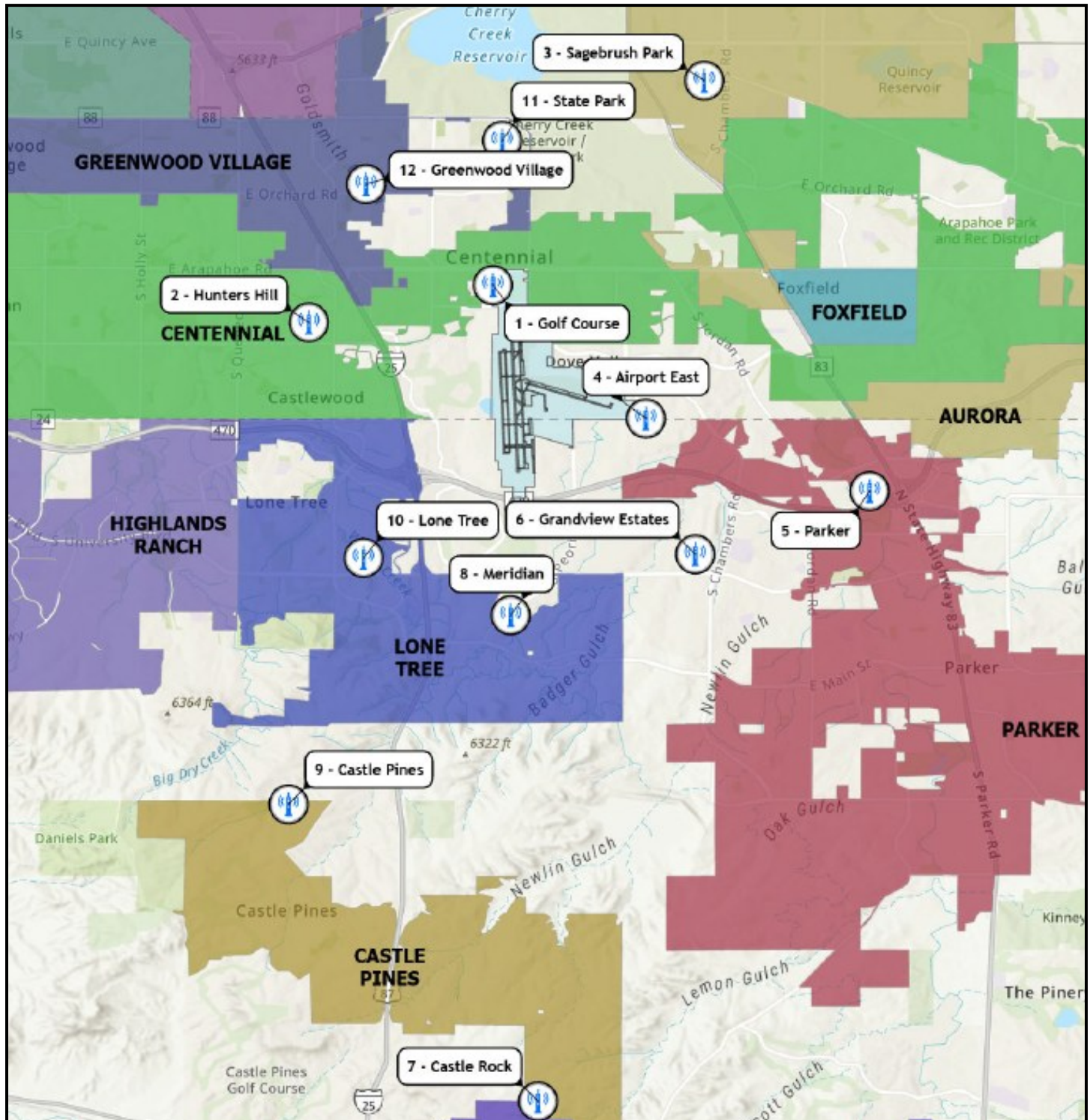
**Visual Flight Rules (VFR)** – A set of regulations under which a pilot operates an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going. A flight plan is not required when the pilot is operating under Visual Flight Rules.

**Sound Exposure Level (SEL)** – The total energy in the A-weighted sound level measured during a transient noise event. SEL accounts for both the duration and the loudness of a noise event.



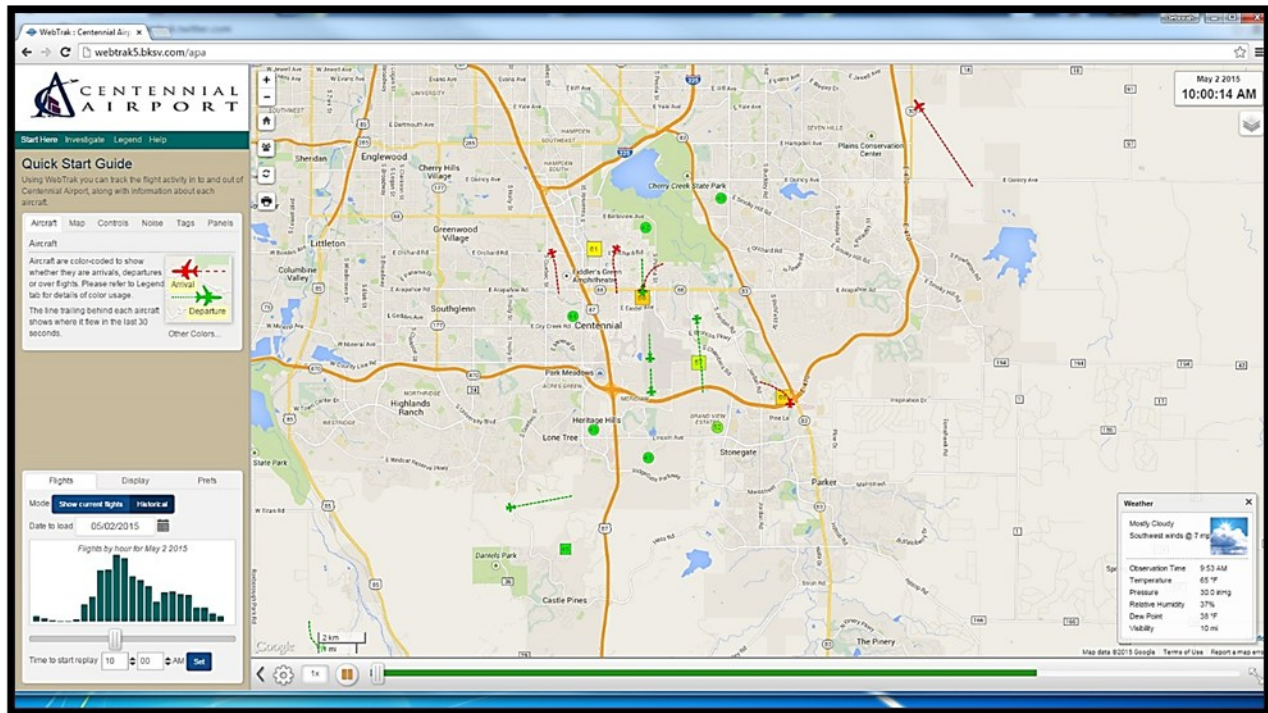
### 3. ABOUT APA's NOISE MONITORING PROGRAM

Centennial Airport's (KAPA) Noise and Operations Monitoring System (ANOMS) is a new state of the art system that enables the Arapahoe County Public Airport Authority to monitor and better understand aircraft noise in the vicinity of Centennial Airport. This system is comprised of 12 fixed noise monitoring terminals in the community, as well as 2 portable monitors that are available for short term monitoring anywhere in the community.



## 4. ABOUT WebTrak™

As part of an ongoing program, Centennial Airport offers an online tracking system for the movement of flights and air traffic patterns within the Denver Metro area. **WebTrak** Flight Tracking and Noise Information System allows concerned individuals to research data about flights to and from Centennial Airport, Denver International Airport, Rocky Mountain Metropolitan Airport, Colorado Air & Space Port and Buckley Space Force Base, as well as any transitional air traffic through the region.



### How to participate

The general public may use **WebTrak** to investigate a noise or flight that occurred near their location. The system also simplifies the process of filing a noise complaint, offering an easy, online option for residents to register concerns regarding noise levels at the following web addresses;

WebTrak: <https://webtrak.emsbk.com/apa>

Additional Noise Information: <https://centennialairport.com/track-and-report-noise>

Scan here to view Centennial Airport's  
Voluntary Noise Abatement Information



## 5. OPERATIONS STATISTICS

	IFR ITINERANT				VFR ITINERANT				LOCAL		
	AIR TAXI	G.A.	MILITARY	TOTAL ITINERANT	AIR TAXI	G.A.	MILITARY	TOTAL	G.A.	MILITARY	TOTAL LOCAL
January	2,634	2,546	131	5,311	1,559	5,291	77	6,927	11,197	2	11,199
February	2,509	2,499	134	5,142	1,488	5,097	84	6,669	11,271	6	11,277
March	2,682	2,896	124	5,702	1,731	5,897	83	7,711	13,120	15	13,135
April	2,405	2,562	161	5,128	1,706	5,418	89	7,213	12,912	0	12,912
May	2,644	2,939	164	5,747	1,826	6,358	84	8,268	13,704	7	13,711
June				0				0			0
July				0				0			0
August				0				0			0
September				0				0			0
October				0				0			0
November				0				0			0
December				0				0			0
Y-T-D Totals	12,874	13,442	714	27,030	8,310	28,061	417	36,788	62,204	30	62,234

	IFR OVERFLIGHTS				VFR OVERFLIGHTS				TOTAL OPERATIONS
	AIR TAXI	G.A.	MILITARY	TOTAL INTINERANT	AIR TAXI	G.A.	MILITARY	TOTAL	
January	6	3	2	11	31	49	2	82	23,530
February	0	3	1	4	35	53	6	94	23,186
March	7	6	1	14	29	53	3	85	26,647
April	6	2	2	10	41	72	10	123	25,386
May	7	13	2	22	30	64	5	99	27,847
June				0				0	
July				0				0	
August				0				0	
September				0				0	
October				0				0	
November				0				0	
December				0				0	
Y-T-D Totals	26	27	8	61	166	291	26	483	126,596

### Definitions

**Air Taxi** – A company that operates aircraft that carry cargo or mail, or passengers on an on demand or charter basis.

**General Aviation (G.A.)** – All civil aviation operations other than scheduled air services and non-scheduled air transport operations for remuneration or hire.

**Local** – Operations are performed by aircraft which operate in the local traffic pattern or within sight of the airport; flight in local practice areas located within a 20-mile radius of the airport; execute simulated instrument approaches or low passes at the airport.

**IFR Itinerant** – Operations other than local operations conducted under Instrument Flight Rules.

**VFR Itinerant** – Operations other than local operations conducted under Visual Flight Rules.

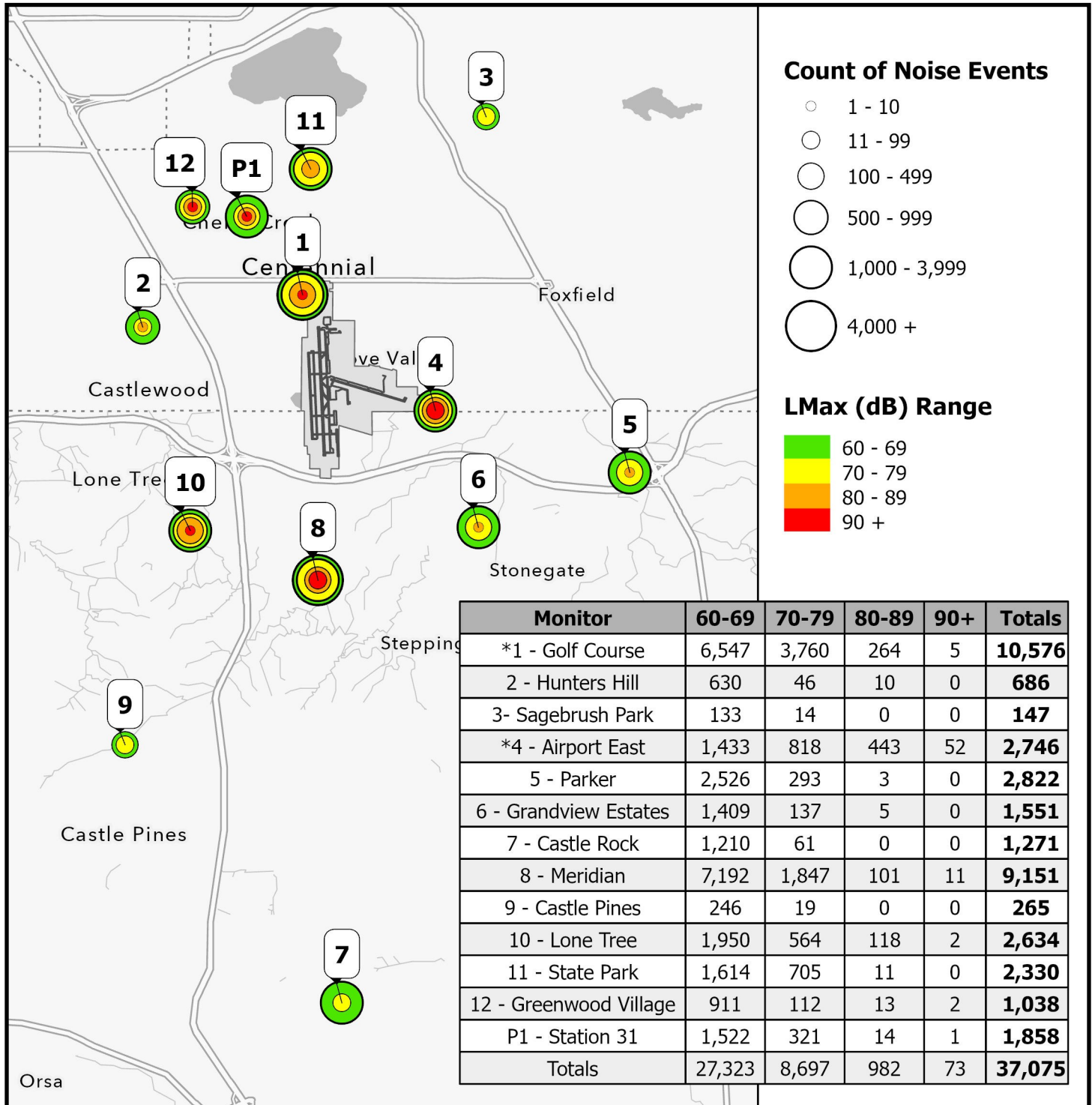
**Overflight** – Operation performed by aircraft that transit the area and did not originate or did not terminate within the airspace.



## 6. NOISE MONITOR REPORT

The following data displays the amount and associated decibel level of aircraft noise events at a given monitor. An aircraft noise event must contain the following characteristics:

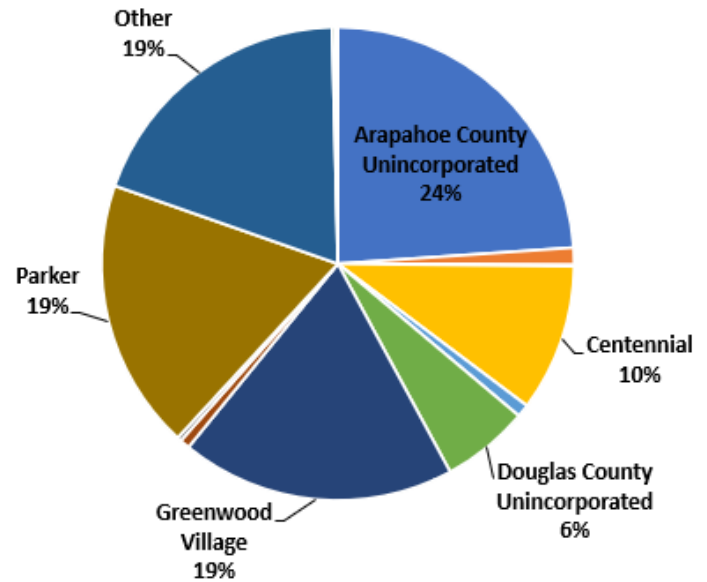
First, the noise event must exceed the ambient noise level. This number varies at every monitor, but is generally greater than 50-55db. Secondly, the noise event must last longer than 5 seconds. Lastly, using radar data, the system must correlate an aircraft with the noise event. This ensures that the sound is not associated with a 'community noise event' such as a lawn mowers or emergency sirens.



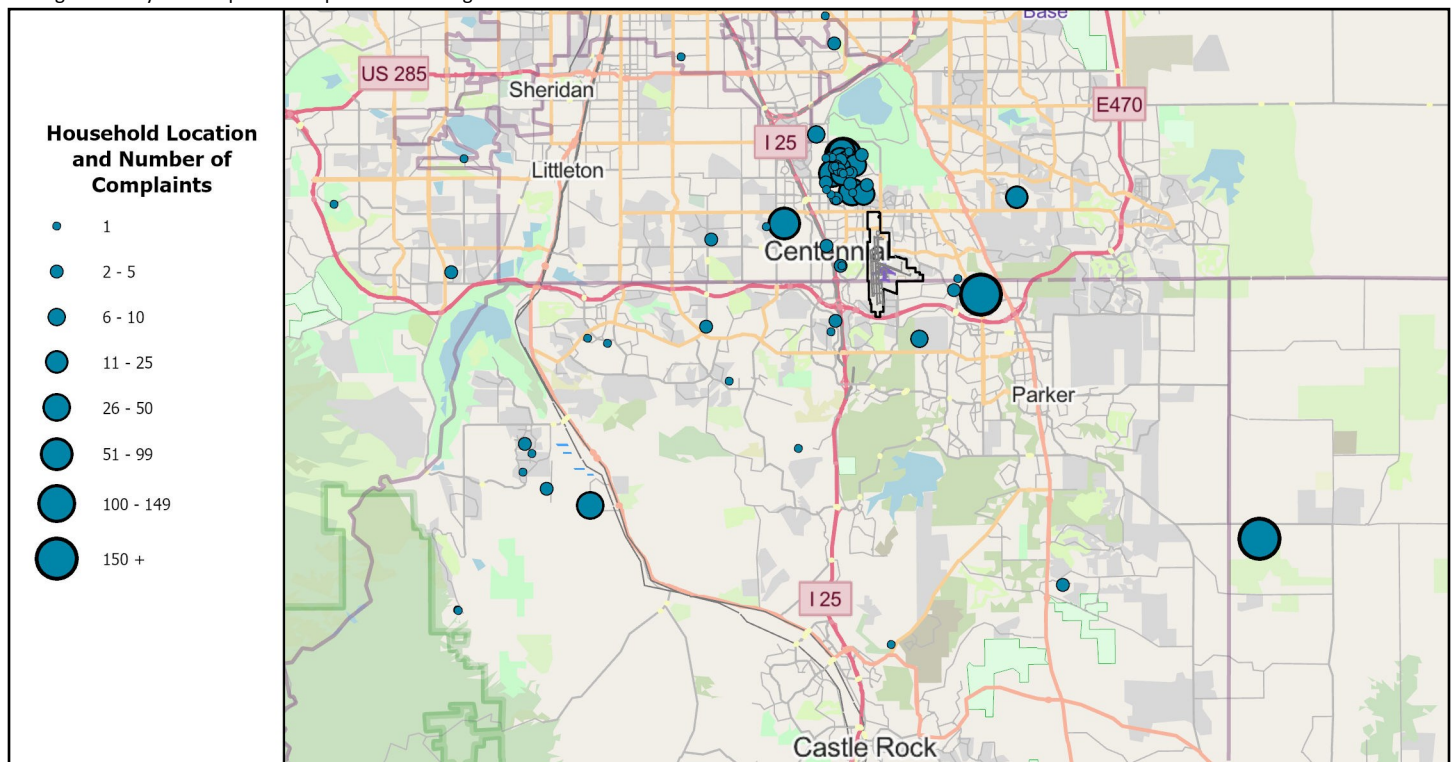
## 7. MAY 2025 NOISE COMPLAINT STATISTICS

Municipality	Complaints	Households	Population
Arapahoe County Unincorporated	247	17	98,066
Aurora	12	1	399,913
Castle Pines	0	0	14,000
Castle Rock	1	1	86,000
Centennial	104	4	108,422
Cherry Hills Village	0	0	6,442
Denver	9	6	715,522
Douglas County Unincorporated	62	6	276,493*
Greenwood Village	194	20	15,691
Highlands Ranch	7	4	103,444
Lone Tree	3	2	14,253
Parker	191	1	68,000
Other	199	8	-
<b>Total</b>	<b>1,033</b>	<b>72</b>	<b>1,906,246</b>

### Complaints per Municipality



\*Douglas County Unincorporated Population with Highlands Ranch Removed



4 Households Outside Map Extent



# 7. MAY 2025 NOISE COMPLAINT STATISTICS CONT'D.

## Complaint by Aircraft Type



Propeller

91%



Jet

8%



Helicopter

1%

\*#1 Household Removed

## Complaint by Operation Type



Departures

29%



Arrivals

12%

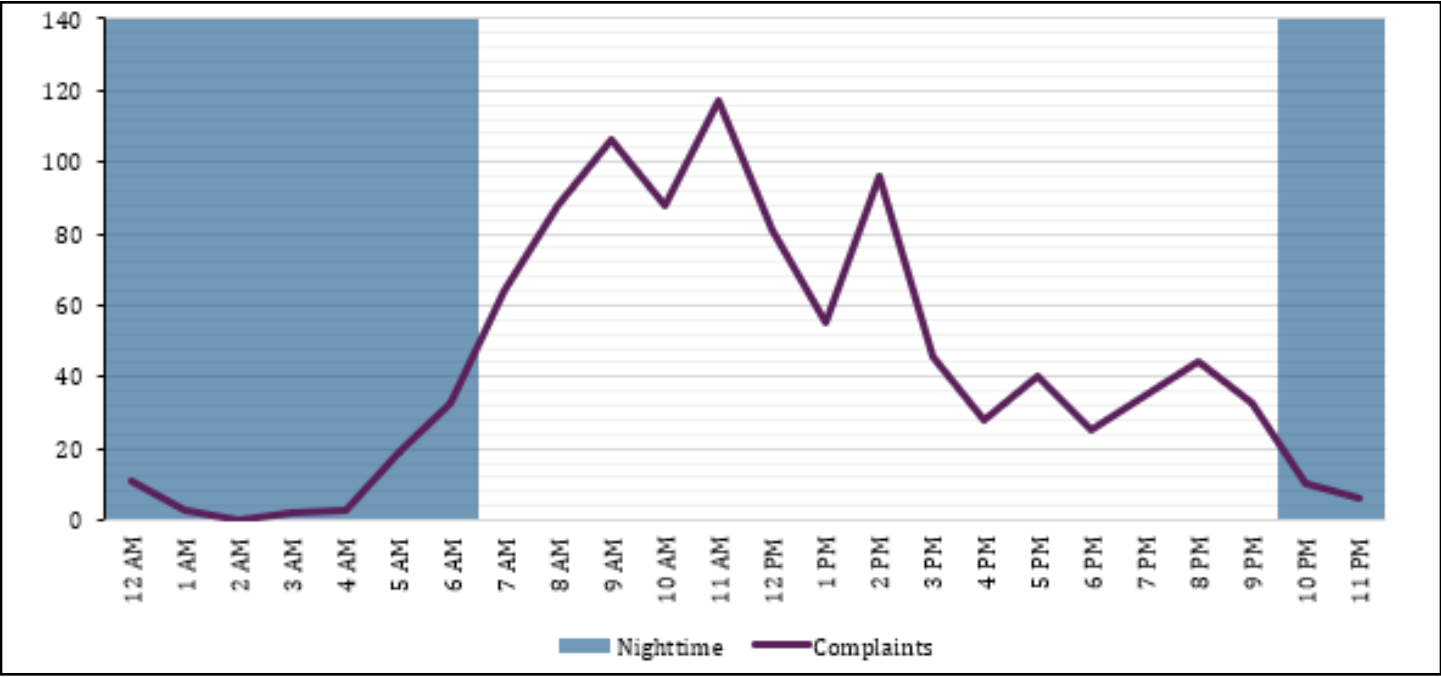


Training

59%

\*#1 Household Removed

## Complaints by Hour



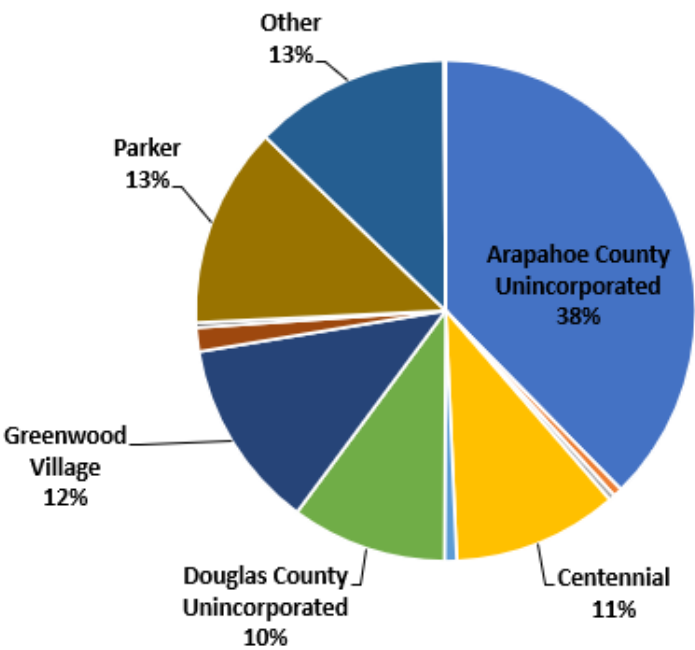
Noise Complaint Responses Completed	
Email	75
Phone	7
Total	82

Time Complaint Received	
Day (7:00 AM—9:59 PM)	946
Night (10:00 PM—6:59 AM)	87
Total	1,033

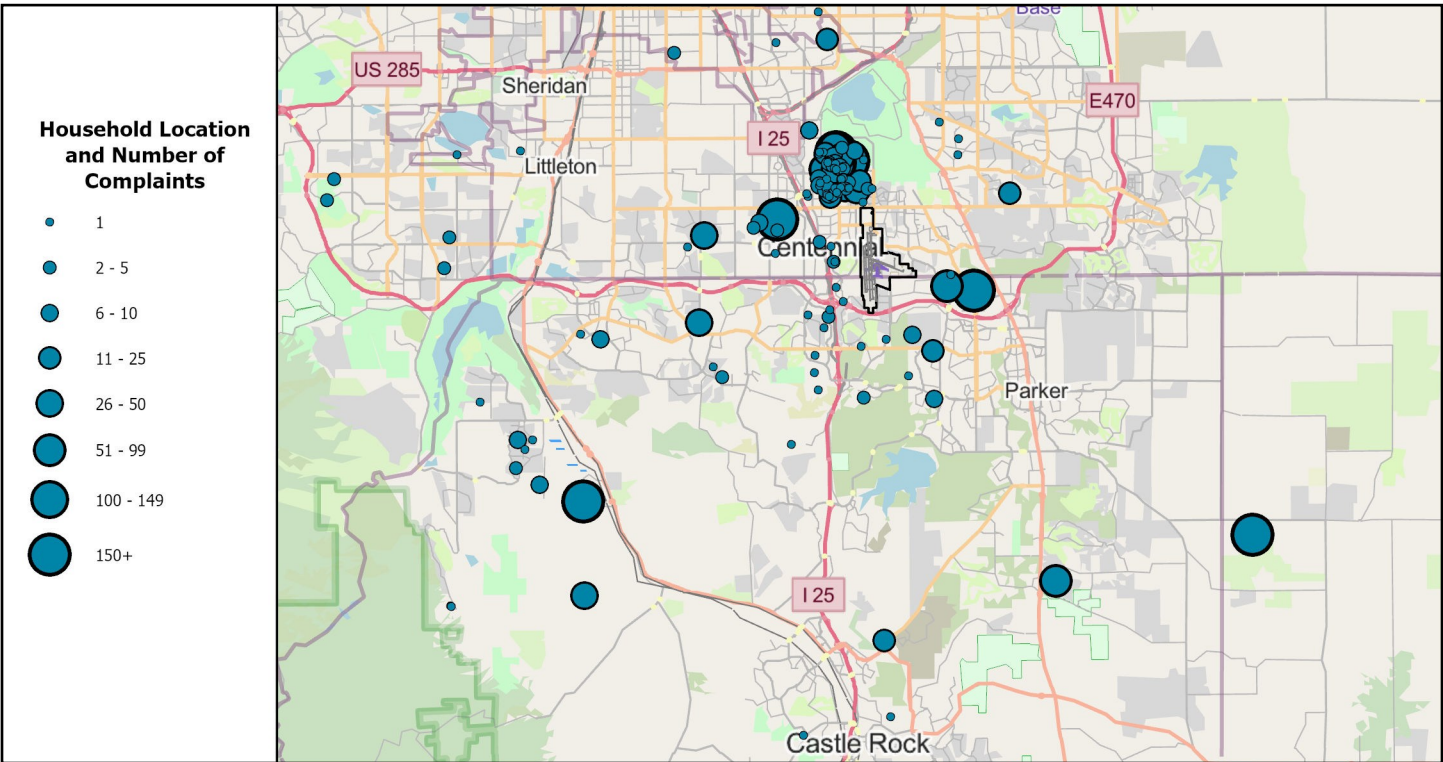
# 9. YEAR-TO-DATE 2025 NOISE COMPLAINT STATISTICS

Municipality	Complaints	Households	Population
Arapahoe County Unincorporated	1,438	38	98,066
Aurora	22	2	399,913
Castle Pines	0	0	14,000
Castle Rock	15	3	86,000
Centennial	408	10	108,422
Cherry Hills Village	0	0	6,442
Denver	30	7	715,522
Douglas County Unincorporated	384	20	276,493*
Greenwood Village	468	32	15,691
Highlands Ranch	59	5	103,444
Lone Tree	12	8	14,253
Parker	495	1	68,000
Other	485	14	-
Total	3,820	140	1,906,246

Complaints per Municipality



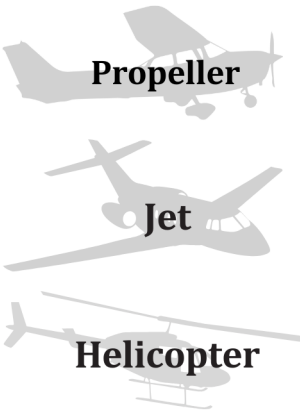
\*Douglas County Unincorporated Population with Highlands Ranch Removed



8 Households Outside Map Extent

# 9. YEAR-TO-DATE 2025 NOISE COMPLAINT STATISTICS

## Complaint by Aircraft Type



**Propeller**      **92%**

**Jet**      **7%**

**Helicopter**      **1%**

\*#1 Household Removed

## Complaint by Operation Type



**Departures**      **35%**



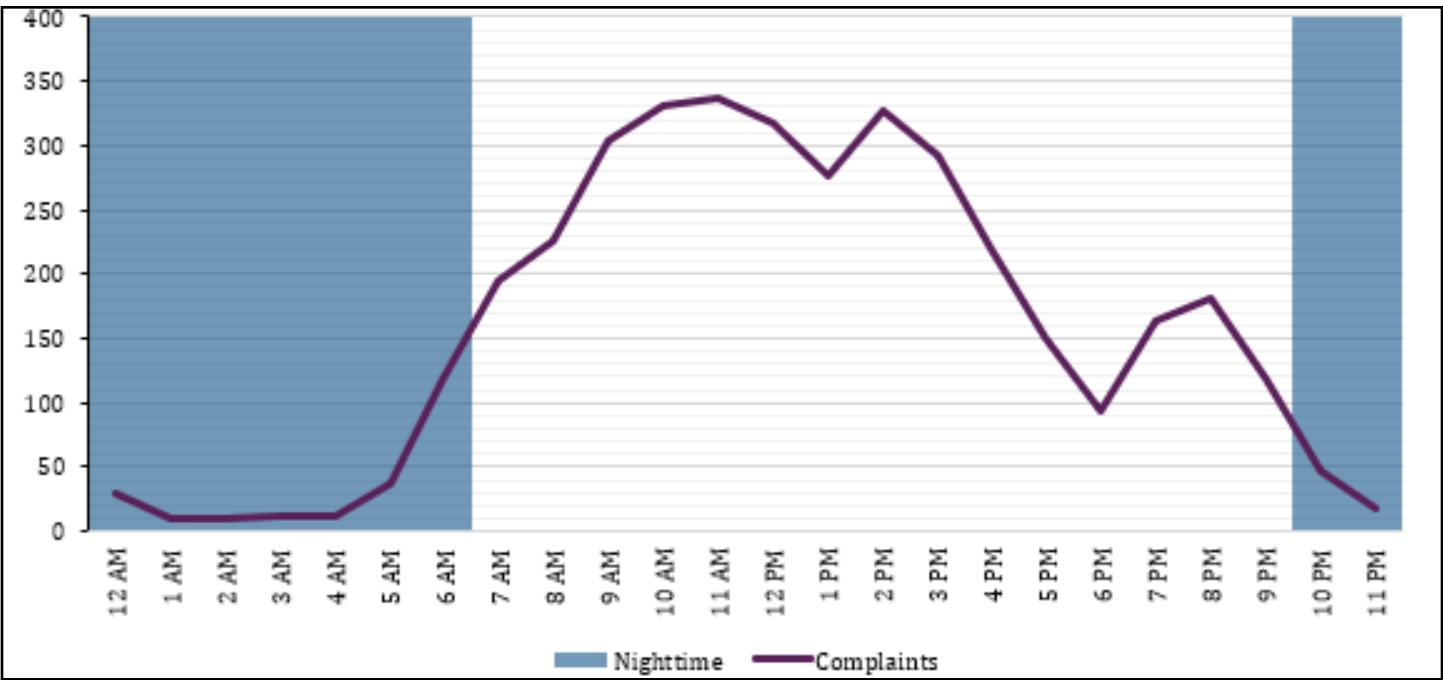
**Arrivals**      **20%**



**Training**      **45%**

\*#1 Household Removed

## Complaints by Hour



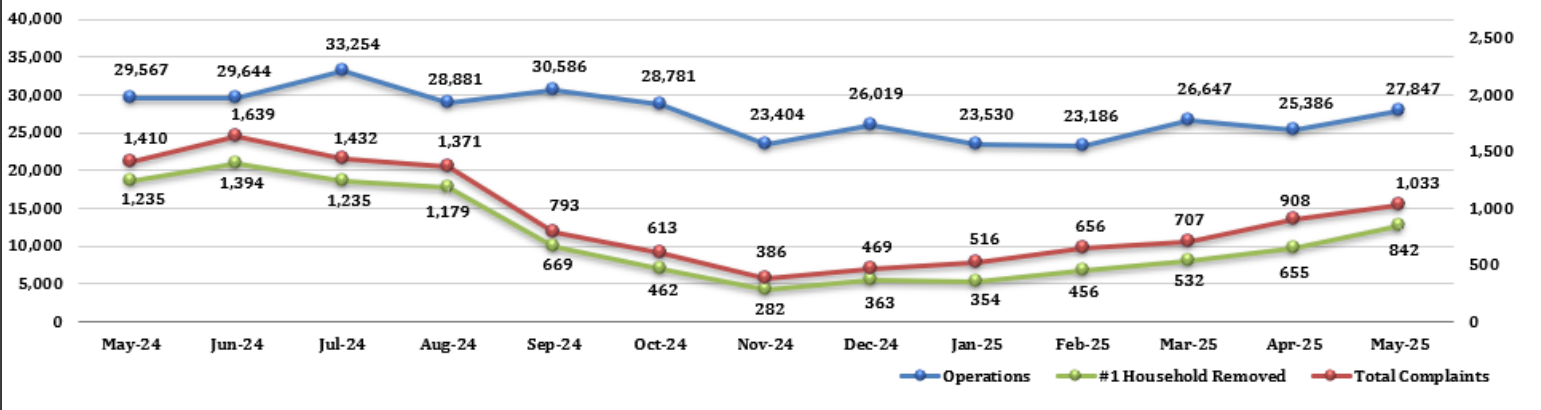
Noise Complaint Responses Completed	
Email	454
Phone	18
Total	472

Time Complaint Received	
Day (7:00 AM—9:59 PM)	3,528
Night (10:00 PM—6:59 AM)	292
Total	3,820

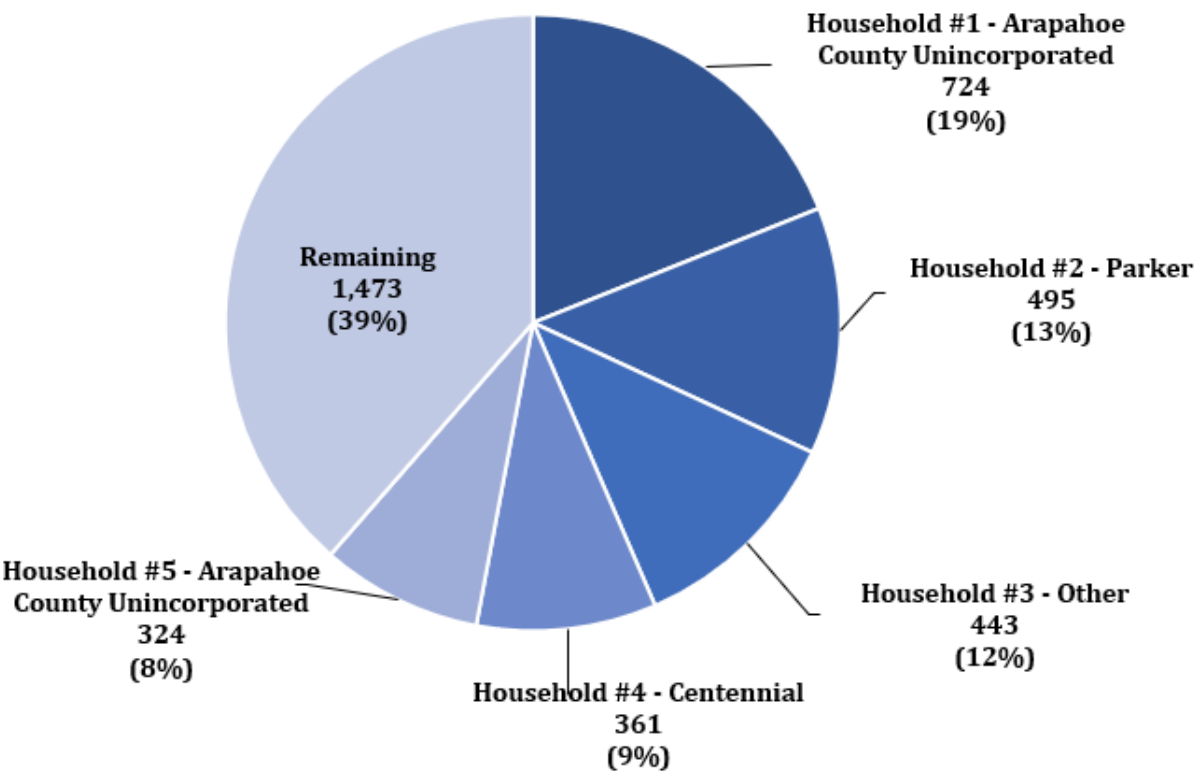


# 9. COMPLAINT STATISTICS

## 13-Month Trend



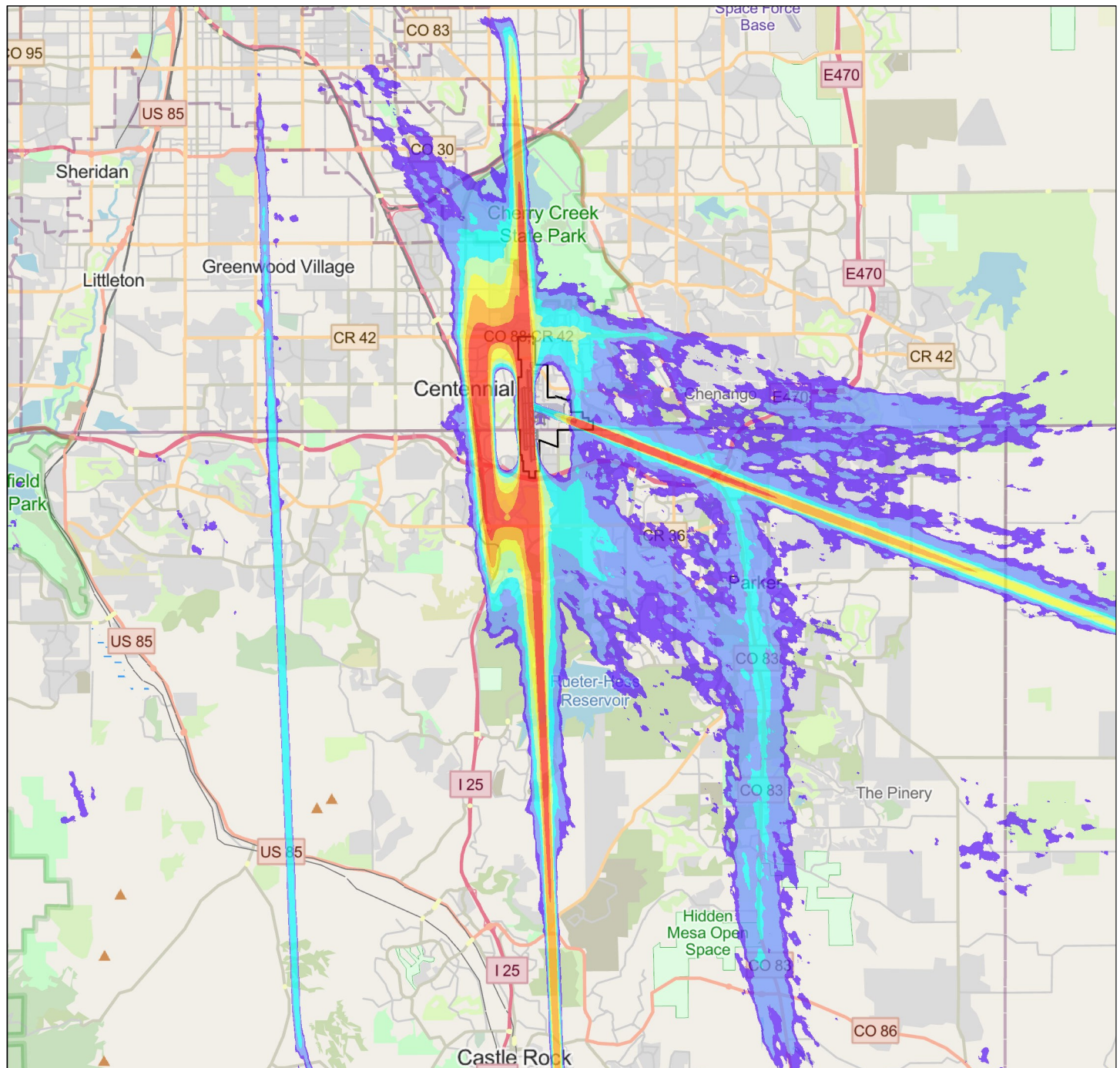
## Top 5 Household Complaints YTD



## 10. CENTENNIAL AIRPORT RADAR TRACK DENSITY

This map takes all of the flight track data for the given time period and creates a line density plot. This enables everyone to have a better understanding of where the flight tracks are at, while allowing for historical comparisons. Dark red in the middle of the picture shows the highest density of flight tracks over the runways. The colors gradually move out to blue as the least dense.

**MAY 2025**



Lower Density Traffic

Higher Density

## 10. NOTES AND DISCLAIMER

This report is for informational use only. Every effort has been made to ensure the accuracy of this data; however, the material may be altered as new information is added or updated in the system.

Centennial Airport disclaims any responsibility or liability for any direct or indirect damages resulting from the use of this data. We hope this information provides you with a valuable tool in which to review noise data and characteristics in your area. If you have questions or concerns, please contact the Centennial Airport Noise office at 303-790-0598.



**CENTENNIAL  
AIRPORT**

**Noise Hotline: 303-790-4709**

**[www.centennialairport.com](http://www.centennialairport.com)**

CAUTION  
STUDENT PILOT TRAINING AREA  
PRACTICE AREA ON 122.75

CAUTION  
INTENSIVE STUDENT PILOT TRAINING AREA  
CTC SE PRACTICE AREA ON 122.75