



CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE

AGENDA

October 2, 2024

6:30 p.m. – 8:30 p.m.

Centennial Airport, 7565 S. Peoria Street, Unit D9, Englewood, CO 80112

Chair: Chris Eubanks **Vice Chair:** Pam Thompson **Treasurer:** Andy Jones **Secretary:** Alison Biggs

**Members' Representatives and Alternate Representatives are requested to attend all meetings in person.
Members of the public may attend meetings in person, or virtually.**

CACNR Mission:

CACNR will bring together airport, community, FAA, and aviation industry representatives to collaboratively identify and discuss noise issues at Centennial Airport and recommend courses of action that could reduce noise over affected communities.

1. CALL TO ORDER AND DETERMINATION OF QUORUM:

<i>Arapahoe County:</i>	Leslie Summey/Sreenivasan Alakappan	<i>Foxfield:</i>	Pam Thompson/Frank Lawrence
	Vacant/Vacant	<i>Greenwood Village:</i>	Donna Johnston/John Jackson
<i>Douglas County:</i>	Abe Laydon/Dan Avery	<i>Highlands Ranch Metro Dist.</i>	Andy Jones/Renee Anderson
	Alison Biggs/Mark Adams	<i>Lone Tree:</i>	Mike Anderson/Chuck Darnell
<i>Aurora:</i>	Brad Pierce/Mindy Parnes	<i>Parker:</i>	Ashley Chasez/Bryce Matthews
<i>Castle Pines:</i>	Chris Eubanks/Ron Cole	<i>ACPAA:</i>	Michael Fronapfel/Vacant
<i>Castle Rock:</i>	Laura Cavey/Sandy Vossler	<i>AOPA:</i>	John Hirshman/Brad Schuster
<i>Centennial:</i>	Don Sheehan/Amy Tharp	<i>CABA:</i>	Don Kuskie/Mike Straka
<i>Cherry Hills Village</i>	Robert Eber/Randy Weil	<i>CDOT Aeronautics Div</i>	Todd Green/Vacant
		<i>Wings Over the Rockies:</i>	Bill Wasmund/Vacant

2. CONSENT AGENDA: (items here may be moved to Agenda Item #3, on the request of any CACNR Representative)

- A. DRAFT MINUTES, September 4, 2024 – Alison Biggs, Secretary
- B. TREASURER'S REPORT, September 2024 – Andy Jones, Treasurer, Zach Gabehart, ACPAA Staff
- C. NOISE REPORT, August 2024- Zach Gabehart, ACPAA Staff

3. ITEMS REMOVED FROM CONSENT AGENDA:

4. CACNR STUDY GROUP COMMITTEE: Brad Pierce, Chris Eubanks, Mike Fronapfel

5. PART 150 STUDY UPDATE/PROGRESS:

- A. REPORTS OF STUDY ADVISORY COMMITTEE MEETINGS
- B. NOISE COUNTOURS
- C. MODELING, EVALUATION, REFINEMENT
- D. ADVANCE NOTICES FOR BRAINSTORMING
- E. OTHER ITEMS OF CONSIDERATION/INTEREST TO CACNR

6. EXECUTIVE COMMITTEE:

- A. ACPAA MEETING, SEPTEMBER 12, 2024 – Pam Thompson
- B. 2025 DRAFT BUDGET
- C. 2023 RETREAT PRIORITIES UPDATE
- D. 2024 CACNR/ACPAA MEETING SCHEDULE
- E. TENTATIVE 2025 CACNR/ACPAA MEETING SCHEDULE

7. REPRESENTATIVES' COMMENTS:

- A. TRAINING BOX USE – Pam Thompson

8. OTHER REGULAR REPORTS:

- A. AIRPORT DIRECTOR – Mike Fronapfel
 - 1. Plane Crash on Meridian Golf Course
 - 2. Flight School Activity
 - 3. Part 150 Study Update
 - 4. Aviation Fuel – How Much Sold/What Kind
 - 5. Community Related Activity

- 6. Other Airport Activity
- 7. Legislative
- 8. Status of Follow Up Items

9. **OLD BUSINESS:**

- A. FOR DISCUSSION AND APPROVAL - DRAFT COLORADO VOLUNTARY NOISE ABATEMENT GUIDELINES – Zach Gabehart

10. **NEW BUSINESS:**

11. **PUBLIC COMMENT:** (3 minutes per person time limit):

- A. RECEIVED BY CACNR
- B. MEETING ATTENDEES /VIRTUAL ATTENDEES

12. **REPRESENTATIVES' COMMENTS:**

13. **RECOMMENDATIONS TO ACPAA AND OTHERS TO POTENTIALLY REDUCE NOISE OVER AFFECTED COMMUNITIES:**

14. **NEXT MEETINGS:**

- A. **CACNR** – November 6, 2024 6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112
December 4, 2024 **NO MEETING**
- B. **ACPAA** – October 10, 2024 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112
November 14, 2024 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112
December 12, 2024 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112

C. **PART 150 MEETINGS** –

15. **ADJOURN:**



CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE
MINUTES
September 4, 2024
DRAFT

VISION – QUIETER SKIES FOR OUR COMMUNITIES

MISSION – CACNR WILL BRING TOGETHER AIRPORT, COMMUNITY, FAA, AND AVIATION INDUSTRY REPRESENTATIVES TO COLLABORATIVELY IDENTIFY AND DISCUSS NOISE ISSUES AT CENTENNIAL AIRPORT AND RECOMMEND COURSES OF ACTION THAT COULD REDUCE NOISE OVER AFFECTED COMMUNITIES.

Chair: Chris Eubanks **Vice Chair:** Pam Thompson **Treasurer:** Andy Jones **Secretary:** Alison Biggs

1. **CALL TO ORDER, ROLL CALL, and QUORUM:** The meeting was called to order at 6:35 p.m. by Chair Chris Eubanks. The following were in attendance, and a quorum was present:

Arapahoe County:	Leslie Summey	Greenwood Village:	Donna Johnston
Douglas County:	Alison Biggs	Highlands Ranch Metro:	Andy Jone (virtual)
Aurora:	Brad Pierce	ACPAA:	Michael Fronapfel
Castle Pines:	Chris Eubanks	AOPA:	John Hirshman
Centennial:	Don Sheehan	Wings Over the Rockies:	Bill Wasmund
Foxfield:	Pam Thompson		

Others in attendance were Ron Cole, Alternate Representative from Castle Pines; Amy Tharp, Alternate Representative from Centennial; and ACPAA staff Zach Gabehart. There were 3 members of the public in attendance and five spoke online.

Those absent were: Arapahoe County:	Vacant/Vacant	Lone Tree:	Mike Anderson/Chuck Darnell
Douglas County:	Abe Laydon/Dan Avery	Parker:	Ashley Chasez/Bryce Matthews
Castle Rock:	Laura Cavey/Sandy Vossler	CABA:	Don Kuskie/Mike Straka
Cherry Hills Village:	Robert Eber/Randy Weil	CDOT Aeronautics Div:	Todd Green/Vacant

2. **CONSENT AGENDA:** The Consent Agenda included the Draft CACNR Minutes from August 7, 2024; a Treasurer's Report from 08/30/24, showing a balance of \$24,782.88; and the Noise Report from July 2024. Request was made to note some typographical errors in the draft minutes without moving them to Agenda Item #3. Request granted. Such errors were noted on pages four and five. On the motion of Donna Jonston, duly seconded, the Consent Agenda was approved.

The July 2024 Noise Report included the following information:

July Local Operations:	17,641	July Total Operations:	33,253
Year to Date Local Operations:	108,054	Year to Date Total Operations:	203,819

33,253 Total Operations in July resulted in 1,432 complaints from 90 households.

July Noise Events:

<u>July Total:</u>		<u>July 60 – 69 db:</u>		<u>July 70 – 79 db:</u>		<u>July 80 – 89 db:</u>	
Golf Course	12,914	Meridian	8,882	Golf Course	4,817	Airport East	578
Meridian	9,040	Golf Course	7,048	Meridian	1,840	Golf Course	230
State Park	2,795	Parker	2,484	Airport East	1,112	Meridian	73
Airport East	2,661	Portable Station	1,902	State Park	754	Portable Station	28
Portable Station	2,555	State Park	1,869	Portable Station	299	Grandview Estates	15
Parker	2,404	Airport East	1,568	Parker	204	Hunters Hill	12
Grandview Estates	1,724	Grandview Estates	1,505	Grandview Estates	156	Greenwood Village	07
Greenwood Village	1,309	Castle Rock	1,163	Greenwood Village	85	Lone Tee	07
Castle Rock	1,055	Greenwood Village	1,048	Hunters Hill	77	Parker	06
LoneTree	1,001	Lone Tree	723	Castle Rock	53	State Park	06
Hunters Hill	743	Hunters Hill	680	Lone Tree	43	Sagebrush Park	03
Castle Pines	270	Castle Pines	274	Castle Pines	17	Castle Rock	02
Sagebrush Park	177	Sagebrush Park	138	Sagebrush Park	10	Castle Pines	01

July Noise events in the 90+ decibel range: Airport East – 33 Golf Course – 10 Meridian – 05 Hunters Hill – 03
Castle Rock – 01 Grandview Estates – 01

<u>July Noise Complaints</u>	<u>and</u>	<u>Numbers of Households:</u>	<u>YTD Complaints and</u>	<u>Number of Households:</u>
(1,432)		(90)	(8,279)	(243)
Unincorporated Arapahoe County	775 (54%)	UAC 34 (38%)	UAC 3,918	UAC 90
Greenwood Village	220 (16%)	GV 18 (20%)	GV 2,260	GV 63
Other	189 (13%)	Other 12 (13%)	Other 694	Other 27
Unincorporated Douglas County	77 (06%)	UDC 09 (10%)	Centennial 663	UDC 15
Centennial	72 (05%)	Centennial 04 (04%)	UDC 330	Lone Tree 10

Castle Pines	62	Highlands R	04	Denver	207	Centennial	09
Denver	22	Castle Rock	03	Castle Pines	66	Highlands R	07
Aurora	04	Parker	03	Castle Rock	54	Parker	07
Highlands Ranch	04	Aurora	01	Aurora	28	Aurora	05
Castle Rock	03	Castle Pines	01	Parker	28	Castle Rock	05
Parker	03	Denver	01	Lone Tree	20	Denver	03
Lone Tree	01	Lone Tree	01	Highlands R	11	Castle Pines	02
Cherry Hills Village	00	CHV	00	CHV	00	CHV	00

Year to Date, the top five households complaining were:

Household #1	1,079	Unincorporated Arapahoe County	Household #4	391	Greenwood Village
Household #2	644	Centennial	Household #5	387	UAC
Household #3	528	Other (Elizabeth)			

In July, 147 responses were requested from 1,432 noise complaints, with 133 of those requests made by email (90%), and 14 made by telephone (10%).

In July, 1,161 complaints were made about **daytime flights** (7:00 a.m. – 9:59 p.m.) – 81%.
271 complaints were made about **nighttime flights** (10:00 p.m. – 6:59 a.m.) – 19%.

In July, props accounted for **90% of the complaints by aircraft type**; **jets** accounted for **9% of the complaints**, and **helicopters** caused **1%**.

In July, training was responsible for 76% of the complaints, **departures** were responsible for 17% of the complaints, and **arrivals** were responsible for 7% of the complaints.

A Complaint Map and a July Radar Track Density Map were provided.

3. ITEMS REMOVED FROM CONSENT AGENDA: None

4. N.O.I.S.E. OVERVIEW AND FEDERAL UPDATE: Emily Tranter, Executive Director of the National Organization to Insure a Sound-controlled Environment, was present via a video connection. She indicated the organization began in the late 1970's when airports were expanding and works to engage and collaborate with the FAA, assuring that those concerned about airport noise have a seat at the table. CACNR's Brad Pierce is the President of the organization.

There are 26 days until the Federal budget expires, and there will most likely be a continuing resolution passed. The results of the November election will have a bearing on both the timing and content of any budget legislation passed by the 'lame duck' Congress and beyond. It is possible a full budget will not be passed until the end of 2025.

There are several 'must pass' bills which require attention. Another piece of policy legislation is the Infrastructure Investment and Jobs Act of 2021. The FAA Reauthorization Act passed in May. It extends the authority of the FAA until 2028 and includes \$105,000,000. Now the activity is the development of rules and regulations to reflect the intent of Congress, which can be terribly difficult to accomplish. Some of the funds are to be directed to the issue of airport noise. The FAA is now required to establish an aircraft noise advisory committee to advise it on issues facing communities related to aircraft noise issues. It gives the FAA the ability to establish programs related to community engagement before new measures are enacted. There is also to be a regular 6 month report to Congress on community outreach engagement programs and the impact of NextGen; there is no definitive date for when those reports are to begin. Many of these items may take a long time while regulations are developed and implemented.

The creation of an aviation noise officer was included in the final legislation, but an ombudsman is still in place, so how this new position will be developed is somewhat unclear. The hoped for requirement of a study on noise metrics was not included in the final bill. The FAA's every 6 month reports to Congress will either include NextGen recommendations, or more likely to indicate delays in implementation. NextGen is very complex, and N.O.I.S.E. represents environmental concerns on that group, so there may be a way to advance noise concerns by getting NextGen recommendations accordingly. All of this is time-consuming and involved. The FAA administrator position tends to change with a changing administration, but on a delayed basis.

Regarding unleaded fuel, Centennial Airport was the first in the state to begin transitioning to the use of unleaded fuel, providing financial assistance to those use it, etc. The FAA has a target of no use of unleaded fuel after 2030. Tranter was positively impressed by the efforts here, and indicated Centennial Airport was a leader throughout the country on this issue, which began with the community being listened to.

N.O.I.S.E. has been affiliated with the National League of Cities, and that organization is changing its focus, so N.O.I.S.E. is looking for another 'home' for dealing with and working on noise issues. Future educational conferences, etc. are to come. Tranter was thanked for her information, and invited to come to Colorado – and Centennial Airport – whenever she could.

5. CACNR STUDY GROUP COMMITTEE: The Quarter 2 2024 Update Report, dated September 4th, 2023 was presented. Areas particularly noted included:

- Page 12, updated Chart Supplement information had been submitted to and approved by the FAA as discussed at the last CACNR meeting. This will allow pilots not based here to know what the noise abatement information is here, and to see where the noise sensitive areas actually are.
- Page 13, two meetings had been held with the flight schools. The most recent one covered sch things as the noise

abatement guidelines, practice area usage, and current noise data. Question was asked about CACNR attending these meetings, as had been done in the past. Response was the focus of the recent meetings had changed from those previously held; those may be restarted at some point.

- Page 14, nighttime noise outliers had been considered and related data analyzed. Operators of nighttime outliers had been contacted and reminded of the voluntary noise abatement guidelines. This kind of outreach will continue. There seems to be more receptivity and willingness to look at why such outlier flights occur; the awareness raising may be being helpful.

The Summary, page 25, and figures related to touch and go aircraft, those entering the study area, not entering the study area, and comparisons, pages 26-29, were considered. It was noted that, while the percentages of different categories may go down, the actual number of aircraft involved may actually go up because of an increase in the number of operations involved. Information was also provided on the numbers of aircraft entering the study area v. the numbers not entering the study area. Data will continue to be collected and analyzed.

5. **PART 150 STUDY UPDATE/PROGRESS:** Question was asked if ambient noise levels would be included in any part of the Part 150 study. Response was likely no, but the airport does look at them when the noise monitors are recalibrated every year. Request was made for the information to be provided again. However, the current contract related to the noise monitors ends this year, so it was unclear when that would occur again.

6. **EXECUTIVE COMMITTEE:**

A. ACPAA Meeting – A copy of Pam Thompson's report to the August ACPAA meeting had been provided. ACPAA seems to appreciate having the consistency of one CACNR Representative joining it every month and learning more regularly about the kinds of issues with which CACNR and the community and thus ACPAA, is involved.

7. **REPRESENTATIVES' COMMENTS:** Leslie Summey indicated Arapahoe County was working on getting someone to represent the unincorporated parts of the county.

Brad Pierce noted it would probably take a while for Grady Stone to respond to the letter from Chris Eubanks which was discussed at the last meeting. However, he had attended the meeting of the Study Group Committee on August 19th, and that had been very much appreciated.

Alison Biggs noted an article in the August 24th *Denver Post* headlined 'How Loud is too loud?' Denver currently has a 50 decibel limit for residential areas at night. Most notably, the article comments on the negative effects of chronic noise exposure and sleep disturbances caused by noise. One of its noise investigators advised ensuring sound levels at 35 decibels or less in sleeping areas, lower than CACNR had ever considered.

Pam Thompson noted a PC-12 which had flown over her location at 8:40 a.m. at 700 feet above ground. She asked what were the parameters, and what could a citizen do as recourse when such low flights occur. Response was 1,000 above the ground, and 500 feet in "rural" areas, except when taking off and landing, which is 500 feet. Transgressions may be reported to the FAA and information on how to do that is on the airport's website.

8. **OTHER REGULAR REPORTS:**

A. DIRECTOR'S REPORT – Mike Fronapfel reported operations for August would not be available yet. Prices for fuel will be going up next year – they have not gone up for eight years and are below the median across the country.

As noted, Grady Stone had attended meetings with the Study Group Committee and the lobbying group on August 19th. He was listening to what personnel had to say about unblocked flight tracks so that recognition of 'good behavior' of flight schools could be done. FAA assistance is also required to implement potential noise mitigation measures as identified by the Study Group Committee. He was reminded we would be anticipating a response to the letter which had been sent as discussed last month.

Centennial Airport was the first airport to receive a state grant to help with the transition to the use of unleaded gas. The go-cart track will be opening to the public soon; information will be found on the airport's website or at Colorado Carting Circuit. As noted last month, several charity events have been or will be coming up at the airport. It was anticipated the hotel might be open before or by the end of the year.

Zach Gabehart presented noise analyses for the 3 Towers practice area box, and the Elizabeth practice area box. There have been increasing complaints about the use of those boxes and the lack of use of the other boxes which had been established. The numbers of flights within the boxes and the numbers of complaints were compared between July 2023 and July 2024. He was thanked for providing the information and graphics. It was noted the practice areas exist by agreement between the flight schools. The airport is exploring how to integrate information about practice box usage into its data collection system. Once accomplished, such information could be included in the noise reports.

9. **OLD BUSINESS:** No discussion

10. **NEW BUSINESS:**

A. 2025 Budget Discussion – Zach Gabehart indicated the airport wanted to know tonight if CACNR would be billing its jurisdictions for 2025 and if the airport would be expected to contribute \$10,000. It was noted the CACNR Executive Committee was charged with developing a draft budget for the organization, for adoption by the entire group, and that process had not occurred yet, so it was essentially impossible to answer those two questions at this meeting. Mike Fronapfel noted the airport was prepared to make its usual \$10,000 contribution for 2025; if in the future CACNR were to end up with a carry-over of \$30,000 from one year to the next, the airport would likely want to pull back its contribution. Comment was made having the jurisdictions fiscally buy in to the

activities of the roundtable was part of the accountability of belonging to the group. The airport indicated it could wait until October for the answers to the questions. By general consensus, agreement was made to follow the established procedure for crafting the 2025 CACNR budget.

B. Voluntary Noise Abatement Guidelines – In accordance with legislation passed this year, five airports, including Centennial, which have significant flight activity over a densely populated residential area are to have a voluntary noise abatement plan to reduce the adverse impacts of aircraft noise. There were only two areas to be included in such a plan which Centennial Airport did not have in place – voluntary guidelines on the number of flights that may depart from the airport within specified periods, and voluntary guidelines on the frequency of touch and go operations. Some discussion on these concepts had occurred with the flight schools. This also provides an opportunity to update the current guidelines in additional areas. These must be in place by the end of this year. The staff intends to bring a draft to the October meeting, and all were encouraged to look at the current guidelines and see what changes they might find useful. It was suggested those involved with the development of the current guidelines would be good resources as well.

11. **PUBLIC COMMENT:**

A. RECEIVED BY CACNR – None

B. ATTENDEES/VIRTUAL/TELEPHONE – Greenwood Village, Denver, Ponderosa Park, Elizabeth, and Louviers were represented. Comment was made that the report of the Study Group Committee did not really present a clear statistical picture of what is going on. It should be rewritten to provide more clarity about things being better or worse for residents, rather than percentages as currently stated. Opinion was also expressed that the roundtable should not shortchange itself and should look at what good it could do with the funds it has.

Apparently the FAA now classifies the Elizabeth area as densely populated and low altitude maneuvers are no longer allowed to be done in those boxes. What might seem as though pilots were turning off their engines was actually more like idling, called stall recovery training. The law that governs how low airplanes can get to the ground while in flight is governed by 14 CFR 91.119 – Minimum safe altitudes: General. Among other things, it mentions except when necessary for takeoff or landing, if a power unit fails, the altitude must be such that an emergency landing can be made without undue hazard to persons or property on the surface; an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft over congested areas; and an altitude of 500 feet above the surface over other than congested areas.

Concern was expressed about airport encroachment which has most recently occurred by the approval of irresponsibly built homes, schools, condos and apartment complexes south of the airport. This has taken away emergency landing locations and will likely result in increased noise complaints, even though those living there should have been made aware of their close proximity to the airport before moving there. Some locations such as Longmont have recently rejected a concept plan for high density housing that would lie 1-3 miles away from the end of a runway.

On the motion of Donna Johnston, duly seconded, it was agreed to extend the meeting by 30 minutes.

A resident requested quiet areas and noted how unsafe even stall recovery training feels over homes. An invitation was extended for anyone to come and hear what is going on at that location. It was also recommended that the area southeast of the airport be included in the voluntary noise abatement guidelines as a noise sensitive area.

In the Louviers area, fewer planes had flown over the area than in June and July, and the resident felt the flight schools were being receptive to trying to lessen their impact.

12. **NEXT MEETINGS:**

- | | | |
|------------|--------------------|---|
| A. CACNR – | October 2, 2024 | 6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112 |
| | November 6, 2024 | 6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112 |
| | December 4, 2024 | NO MEETING |
| B. ACPAA – | September 12, 2024 | 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112 |
| | October 10, 2024 | 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112 |
| | November 14, 2024 | 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112 |
| | December 12, 2024 | 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112 |
- B. **PART 150 MEETING DATES** When and What Meetings, When Available from APA Staff

13. **ADJOURNMENT:** The meeting was adjourned at 9:04 p.m.

Alison Biggs, Secretary

CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE		2024 BUDGET - Approved November 1, 2023; Updated as of 09/27/2024			
		BUDGET	ACTUAL		
INCOME:			as of 09/27/24	NOTES	
CARRY OVER FROM PRIOR YEAR		\$ 20,000.00	\$20,317.55	Carry over from 2023	
ACPAA		\$ 10,000.00	\$10,000.00		
CACNR REGULAR MEMBERS		\$ -		Members not invoiced for 2024 due to amount of carry over available	
TOTAL INCOME:		\$ 30,000.00	\$30,317.55		
EXPENDITURES:					
WORK PROGRAM:					
COMMUNITY OUTREACH		\$ 2,000		Website Updating and Maintenance	
		\$ 5,000		Media Outreach Project	
FLY QUIET		\$ 1,000		Placeholder for Projects tbd	
NOISE MONITOR		\$ 1,000		Exploration of desired data and software for 2024	
EXECUTIVE/WORK PLAN		\$ 500		Orientation Manual, Annual Report	
EDUCATION					
2 Reps to UC Davis Symposium		\$ 4,000	\$4,534.67	Symposium to be at UC Davis; estimate based on prior symposiums	
2 Reps to 2 N.O.I.S.E. Conferences		\$ 4,000		based on prior years on-site conferences	
CONSULTATION/ TASK SUPPORT		\$ 4,000		Projects with Jason Schwartz	
MEMBERSHIP DUES		\$ 1,000	\$1,000.00	N.O.I.S.E.	
ADMINISTRATIVE		\$ 1,000		Part time secretarial assistance	
		\$ -		Legal	
RESERVE		\$ 2,500.00		for presently unidentified and unanticipated expenses and/or	
				work CACNR activities consistent with the approved Work Plan.	
TOTAL EXPENDITURES:		\$ 26,000.00			
CARRY OVER TO 2025		\$ 4,000.00	\$24,782.88	Actual to be determined at the end of 2024	
** Usually includes registration, travel, ground transportation, lodging, meals.					
FRAME OF REFERENCE: The MOU Funding Structure adopted 12/13/2018 called for an initial two-year funding mechanism. "Thereafter, CACNR will provide ACPAA and each Regular Member with a report on the previous year's expenditures, and an annual invoice accompanied by a proposed budget indicating how the requested funds would be utilized, so that funds could be appropriated for the coming year."					



Centennial Airport Monthly Noise Report



August 2024

1. TABLE OF CONTENTS

2. Definitions.....	3
3. About APA’s Noise Monitoring Program	4
4. About WebTrak™	5
5. Operations Statistics	6
6. Noise Monitor Reports	7
7. Noise Complaint Statistics	8-10
8. Complaint Map.....	11
9. Radar Track Density Map	12
10. Notes and Disclaimer.....	13

2. DEFINITIONS

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 ($L_{\max}$) – The peak noise level for a single noise event.

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

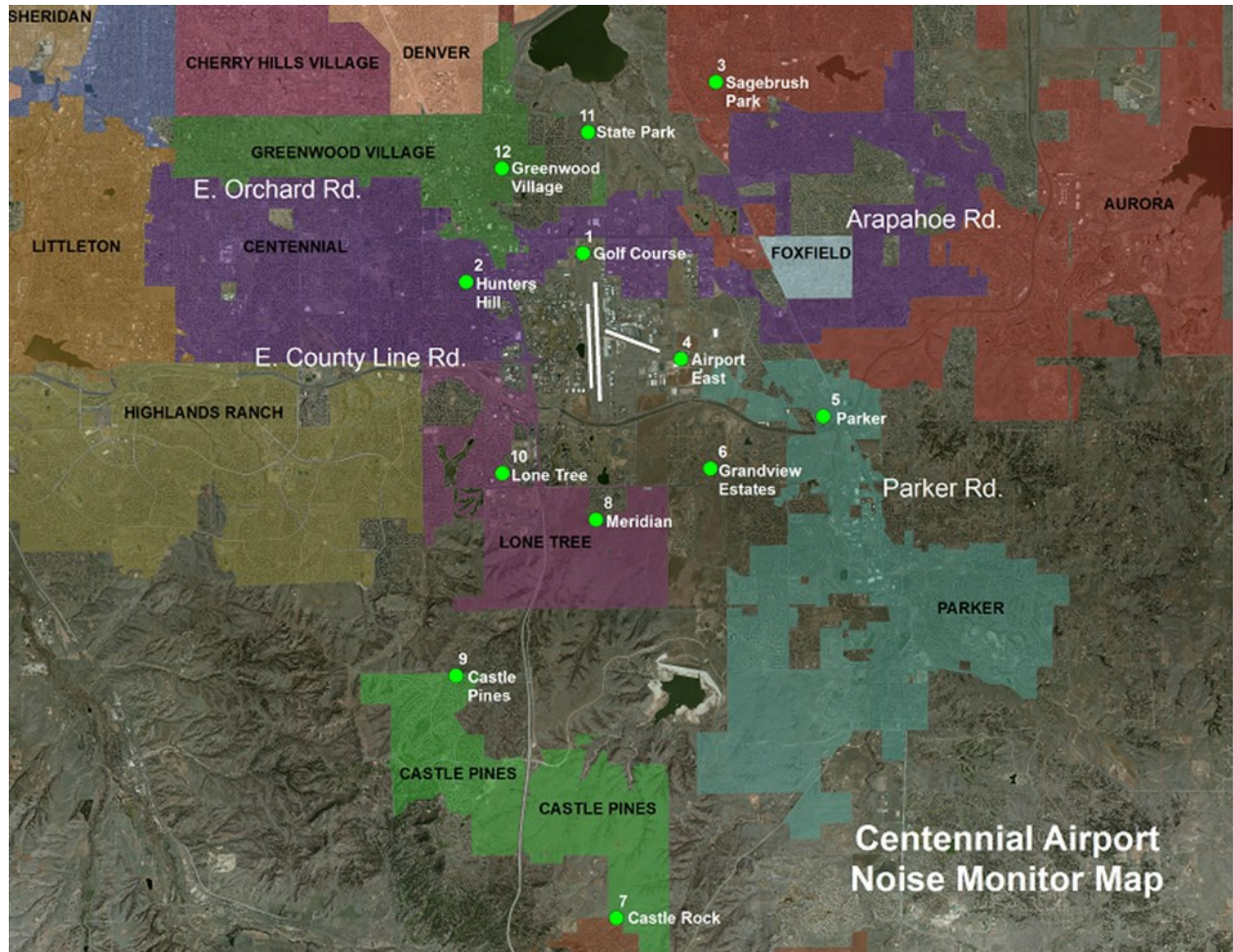
Overflight – Aircraft flight originating and terminating outside the area that transits the airspace without landing.

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.

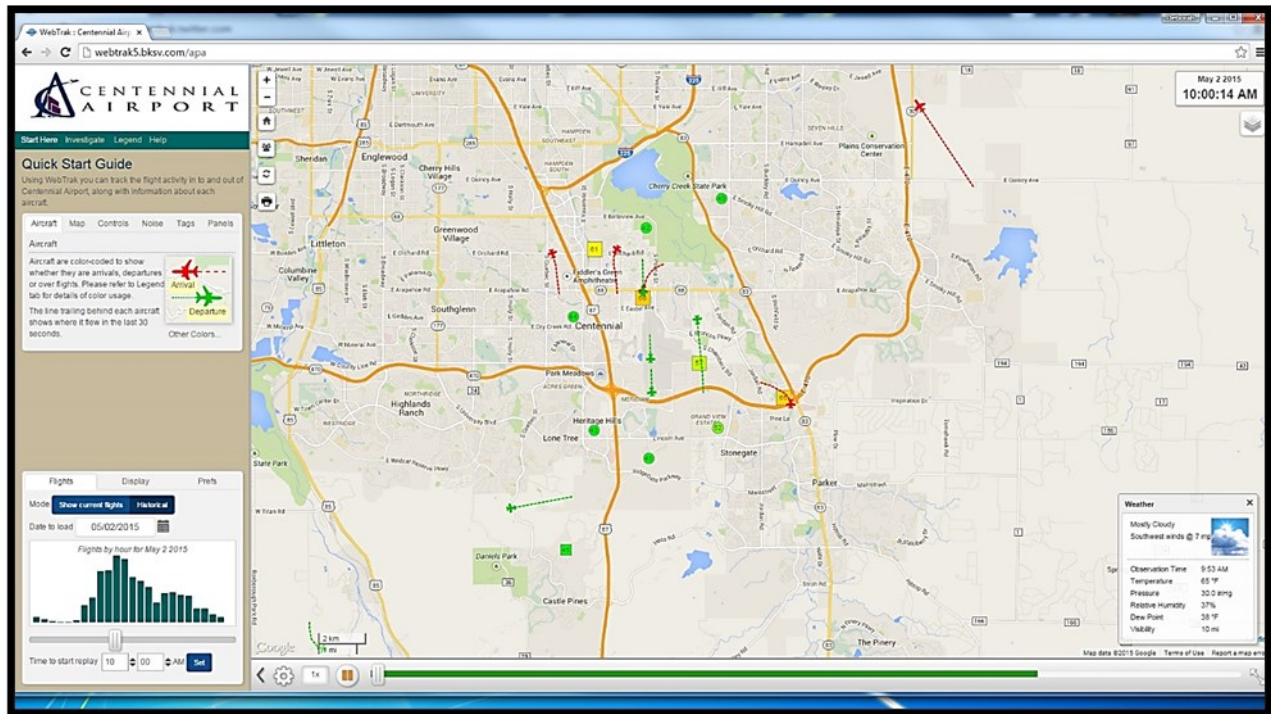
3. ABOUT APA’S NOISE MONITORING PROGRAM

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 now 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, Front Range Airport and Buckley Air 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:

APA WebTrak:

[https://webtrak.emsbk.com/apa?](https://webtrak.emsbk.com/apa?fbclid=IwAR1xnXwQ2sVwisSZ_szUAIHFtyYBNIZTACOI1PF7ZSH8PPbBxORnnaidUUE)

[fbclid=IwAR1xnXwQ2sVwisSZ_szUAIHFtyYBNIZTACOI1PF7ZSH8PPbBxORnnaidUUE](https://webtrak.emsbk.com/apa?fbclid=IwAR1xnXwQ2sVwisSZ_szUAIHFtyYBNIZTACOI1PF7ZSH8PPbBxORnnaidUUE)

Centennial Airport Website: <http://www.centennialairport.com>

In addition, noise complaints can also be submitted on our noise hotline:

APA Noise Hotline:

303-790-4709

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	2,483	2,640	172	5,295	1,607	5,408	132	7,147	13,881	2	13,883
February	2,374	2,702	161	5,237	1,709	5,384	83	7,176	13,797	2	13,799
March	2,527	2,771	133	5,431	1,947	6,487	89	8,523	16,676	13	16,689
April	2,247	2,606	140	4,993	1,592	5,580	105	7,277	15,502	29	15,531
May	2,659	2,833	164	5,656	1,933	6,068	112	8,113	15,677	24	15,701
June	2,743	2,961	190	5,894	2,145	6,599	97	8,841	14,805	5	14,810
July	2,618	3,056	230	5,904	2,301	7,138	140	9,579	17,631	10	17,641
August	2,983	3,413	191	6,587	2,011	6,522	101	8,634	13,537	23	13,560
September				0				0			0
October				0				0			0
November				0				0			0
December				0				0			0
Y-T-D Totals	20,634	22,982	1,381	44,997	15,245	49,186	859	65,290	121,506	108	121,614

	IFR OVERFLIGHTS				VFR OVERFLIGHTS					TOTAL OPERATIONS
	AIR TAXI	G.A.	MILITARY	TOTAL INTINERANT	AIR TAXI	G.A.	MILITARY	TOTAL		
January	3	4	4	11	35	61	12	108	January	26,444
February	4	8	1	13	21	36	5	62	February	26,287
March	0	10	1	11	31	31	6	68	March	30,722
April	3	5	3	11	39	47	4	90	April	27,902
May	8	7	0	15	16	60	6	82	May	29,567
June	4	5	1	10	21	61	7	89	June	29,644
July	4	12	5	21	14	91	4	109	July	33,254
August	7	19	1	27	31	37	5	73	August	28,881
September				0				0	September	
October				0				0	October	
November				0				0	November	
December				0				0	December	
Y-T-D Totals	33	70	16	119	208	424	49	681	Y-T-D Totals	232,701

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 REPORTS

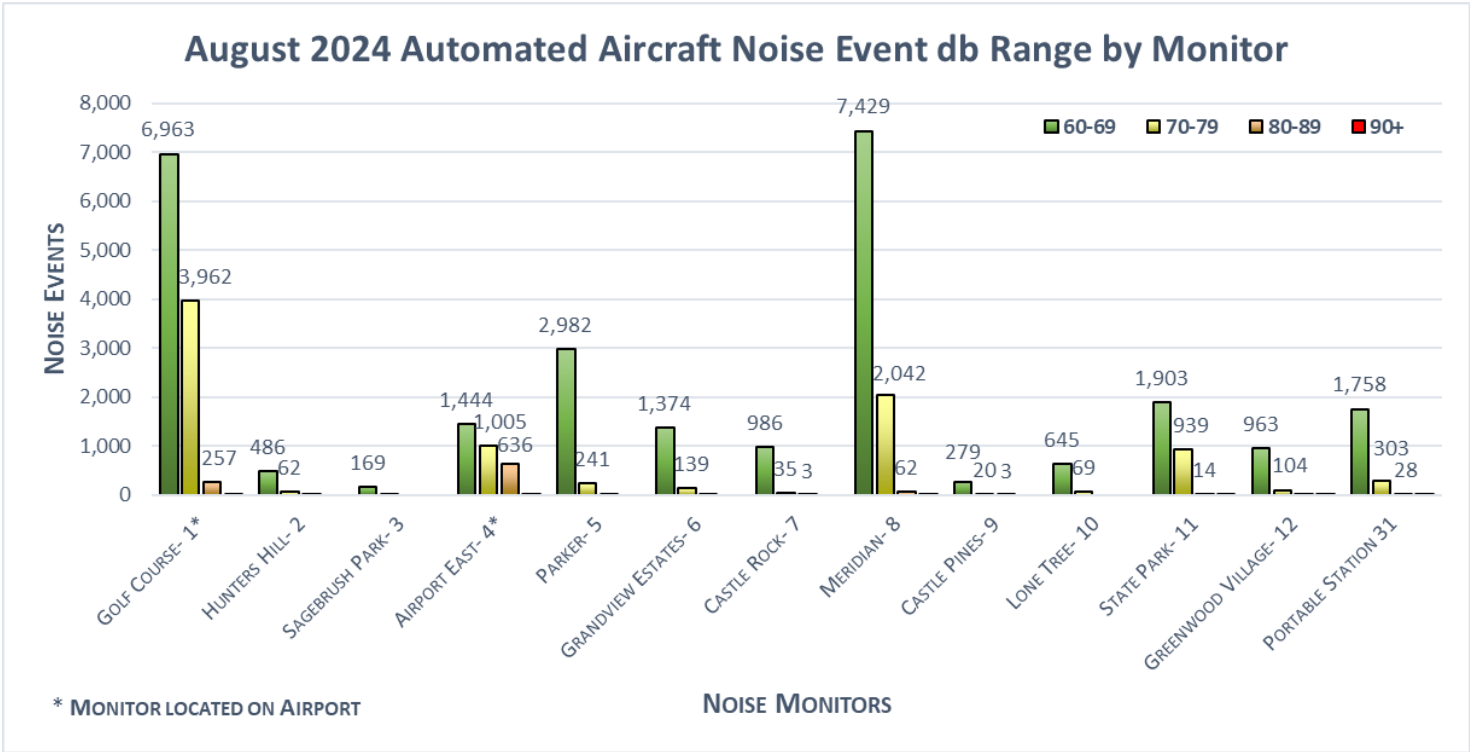
The following data displays the amount and associated decibel level of aircraft noise events at a given monitor. An aircraft noise event must contain the following characteristics:

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.

The information below reflects only aircraft noise events as described above.

Automated Aircraft Noise Event Decibel Range By Monitor					
Monitor	60-69	70-79	80-89	90+	Totals
Golf Course- 1*	6,963	3,962	257	4	11,186
Hunters Hill- 2	486	62	16	0	564
Sagebrush Park- 3	169	14	0	0	183
Airport East- 4*	1,444	1,005	636	32	3,117
Parker- 5	2,982	241	3	0	3,226
Grandview Estates- 6	1,374	139	4	0	1,517
Castle Rock- 7	986	35	3	0	1,024
Meridian- 8	7,429	2,042	62	2	9,535
Castle Pines- 9	279	20	3	0	302
Lone Tree- 10	645	69	0	0	714
State Park- 11	1,903	939	14	2	2,858
Greenwood Village- 12	963	104	10	1	1,078
Portable Station 31	1,758	303	28	1	2,090
Totals	27,381	8,935	1,036	42	37,394

*Monitor located on Airport



7. MAY 2024 NOISE COMPLAINT STATISTICS

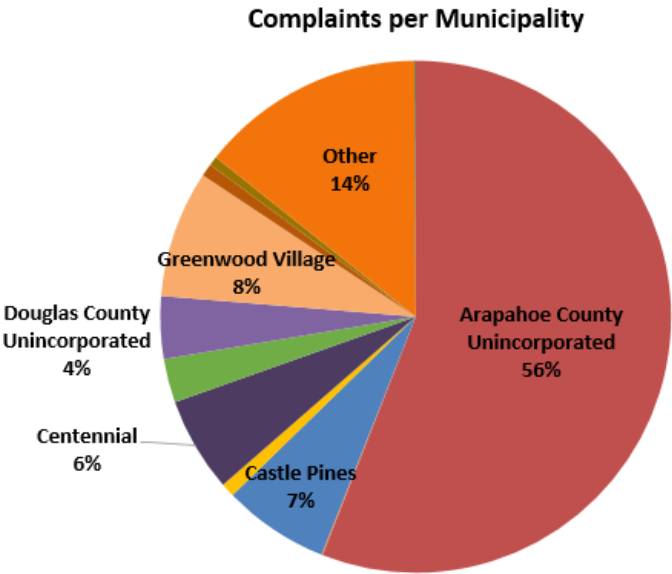
In August, Centennial Airport received 1,371 complaints from 87 households

August Noise Complaints			YTD		Population
Municipality	Complaints	Households	Complaints	Households	
Arapahoe County Unincorporated	767	30	4,685	95	98,066
Aurora	1	1	30	5	399,913
Castle Pines	92	1	158	2	14,000
Castle Rock	12	2	66	5	86,000
Centennial	82	4	745	10	108,422
Cherry Hills Village	0	0	0	0	6,442
Denver	38	1	245	3	715,522
Douglas County Unincorporated	54	14	384	21	276,493*
Greenwood Village	110	17	2,370	71	15,691
Highlands Ranch	11	2	22	8	103,444
Lone Tree	8	6	28	15	14,253
Parker	1	1	29	7	68,000
Other	195	8	889	28	UNK
Total	1,371	87	9,651	268	1,906,246

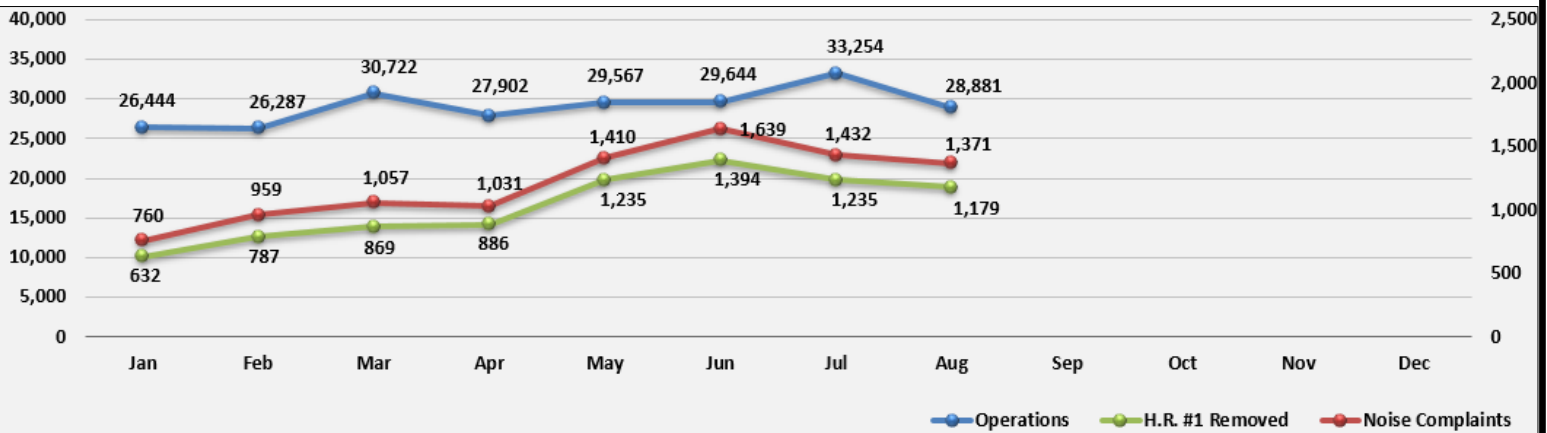
*Douglas County Unincorporated Population with Highlands Ranch Removed

August 2024 Noise Complaint Responses Completed	
Email	120
Phone	19
Total	139

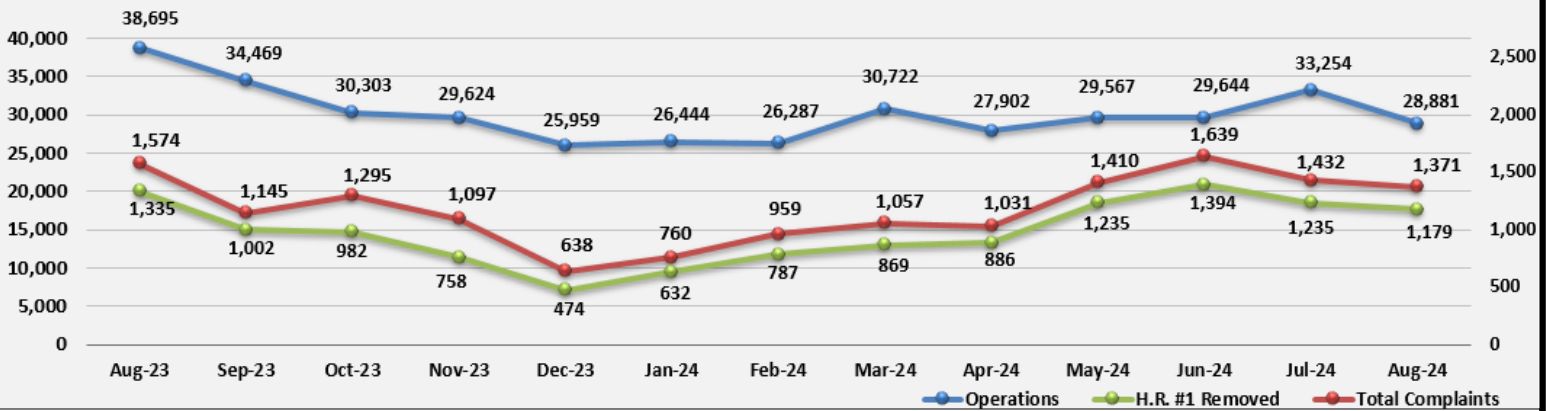
Time Complaint Received	August
Day Hours (7:00 am - 9:59pm)	1,090
Night Hours (10:00 pm - 6:59 am)	281
TOTAL	1,371



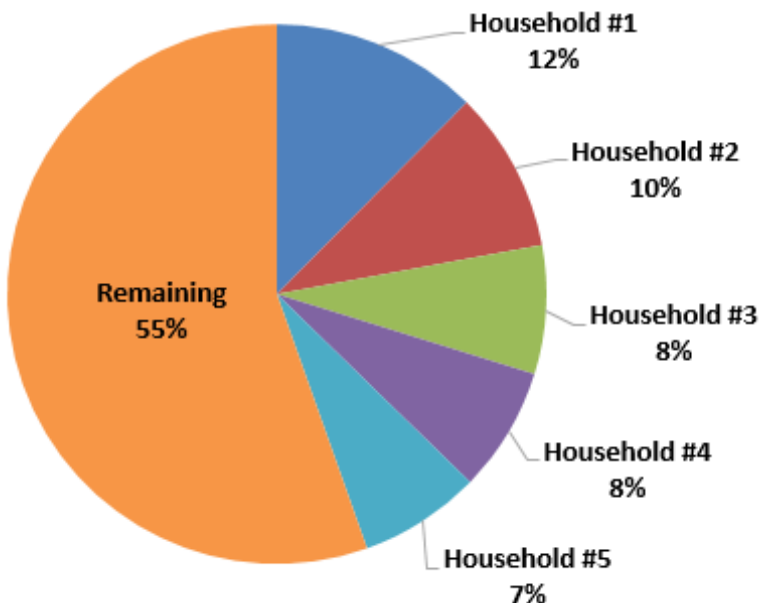
Current 12 Month Trend



Previous Year 13 Month Trend



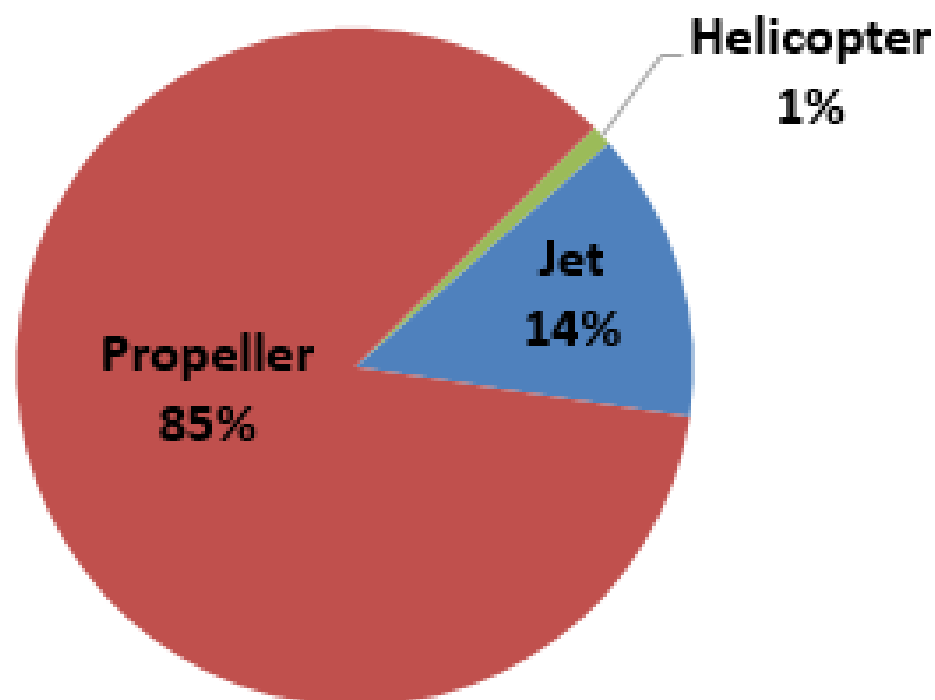
Top 5 Household Complaints YTD



Top 5 Household Complaints YTD

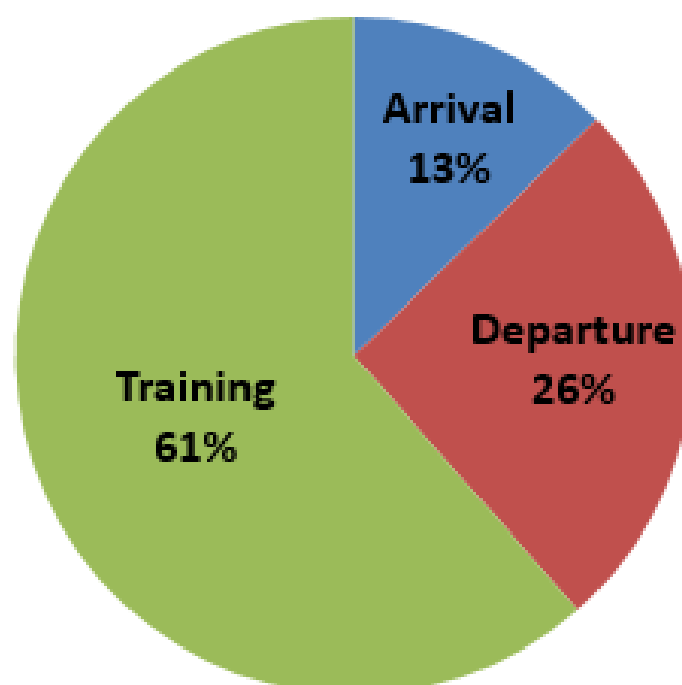
Household	Complaints	Resides In
Household #1	1,199	Arapahoe County Unincorporated
Household #2	932	Greenwood Village
Household #3	744	Arapahoe County Unincorporated
Household #4	723	Centennial
Household #5	704	Other (Elizabeth)
Remaining	5,349	
Total	9,651	

Complaints by Aircraft Type

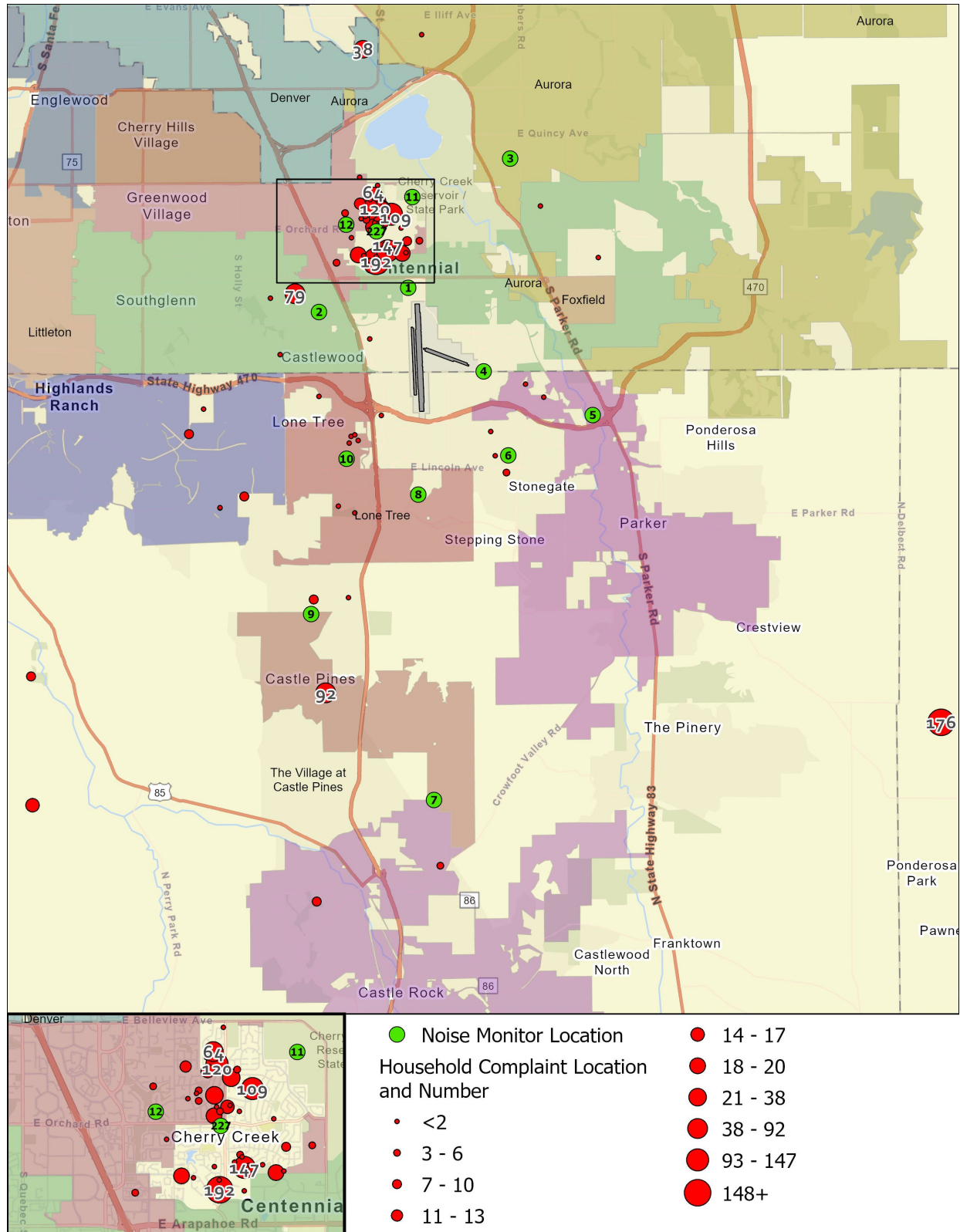


*#1 Household removed for the charts on this page.

Complaints by Operation Type



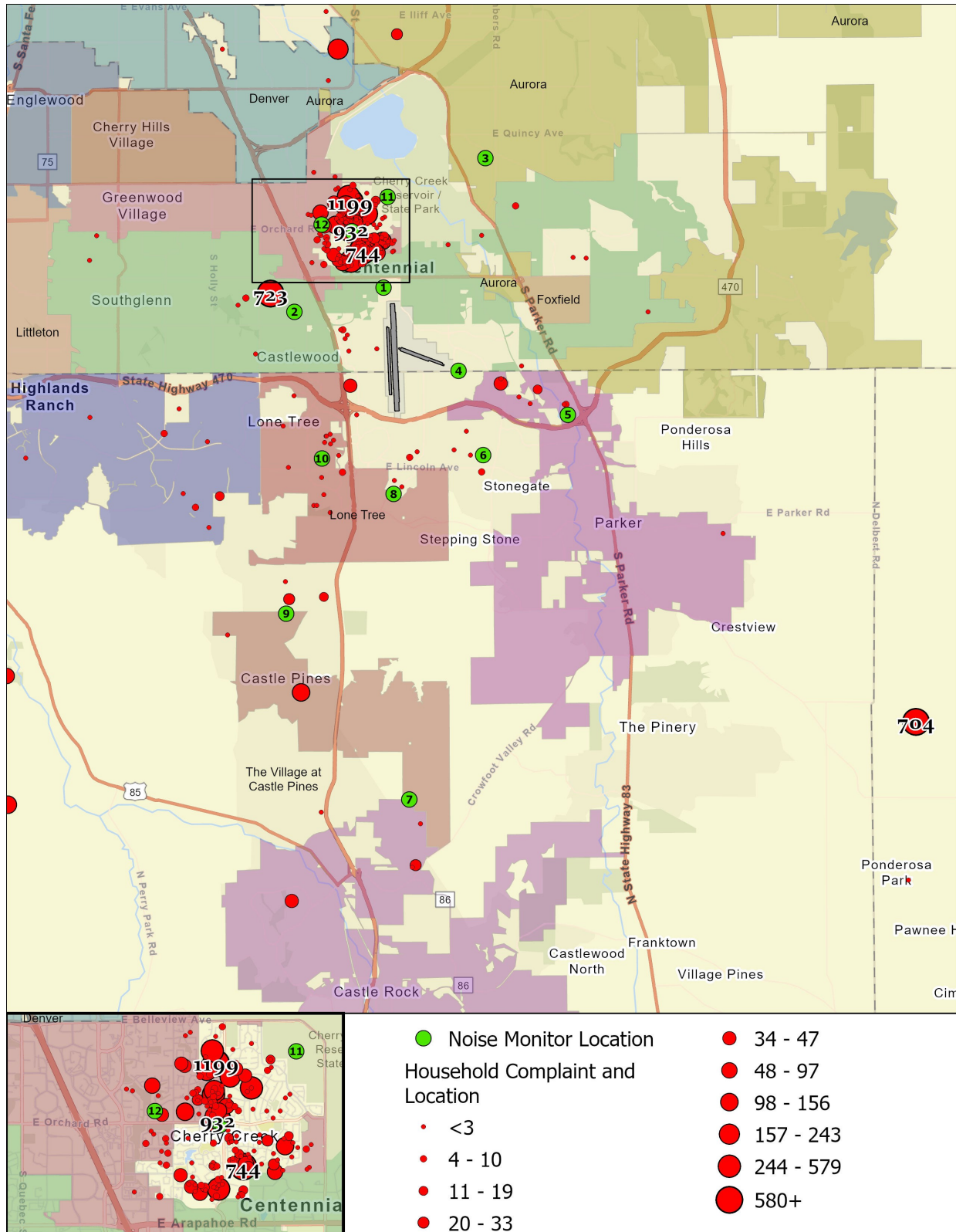
8. CENTENNIAL AIRPORT COMPLAINT MAP—AUGUST 2024



**Larger dots equate to more complaints for that household.

**9 households not visible in map view.

9. CENTENNIAL AIRPORT COMPLAINT MAP—YEAR TO DATE



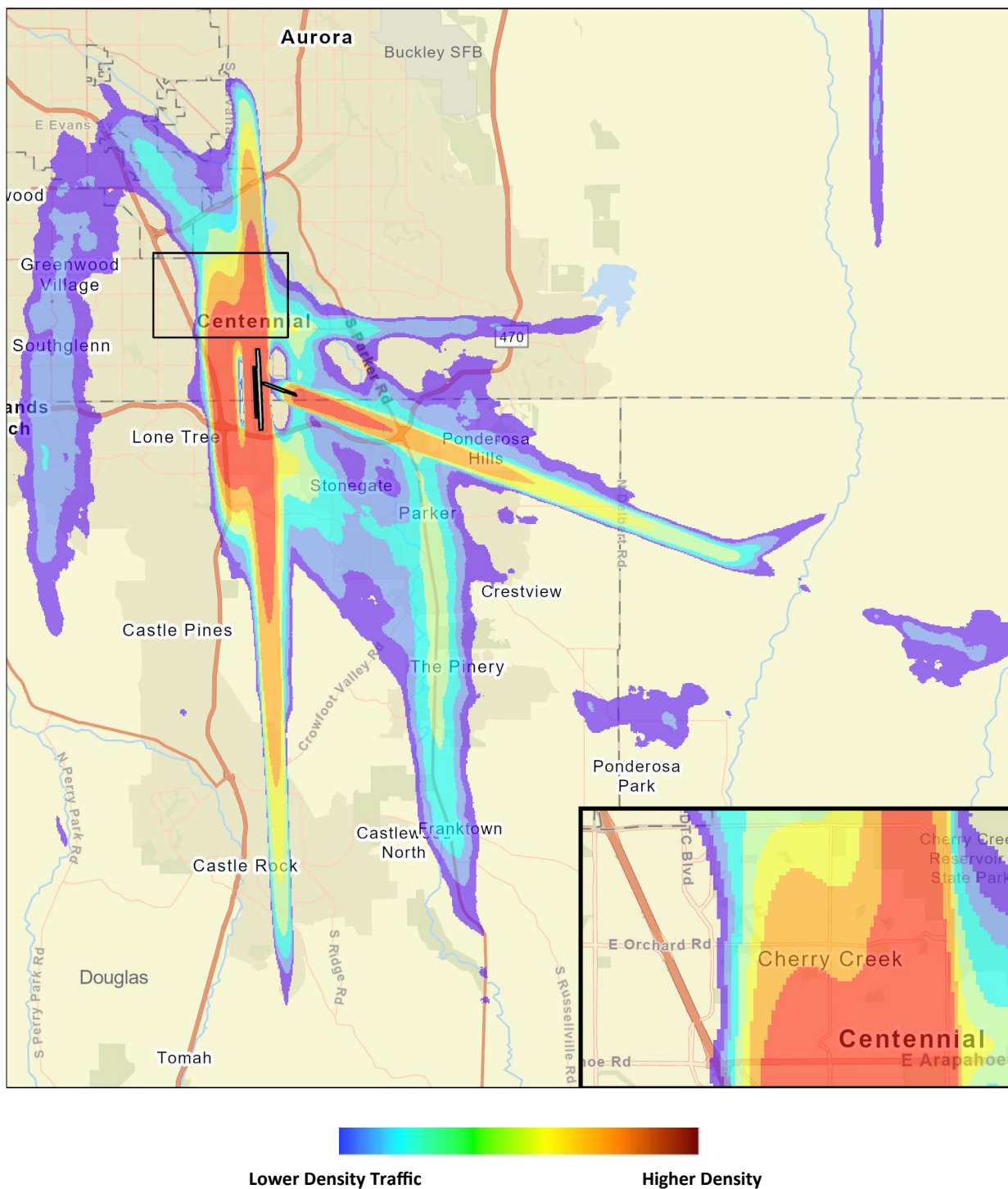
**Larger dots equate to more complaints for that household.

**30 households not visible in map view.

10. CENTENNIAL AIRPORT RADAR TRACK DENSITY MAP

The following maps take all of the flight track data for the given time period and create 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.

August 2024 Flight Tracks associated with Centennial Airport



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**.



Noise Hotline: 303-790-4709

www.centennialairport.com



Our Vision

Quieter Skies for Our Communities

Mission Statement

CACNR will bring together airport, community, FAA, and aviation industry representatives to collaboratively identify and discuss noise issues at Centennial Airport and recommend courses of action that could reduce noise over affected communities.

CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE

September 4th, 2024 MEETING

Prior to CACNR Report – Airport Staff Report / Fuel Report / Noise Report
Development Plan for CO Karting Circuit LLC

- N.O.I.S.E. Overview and Federal Update
 - Emily Tranter, N.O.I.S.E. Executive Director

Established in 70's / 30+ members / National Geographic footprint

Federal Re-authorization Act – provide ABILITY for standardized policy / Nex Gen Committee (25) – FAA report every 6 months to Congress / Policy recommendations

Unleaded Fuel – Centennial leader in industry – Kudos!

- CACNR Study Group Committee
 - Quarter 2 2024 Update Report

Q2 2024 T&Go Aircraft = 21,193

Q2 Entering = 11,163 NOT entering 10,030

50% strive for 100%

Q2 2024 (down) 2023 5.1% entering study area

Q1 2024 Entering = 10,729 NOT entering 10,631

Compare to college fund.

- 2025 Budget Discussion

Training / re-aligning efforts

Board suggestions – opportunities for development / improvements – great relationship - we all want to succeed!

- Voluntary Noise Abatement Guidelines

Opportunity for voice – so much effort into mitigation of noise is voluntarily done.

- Public Comment Received

- Greenwood Village, Elizabeth and Louviers

Training Boxes: incentive Program for Flight Schools

FAA High Density Area - 3 towers ; 500 foot flight over homes

Randy Johnson present for Public Comment.

CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE		2025 draft budget 9/19/24		
		2025 BUDGET	2024 ACTUAL	
INCOME:				NOTES
CARRY OVER FROM PRIOR YEAR	\$	24,000.00	\$ 20,317.55	approximate carry over from prior year
ACPAA	\$	10,000.00	\$ 10,000.00	
CACNR REGULAR MEMBERS	\$	7,000.00	\$ -	12 Regular Members to be invoiced at 1/2 past regular amount (\$500 for Cities and Towns; \$1,000 for Counties)
TOTAL INCOME:	\$	41,000.00	\$ 30,317.55	
EXPENDITURES:				
<u>WORK PROGRAM:</u>				
TEAM EXPENDITURES	\$	10,000	\$ -	Community Outreach; Incentive Program(s); Fly Quiet; Practice Areas; Noise Monitors; Legislative/Governmental Affair
WEBSITE	\$	1,600		Webmaster; Website maintenance and update
EXECUTIVE/WORK PLAN	\$	500	\$ -	Annual Report
<u>CONFERENCES:</u>				
2 Reps to UC Davis Symposium	\$	5,000	\$ 4,534.67	** Estimate based on prior symposiums
2 Reps to 2 N.O.I.S.E. Conferences	\$	4,000	\$ -	** Estimate based on prior years when conferences were held
<u>CONSULTATION/EDUCATION:</u>	\$	4,000	\$ -	Projects with consultants for entire Roundtable
<u>MEMBERSHIP DUES</u>	\$	1,000	\$ 1,000.00	N.O.I.S.E.
	\$	325		CML
<u>ADMINISTRATIVE</u>	\$	2,000	\$ -	Consultation on Work Plan
	\$	3,000	\$ -	Legal
	\$	1,650		Meeting Space
	\$	1,500		Recorder
<u>RESERVE</u>	\$	2,500.00	\$ -	for presently unidentified and unanticipated expenses and/or CACNR activities consistent with the approved Work Plan
<u>TOTAL EXPENDITURES:</u>	\$	37,075.00	\$ 5,534.67	
<u>CARRY OVER TO 2026</u>	\$	3,925.00	\$ 24,782.88	Actual to be determined at the end of each year
** Usually includes registration, travel, ground transportation, lodging, meals.				
FRAME OF REFERENCE: The MOU Funding Structure adopted 12/13/2018 called for an initial two-year funding mechanism. "Thereafter, CACNR will provide ACPAA and each Regular Member with a report on the previous year's expenditures, and an annual invoice accompanied by a proposed budget indicating how the requested funds would be utilized, so that funds could be appropriated for the coming year."				

SEPTEMBER 2023 RETREAT PRIORITIES

Update September 2024

The Summary Report from Jason Schwartz was received and accepted. Comment was made that the retreat was useful, and perhaps such meetings should be held more often. Agreed upon as top priorities from that report were:

- 1) Establish training for roundtable members ***process began in May, 2024; needs to be ongoing***
- 2) Make recommendations to Airport Authority and other than can reduce noise ***suggest making this an on-going agenda item, to keep the idea from getting 'lost;'*** ***activity of the Study Group Committee has also included this activity***
- 3) Restructure meeting agendas to make meetings more effective and productive ***a revised meeting agenda has been adopted***
- 4) Publish annual reports ***plans are in place to resume this activity for the 2024 calendar year***
- 5) Expand community outreach ***needs attention; using a team approach may facilitate progress here***
- 6) Strengthen relationships with FAA ***the Study Group Committee has established a good working relationship with the FAA within its area of work focus***
- 7) Expand industry engagement ***needs attention; using a team approach may facilitate progress here***
- 8) Fly Quiet briefings ***with whom? Is this being handled adequately by the Study Group Committee? Also addressed by the previous meetings with airport staff and the flight schools, to which CACNR was invited and has asked to be again.***
- 9) Study Noise Monitor data ***needs attention; using a team approach may facilitate progress here***
 - Correlate complaints to noise levels
 - Do more to leverage available noise data

Other Current / High Priority Issues were:

- 1) FAA Support of Roundtable ***the Study Group Committee has established a good working relationship with the FAA within its area of work***
- 2) Flight School Engagement ***see #8 above; determine what other types of engagement might be established between the flight schools and CACNR if additional engagement is desired; determine what types of incentives might be appealing to the flight schools.***
- 3) Airport Capacity ***needs further clarification; explore the types of aircraft related to noise complaints***

Finally, from the Consultant's Observations and Recommendations:

- 1) Sometimes roundtable "structures" seem to get in the way of the mission ***restructuring efforts are underway to make better use of Representatives' time and interests***
- 2) Relationship to the Airport and Airport Board ***having a consistent CACNR Representative attend ACPAA meetings and speak on behalf of CACNR seems to be having a positive effect***
- 3) Meetings with Airport Management ***relationship with airport management, though not via regularly scheduled meetings, seems to be open and useful***
- 4) Value in additional Roundtable training ***2025 draft budget includes funding for such activity***
- 5) Expand community outreach ***needs attention***
- 6) Consider additional roundtable support ***2025 draft budget provides some administrative support***

CACNR/ACPAA 2024 MEETING SCHEDULES

CACNR REPRESENTATIVES TO 2024 MEETINGS OF THE ARAPAHOE COUNTY PUBLIC AIRPORT AUTHORITY

CACNR meets at 6:30 p.m., 7565 South Peoria Street, Englewood, CO 80112

ACPAA meets at 3:00 p.m., 7565 South Peoria Street, Englewood, CO 80112

<u>CACNR MEETINGS</u>	<u>CACNR REPRESENTATIVE</u>	<u>REPORT DUE DATE</u>	<u>ACPAA MEETINGS</u>
(To sblymyer@centennialairport.com)			
January 03		due January 31 for Feb 8 meeting	NO ACPAA MEETING
February 07	Brad Pierce	verbal and on dias	February 08
March 06	Chris Eubanks	March 07	March 14
April 03		April 04	April 11
May 01		May 02	May 09
June 05		June 06	June 13
July 02 - NO CACNR MEETING	---	----	NO ACPAA MEETING
August 07		verbal or on dias	August 08
September 04		September 05	September 12
October 02		October 03	October 10
November 06		November 07	November 14
Dec 03 – NO CACNR MEETING		---	December 12

CACNR/ACPAA 2025 MEETING SCHEDULES

tentative 09/24/24

2025 MEETINGS OF **THE CENTENNIAL AIRPORT COMMUNITY ROUNDTABLE AND** **THE ARAPAHOE COUNTY PUBLIC AIRPORT AUTHORITY**

CACNR meets at 6:30 p.m., 7565 South Peoria Street, Englewood, CO 80112

ACPAA meets at 3:00 p.m., 7565 South Peoria Street, Englewood, CO 80112

Unless otherwise noted, CACNR will be represented at all ACPAA meetings by Pam Thompson, CACNR CVice-Chair

<u>CACNR MEETINGS</u>	<u>CACNR REPRESENTATIVE</u>	<u>REPORT DUE DATE</u>	<u>ACPAA MEETINGS</u>
(To zgabehart@centennialairport.com)			
January 08	Pam Thompson	due Feb 6 for Feb 13 meeting	NO ACPAA MEETING
February 05	Pam Thompson	Feb 06	February 13
March 05	Pam Thompson	March 06	March 13
April 02	Pam Thompson	April 03	April 10
May 07	Pam Thompson	Verbal or on dais	May 08
June 04	Pam Thompson	June 05	June 12
July 02	NO CACNR MEETING		NO ACPAA MEETING
August 07	Pam Thompson	verbal or on dais	August 08
September 03	Pam Thompson	September 04	September 11
October 01	Pam Thompson	October 02	October 09
November 05	Pam Thompson	November 06	November 13
Dec 03	NO CACNR MEETING	---	December 11

The map displays Elbert County, Colorado, divided into 12 districts, each represented by a different color. The districts are: Happy (yellow), Woodis (cyan), Deer Trail (light blue), Aspen (pink), Chaparral (green), Fairgrounds (blue), 3 Towers (teal), Kiowa (orange), Elizabeth (red), North Perry Park (light green), Larkspur South Perry Park (magenta), and Louviers (yellow-green). Major highways are shown as orange lines with their respective shields: I-70 (blue and red), I-25 (blue and red), US-30 (white and black), US-83 (white and black), US-86 (white and black), US-67 (white and black), and CO-105 (green and white). Surrounding cities and towns are labeled, including Golden, Denver, Aurora, Lakewood, Glendale, Holly Hills, Sheridan, Littleton, Morrison, Castlewood, Foxfield, Lone Tree, Parker, Castle Rock, Louviers, North Perry Park, Larkspur, South Perry Park, Palmer Lake, Ramah, Simla, and Deer Trail. A blue circle highlights the Centennial Airport Class D Airspace, which includes Castlewood and Foxfield. A red square indicates the location of Elbert.



NOISE ABATEMENT GUIDELINES

VOLUNTARY NOISE ABATEMENT GUIDELINES

**IN ALL CASES SAFETY AND ATC INSTRUCTIONS
TAKE PRECEDENCE!** The following guidelines are recommended voluntary practices to minimize sound levels in the vicinity of Centennial Airport.

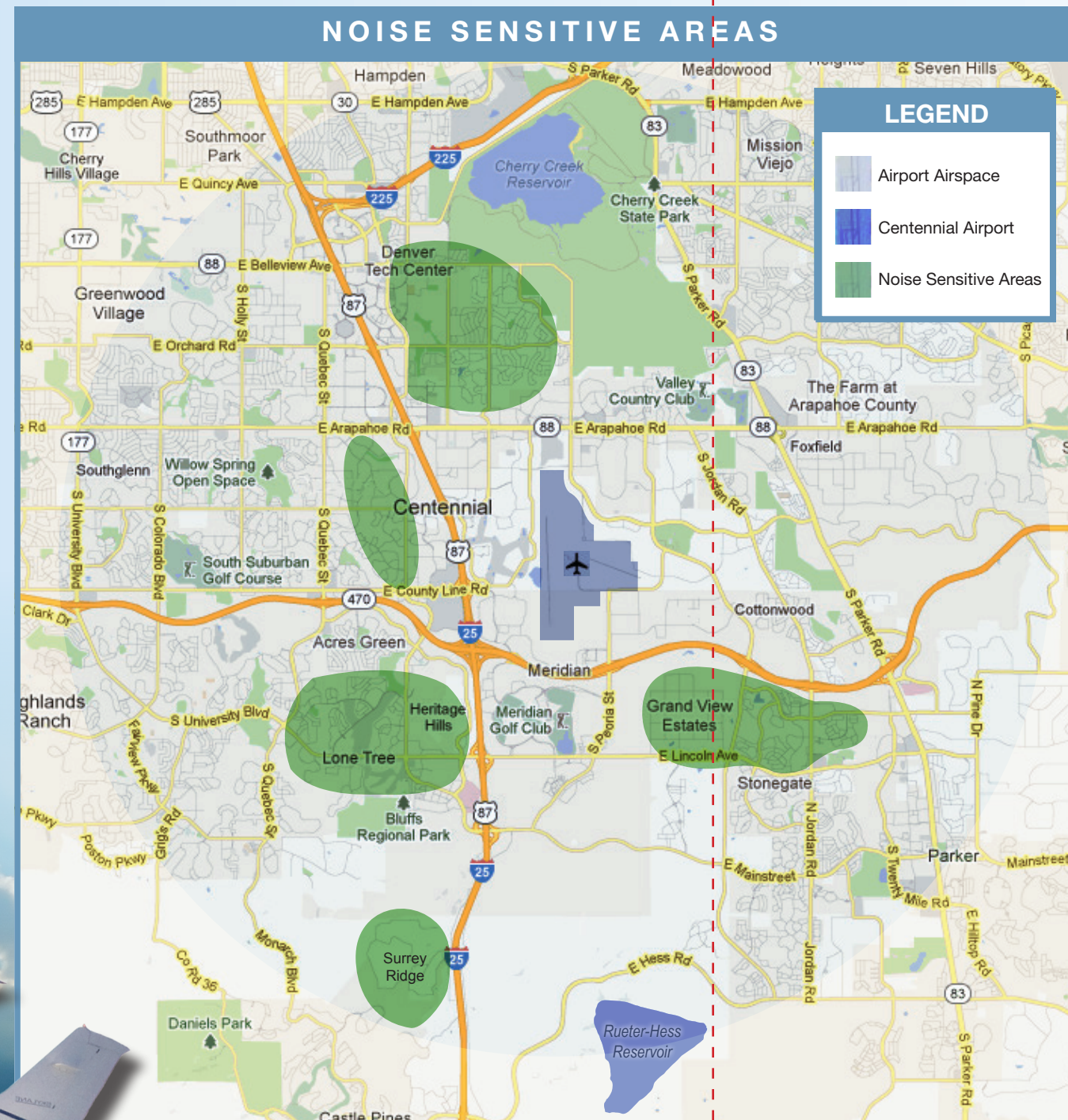
General Guidelines:

Traffic pattern altitude 6,885 ft. MSL (1,000 ft. AGL).

If possible, avoid noise sensitive areas as shown in green on the Noise Sensitive Areas map.

Terrain rises significantly to the south, southwest and west of Centennial Airport. Please adjust altitude accordingly.

For additional information regarding aircraft noise abatement, please call the Centennial Airport Noise Office at 303-790-0598.



All Aircraft:

Avoid flight training and ILS training operations between 10:00pm and 7:00am.

Make power setting changes slowly.

Observe noise abatement signs at runway departure ends.

Avoid noise sensitive areas when able.

Jet Aircraft:

Follow NBAA noise abatement guidelines.

Minimize use of reverse thrust.

Use thrust reduction techniques.

This document has been developed and approved by the Centennial Airport Community Noise Roundtable.



North Corridor
All Others

Reservoir Route
FAA LOA Only

East Corridor
All Others

Bronco Route
FAA LOA Only

South Corridor
All Others

Lincoln Route
FAA LOA Only

Radio Towers

Office Buildings

CENTENNIAL AIRPORT

Broncos Practice Field

E-470 and Peoria

Helicopter operators please contact tower for preferred noise abatement routes.

LEGEND

- Normal Pattern Area
- Extended Pattern Area

www.centennialairport.com
www.centennialnoiseroundtable.com



Propeller Aircraft

Limit consecutive touch-and-goes to 10 per flight.

Wind permitting, request Runway 10/28 for arrival and departure.

Take off and climb at best angle of climb (Vx) to 500 ft. then best rate (Vy).

Reduce RPM as soon as possible and do not increase RPM until on short final for landing.

Avoid intersection take offs.

Minimize the number of flight training departures during periods of heavy traffic (i.e. morning and early afternoon arrival/departure rush).

Jet Aircraft

Follow NBAA noise abatement guidelines.

Use thrust reduction techniques and minimize use of reverse thrust.

Helicopters

Helicopter operators please contact tower for preferred noise abatement routes.

APA Pilot Information

Coordinates

N39°34.21' W104°50.96'

Field Elevation

5885'

Airport Frequencies

DEN App/Dep **132.75**

ATIS **120.3** 303-799-6722

CLNC DEL **128.6**

FSS **122.2** 800-428-7652

ILS/DME **111.3**

Ground **121.8**

Tower **118.9**

123.7

124.6

jetCenters of Colorado (FBO) **130.57** 303-790-4321

Signature Aviation North (FBO) **130.07** 303-790-2575

Signature Aviation South (FBO) **129.72** 303-799-8388

Modern Aviation (FBO) **129.62** 877-649-9538

The Heliplex (Heli FBO) **130.27** 303-799-8877

Instrument and Visual Approaches

RY 17L PAPI/RNAV GPS

RY 17R PAPI/REIL

RY 35L PAPI/REIL/ILS sidestep approach

RY 35R ILS or LOC/DME RNAV GPS/MALSR/PAPI

RY 28 RNAV GPS PAPI/REIL

FAA Departure Procedures

All departures advise Ground Control when run up is complete. Remain on Ground Control Frequency until advised

Websites

www.centennialairport.com

www.centennialnoiseroundtable.com



CENTENNIAL
AIRPORT

Voluntary
**Noise Abatement
Guidelines**

The following guidelines are recommended voluntary practices to minimize sound levels in the vicinity of Centennial Airport.

For additional information regarding aircraft noise abatement, call the Centennial Airport Noise Office at 303-790-0598.

IN ALL CASES SAFETY AND ATC INSTRUCTIONS TAKE PRECEDENCE.

General Noise Abatement Guidelines

Traffic pattern altitude 6,885 ft. MSL (1,000 ft. AGL).

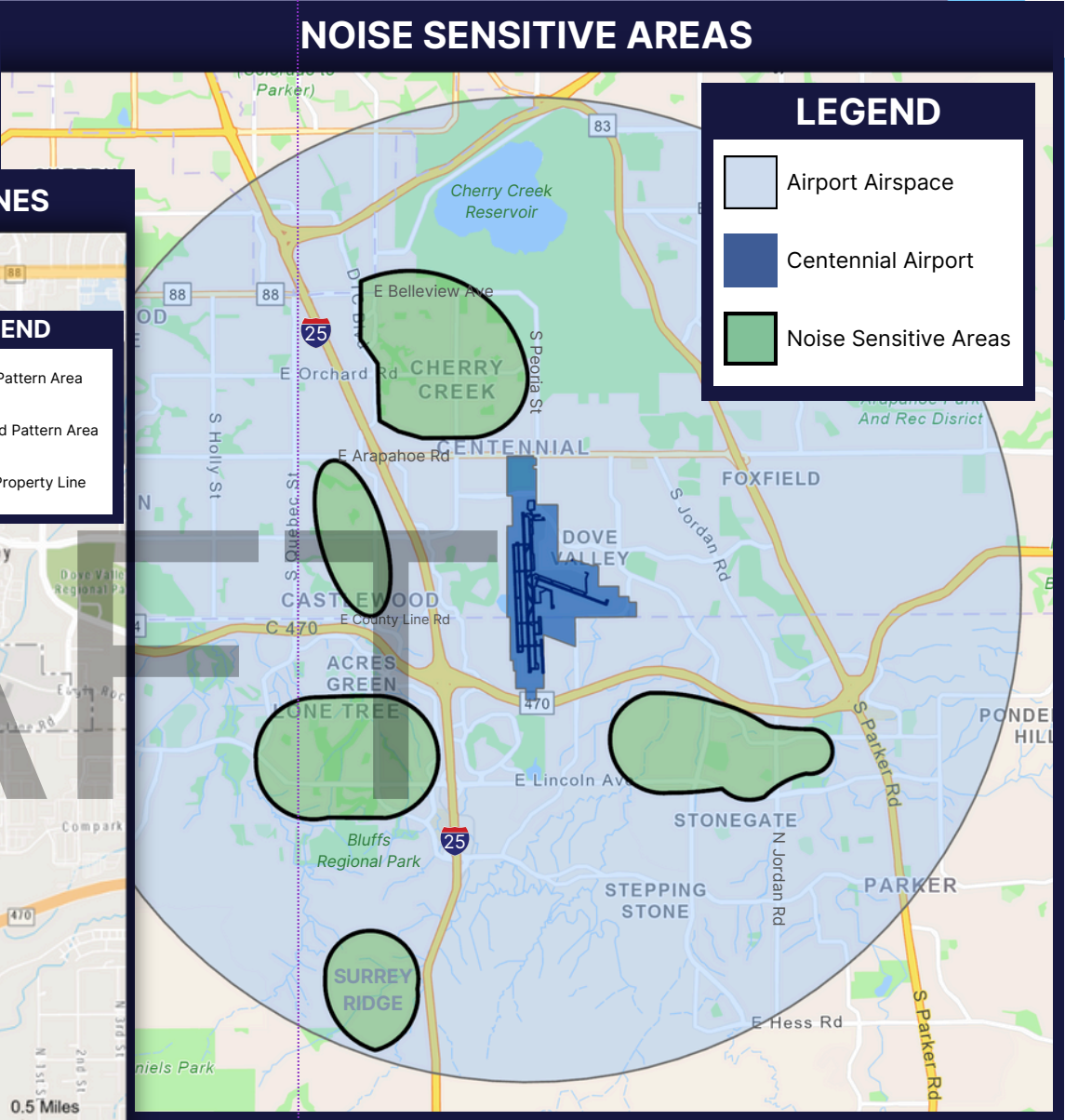
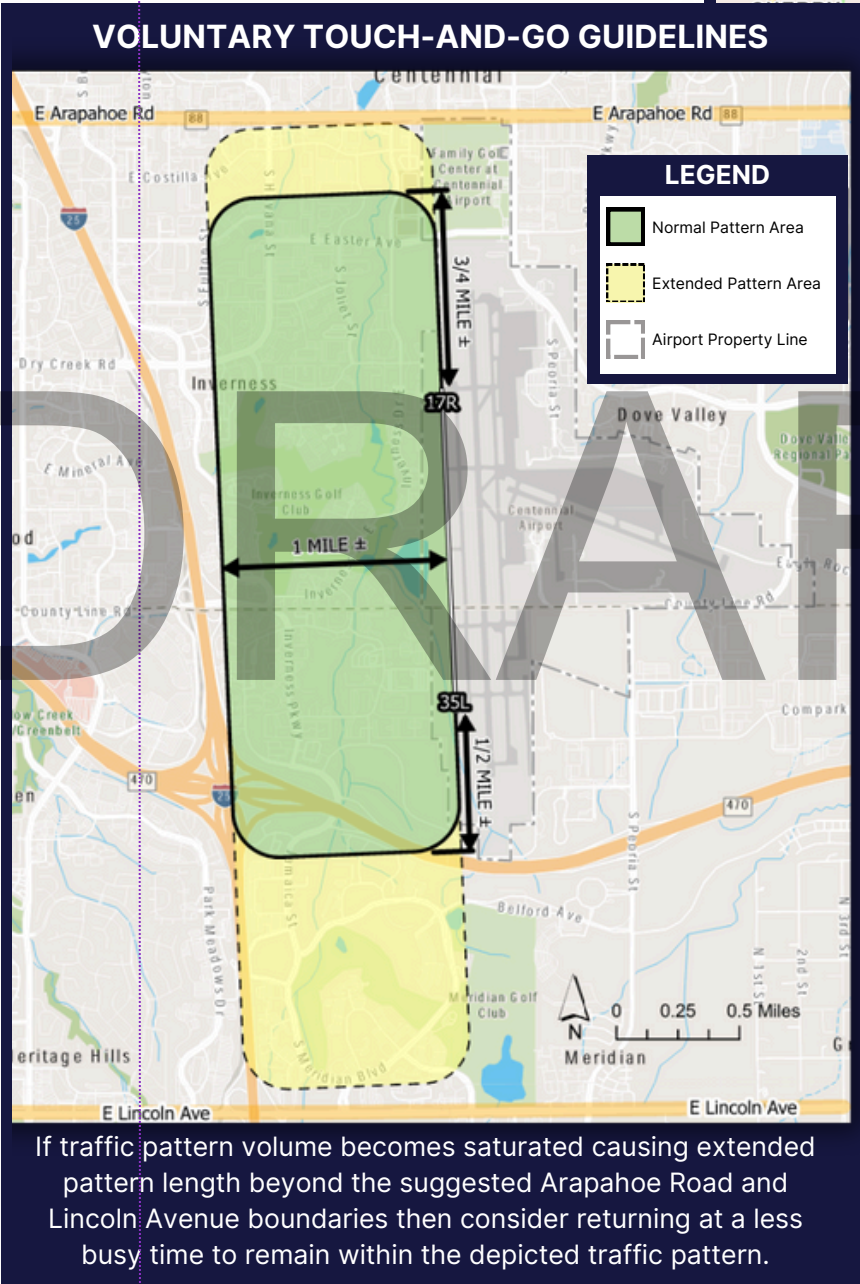
If possible, avoid noise sensitive areas as shown in green on the Noise Sensitive Areas Map.

Avoid flight training and ILS training operations between 10:00pm and 7:00am.

Make power setting changes slowly.

Observe noise abatement signs at runway departure ends.

Terrain rises significantly to the south, southwest, and west of Centennial Airport. Please adjust altitude accordingly.



This document has been developed and approved by the Centennial Airport Community Noise Roundtable.

