

**REPORT/ RECOMMENDATION TO THE BOARD OF COMMISSIONERS OF
ARAPAHOE COUNTY PUBLIC AIRPORT AUTHORITY AND
RECORD OF ACTION**

August 13, 2026

FROM: Operations

SUBJECT: Fuel and Operations Report for June and July 2026

RECOMMENDATION: Advisory

BACKGROUND: Fuel and Ops will be provided prior to the Board Meeting.

FINANCIAL DATA: N/A

REVIEW BY OTHERS: N/A

PRESENTERS: Brycen Hoover

Action of the Board of Commissioners

	1 st	2 nd	YES	NO	ABSTAIN
Bagnato	☐	☐	☐	☐	☐
Baker	☐	☐	☐	☐	☐
Beatty	☐	☐	☐	☐	☐
Campbell	☐	☐	☐	☐	☐
Summey	☐	☐	☐	☐	☐

**REPORT TO THE BOARD OF COMMISSIONERS OF
ARAPAHOE COUNTY PUBLIC AIRPORT AUTHORITY AND
RECORD OF ACTION**

August 13, 2026

FROM: Zach Gabehart – Senior Planner, Noise & Environmental

SUBJECT: 2nd Quarter 2026 Flight School Fly Quiet Dashboard Report

RECOMMENDATION: Advisory

BACKGROUND: The 2nd Quarter 2026 Flight School Fly Quiet Dashboard Report is attached.

FINANCIAL DATA: N/A

REVIEW BY OTHERS: M. Fronapfel

PRESENTERS: Zach Gabehart – Senior Planner, Noise & Environmental

Action of the Board of Commissioners

	1 st	2 nd	YES	NO	ABSTAIN
Bagnato	☐	☐	☐	☐	☐
Baker	☐	☐	☐	☐	☐
Beatty	☐	☐	☐	☐	☐
Campbell	☐	☐	☐	☐	☐
Summey	☐	☐	☐	☐	☐

**REPORT TO THE BOARD OF COMMISSIONERS OF
ARAPAHOE COUNTY PUBLIC AIRPORT AUTHORITY AND
RECORD OF ACTION**

August 13, 2026

FROM: Zach Gabehart – Senior Planner, Noise & Environmental

SUBJECT: 2nd Quarter 2026 Flight School Fly Quiet Dashboard Report

RECOMMENDATION: Advisory

BACKGROUND: The 2nd Quarter 2026 Flight School Fly Quiet Dashboard Report is attached.

FINANCIAL DATA: N/A

REVIEW BY OTHERS: M. Fronapfel

PRESENTERS: Zach Gabehart – Senior Planner, Noise & Environmental

Action of the Board of Commissioners

	1 st	2 nd	YES	NO	ABSTAIN
Bagnato	☐	☐	☐	☐	☐
Baker	☐	☐	☐	☐	☐
Beatty	☐	☐	☐	☐	☐
Campbell	☐	☐	☐	☐	☐
Summey	☐	☐	☐	☐	☐

**REPORT TO THE BOARD OF COMMISSIONERS OF
ARAPAHOE COUNTY PUBLIC AIRPORT AUTHORITY AND
RECORD OF ACTION**

August 13, 2026

FROM: Luis Gonzales – Noise & Environmental Specialist

SUBJECT: 2026 2nd Quarter Land Use Referrals Report

RECOMMENDATION: Advisory

BACKGROUND: The land use referrals received for the 2nd Quarter of 2026:

- Received a total of 19 referrals during April 2026 through June 2026
- 7 were approved as submitted
- 10 were subject to comments
- 2 were not recommended

FINANCIAL DATA: N/A

REVIEW BY OTHERS: Z. Gabehart, M. Fronapfel

PRESENTERS: Luis Gonzales

Action of the Board of Commissioners

	1 st	2 nd	YES	NO	ABS
Bagnato	☐	☐	☐	☐	☐
Baker	☐	☐	☐	☐	☐
Beatty	☐	☐	☐	☐	☐
Campbell	☐	☐	☐	☐	☐
Summey	☐	☐	☐	☐	☐

MEMORANDUM

DATE July 6, 2026
TO ACPAA Board Members
FROM Zach Gabehart - Senior Planner
RE Land Use Review

The following is a list of Land Use Development referrals that have been reviewed by Centennial Airport staff from 4/1/2026 through 6/30/2026:

Date	Previously Referred	Development	Location	Referring Entity	Type	Reco
4/3/2026	☐	RidgeGate SW Village Filing No. 5	RidgeGate SW Village	City of Lone Tree	R	N
4/23/2026	☐	Advent Health Medical Office Building	Castle Pines Pkwy. & Canyon Forge Dr.	City of Castle Pines	C	S
5/1/2026	☐	Final Plat - The District Parcel 6	The Jones District	City of Centennial	R	S
5/1/2026	☐	QuikTrip Canyonsides Filing No. 4	Canyonsides Filing No. 4	City of Castle Pines	C	A
5/1/2026	☐	Site Plan - The District Parcel 6	The Jones District	City of Centennial	R	S
5/5/2026	☒	Denver Broncos Training Facility Expansion	Broncos Pkwy. & Potomac St.	Arapahoe County	C	S
5/12/2026	☐	Inverness #55 Replat	106 Inverness Dr. E	Arapahoe County	I/C	A
5/12/2026	☐	Playground Centennial Light Industrial	7020 S. Kenton St.	City of Centennial	I	S
5/26/2026	☒	Cabela Dr. Extension	Cabela Dr.	City of Lone Tree	I	A
5/26/2026	☒	Hillcamp Sub-Area Plan	W. of I-25 and S. of RidgeGate Pkwy.	City of Lone Tree	R	S
5/26/2026	☒	RidgeGate Rural Residential Planning Area	W. of I-25 and S. of RidgeGate Pkwy.	City of Lone Tree	R	S
5/26/2026	☒	Southridge Preserve PDD	W. of I-25 and S. of RidgeGate Pkwy.	City of Lone Tree	R	S
6/3/2026	☐	Inverness Filing No. 7 Drainage Easement Vacation	Inverness Business Park	Douglas County	I	A
6/5/2026	☐	AutoNation Costilla	9750 E. Costilla Ave.	City of Centennial	C	S
6/8/2026	☐	DCZR Training & Exercising of Non-Owned Animals	Douglas County Zoning Resolution	Douglas County	C/R	A
6/12/2026	☐	Canyonside Prelim No. 2 2nd Amed. And Canyonside Filing No. 1 3rd Amend.	Canyonsides Blvd. & Canyon Forge Dr.	City of Castle Pines	R	N
6/18/2026	☐	Cisco's Auto Paint & Collision	14824 E. Hinsdale Ave.	City of Centennial	I	A
6/25/2026	☐	CSQUARE Data Center Chillers & Generators	8534 Concord Dr.	Douglas County	I	S

Type of Development
R = Residential
C = Commercial
I = Industrial

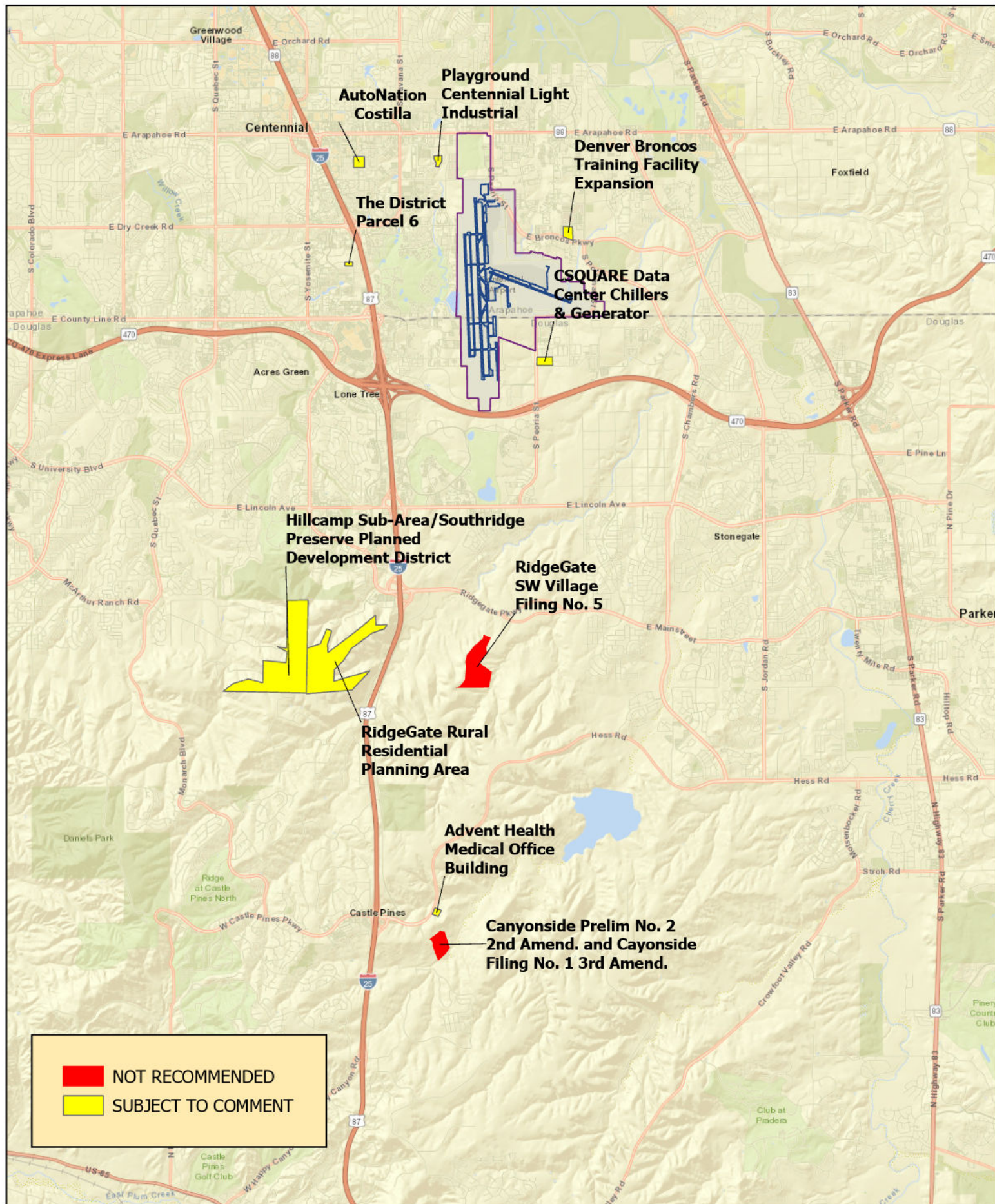
Recommendation
A = Approved as Submitted
S = Subject to Comment
N = Not Recommended

Date	Previously Referred	Development	Location	Referring Entity	Type	Reco
6/26/2026	☐	Garage Den Replat	7522 S. Potomac St.	City of Centennial	C	A

Type of Development R = Residential
C = Commercial
I = Industrial

Recommendation A = Approved as Submitted
S = Subject to Comment
N = Not Recommended

ACPAA Land Use Referral Recommendations Quarter 2 2026



**REPORT TO THE BOARD OF COMMISSIONERS OF
ARAPAHOE COUNTY PUBLIC AIRPORT AUTHORITY AND
RECORD OF ACTION**

August 13, 2026

FROM: Luis Gonzales – Noise & Environmental Specialist

SUBJECT: Noise Report for June and July 2026

RECOMMENDATION: Advisory.

BACKGROUND: The Noise Report for June 2026 is attached. The Noise Report for July 2026 will be provided prior to the meeting.

FINANCIAL DATA: N/A

REVIEW BY OTHERS: Z. Gabehart, M. Fronapfel

PRESENTERS: Luis Gonzales

Action of the Board of Commissioners

	1 st	2 nd	YES	NO	ABSTAIN
Bagnato	☐	☐	☐	☐	☐
Baker	☐	☐	☐	☐	☐
Beatty	☐	☐	☐	☐	☐
Campbell	☐	☐	☐	☐	☐
Summey	☐	☐	☐	☐	☐



CENTENNIAL
AIRPORT®

CENTENNIAL AIRPORT
JUNE 2026
NOISE REPORT



Visit Our Website
centennialairport.com

1. TABLE OF CONTENTS

2. Definitions3

3. About APA’s Noise Monitoring Program4

4. About WebTrak™5

5. Operations Statistics6

6. Current Month Noise Monitor Report7

7. Current Month Noise Complaint Statistics8-9

8. YTD Noise Complaint Statistics10-12

9. Radar Track Density & Noise Complaint Map13

10. Notes and Disclaimer.....14

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.

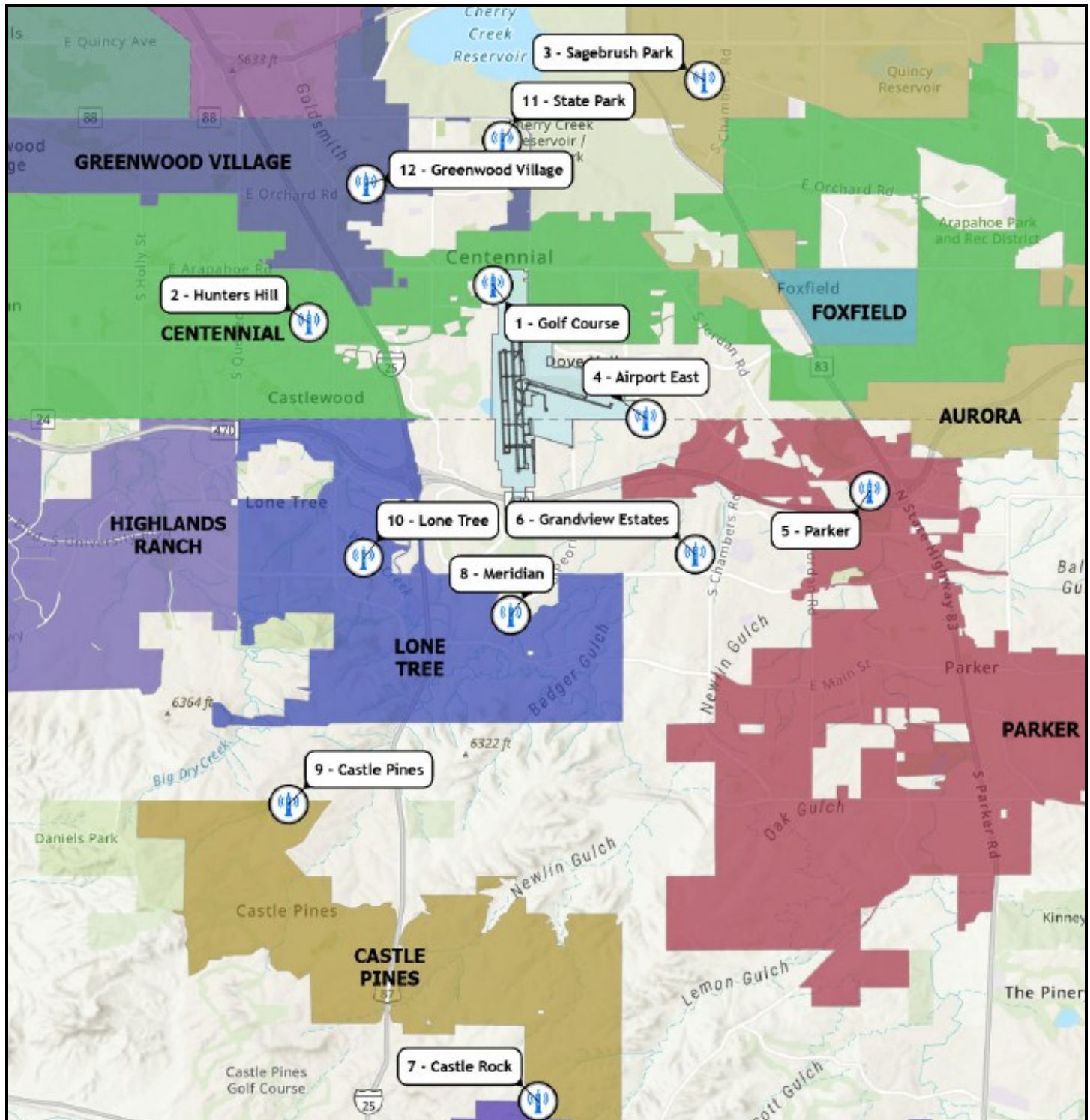
Overflight – Aircraft flight originating and terminating outside the area that transits the airspace without landing.

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.

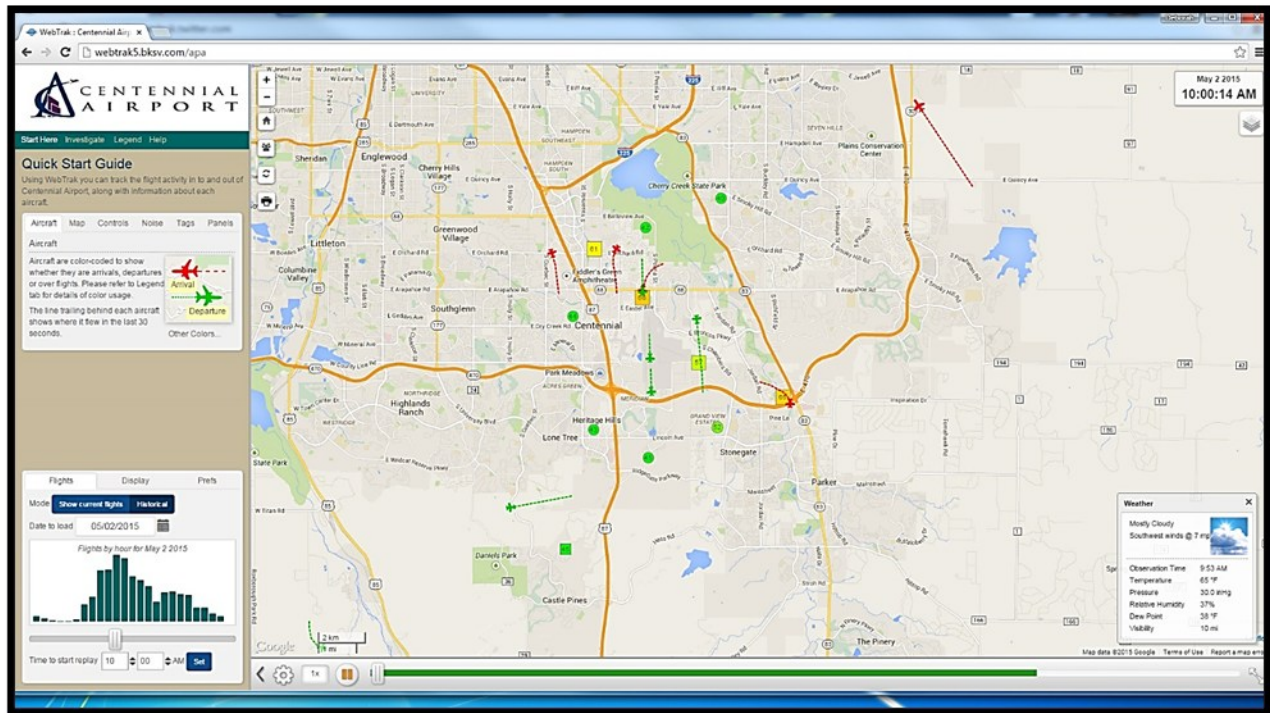
3. ABOUT APA's NOISE MONITORING PROGRAM

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 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://noise.centennialairport.com/>

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	2,880	2,644	82	5,606	1,713	5,480	44	7,237	12,900	6	12,906
February	2,551	2,367	128	5,046	1,722	5,780	28	7,530	12,353	0	12,353
March	2,787	2,619	106	5,512	1,621	5,491	51	7,163	11,306	0	11,306
April	2,689	2,351	176	5,216	1,454	5,210	47	6,711	11,757	0	11,757
May	2,892	2,632	164	5,688	1,749	6,245	73	8,067	14,095	0	14,095
June	2,916	2,873	203	5,992	1,591	6,667	88	8,346	13,877	0	13,877
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	16,715	15,486	859	33,060	9,850	34,873	331	45,054	76,288	6	76,294

	IFR OVERFLIGHTS				VFR OVERFLIGHTS					TOTAL OPERATIONS
	AIR TAXI	G.A.	MILITARY	TOTAL INTINERANT	AIR TAXI	G.A.	MILITARY	TOTAL		
January	3	0	1	4	49	58	6	113	January	25,866
February	2	0	6	8	57	86	2	145	February	25,082
March	6	5	1	12	66	214	2	282	March	24,275
April	1	6	2	9	38	80	3	121	April	23,814
May	5	11	0	16	25	61	5	91	May	27,957
June	2	9	2	13	46	75	5	126	June	28,354
July				0				0	July	
August				0				0	August	
September				0				0	September	
October				0				0	October	
November				0				0	November	
December				0				0	December	
Y-T-D Totals	19	31	12	62	281	574	23	878	Y-T-D Totals	155,348

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.

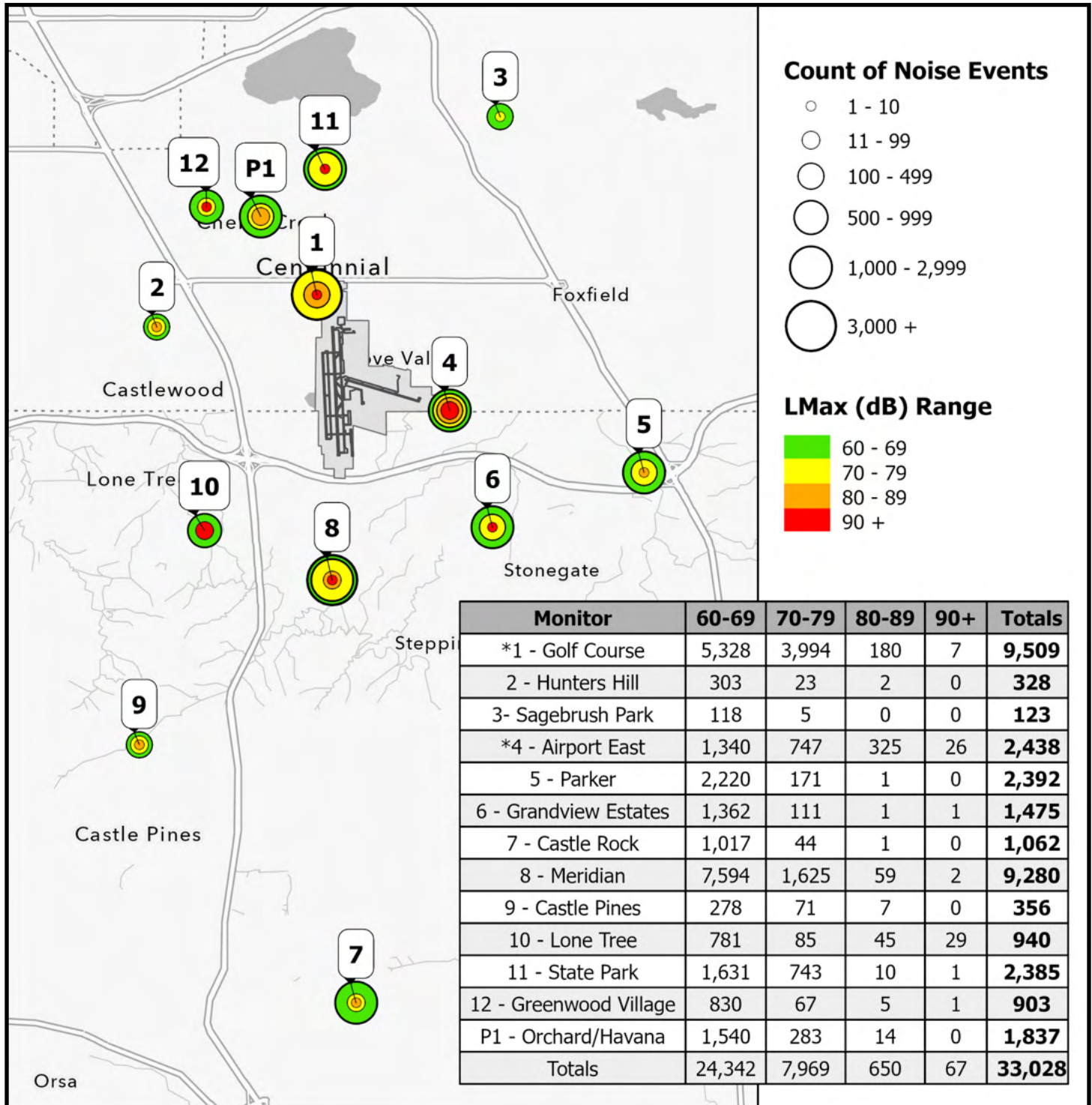
VFR Itinerant – Operations other than local operations conducted under Visual Flight Rules.

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

6. JUNE 2026 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.



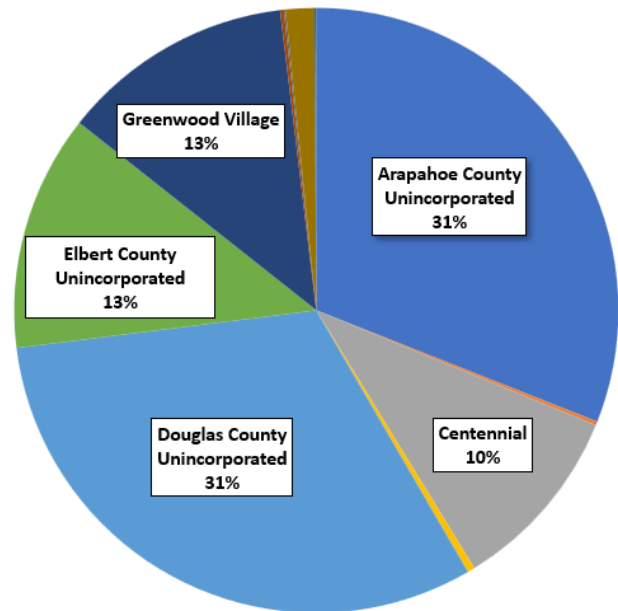
*NMT located on airport.

NMT Downtimes: No notable downtimes.

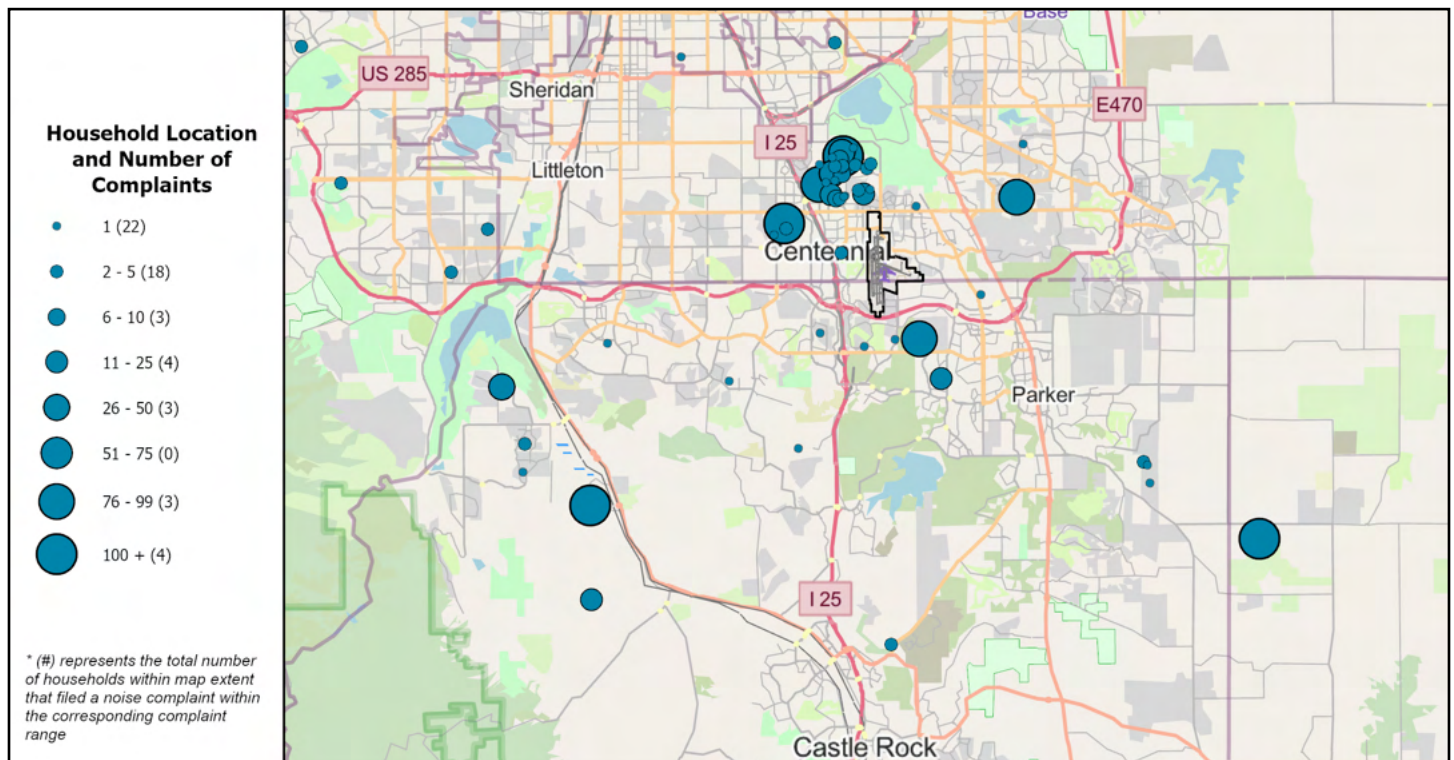
7. JUNE 2026 NOISE COMPLAINT STATISTICS

Municipality	Complaints	Households	Population
Arapahoe County Unincorporated	324	18	98,066
Aurora	0	0	399,913
Castle Pines	0	0	14,000
Castle Rock	2	1	86,000
Centennial	105	5	108,422
Cherry Hills Village	0	0	6,442
Denver	4	2	715,522
Douglas County Unincorporated	328	13	276,493*
Elbert County Unincorporated	132	1	29,382
Greenwood Village	130	9	15,691
Highlands Ranch	2	2	103,444
Lone Tree	1	1	14,253
Parker	1	1	68,000
Other	16	7	-
Total	1,045	60	1,936,078

Complaints per Municipality

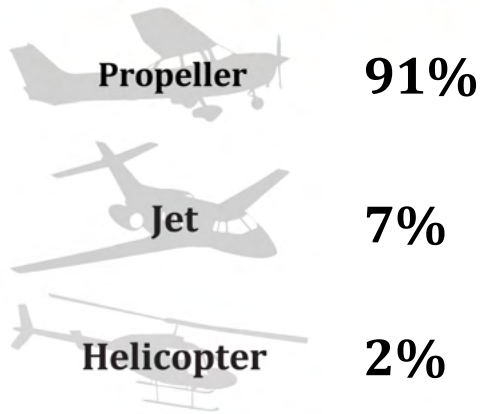


*Douglas County Unincorporated Population with Highlands Ranch Removed



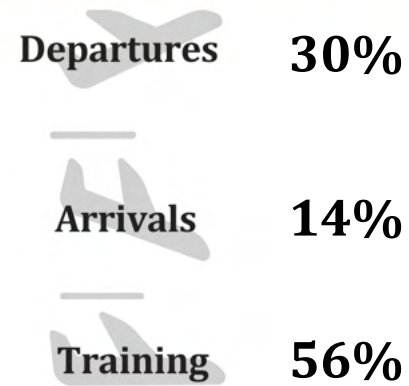
7. JUNE 2026 NOISE COMPLAINT STATISTICS

Complaint by Aircraft Type



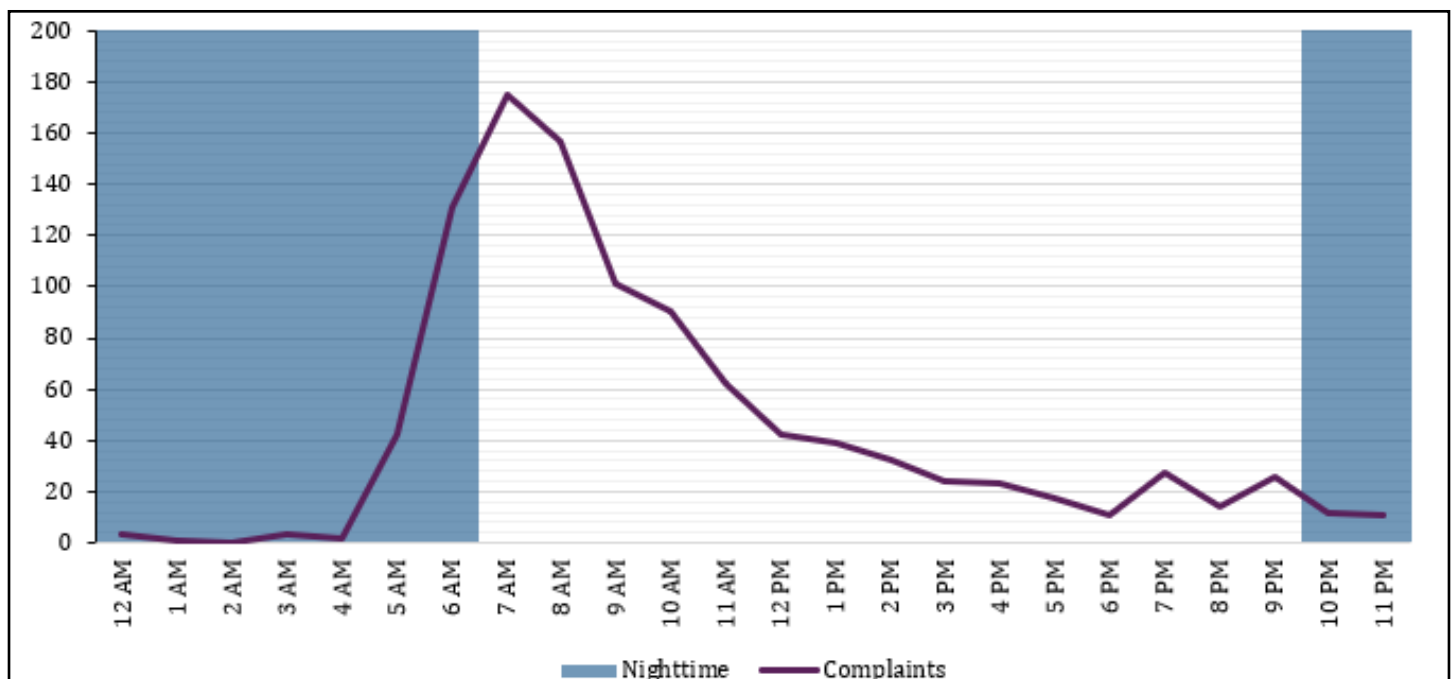
*#1 Household Removed

Complaint by Operation Type



*#1 Household Removed

Complaints by Hour



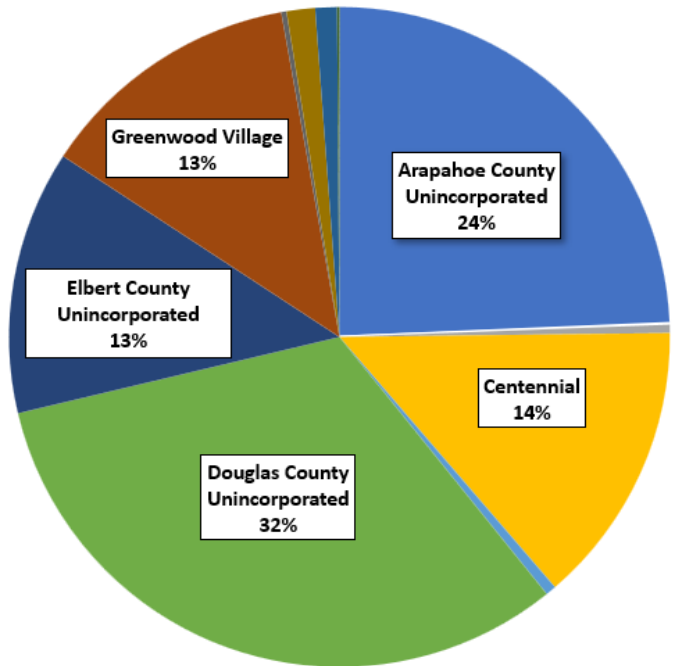
Noise Complaint Responses Completed	
Email	79
Phone	4
Total	83

Time Complaint Received	
Day (7:00 AM—9:59 PM)	840
Night (10:00 PM—6:59 AM)	205
Total	1,045

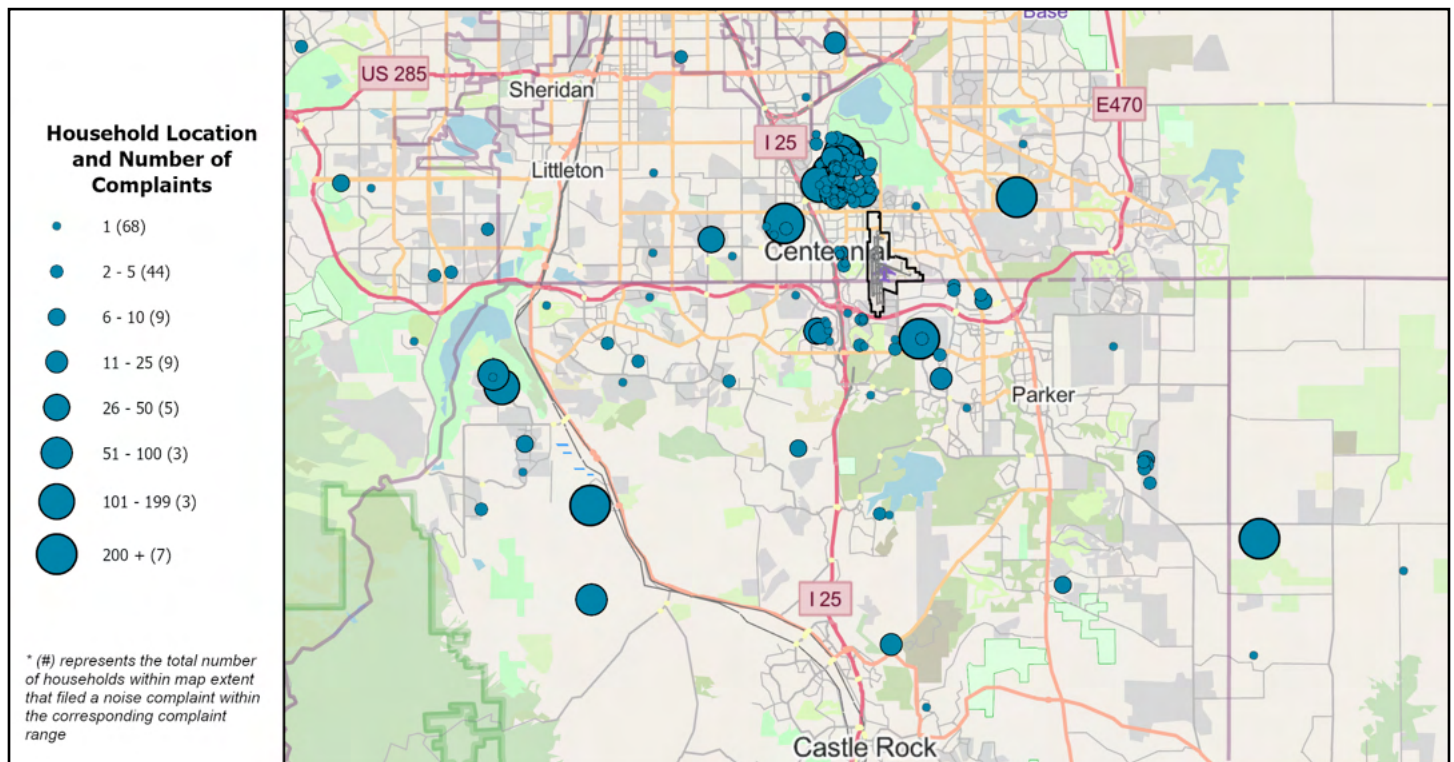
8. YEAR-TO-DATE 2026 NOISE COMPLAINT STATISTICS

Municipality	Complaints	Households	Population
Arapahoe County Unincorporated	1,034	46	98,066
Aurora	0	0	399,913
Castle Pines	3	2	14,000
Castle Rock	17	2	86,000
Centennial	590	9	108,422
Cherry Hills Village	0	0	6,442
Denver	22	2	715,522
Douglas County Unincorporated	1,363	32	276,493*
Elbert County Unincorporated	550	5	29,382
Greenwood Village	550	29	15,691
Highlands Ranch	11	6	103,444
Lone Tree	59	7	14,253
Parker	5	3	68,000
Other	45	13	-
Total	4,249	156	1,936,078

Complaints per Municipality

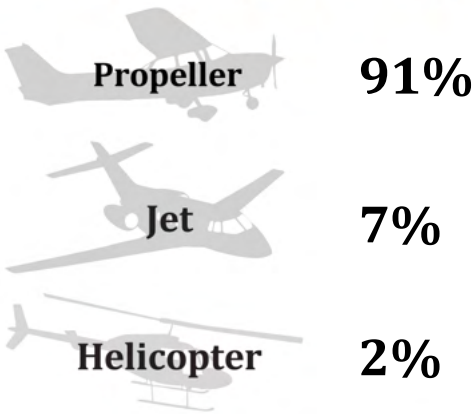


*Douglas County Unincorporated Population with Highlands Ranch Removed



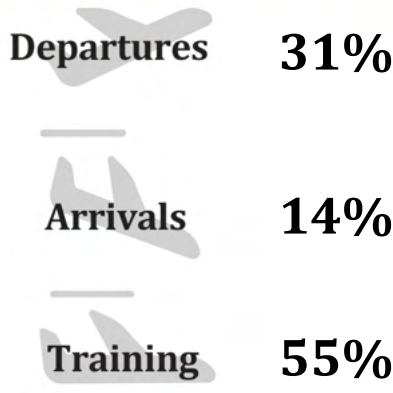
8. YEAR-TO-DATE 2026 NOISE COMPLAINT STATISTICS

Complaint by Aircraft Type



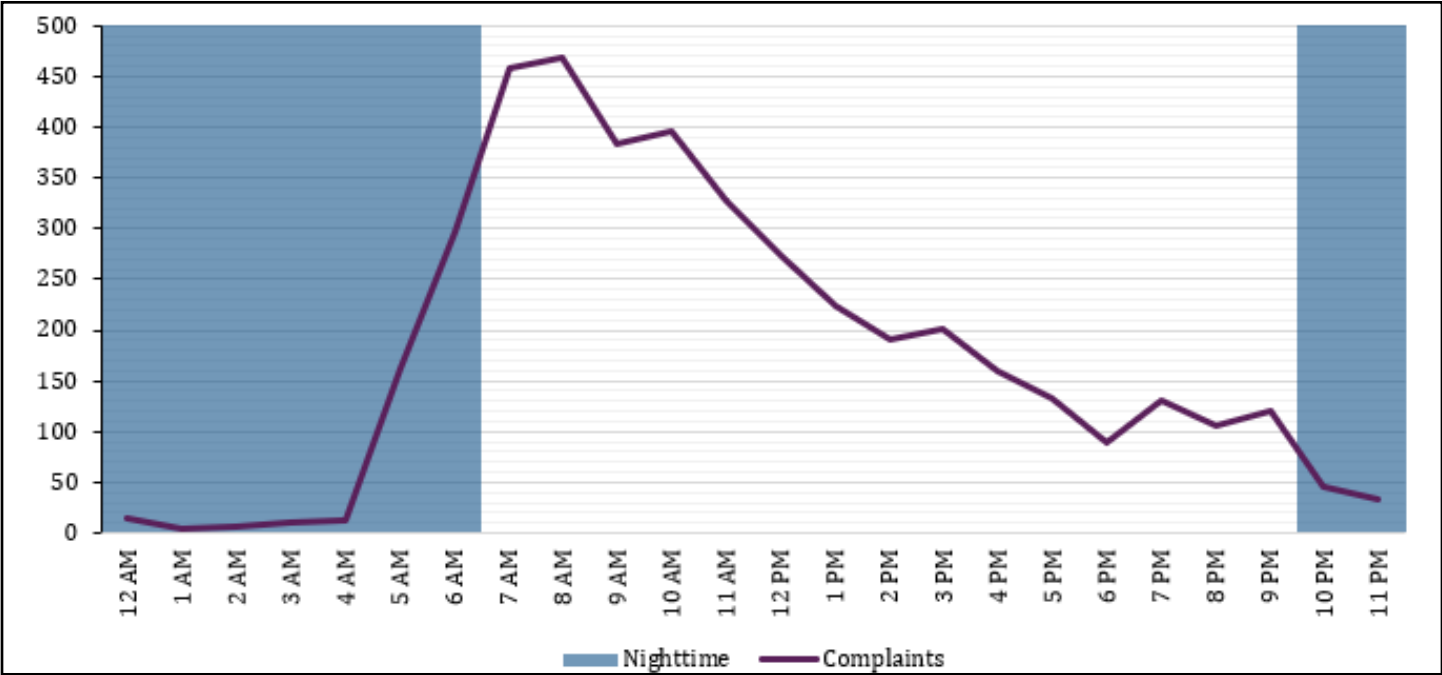
*#1 Household Removed

Complaint by Operation Type



*#1 Household Removed

Complaints by Hour

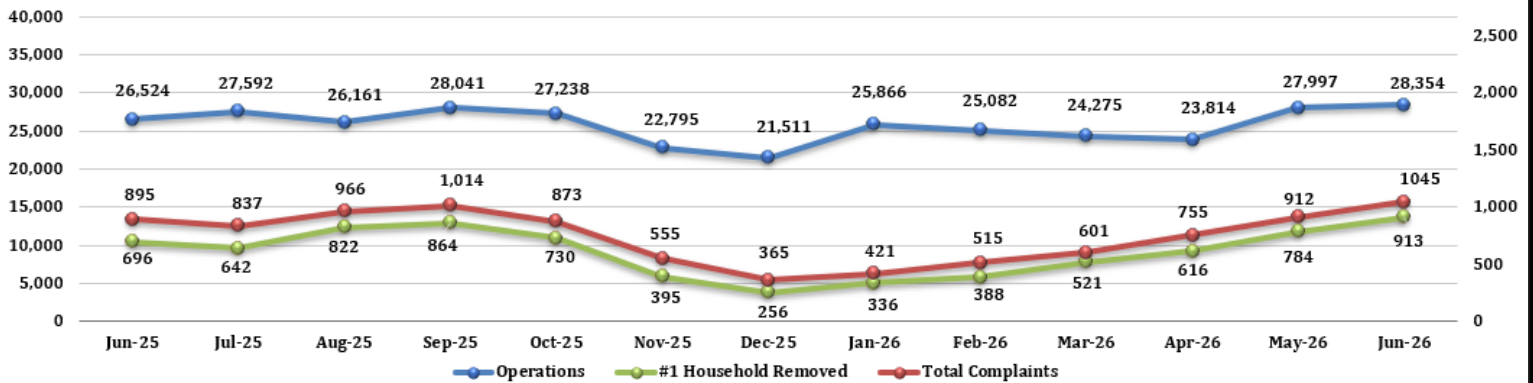


Noise Complaint Responses Completed	
Email	436
Phone	31
Total	467

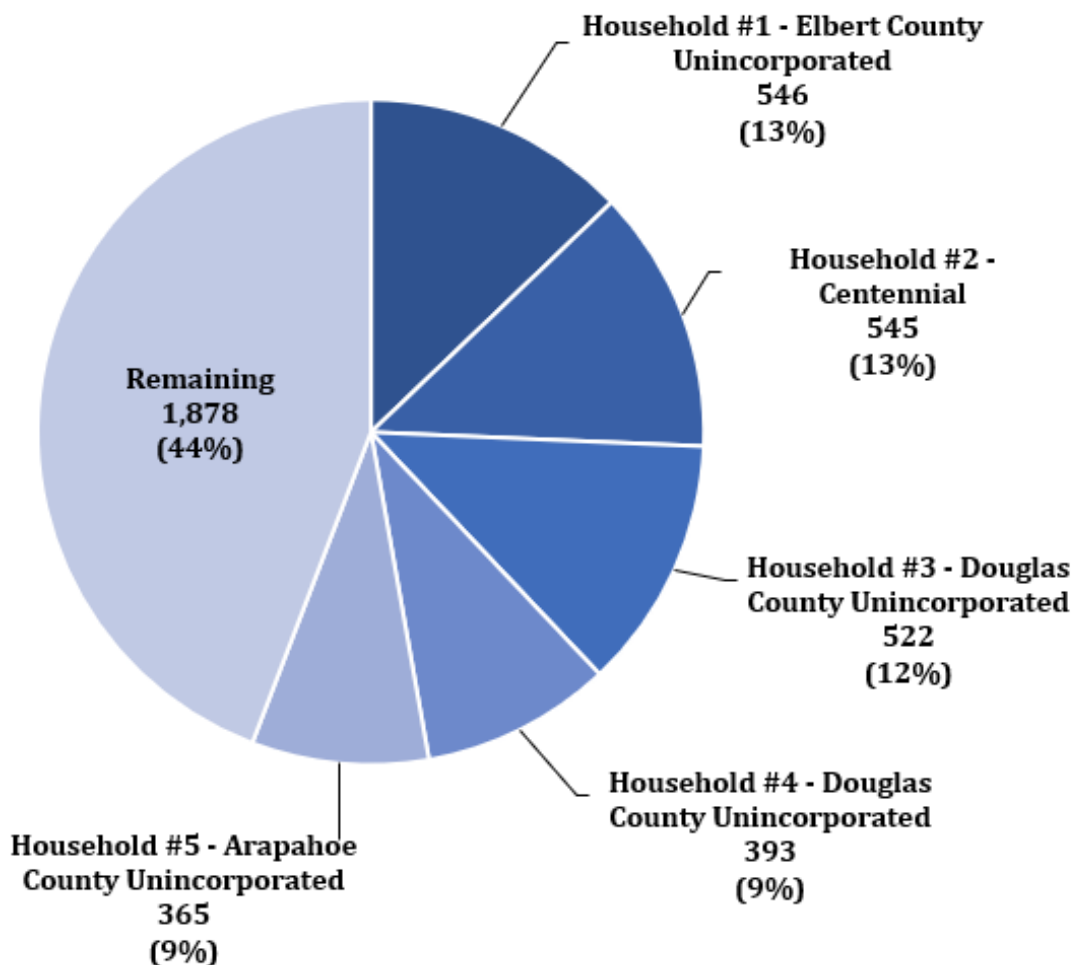
Time Complaint Received	
Day (7:00 AM—9:59 PM)	3,663
Night (10:00 PM—6:59 AM)	586
Total	4,249

8. YEAR-TO-DATE 2026 NOISE COMPLAINT STATISTICS

13-Month Trend



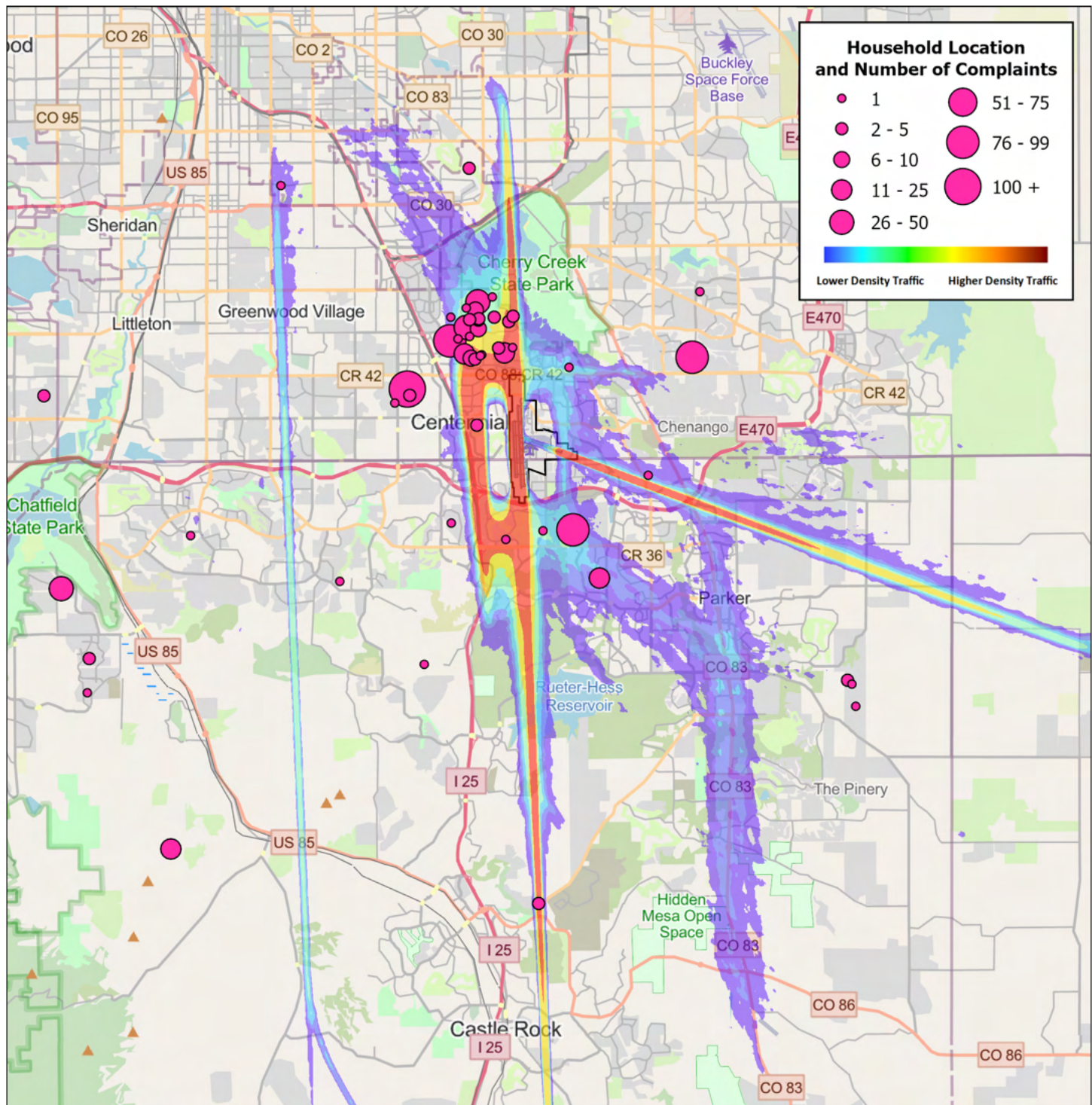
Top 5 Household Complaints YTD



9. CENTENNIAL AIRPORT RADAR TRACK DENSITY MAP

This map takes all of the flight track data for the given time period and creates a line density plot overlaid with the monthly noise complaint dot map. This enables a better understanding of where the flight tracks are at in relation to noise complaints, 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.

JUNE 2026



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.noise.centennialairport.com

**REPORT TO THE BOARD OF COMMISSIONERS OF
ARAPAHOE COUNTY PUBLIC AIRPORT AUTHORITY AND
RECORD OF ACTION**

August 13, 2026

FROM: Luis Gonzales – Noise & Environmental Specialist

SUBJECT: Centennial Airport Community Noise Roundtable (CACNR) Update

RECOMMENDATION: Advisory

BACKGROUND: The report for the August 5th CACNR Meeting and the approved minutes from the June 3rd CACNR Meeting are attached.

FINANCIAL DATA: N/A

REVIEW BY OTHERS: L. Gonzales, M. Fronapfel

PRESENTERS: Pam Thompson – CACNR Chair – Town of Foxfield

Action of the Board of Commissioners

	1 st	2 nd	YES	NO	ABSTAIN
Bagnato	☐	☐	☐	☐	☐
Baker	☐	☐	☐	☐	☐
Beatty	☐	☐	☐	☐	☐
Campbell	☐	☐	☐	☐	☐
Summey	☐	☐	☐	☐	☐



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.

AUGUST 5th, 2026 MEETING

➤ Public Comment

- Concerned Citizen
- Louviers
- Grandview Estates
- Email Elbert County – 3 Towers Training Box
- Email Douglas County
- Email Chatfield Reservoir – Solstice Community
- Email Greenwood Village Study Area

➤ Noise Reports

- Operations / Training / Nighttime Complaints

➤ CACNR Study Group Report Quarter 2 2026

- Touch & Go Aircraft Entering the Study Area (Figure 1)
- Percentage of Touch & Go Aircraft Entering the Study Area (Figure 4)
- Aircraft Entering VS Not Entering the Study Area (Figure 5)

➤ CACNR Executive Reports

- Website Revamp – September draft
- Letter: CACNR Response to Supersonic
- Letter: FSDO & Flight School Owners
 1. Request flight schools to avoid ground reference maneuvers
 2. Flight schools adopt a standardized altitude entering and exiting Practice Areas

FIGURE 1

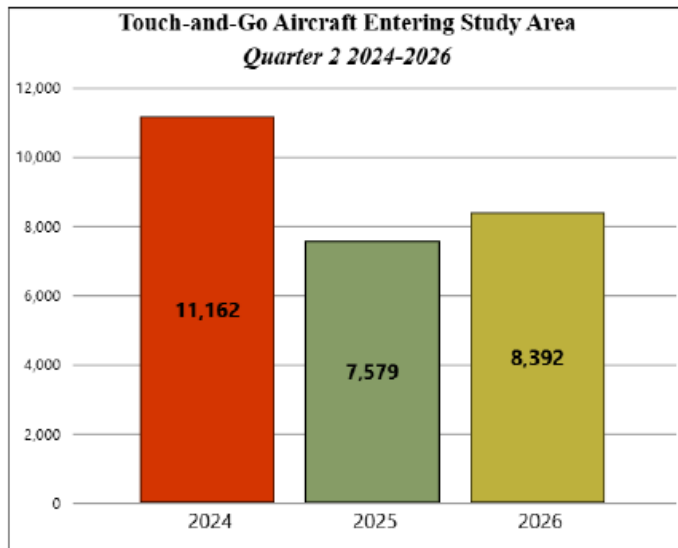


Figure 1.1

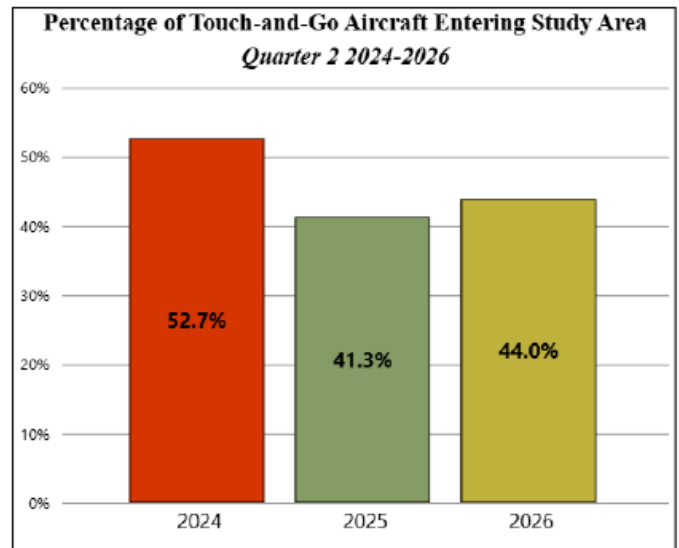
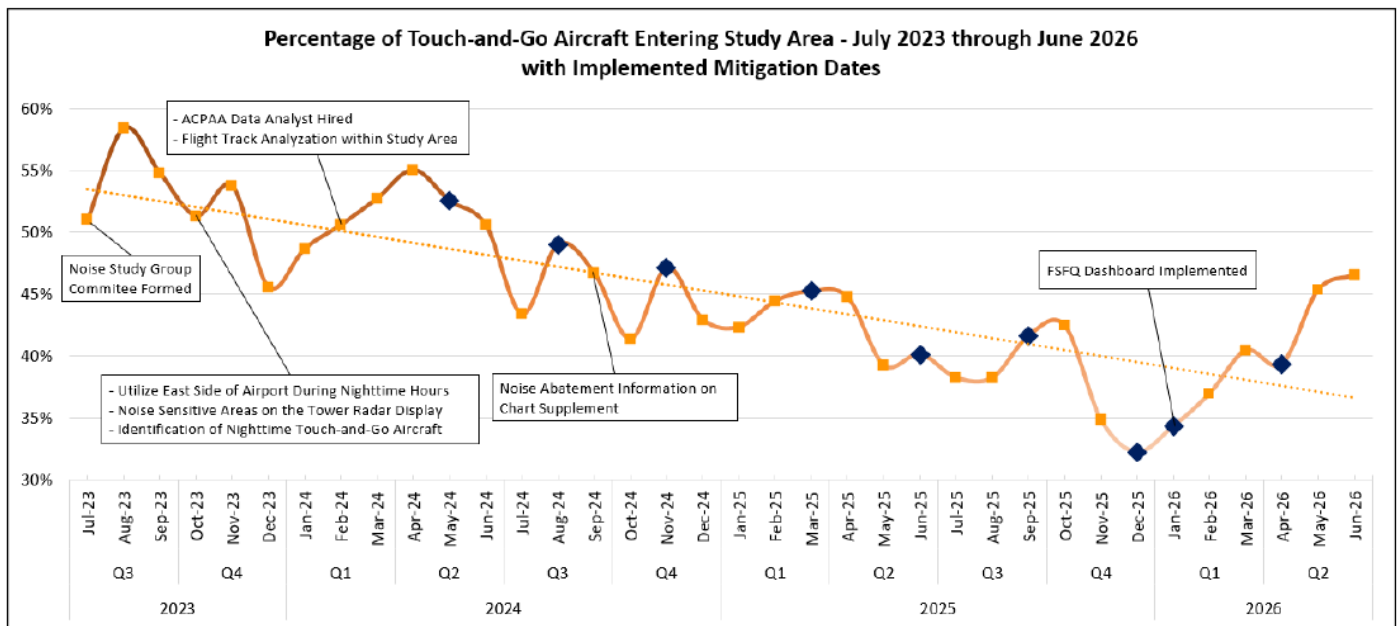


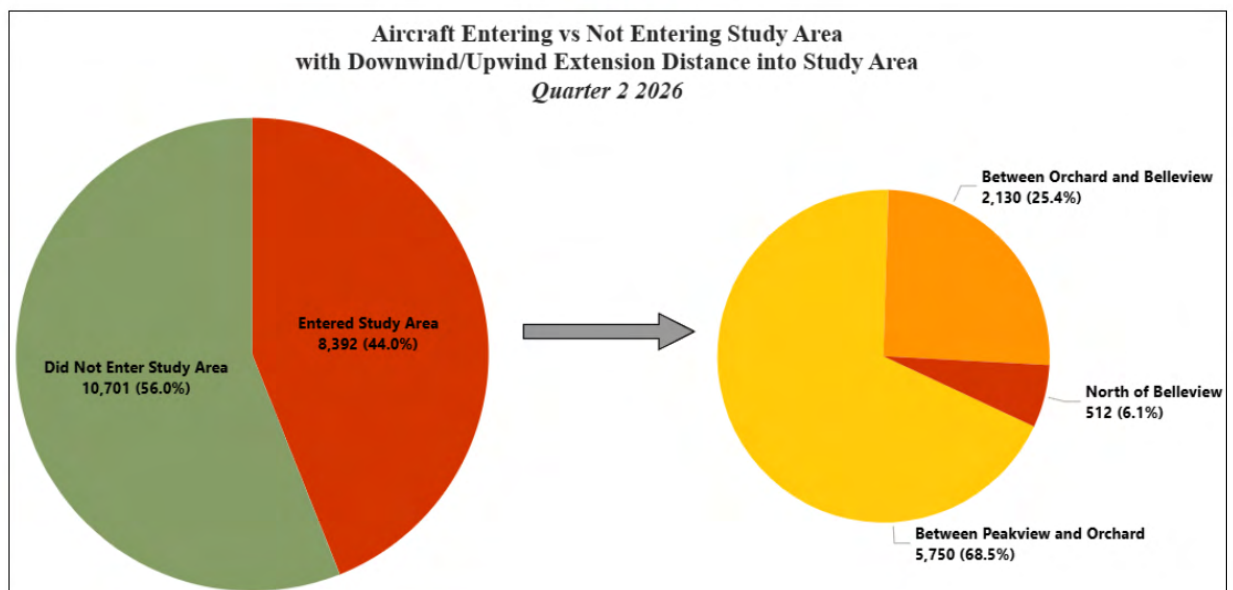
Figure 1.2

FIGURE 4



◆ FAA, ACPAA, and Flight School Safety and Noise Abatement Meeting

FIGURE 5





CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE MINUTES

Approved 08 05 26

June 3, 2026

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

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.

1. **CALL TO ORDER, ROLL CALL, and QUORUM:** The meeting was called to order at 6:31 p.m. by Vice Chair Pam Thompson. The following were in attendance, and a quorum was present:

Arapahoe County:	Rhonda Fields online	Foxfield:	Pam Thompson
Douglas County:	DJ Beckwith	Greenwood Village:	Donna Johnston
Douglas County:	Alison Biggs	Highlands Ranch Metro:	Andy Jones
Elbert County:	Brenda Dyche	Parker:	Cynthia Liston Thyme
Aurora:	Brad Pierce	ACPAA:	Michael Fronapfel
Castle Pines:	Chris Eubanks	AOPA:	Joe Patton
Castle Rock:	Sandy Vossler online	CABA:	Don Kuskie
Centennial:	Don Sheehan	Wings Over the Rockies:	Bill Wasmund
Cherry Hills Village:	Dave Heller online		

Also present: Castle Pines Alternate Representative Ron Cole online; ACPAA Alternate Representative Zach Gabehart; AOPA Alternate Representative Mike Koscielniak; Jennifer Redding, FAA Senior Program Analyst, Northwest Mountain Region; online; and ACPAA Staff Matt Frenette, Aliyah Then, and Lauren Wiarda.

Additional attendees or online guests: Michael Gradis, City of Centennial Staff, online; Randy Johnson, citizen online; Nathan Moran, Mead & Hunt, online; Joe Panem, citizen; Brad Rolf, Mead & Hunt, online; and pilot/instructor Bill Ward, online.

Absent: Arapahoe County:	Sreenivasan Alakappan/Vacant	Lone Tree:	Vacant/Chuck Darnell
Elbert County:	Mike Buck/Shawn Fletcher	CDOT Aeronautics Div:	Todd Green/Vacant

SPECIAL ANNOUNCEMENT: Before the beginning of the meeting, Chris Eubanks announced he would be resigning the Chair position for CACNR at the end of this meeting. Various work and personal commitments had made it very difficult for him to give that position the attention and time he felt it deserved. Per the bylaws, the Vice Chair automatically assumes the Chair, until the next election, and the Chair would then appoint someone to the Vice Chair position, subject to approval of a majority of the Regular Member Representatives present at the meeting when any appointment was made.

Eubanks was thanked for his work on behalf of CACNR, both as Chair and as a member of the CACNR Study Group Committee. He indicated he would remain as the Castle Pines Representative to CACNR, and on that Committee. Interest in the Vice Chair position was solicited so that an appointment could be made at the August CACNR meeting.

2. **CONSENT AGENDA:** The Consent Agenda included the draft CACNR Minutes from May 6, 2026; the Treasurer's Report from May 29, 2026, showing a balance of \$27,587.53; and the CACNR Attendance Record through May, 2026. On the motion of Alison Biggs, duly seconded, the Consent Agenda was approved.

3. **ITEMS REMOVED FROM THE CONSENT AGENDA:** None.

4. **PART 150 STUDY UPDATE:**

A. UPDATE - Zach Gabehart reported continuation of the refinement and finalized modeling of noise alternatives. The consultant team was scheduled to attend the August CACNR meeting to bring a finalized version of the draft noise compatibility plan. The Part 150 Noise Compatibility Study Advisory Committee would meet to receive the information on the same day as CACNR. Comments received at those meetings might be used to make changes. The public hearing on the plan could be scheduled for September. The plan would then be taken to ACPAA which would decide on the final version as the official recommendation from the airport to the FAA, possibly by mid-October.

Requests were made for the consultants to date their reports and to number the pages. More importantly, request was again made for the reports to be provided in a timelier fashion so they could be included in the pre-meeting e-mailing instead of just being made available at the meeting. Without receiving the reports before the meetings, those Representatives who could only attend online had no

opportunity to review the material and provide comments or questions. Not receiving the reports until after the meetings was considered unfortunate for them at the least. It did not seem as though the content of reports received had been so time sensitive that they could not have been prepared in time for inclusion in the CACNR e-mailings, and it was asked that this not occur for the August CACNR meeting.

B. REPONSES TO PAST CACNR QUESTIONS - Questions pulled from past CACNR meetings had been submitted to the consultants; some had been answered by them, and some had been referred back to the airport. Responses were provided. It was noted many of the inquiries which had been indicated would/could be considered during the upcoming Part 150 had been deemed not within the scope of that study.

Clarification was sought about the status of the portable noise monitor currently labeled P1 becoming permanent in the Greenwood Village area. The FAA will no longer install or recommend installation of anything outside the 65 DNL noise contour as it did when the current noise monitors were installed following the last Centennial Airport Part 150. From the airport's perspective, the current Part 150 would look at areas that potentially need a permanent noise monitor, and if they were not eligible for federal funding, then different funding avenues could be explored by the airport, possibly in conjunction with the jurisdictions involved. Such monitors would be integrated into the airport's current system for data collection and reporting and maintenance. Since the FAA would not assist with funding, there would be no reason to wait on the FAA any longer to begin the process of making the P1 monitor permanent. The exact required expenditure was unclear, and Greenwood Village had not budgeted for it this year, pending an FAA ruling. There would also need to be some agreement on what the monitor would be called, to assure recognition of its location as well as continuity with the data already collected from the portable location.

Discussion noted if the FAA will not pay for any noise monitors outside the 65 DNL noise contour on a nationwide basis, how would airports without current noise monitoring systems know where their noise contours were, and what was outside the 65 DNL? If airports cannot access that information, they cannot truly identify or measure the noise in their surrounding communities. It did leave the impression that the FAA did not really want to know about noise issues facing the public, perhaps not a good message for the FAA to be sending.

Frustration was again noted that when questions and concerns had come up in prior meetings, it had been easy to say they could be looked at during the Part 150, and then it turned out they were replied to with generalities or weren't considered within the purview of the Part 150 study after all. A listing of meetings the consultants indicated they had attended, either in person or virtually, with various groups, including CACNR was provided. It was noted the group the consultants called the FAA Study Group was actually CACNR's Study Group Committee.

C. PART 150 NOISE COMPATIBILITY STUDY ADVISORY COMMITTEE – No report.

5. NOISE REPORTS:

A. APRIL 2026 - The April 2026 Noise Report included the following information:

April Local Operations:	11,757	April Total Operations:	23,814
Year to Date Local Operations:	48,322	Year to Date Total Operations:	99,037

23,814 Total Operations in April resulted in 755 complaints from 53 households.

April Noise Events:

<u>April Total:</u>		<u>April 60 – 69 db:</u>		<u>April 70 – 79 db:</u>		<u>April 80 – 89 db:</u>	
Golf Course	7,907	Meridian	6,702	Golf Course	3,427	Airport East	380
Meridian	7,876	Golf Course	4,278	Meridian	1,142	Golf Course	197
Airport East	2,651	Parker	2,032	Airport East	792	Lone Tree	42
Parker	2,243	State Park	1,435	State Park	498	Meridian	30
State Park	1,944	Airport East	1,434	Port. Station 31	264	Port. Station 31	18
Port. Station 31	1,523	Port. Station 31	1,241	Parker	210	State Park	11
Grandview Estates	1,288	Grandview Estates	1,140	Grandview Estates	142	Grandview Estates	5
Castle Rock	951	Castle Rock	894	Greenwood Village	70	Castle Rock	2
Greenwood Village	781	Greenwood Village	710	Castle Rock	55	Castle Pines	2
Lone Tree	624	Lone Tree	506	Castle Pines	48	Parker	1
Hunters Hill	399	Hunters Hill	379	Lone Tree	36	Greenwood Village	1
Castle Pines	241	Castle Pines	191	Hunters Hill	19	Hunters Hill	1
Sagebrush Park	78	Sagebrush Park	72	Sagebrush Park	6	Sagebrush Park	0

April Noise Events in the 90+ decibel range: Airport East – 45 Lone Tree – 40 Golf Course – 5 Meridian – 2 Grandview Estates - 1

<u>April Noise Complaints per Municipality</u>		<u>Numbers of Households:</u>		<u>YTD Complaints and</u>		<u>Number of Households:</u>	
Unincorporated Douglas County	277 (37%)	UAC	15 (28%)	UDC	673 (29%)	UAC	24 (23%)
Unincorporated Arapahoe County	148 (22%)	UDC	14 (26%)	UAC	494 (22%)	GV	23 (22%)
Centennial	142 (19%)	Greenwood Village	12 (23%)	Centennial	397 (17%)	UDC	23 (22%)
Unincorporated Elbert County	73 (10%)	Centennial	2 (4%)	UEC	354 (16%)	Other	8 (8%)
Greenwood Village	60 (8%)	Lone Tree	2 (4%)	GV	266 (12%)	Lone Tree	6 (6%)
Lone Tree	44 (6%)	Highlands Ranch	2 (4%)	Lone Tree	57 (2.5%)	Centennial	5
Highlands Ranch	4	Other	2 (4%)	Other	21	HR	5
Denver	3	Castle Rock	1	Denver	10	Parker	3
Other	2	Denver	1	Highlands Ranch	8	Denver	2
Castle Rock	1	UCE	1	Castle Rock	6	UEC	2
Parker	1	Parker	1	Parker	4	Castle Pines	1
Aurora	0	Aurora	0	Castle Pines	2	Castle Rock	1
Castle Pines	0	Castle Pines	0	Aurora	0	Aurora	0
Cherry Hills Village	0	Cherry Hills Village	0	Cherry Hills Village	0	CHV	0

Year to Date, the top five households complaining were:

Household #1 358 (16%) Centennial
Household #2 353 (15%) Unincorporated Elbert County
Household #3 289 (13%) Unincorporated Douglas County

Household #4 212 (9%) Unincorporated Arapahoe County
Household #5 166 (7%) Unincorporated Douglas County
Remaining Households 914 (40%)

In April, 78 noise complaint responses were completed from 755 noise complaints, with 72 of those by email and 6 by telephone.

In April 675 complaints were received from 7:00 a.m. – 9:59 p.m. (89.5%)
80 complaints were received from 10:00 p.m. – 6:59 a.m. (10.5%)

In April props accounted for **91% of the complaints by aircraft type**; **jets** accounted for **6% of the complaints**, and **helicopters** caused **3%**. Comparatively, **Year to Date** figures showed propellers had caused 91% of the complaints; jets caused 7%, and helicopters caused 2%.

In April departures were responsible for **22% of the complaints**, **training** was responsible for **69% of the complaints**, and **arrivals** were responsible for **9% of the complaints**. Comparatively, **Year to Date** figures showed training had caused 66% of the complaints, departures had caused 24%, and arrivals had caused 10%.

A graph was provided showing the **April number of complaints by the hour** in which they were made, with a peak at 7 a.m. hour; followed by a secondary peak at 10 a.m. An early evening bump in complaints is observed at 8 p.m.

The map of household locations and numbers of complaints was included, as was the April Radar Track Density Map.

- Looking at noise complaints month to month, they seemed to be going up even though operations have been trending down: 421 complaints from 25,866 operations in January 2026 to 755 complaints from 23,814 operations in April.
- Could there be a relationship between the higher number of complaints and the decibel levels noted in some neighborhoods? For example, Lone Tree's noise monitor recorded 40 flights in the 90+ dB range, almost as many as Airport East on the airport's grounds. Last month Lone Tree had only eight in that range. Staff reported having noticed the seeming discrepancy and was examining the situation. Flight tracks had not appeared to correlate to the number of events recorded, so all related aspects of these numbers were being explored.
- It was noted complaints from Unincorporated Douglas County were up rather significantly, as were those from Centennial. Greenwood Village complaints had stayed steady. The Unincorporated Douglas County complaints were heavily attributed to one or two households in the northwestern part of the county. For Greenwood Village, comment was made that jet traffic there had moved toward Cherry Creek High School, and fewer of the flight schools were circling by the fire station. The number one Centennial house was located west of the airport, west of I-25. Nighttime complaints had also increased from 47 to 80 although that might be attributed to the effect of daylight savings time's longer daylight hours encroaching on clock hours.
- Representatives were asked to self-monitor their areas to see what was happening regarding fluctuations in noise and complaint data over both the short and long terms, and to bring that information to future CACNR meetings.

B. PORTABLE MONITOR, The Canyons, Castle Pines – The location of this portable monitor was in the Canyons subdivision of Castle Pines, about five miles directly south of the airport, right in the ILS approach corridor for the airport's main runway. This approach has a ground based precision approach which is used in any sort of inclement weather because it can get aircraft closest to the ground in bad weather. That approach is critical, very precise, and cannot be deviated from.

- The portable monitor was in place during the month of April before the prevailing winds had switched into summer mode out of the south. Jets were the aircraft most using the approach related to the location of the portable monitor; 916 jets, 558 propellers, and 10 helicopters. There were 907 arrivals, 440 departures, and 130 training flights.
- Question was asked about the altitude, which had been between 1,500 and 2,000 feet, going below that about five miles out where the pilots are also powering back to slow down, deploying flaps, etc., all of which increases the noise footprint. That was not really any different than any other north flow April.
- It was noted the residence where the portable monitor was located was directly under the approach path, so every aircraft using the path is right over that residence. The topography also might be contributing to the problem, as the sound down in the canyon there seemed different than other locations. The majority of noise events at the portable monitor were in the 60-69 decibel range, with a smaller number in the 70-79 decibel range.
- There had been a noticeable increase in the number of complaints coming from the area, which had not even been completely built out yet. The Outer Marker Road within the community had been there for a very long time, as the outer marker to the instrument approach to the runway.
- Because of these factors, the airport had opposed this development and had requested navigation easements and notifications to perspective buyers, but the home builder had declined to do that. If prospective residents do not do their due diligence, they are met with unanticipated noise.
- It was reported that the main developer in the area does provide one paragraph in its contracts saying you are moving into an area where there is slight activity, and they ask the buyer to sign the statement. It was unknown how many actually looked at flight activity in the area before signing. Apparently other builders are doing something similar. It was noted being given something within the myriad of papers needing to be signed at closing was too late to be meaningful in relation to the airport and aircraft noise.

Developers do not want to disclose anything which might affect their sales. It would be positive if there was differing notification being done by any developers.

- There was discussion of what to do with results from the portable noise monitors, or any of the monitors for that matter. Given the constraints in place from the FAA, the need to use a precision approach flight path which cannot be changed, and the complaints CACNR receives from a variety of locations, it was obviously a challenging situation. It was noted the frequency of overhead flights seemed to be of particular concern, and that was something CACNR was attempting to address with the flight schools at least.
- Question was asked what the response of the homeowner who had asked for the portable monitor had been about the results. Some questions had been asked and information provided to help with understanding, such as why the ILS could not be moved, and some discussion of the frequency annoyance issue. There had been no further communication from the resident.

6. **PUBLIC COMMENT:**

A. MEETING OR VIRTUAL ATTENDEES – There was no one attending in person who wished to speak.

- Online, Randy Johnson of Louviers reported noting 352 planes over his area, mostly training flights; 215 had come from Centennial and 175 from Rocky Mountain Metropolitan, with occasional ones from Spaceport. On their highest days, 15 had come from Centennial and 17 had come from Rocky Mountain. His overall highest days included one day of 38 planes, two days of 36 and one of 33. He had submitted 116 complaints to Centennial, the highest he had ever done, and 13 to Rocky Mountain, which was a little low because he was so busy with Centennial's.

Once again, Johnson felt multiple planes had been purposely flying directly towards Louviers and then doing a similar turning pattern which included flying over Louviers area residences. He had been able to identify which flight schools had been involved, including Aspen, Independence, and Epic. It had appeared to him that Epic had added planes, and they did not normally fly close. He had also noted some new plane numbers but did not provide specifics about those.

- Online, Bill Ward, flight instructor and pilot at Centennial commented on the home closing disclosure documents mentioned earlier. He had previously felt and continued to feel that a paragraph in a closing document comprised of countless pages was not enough. He felt Shea Homes and Richmond America Homes were two of the most difficult for giving notice. He had toured the Summit at Meridian, Cityscape at Dove Valley, and the Canyons in Castle Pines and had asked about the airport at each. Responses had included such comments as "Oh, the airport is subject to restrictions," or "the airport's not that busy," or "they don't even use that runway," or "you don't really get any noise."

He felt it should be made clear to people moving right next to the airport or in the path of the ILS that they are going to be subjected to 24-7-365 noise from the airport. The results from the portable noise monitor provided an honest picture of what being under a precision approach is like. Centennial Airport objects to developments being built in that location as did many other people, because the ILS cannot be moved or curved or otherwise fixed.

He suggested one thing CACNR might do was to look at some way to strengthen disclosures about the noise sensitive areas around the airport, whether it was through CACNR itself or Representatives working with their jurisdictions' governing bodies. Prospective buyers need to be helped to look at a map, and a heat map, and understand the development's relationship to the airport, and understand what a navigation easement means before they sign one. It had been observed that the housing market or the housing developers and the aviation industry were eventually going to come head to head. It did not seem appropriate or safe to keep allowing building and selling single family, not as well insulated homes in areas where they are being placed right now. He noted he had recently flown over a development to the unacceptably Immediate south of the airport that was being unfortunately heavily populated and wondered how many of those residents were really aware of the implications of their decisions.

B. RECEIVED BY CACNR –

1. Randy Johnson was commended for the work he did and does to keep airport staff and CACNR apprised of the flight activity in his area. He had spoken about his results for the month as noted above.
2. Brenda Dyche from Elbert County also had provided explicit records of flight activity in her area, including for today showing four planes which were recorded as being between six to eight hundred feet over the top of her house. Factors which might have affected the accuracy of the measurements could have been cloud cover, barometric pressure, etc. There may also have been aerial surveying going on, or some kind of photography. Knowing that did not necessarily make the accompanying noise any less annoying.
3. Laurie Boshart from Douglas County, a new development east of Hilltop and Singing Hills Road, basically had requested flights going to the training boxes observe the voluntary fly quiet hours. Although there were both late-night and morning violations, the very numerous 5:30 a.m. wake-up flights were the most prevalent and annoying.
4. Joe Panem was in attendance and also regularly communicated with CACNR and airport staff. His emails agreed strongly with Boshart, as he had been expressing for several months. Planes seemed to be using an older, retired training box even though there was one only five minutes away. And unfortunately, planes had to go over Randy Johnson's location to reach that location. For Panem, it frequently started around 4:00a.m., and he shared some personal information about the impact such noise had on his family. He was thanked for putting such a real life perspective on the situation. All agreed there had to be a better way to get the flight schools to respect those on the ground more than had been evidenced so far.
5. Lisa Esquivel was in the area involved by the Study Group Committee, and it was the first communication from someone in that area for a long time. Her point was she was getting a lot of training flights, some seeming as low as 450 feet over her house, from 5:00 a.m. to 11:00 p.m.

It was noted that concerns as noted above are brought to CACNR's attention, and responses are provided to the questions asked.

7. EXECUTIVE COMMITTEE:

A. ACPAA MEETING - Pam Thompson had provided the written report given to the May meeting, and reported the members of the ACPAA Board were very concerned about noise. Two on that Board were Douglas County Commissioners, and all would have these minutes to read, plus having heard Thompson's report on June 18th. She noted there were now areas from Elizabeth to Louviers, with Chatfield, Ridgeway, Castle Pines and Meridian coming for more anticipated noise complaints. It would be a challenge to determine what to do with all of them, since it would be difficult to form a targeted Study Group to address each of them. Those who had been complaining for some time would not want to take a back seat to the newer developments, even if those were actually closer to the airport.

The ACPAA Board was very sympathetic to the noise problems, but there was little it could do since so many of the affected areas were not within its jurisdiction. FAA regulations also limit actions airports can take regarding noise abatement and aircraft. Voluntary noise abatement guidelines were perhaps its best offense for working with the flight schools. One of the pilots connected to CACNR had commented that when he was in a training box and noticed he was over houses, he made the conscious effort to relocate his training. That kind of thinking would be nice to instill in all pilots and pilot instructors. The concept was being discussed at the pilots' association, and at the Colorado Aviation Business Association (CABA), but was taking a very long time to trickle down,

B. WEBSITE RFP – Andy Jones was excited to bring information about updating the website, which had not occurred for a very long time. The goal was to have a website which was simple but sophisticated, visually appealing, user friendly, and which would effectively inform and educate CACNR Members and Representatives and the public about airport noise issues, noise mitigation efforts, noise abatement procedures, and the roles of CACNR, ACPAA, and other related or involved organizations.

Jones noted CACNR was not a governmental agency and therefore was not required to obtain multiple bids to do the update and maintenance of its website. He had created a draft RFP which the Executive Committee had seen and he had shared it with Altitude Design Agency (ADA), run by an individual he knew and had worked with for a long time who was currently based in Bentonville, Arkansas. He had received ADA's proposal the day before this CACNR meeting. He had spoken with his friend extensively and believed he had already started working on the website even without a contract. He was suggesting changing the content management system to one which would be very easy to use and to regularly update. He understood the website should be a repository for information to be accessed and used by CACNR Representatives and by the general public

The cost of the ADA proposal to update the website would be the full \$5,000 included in CACNR's budget for both the update and maintenance of the website. ADA requested \$2,500 at the start of the project, and \$2,500 when the update was completed to CACNR's satisfaction. Details and timelines were included in the proposal, beginning with this meeting, with the update completed by the August CACNR meeting. There would be another month for training on the use of the site, and completion of any necessary adjustments.

Question was asked if there would be any kind of service agreement for perhaps at least a year. There did not want to be any reliance on airport staff to do maintenance or updating of the site on a regular basis. ADA would do so but would require a separate agreement at a special rate to CACNR of \$200 an hour. The cost of ongoing maintenance would certainly need to be under consideration, unless CACNR Representatives would take on the task. There would also be a cost factor related to the new content management system, and how that would compare with the cost of the Go Daddy current platform, domain registration fee, etc. was unclear. Although ADA's proposal did not include these types of additional costs, it was noted CACNR did have budgeted reserve funds, as well as unexpended funds in other categories. Such costs should be clarified before the 2027 budget needed to be created.

Question was asked if ADA had its own hosting site or would host on its own mainframe, or would it be taking over the current CACNR Go Daddy account, and what kind of refreshing would go along with either. Security of the site was also brought up. The proposal did address some of these more technical topics, which were included in the proposal's cost.

Jones encouraged proceeding with the ADA proposal in order to have something operable by the August CACNR meeting. Observation was made that would preclude any interest which might be expressed by any other vendors, with perhaps a different cost factor. Request was made for next steps which needed to be accomplished. Per Jones, it appeared CACNR should approve the draft RFP, with a price point not to exceed \$5,000; the timeline written into the RFP splitting the cost into \$2,500 initially and \$2,500 when CACNR was satisfied with the update. CACNR would supply the content, although Jones would ask the airport for the use of any archived photos or videos not currently in use and for which CACNR would not have to include attribution. He next wished for approval of the proposal from ADA to be signed no later than July 10th, provided no one had major modifications between now and then.

Question was asked about the different dates in the version of the RFP which had been shown on the screen, and what was correct. It was noted the majority of CACNR Representatives had not seen the RFP or the ADA proposal before getting it tonight, and was there a definitive reason for taking action now? It did not seem appropriate to approve something in that fashion. It was noted the website had needed to be updated for a very long time, so waiting another couple months would probably not make a lot of difference, but would allow everyone to know what they were voting on.

Considerable additional time was spent clarifying deadlines and deciding how to handle the RFP and the vendor (s) proposal(s). Finally, on the motion of Brad Pierce, duly seconded, it was agreed to approve the RFP with the issuance date changed to June 10th, and to postpone any decision on a vendor proposal until the August meeting. (Secretary's note – other dates in the RFP also needed to be changed to accommodate final action on a proposal not taking place until August.)

C. WORK PROGRAM – Alison Biggs reported Bill Wasmund (see #13), Mike Koscielniak and Andy Jones were the three who had so far volunteered and were working on aspects of the Work Program. Volunteers were still needed.

8. **CACNR STUDY GROUP COMMITTEE:** Chair Brad Pierce reported the committee greatly appreciated the active participation of two representatives from the air traffic control tower at its last meeting and looked forward to their continued attendance. He also thanked Jennifer Redding from the FAA Regional Office for approving their return to the committee.

He next reported that, as requested, the committee had looked into possible mitigation strategies to reduce the number of overflights and low-flying aircraft within the 3 Towers and Elizabeth practice areas. It had also been asked to include the practice areas in the group's scope of work by providing data analysis and developing operational mitigations. Its findings and recommendations had been included in the email for this meeting.

The report provided background on the development of the practice areas, the growth of the Elizabeth, Elbert County, and Kiowa areas, and the FAA's mention of minimum safe altitudes for aircraft flying over "congested areas," leaving the application and definition of "congested area" to individual assessments.

The current study area was located within the Centennial Airport Class D airspace, which enabled collaboration between the airport, the local FAA control tower, based flight schools, and CACNR. The 3 Towers and Elizabeth practice areas were in uncontrolled airspace approximately two miles southeast of Centennial's airspace boundary or approximately nine miles from the center of the airport. The airport and local FAA tower do not have jurisdiction in that area.

Consideration had been given to the challenges presented for pilot training in areas surrounding Centennial Airport, including the existence of nearby Denver International Airport, Buckley Space Force Base, and Colorado Air and Space Port. The vertical cap provided by the overlying Denver Class B airspace allowed separation of larger and faster jets from the smaller propeller aircraft used for training, but did increase congestion and limit flexibility for use of certain other areas. Population density differences were also a factor.

The committee acknowledged the seriousness of the issue with aircraft noise and repetitive flights in the requested study area, but after considerable consideration, it had been determined the committee's current scope of work did not include developing operational mitigations or providing continuous data analysis of the 3 Towers and Elizabeth practice areas. However, the committee made three recommendations for CACNR to

1. Request flight schools to avoid ground reference maneuvers in the 3 Towers and Elizabeth practice areas. Such maneuvers require aircraft to be lower to the ground, generally a thousand feet above ground level. These would be requested to be conducted in the more easterly practice areas. For reference, some based flight schools have already adopted this practice as mandatory in their standard operating procedures.
2. Request flight schools to adopt a standard altitude entering and exiting the 3 Towers and Elizabeth practice areas to allow for maximum vertical separation between the aircraft and communities. This practice would help flight schools be good neighbors while transversing through the practice areas.
3. Continue working with the Colorado Pilots Association to address and relay concerns about flight training activities in the practice areas.

It had been noted that any concern about low flying or erratic maneuvered aircraft should be directed to the FAA through the Denver Flight Standard District Office (FSDO), the regulatory body which would determine any possible violation of FAA regulations.

Discussions, clarifications and observations:

- The three training boxes to the west of the airport were considered unacceptable or of concern to flight instructors due to the rising terrain, more frequent turbulence and wind shear, traffic congestion and airspace constraints.
- The 2020 population figures used did not reflect the current populations of the areas involved. This had made the comparisons cited by the committee in that paragraph of its report inaccurate and the paragraph should be stricken.
- Although pilots were already asked to voluntarily refrain from doing ground reference maneuvers in these training boxes, there had never been an official CACNR recommendation to that effect, thus recommendation #1.
- Question was asked what the standard altitude was or would be as referenced in recommendation #2? Response was it would not be for 'us' to determine but would be up to the flight schools; it was anticipated it would be close to two thousand feet. The topic was on the agenda for the next flight school meeting.
- It was noted CACNR had never worked formally with the Colorado Pilots Association or attended any of its meetings. Having one

of CACNR's Alternate Representatives also be an active board member of the pilots' group had been very helpful, as he had served as an informal conduit, taking what CACNR had heard from the communities to the broader flying community along the Front Range and the State. Recommendation #3 seemed to make a communication channel between CACNR and the Colorado Pilots' Association more recognizable, official, and useful for the future. Mike Koscielniak was thanked for his role in all of this!

- It was also noted when information had not seemed to be getting to the pilots, the pilots' association had published several templates, map overlays, the Noise Abatement Guidelines, and other items for the use of pilots, and this had been much appreciated. That type of information sharing and the resulting related conversations could result in broader communication channels throughout the state and to other flight schools as well. Mike Koscielniak was again recognized for his actions.
- Question was asked how to get in touch with the Denver FSDO with safety concerns, reports of low-flying aircraft, etc. That part of the FAA can be reached through the airport's website, noise.centennialairport.com, or it could be accessed through the FAA website, FAA.com.
- Noise reports, data, and complaint information from the communities continued to be shared during the mandatory flight school meetings, and some individual schools had also been informed of specific problems involving their school's flights. Some schools were responding by giving instructions to their members about the issues. Others, perhaps not so much.

MOTION TO EXTEND THE MEETING TIME: A motion to extend the meeting time by 30 minutes was made by Don Sheehan, and duly seconded. The motion carried.

- Question, was asked if CACNR should communicate with the Denver FSDO, providing the kind of information available from members of our communities who had tracked planes. It would seem appropriate for CACNR to be on record as having identified safety problems, and would appreciate the FSDO's attention to them. Or should it be on the CACNR agenda so there could be more specific information gathering to create a compelling communication to send to the FSDO? It would need to focus on safety rather than noise for the FSDO to even consider it. Getting any kind of response from the FSDO could be useful in the future.
- There was considerable discussion of the FAA's lack of a specific definition of a congested v. non-congested area, and the frustrations that caused. Leaving the decision up to individual inspectors would result in an incalculable number of different standards. It was again as though the FAA had found another way to prevent careful consideration of the problems aircraft cause for the public.
- Suggestion was made for informational letters about the issues under consideration to be sent to the actual owners or financiers of each flight school. They could be asked to look into the situations with their chief financial officers and their membership, and perhaps others. Mike K. volunteered to bring a draft of such a letter to the August CACNR meeting. It would need to be sent personally to each company owner. Airport staff indicated that information was available for CACNR's use.
- Frustration and disappointment was expressed that with all the work done by the committee to help Greenwood Village, similar assistance was not being provided to those in the 3 Towers and Elizabeth areas. Would there ever be any way to help someplace other than Greenwood Village if the committee was given a different charge? The committee had discussed the problem at length, and the decision had been made as given in the report.

On the motion of Brad Pierce, duly seconded, CACNR adopted the 3 recommendations from the CACNR Study Group Committee.

9. **AIRPORT DIRECTOR:** Mike Fronapfel indicated he would be brief, but did want to note that operations through the end of April were almost identical to that time last year. Fuel sales were 5.8% higher than last year, surprising since operations were flat and fuel costs were higher.

As noted, the FAA had participated with the last Study Group Committee and had been welcomed with open arms. Time had been spent reviewing the activity, mediations, and progress over the last year, as well as the dashboards, which they had not seen.

Work on the Signature hangar was progressing, with completion expected in Spring 2027. Work on the air traffic control tower was also continuing, with completion anticipated late Summer 2026. He reminded that the tower would be closed from 10:00 p.m. until 5:00 a.m., Monday through Thursday through June 12th. There would also be some additional nighttime closures toward the end of July and the exact dates would be provided to CACNR. The Hot Dogs and Airplanes Runway 5K event was the next weekend, with about 2,000 people participating as well as others attending, vendors, sponsors and spectators. Due to an industry conference in Pueblo on a conflicting date, the ACPAA meeting would be on June 18th instead of June 11th.

Question was asked if Centennial expected any differences in operations with the airport in Aspen closing. Most aircraft go to Eagle or Rifle if they don't use Aspen, so only a small difference would probably be noted. In the Winter, some now go to Aspen, drop their passengers and come to Centennial because there is more space to park and fuel prices are lower. If Aspen is closed, more might come here and their passengers would either drive or helicopter to Aspen, but both Rifle and Eagle have more ramp space, which might or might not fill up. It will likely be a 'remains to be seen' situation.

Zach Gabehart reported the FAA had just notified the airport of a proposed updated arrival procedure into the airport. The change affected a star or standard terminal arrival meant to bring aircraft from high flight levels down into the terminal area and set them up to approach into the airport. It would be used by jet aircraft approaching from the northwest, only when under instrument flight rules, so a fairly small segment of aircraft would be using it; single engine planes would not be. Gabehart provided slides comparing current routes and the proposed revised routes, which had been requested by the air traffic controllers and would require fewer directional changes to aircraft by them since the routes would be in the GPS.

MOTION TO EXTEND THE MEETING TIME: A motion to extend the meeting time by 30 minutes was made by Andy Jones and duly seconded. The motion carried.

Although this would affect aircraft approaching from the northwest, that westward shift would make a change for those outside that airspace, so those in the foothills could notice an increase in traffic because of the FAA's action. Questions were asked if the FAA was telling anybody about this, or if an environmental study had been done on the shift. The FAA is apparently only required to do an environmental assessment if it is 3,000 or less feet above ground, and there is only one segment of this approach that met that criteria. It seemed that one change segment had been evaluated as part of the 2020 Denver Metroplex project and had been included as an approval in that overall assessment. Anything above the 3,000 foot buffer does not require any sort of environmental action.

As far as advance notice is concerned, apparently the FAA has some sort of an internal comment process about which Centennial Airport staff had no knowledge and which comment time had closed; Centennial was now signed up to receive such notices. Comments which could have been made would have included that people in the foothills would be impacted negatively by the change; The shift of traffic from a more populous to a less populous area might be considered a positive by the FAA, but it likely would be noticed more because of that, as well as because the different terrain reflects noise more dramatically. It would also be harder to find a landing spot in the foothills in the case of an emergency. Observation could also have been made that operators would likely experience more turbulence and more discomfort over the foothills, as well as the safety concerns mentioned. It was noted this change had been sent out to corporate pilots as soon as it was available and would likely be discussed at that group's monthly meeting and their observations shared with CACNR in August.

10. **OLD BUSINESS:** Dave Heller had provided a report from the UC Davis Noise and Emissions Symposium which he had attended along with Chris Eubanks and Pam Thompson. The cover page of the report had been in the mailing, but the referenced attachments had been missed and were provided on site. There had been some discussion during previous CACNR meetings, but to recap, the symposium was a great networking and learning environment, and particularly helpful for those new to CACNR and aviation noise. There had not been much specific to general aviation airports, but there was still a lot of relevant noise and related topics.

Thought was expressed that it might be time to become more aggressive about getting some general aviation topics on the agenda, or to have general aviation represented on some of the panels. That had been mentioned by the CACNR representatives when they completed the post-conference evaluations.

11. **NEW BUSINESS:** None

12. **PUBLIC COMMENT EXTENSION:** Not needed

13. **REPRESENTATIVES COMMENTS:** Nothing from members of the Colorado Municipal League.

- Bill Wasmund reported Wings Over the Rockies was having a breakfast fly-in on June 13th. About 1,000 people were expected at the event, from 7:30 a.m.- 11:30 a.m. If they could arrive on time, two F-16 Vipers would take part in the fly-in, and would be there until about 9:00 p.m. This was all in support of a Dos Gringos (an American fighter pilot band) concert that evening, from 5:00 p.m. - 8:30 p.m.

The June 2026 issue of *Flying* magazine contained an article about Wings Over the Rockies, about 6-7 pages long and well done. A copy had been provided so it could be shared with CACNR, and it would be attached to the minutes.

For part of his volunteer work with the CACNR Work Program, Wasmund had created two 30-minute presentations that could be used for new CACNR Representative and Alternate Representative orientation and also for airport tour participants. The first was an introduction to Denver airspace and the flight school practice areas. The second one was called Sound, Noise and Human Perception and was an abbreviated version of the Noise 101 course that many have taken. It condensed much of that information into about 30 minutes; if viewers required additional information, Wasmund volunteered to help them individually.

It was anticipated these would be put on the updated website, and Wasmund had also shared them for CACNR distribution before the website was operational.

- Brenda Dyche first wanted to formally request a data comparison to be done for one of the flight training areas in Douglas County compared to 3 Towers.

Second, she had found an article stating "*A congested area in the eyes of the FAA is defined by the number of complaints that come from a given area or individual. A single phone call to the local FSDO turns one person's house into a congested area. An enforcement action has in the past been taken against pilots who operated aircraft below 1,000 feet in what the pilot considered a sparsely populated area. The following is an FAA chief council opinion taken from the federal aviation regulations explained (Jeppesen, 2005). 'Congested area' is determined on a case-by-case basis. Examples of what was determined by the [NTSB to be congested areas] are 1. an area consisting of 10 houses and a school, 2. a university campus; 3. a beach area along a highway; 4. over a camp where there are numerous people on the dock and children playing on the shore.*" Dyche noted some of these criteria fit the 3 Towers area and the Elizabeth area as being congested.

Third, in response to the concern about the additional cost to training flights for going further east, she observed if they can pay for flying lessons, they can probably afford the gas to take a straight line from the airport east over less congested areas instead of flying down south, directly into 3 Towers, buzzing the houses there, and then making a beeline north and east to the less congested areas. Numerous violations of aircraft flying below 1,000 feet out there had been reported but nothing was being done about them. She had heard nothing from the FAA, nothing.

She recommended the 3 Towers training box and the Elizabeth training box both be closed entirely due to the large amount of development in those sites. Less congested space is available further east. Listening to recordings of what the neighborhood sounds

like when the planes are not there and when they are gives some idea of what the neighborhood deals with on a far too regular basis from before 7:00 a.m. until after 10:00 p.m.

- Brad Pierce thanked Chris Eubanks for chairing CACNR during the past couple years. He noted appreciation that Ebanks was staying on CACNR representing Castle Pines.
- Alison Biggs issued a "ditto" to Pierce's comments to Eubanks, followed by further commendations by the other Representatives around the table.
- Reminder was given that the Vice Chair position would need to be filled at the August meeting, so volunteers were being sought or no one would leave the room on August 5th!
- Mike Koscielniak indicated as he was working on the Work Program on noise study issues, looking at GA airports with roundtables and noise monitors and had found that Aspen and Jackson Hole Wyoming had dashboards and noise monitors. Surprise! In addition, there were 20 airports in Colorado that had some sort of noise abatement in effect.

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

None

15. **NEXT MEETINGS:**

- A. **CACNR** –
- | | |
|--------------|---|
| July 1, 2026 | NO CACNR MEETING |
| Aug 5, 2026 | 6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112 |
| Sept 2, 2026 | 6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112 |
| Oct 7, 2026 | 6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112 |
| Nov 4, 2026 | 6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112 |
| Dec 2, 2026 | 6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112 |
- B. **ACPAA** –
- | | |
|---------------|---|
| June 18, 2026 | 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112, Pam Thompson for CACNR |
| July 9, 2026 | NO ACPAA MEETING |
| Aug 13, 2026 | 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112, Pam Thompson for CACNR |
| Sept 10, 2026 | 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112, Pam Thompson for CACNR |
| Oct 8, 2026 | 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112, Pam Thompson for CACNR |
| Nov 12, 2026 | 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112, Pam Thompson for CACNR |
| Dec 10, 2026 | 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112, Pam Thompson for CACNR |

C. **PART 150 NOISE COMPATIBILITY STUDY ADVISORY COMMITTEE** – August 5, 2026

16. **ADJOURN:** Before adjourning the meeting, Eubanks asked for a warm welcome for Pam Thompson as the next Chair of CACNR. Such was given. The meeting was adjourned at 9:18 p.m.

Alison Biggs, Secretary





RICK DURDEN

FLYING The Ultimate Issue 45 June 2026

TREASURE TROVE OF AEROSPACE

Denver's Wings Over the Rockies museum continues legacy of learning where history meets the future

Rick Durden

Douglas B-18A Bolo bomber, developed from the DC-2 airliner.



good air
museum is
a treasure
for pilots—a
great one is a
treasure for
everyone.

The Wings Over the Rockies Air & Space Museum, with its separate 15-acre Exploration of Flight campus, qualifies as a great air museum. The Denver facility is a treasure that celebrates our military and civilian aerospace history, the myriad people who made it happen and, welcoming the future, uses forward-looking technology in teaching how to be involved in what's to come in aviation and space.

The History

What would become the Wings Over the Rockies Air & Space Museum started as a small part of a large Army Air Corps base in 1937. Beginning in 1988, an evolving group of volunteers who recognized the contributions of the tens of thousands of people who served and trained at what became Lowry Air Force Base kept some aircraft (parked outdoors), memorabilia, records, newspaper clippings, and jotted notes of the human history, events, and aircraft in a space devoted to keeping memories alive and called the Lowry Heritage Museum.

Volunteers stored what they could collect from the time Lowry was established after the Army Air Corps reacted to the



A McDonnell Douglas AV-8B II+ Harrier, noted for the third highest combat time of any Harrier in the world.



RICK DURDEN

deterioration and several fires at its Chanute Field in Illinois by soliciting bids for a replacement training facility in 1934. With the military's budget cut repeatedly during the depths of the Depression, there wasn't money to make needed fixes to the badly neglected buildings at Chanute, and it was determined it would

be cheaper to build new.

Denver submitted a bid and followed up by purchasing a tuberculosis sanitarium and grounds. The Works Progress Administration converted the grounds to an airfield, and in 1937 the Denver Branch of the Air Corps Technical School was formed with departments of

photography and armament. Those departments were only a first hint at the magnitude of the base that would later that year be named Lowry Field after Francis Lowry, the only Colorado aerial observer killed in World War I.

In addition to the often-hectic aircraft operations routine to an air base, Lowry would be dedicated to training the thousands of enlisted men and officers for the hundreds of specialized jobs that would be required to integrate into the process of hurling mechanical invective at the country's enemies in WWII.

An 8,550-foot paved runway was completed in 1941 in recognition that the heavy bombers being developed were going to require much more concrete than in the Air Corps' inventory. It also served notice that the base and its buildings were going to need to be massive to handle the needs of an aerial wing of the U.S. Army that was growing at a rate unimaginable even a few years earlier. Hangar One, the home of the main part of the museum, covers 100,000 square feet and can hold a B-52—an aircraft not even on the drawing board when the hangar was built.

As the Army Air Corps became the U.S. Army Air Forces in 1941 and then the U.S. Air Force in 1947, Lowry grew and evolved.

Even after WWII, in addition to flight operations, Lowry was a school. It taught virtually everything and everyone in the Air Force—photographers (air, ground and intelligence for aerial reconnaissance); bombardiers; accountants; clerks; pilots; flight engineers; operational crewmembers; combat reporters; armorers; rocket propulsion experts; radar-operated fire-control system crewmembers; missile crewmembers; handlers of nuclear weapons, and maintainers of gun and rocket sights to name a few. Thousands graduated from the schools annually. According to Wings Over the Rockies museum curator Stewart Bailey, there were 20,000 people on the base at any given time.

The U.S. Air Force Academy inducted its first class of cadets in 1955 at Lowry, which would be its home for three years while the current AFA facility was constructed in Colorado Springs. In 1966 the Air Force ceased flight operations at Lowry, closing all runways. However, a variety of aircraft remained on the base



as they were essential for the training that continued to be conducted until the base was closed in 1994.

The Lowry volunteers didn't shut down when the base did. Instead, joined by civilian volunteers, they successfully petitioned the Air Force and the city of Denver to turn over a portion of it to them for a museum. The transfer of Hangar One and adjacent land took place in 1994, and the museum was formed. Through hard work, extensive fundraising, and perseverance, Wings Over the Rockies became Colorado's official air and space museum in 1997.

What started as a determined group of volunteers has grown to one of the larger collections of historic military jet aircraft with a nice mix of significant civilian aircraft presented in a way that helps bring them to life. There are large-screen videos beside several of the aircraft, many featuring descriptions by those who flew and maintained them. Many of the volunteer docents worked with the aircraft before they retired from the military and now bring a personal touch to their tours.

As we talked with Bailey about the museum, he emphasized that the people behind it wanted it to be much more than a display of "just another silver airplane." He said they sought to bring to life how the aircraft came to be and the thought processes of those involved in designing, flying, and servicing them.

Exploring Inside

There's a desire to look up and understand how a 100,000-square-foot area could be covered with a clear span that left all the floor space open. The technology of 90 years ago took the much smaller, wood-truss structure design of WWI hangars and hugely inflated it using steel so that airplanes not even conceived could fit inside without effort.

There's so much to see immediately. The floor, save for the very center, is covered with aircraft of all shapes and sizes. Around the perimeter and on the mezzanine sit galleries in rooms dedicated to such things as the Colorado Air National Guard, military uniforms,

avionics, Lowry AFB, cameras, armaments, Colorado astronauts, and flight breakthroughs.

A Douglas B-18A Bolo is displayed without the right engine cowl, allowing a clear view of its 1,000 hp Wright R-1820-53 radial engine. There are only six B-18s left in the world, and it feels appropriate that the museum has one because a B-18 was the first airplane to land on Lowry's newly built unpaved runway in 1938. It was to be used for training because the bomber was already obsolete. It's a striking juxtaposition to the B-52—the type parked in front of the museum—which is still in service after more than 70 years. Consider that airframe and engine development was moving so fast at the time that the first B-18 landed at Lowry, having only been in service four years, and its 216 mph maximum speed and puny armament made it so out of date that it would have been a slow-motion death trap against fighters that were already more than 100 mph faster.

The display includes a video with detailed information on the development of the bomber during the depths of the Depression as the Army tried to get the most for every scarce dollar. Douglas took the DC-2, increased the wingspan slightly, moved the wings from a low-to a mid-fuselage position while deepening the fuselage to allow space for a bomb bay. It also created a Plexiglas nose for a bombardier and nose gunner and added a top turret. Spending some time looking at the airframe it's evident how hard Douglas worked to keep manufacturing costs down by using as many components from the DC-2 production line as possible.

The Bolo on display was a bombardier trainer during the war—although not at Lowry. After the war it was sold and used as a freighter, crop duster, and survey aircraft. In 1958 it was caught running guns to Cuban dictator Fidel Castro and confiscated by the U.S. Border Patrol. Now owned by the Air Force, it was loaned to Wings Over the Rockies, where its painstaking volunteers restored it to its prewar bomber configuration.

A walk around the floor of the huge hangar is initially sensory overload as one famous aircraft after another is encountered. A Bell UH-1M "Huey" gunship is displayed—shark's teeth and

all—sitting in a revetment as it would have appeared when it flew in combat during the Vietnam War. Colonel Bill McPherson flew the helicopter on display when he was in Vietnam, acquired it after the war, and piloted it around Colorado to meet veterans' groups before donating it to the museum.

Nearby, also in a Vietnam revetment display, is a McDonnell Douglas F-4 Phantom II. Placards and a video provide information about this incredibly versatile Mach 2+ fighter that served with the Air Force, Navy, and Marines as well as with 15 other nations. This cannon-equipped fighter also represents the learning curve that went on in combat after military leaders originally decreed that the F-4 be armed only with missiles for "modern" air-to-air engagements. Real life proved that to be a serious mistake, so guns were added, allowing greatly increased success. The fighter on exhibit was used in flight and ground test programs for the Air Force before being transferred to Lowry in 1982 as a munitions loading trainer—yet another airplane that served at Lowry to educate Air Force personnel that continues in a new life teaching the public about U.S. military history.

Tucked between an F-102A Delta Dagger and F-101Voodoo sits the diminutive but terrifying F-104C, a Mach 2.2 design from the 1950s with a total wingspan of only 21 feet, 9 inches, and a wing loading that made for challenging handling at low speeds. It set numerous altitude and speed records, including flight at over 100,000 feet. It was a lethal weapon in the hands of a well-trained, experienced pilot. Unfortunately, the process of getting pilots to the needed level of skill proved difficult, and the series had a frighteningly high accident rate. The display airplane is another of those in the museum that saw combat, flying with the 435th Tactical Fighter Squadron from Udorn Royal Thai Air Force Base during the Vietnam War.

The museum is arranged so that it's possible for visitors to move close to the aircraft. It's fascinating to be able to clearly see the "alert start" switch on the landing gear of the B-1A Lancer. It was a button slapped by crewmembers that started the engines as they raced up into the jet for an immediate take-off. You can also see the wing-folding

Army Bell UH-1M (top). Spare engine for AV-8B II+ Harrier (middle left). Grumman F-14A Tomcat (lower right).

RICK DURDEN (3)



Boeing B-52B Stratofortress, the seventh manufactured (left). A sculpture tribute to WWII soldiers (below).

mechanism in the Grumman EA-6B Prowler and the ducting for the vectored thrust capability of the AV-8B Harrier, which boasted the third-highest number of combat hours of any Harrier. The Harrier was the centerpiece of the museum's celebration of the 250th anniversary of the U. S. Marine Corps on November 9, 2025.

Yes, Wings Over the Rockies gives you a lot to experience.

There's the innovative but hopelessly screwy Hiller XROE-1 Rotorcycle—a tiny, folding helicopter that was to be dropped to downed fighter pilots. A pilot could unfold it, fire up the diminutive piston engine and—if they knew how to operate the cyclic, collective, and anti-torque pedals of a helicopter—fly it home. One of seven that survived from the sensibly abandoned project is on display.

Then there's the Schweizer SGS 2-33 glider used for training at the Air Force Academy. It's not just any academy glider. Once the museum received it on loan and went through the logbooks, volunteers discovered that one Chesley "Sully" Sullenberger made training flights in it as a cadet. Those lessons paid off some years later when he safely landed a far larger glider carrying 155

people on the Hudson River—an Airbus A320 that lost both engines after hitting a flock of birds.

Future Forward

Looking more deeply at what's offered by Wings Over the Rockies at both its Lowry location and Exploration of Flight campus is akin to peeling the layers of an onion—there is simply so much to see.

At both campuses there's an Aerospace Exploration Pathway that prepares students in grades 6-12 for careers in aerospace—"hands-on experiential learning in a real-world context that allows students to find out, firsthand, what it takes to succeed in the aerospace industry." At the Exploration of Flight campus there are classes on becoming a drone pilot and how to make a living doing so, a pathway toward obtaining a pilot certificate that includes ground school, and some scholarships for flight training that provide funds raised by the Captain Jeppesen Foundation.

There's also a Teacher Flight program that provides a "total immersion

in the aviation industry for K-12 formal educators with direct support toward certifying new Career and Technical Education (CTE) pathways." Former NASA astronaut Eileen Collins serves as the honorary chair of the program and supplies information in a video on the museum's website.

There are summer camps, Scout programs, teacher workshops, and field trips. Many flight simulators can be rented for pilot training. Speakers regularly are invited to make presentations at the Exploration of Flight campus. Want to go to the Air Force Academy? There's a good chance that there will soon be another program featuring current cadets talking about their experiences applying to and attending the academy.

Chances are, you won't be able to get enough of your time at Wings Over the Rockies Air & Space Museum. Its location on a former Air Force base renowned for its dedication to teaching and learning is somehow symbolic of the ongoing goals of the museum. It's successfully carrying on the biggest part of its avowed mission: "To inspire innovation and action for the next generation of aviation and space explorers." 

Rick Durden is a retired aviation lawyer, active CFII, and holds an ATP with type ratings in the Douglas DC-3 and Cessna Citation 500 and 680. He is the author of *The Thinking Pilot's Flight Manual* and *How to Survive Flying Little Airplanes and Have a Ball Doing It*.



'LEST WE FORGET'

One of the most powerful displays at the Wings Over the Rockies Museum in Denver is a sculpture entitled "Lest We Forget: The Mission." The three, life-size bronze statues of World War II fighter pilots on and around a ready room bench are a duplication of a part of the full sculpture that was first unveiled at the museum and is now on display at the National WWII Museum in New Orleans. Conceived by artist Fredric Arnold at age 87, he completed it at 94. At 19, Arnold joined the Army Air Forces shortly after the Pearl Harbor attack and was trained as a fighter pilot, going into combat in North Africa in P-38 Lightnings. Of the original 14 pilots who initially went into combat together against experienced German fighter pilots, Arnold was one of only two still alive after six months. Arnold completed 50 combat missions, being shot down once and escaping. Knowing that he'd be killed by the Germans if he were captured because he was Jewish and facing deep-seated antisemitic hostility from many of his squadron mates, he never believed he would survive the war. In 1998 Arnold learned that the only other surviving member of his cohort was dying and went to visit him in the hospital. His friend reminded him of the vow the two had made that the last one standing would act to honor the 12 comrades lost in the war. Arnold's honor to his comrades shows composites of fighter pilots he had known and flown with in a ready room at a mission briefing. In the current display, two pilots are sitting on a bench in full flying gear. This moving display is accompanied by a 20-minute video that explains Arnold originally created the sculpture to honor his 12 lost comrades but expanded it to recognize and honor the more than 88,000 Army aviators who lost their lives in World War II.

LEFT: JASON ROBERTS;
RIGHT: RICK DURDEN

Some issues/observations raised at CACNR meetings related to the Part 150 study: (not in any order of priority, but as they came up at various meetings)

Is Part 150 looking at:

1. The effect of Covid and Metroplex on the airport and the surrounding communities
Part 150 assesses noise from aircraft operations originating from or ending at the Study airport and represents the existing condition and five years beyond the existing condition. Therefore, the effect of COVID (2020) and the Metroplex implementation (2020) will not directly be assessed; they are considered existing conditions.
2. The effect of Next Gen on the airport and the surrounding communities
Please see response number 1.
3. Is there any useful information the consultants have learned from other airports/ roundtables/Part 150 studies elsewhere
APA hired the consultants with the most Part 150 experience; with Mead & Hunt and HMMH having conducted more Part 150 studies than any other competing firms (over 100 studies between the two firms). In addition, no firm has more experience with airport noise roundtables than HMMH. This team was selected to bring their experience to APA, and all alternatives within the study were formulated based on the combination of the public and stakeholder process paired with lessons learned from their industry-wide experience.
4. Will the set of summary notes only be available at the conclusion of the 7 Study Advisory Committee meetings, or will a summary of each meeting be prepared and available before each subsequent meeting? It seems waiting for a set to be prepared and presented until after all meetings are concluded would not be the most useful to the committee as its work progresses.
The presentation for each SAC meeting has always been posted on the website and notes regarding questions, comments on alternatives or the Study itself have been addressed in the FAQs, which are regularly updated. Also, we have addressed substantive questions that have come up in the SAC meetings and addressed those questions in the subsequent round of meetings. The SAC included a member from the CACNR to report back and create a cohesive link between the two groups for information sharing. One of the important roles of the SAC members is to bring back notes to their respective community at the meetings.
5. In addition to identification of completed measures from the previous Part 150, will there be some indication of the accuracy of the forecasts from the last Part 150
No. This Part 150 is being done so that the noise exposure maps represent current and forecast conditions as known today. It does not look backward. Additionally, Part 150 has a provision to update the NEMs if future operations end up being substantially different than the forecasts.
6. The work would seem to merit more than one public hearing. Having the only public hearing to be held on the final document may leave the public feeling it is being presented with a fait accompli, so why have a hearing? Not seeing a proposed document until it is final may not meet the needs of our currently so-very-involved public. Or don't call it 'final' if there will still

be further work to be done after that public hearing.

Part 150 requires a public hearing for the public to comment on the APA-recommended measures in the draft Noise Compatibility Program (NCP) update to address the noncompatible land uses identified in the Noise Exposure Map (NEM). APA expects to not only present measures to address noncompatible land uses, but also aircraft noise exposure concerns raised by the public through the open houses. The materials presented in the hearing will be materials that the stakeholders have seen in various formats during previous meetings and presentations. However, it will be focused on those alternatives that are recommended to move forward. Revisions to the document may be made based on comments in the public hearing and comment period. The draft document will also be available at least 30 days prior to the public hearing.

7. Also, having the one public hearing immediately following a 4th workshop bodes for a very long night, and no opportunity for the input from the 4th workshop to be rolled into a real final document. Combining these two does not seem quite right.

The 4th workshop is designed to present the APA-recommended NCP measures so that the public can provide their comments on the recommended measures at the public hearing. This is not the first time the public will have seen these measures, but it will be the first time they have been presented as “recommended” because APA will consider public comments received during the process before making recommendations. APA will not submit the NCP with the recommended measures before hearing from the public – that is the purpose of the public hearing. The format will follow closely with the last public meeting, with an open workshop first, followed by a short presentation, and then the opportunity to submit verbal and written comments.

8. Will there be acknowledgement or mention of the *Denver Post* article reporting Denver has a 50 decibel limit for noise in residential areas at night; article also noted the negative effects of chronic noise exposure and sleep disturbances caused by noise; one investigator recommended sound levels of 35 decibels or less in sleeping areas

No. Part 150 has identified land uses compatible with various noise levels as reported using the Day-Night Average Sound Level (DNL) and has determined that all land uses are compatible with noise below 65 dB in terms of the DNL metric from aircraft operations. That is the required metric for this Study. The health effects of noise are something that the FAA is studying, though if/how it might affect the Part 150 process or requirements is currently unknown.

9. Part 150 would benefit from more community involvement rather than less, even though it might take longer

Thanks for your comment. Part 150 only requires that the public be provided the opportunity to review the NEM and NCP documents; and an opportunity for a public hearing prior to submitting the NCP to the FAA for review and subsequent approval/disapproval of the Airport-recommended measures individually. However, the Airport has included a much broader

stakeholder involvement plan as part of this Study. Below is a summary of all the meetings to date in which members of the Study team have attended to present information on or answer questions pertaining to the Part 150 Study (through the upcoming meetings in May 2026). By May 2026, the Study team will have attended 87 meetings in total for the purpose of informing stakeholders about the Part 150 Study.

Meeting	In Person	Virtual
Study Advisory Committee	5	0
Centennial Airport Community Noise Roundtable	6	11
Arapahoe County Public Airport Authority Board	5	23
FAA Study Group	15	19
Public Workshops	3	0
Total	34	53

10. How will the Part 150 study consider or utilize the airport's Strategic and Master Plans
Part 150 requires that all projects approved by the FAA and to be implemented within the five-year forecast horizon be included in the Forecast Noise Exposure Map. So, any substantial changes, particularly to the airfield, would need to be included. No changes to the airfield that could affect noise are expected in the next five-year period.
11. Will there be mention of safety concerns over the increasingly populated areas surrounding the airport – including those at some distance from the airport - recent and more frequent crashes, the accident rate involving Centennial related aircraft
Not directly. The Part 150 is solely focused on land use compatibility with noise from aircraft operations. However, safety will be assessed for any suggested change in aircraft flight procedures potentially recommended as a noise abatement measure. Vetting of all operational changes will require coordination with FAA and a detailed safety review.
12. Will the anticipated effect of increased capacity (including JSX) be modeled or considered, and to what detail (touch and goes, transient or airport based, scheduled "charter" flights, etc.)
At the direction of FAA, JSX was added to the forecast condition Noise Exposure Map, and is included in the accepted NEM.

13. What else is being modeled or will be; who decided what to model, any input from the public
Each and every suggested measure to address the noncompatible land uses around APA will be considered. Those that can proceed with modeling (after feasibility assessment), will be modeled to determine the potential noise benefit in terms of noncompatible land use.
14. Consider making Greenwood Village portable noise monitor permanent
Part 150 requires an assessment of the noise monitoring program be completed as the system was acquired with federal funds through the Part 150 program. This has been suggested to the Airport. Therefore, this will be assessed. However, it is the current FAA policy to not fund any noise monitor outside of the 65 dB DNL contour as reported in the FAA-accepted NEM, so if the Airport moved forward with this recommendation, it could be at their own cost.
15. Consider moving any current noise monitors, or adding additional noise monitors to identified “problem” areas, both currently and anticipated due to already approved land use developments?
Part 150 requires an assessment of the noise monitoring program be completed as the system was acquired with federal funds through the Part 150 program. It is the current FAA policy to not fund any noise monitor outside of the 65 dB DNL contour as reported in the FAA-accepted NEM. This can be included in the measure, but likely would not be federally funded. The Airport already has a portable noise monitor that can be used in some of these areas.
16. Will the public’s concern that flight schools are seemingly allowed to do whatever they want be addressed - frustration that NAG are only allowed to be voluntary
Flight training activity has been a major discussion topic throughout the Part 150 process. Many of the complaints around flight schools deal with the extension of the pattern to the north during busy time periods. The FAA Study Group has been working on this challenge and has already implemented voluntary measures to reduce the extension with positive results. (<https://tinyurl.com/26hpsebx>). All public concerns raised during the process will be assessed if applicable to Part 150. It is correct that many operational measures (such as preferential runway use, etc.) are voluntary, and at the purview of the tower and the pilots, as the top priority is safety.
17. What will Part 150 forecast in relation to the noise exposure maps
The forecast assumptions are detailed in the [Final NEM package](#).
18. Anything new on how the Part 150 will address incompatible land uses around the airport, considering what has already occurred and is planned or approved by some jurisdictions – almost too late for Part 150 to influence anything
Part 150 is solely focused on land use compatibility around an airport with noise from aircraft operations. However, land use development is the sole responsibility of the local land use jurisdictions. Neither the FAA nor the Airport can control land use development outside the Airport property. A major focus of the Study has been to review the existing land use measures. The Study team and Airport have collaborated with the land use jurisdictions from the beginning to understand constraints. The update of the Airport Influence Area would be helpful for consistency in limiting noncompatible land uses near the Airport. It is imperative

that the local land use jurisdictions adopt measures to maintain land use compatibility with noise from aircraft operations, but this is outside the Airport's control.

19. Can CACNR have updated specific progress reports re Part 150 at every or every other meeting, in time for consideration before meeting – don't just refer us to the website – we were promised close involvement but does not seem to be happening

The CACNR has a representative on the SAC and the Part 150 Team has kept the Roundtable apprised of progress at the CACNR meetings, which has also been supplemented by the team presenting at meetings at key points in the Study. Additionally, the Study team has virtually attended every CACNR meeting that wasn't attended in person and took notes for the full Study Team. Please see the list of meetings attended above for reference.

20. Could flights take off over Cherry Creek Reservoir – this recommendation was made in the last Part 150 and the FAA turned it down – it should/ought to be reconsidered and brought up again

The Part 150 is including assessment of jet aircraft turning right 10 degrees to have them fly over the Reservoir. This analysis will be presented in May.

21. Will the FAA's recognition of Elizabeth as a densely populated area be reflected in the study – it should be

Part 150 includes existing land use by parcel and estimated population based on the 2020 Census for areas on the Noise Exposure Maps. The town of Elizabeth is well outside of the area that is the focus of the Part 150 Study. The airport acknowledges the concerns being raised from areas within the training boxes and is exploring potential approaches outside the scope of the Part 150 study to address them.

22. Will the need for the FAA to unmask tail numbers be addressed

Unmasking of tail numbers is not a necessary component for the Part 150 Study as unmasking of tail numbers has no bearing on compatible land use. However, the Airport has been working with the FAA and potential third-party providers to find a way to better track users through the voluntary fly quiet dashboard.

23. Will the current administration's refusal to let the FAA interact with Centennial (and others) be addressed

No. Part 150 requires interaction with various entities of the FAA for which we have had the cooperation required. If we do not continue to get the cooperation required, then this will have to be brought to the FAA's attention, as the Part 150 Study cannot be completed without such cooperation. While not pertinent to the Part 150 Study, the Airport recognizes the frustration of the Roundtable in having the FAA depart the Study Group for the last few months. The Airport recently received notice that the FAA plans on re-engaging with the CACNR subcommittee (FAA Study Group), which has been on pause for a number of months.