

**THE COMMITTEES WILL MEET AT 6:30 P.M.
THE REGULAR MEETING WILL BEGIN AT 7:00 P.M.**

Centennial Airport Community Noise Roundtable

March 4, 2020

Arapahoe Board Room, 6924 S. Lima Centennial, CO 80112

6:30 p.m. – 8:30 p.m.

Chair: Brad Pierce **Vice Chair:** Melissa Coudeyras **Treasurer:** Tom Dougherty **Secretary:** Alison Biggs
CACNR Mission: Utilizing Partnerships to Reduce Airport Noise for the Benefit of Neighboring Communities

AGENDA

1. CALL TO ORDER AND DETERMINATION OF QUORUM:

<i>Arapahoe County:</i>	Kathleen Conti/Bill Skinner	<i>Foxfield:</i>	Pam Thompson/Dave Goddard
	Paul Krier/Joseph Berger	<i>Greenwood Village:</i>	Tom Dougherty/Karen Blilie
<i>Douglas County:</i>	Abe Laydon/Lauren Pulver	<i>Lone Tree:</i>	Mike Anderson/Jennifer Drybread
	Alison Biggs/Mark Adams	<i>Parker:</i>	Amy Holland/Vacant
<i>ACPAA:</i>	Robert Olislagers/Michael Fronapfel	<i>AOPA:</i>	Robert Doubek/John Hirshman
<i>Aurora:</i>	Brad Pierce/Liia Koiv-Haus	<i>CABA:</i>	Don Kuskie/Mike Straka
<i>Castle Pines:</i>	Melissa Coudeyras/Kevin Rants	<i>CDOT Aeronautics Div:</i>	Todd Green/Vacant
<i>Castle Rock:</i>	Jason Gray/James Townsend	<i>FAA APA Control Tower:</i>	Joseph Wolters/Ron Curry
<i>Centennial:</i>	Candace Moon/Don Sheehan	<i>FAA District Office:</i>	John Bauer/John Sweeney
<i>Cherry Hills Village:</i>	Al Blum/Afshin Safavi	<i>FAA TRACON:</i>	Steve Martin/Bill Dunn

6:30 pm – 7:00 pm COMMITTEE MEETINGS – COMMUNITY OUTREACH, FLY QUIET, NOISE MONITORS

7:00 p.m.

2. APPROVAL OF AGENDA:

3. PUBLIC COMMENT: (non-Agenda items – 3 minutes per person time limit; correspondence from the public)

4. CONSENT AGENDA:

- A. DRAFT MINUTES, February 5, 2020 – Alison Biggs, Secretary
- B. TREASURER'S REPORTS– Tom Dougherty, Treasurer
 - 1. December/Year End 2019
 - 2. February 2020

5. ITEMS REMOVED FROM CONSENT AGENDA

6. COMMITTEE REPORTS:

- A. COMMUNITY OUTREACH – Melissa Coudeyras, Chair
 - 1. Website Update – Amy Holland
- B. FLY QUIET – Don Kuskie, Chair
- C. NOISE MONITORS – Bette Todd, Chair
 - 1. Noise Report, January 2019
- D. WORK PLAN – Alison Biggs, Chair
- E. STUDY GROUP – Brad Pierce, Chair

7. FAA REPORTS:

- A. DISTRICT OFFICE – John Bauer
- B. CENTENNIAL AIRPORT AIR TRAFFIC CONTROL TOWER – Joseph Wolters
- C. TRACON – Steve Martin

8. OTHER REGULAR REPORTS:

- A. ARAPAHOE COUNTY PUBLIC AIRPORT AUTHORITY – Feb 12, Bob Doubek; Treasurer & Brad Pierce, CACNR
- B. AIRPORT DIRECTOR'S REPORT – Robert Olislagers
 - 1. Airport Activity
 - 2. Legislative
 - 3. Litigation
 - 4. Master Plan
 - 5. Other
- C. METROPLEX
- D. NEXTGEN ADVISORY COMMITTEE (NAC) – Brad Pierce
- E. N.O.I.S.E. – Brad Pierce
- F. 2019 4th Quarter Land Use Review – Dylan Heberlein

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THE REGULAR MEETING WILL BEGIN AT 7:00 P.M.**

9. OLD BUSINESS:

- A. UC DAVIS AVIATION NOISE AND EMISSIONS SYMPOSIUM 2020 – March 1 – March 3, 2020, San Diego
- B. 2020 MEETING SCHEDULE FOR CACNR AND ACPAA, with CACNR REPRESENTATIVES TO ACPAA
- C. CONGRESSIONAL QUIET SKIES CAUCUS

10. NEW BUSINESS:

- A. INFORMATION SHARING
- B. ELECTION OF CACNR OFFICERS
 - Article IV - Officers and Terms of Office (also see Appendix II attached hereto)
 - a. The Officers of CACNR shall consist of a Chair, Vice Chair, Secretary, and Treasurer, elected from the Regular Membership by a majority of the Regular Member Representatives present at the meeting when elections are held. All officers will continue to hold voting rights during their terms. Terms of office shall be one year. Elections shall be held at the March meeting of each year and officers will serve from April through March of the year following. There shall be no term limits.

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

12. NEXT MEETINGS:

- A. **CACNR** – Apr 01, 2020 6:30 p.m. Arapahoe Board Room, 6924 S. Lima, Centennial 80112
May 06, 2020 6:30 p.m. Arapahoe Board Room, 6924 S. Lima, Centennial 80112
- B. **ACPAA** – Mar 12, 2020 3:00 p.m. Wright Brothers Room, Centennial Airport, 7800 S Peoria Street, Englewood, CO
(??? representing CACNR)
Apr 09, 2020 3:00 p.m. Wright Brothers Room, Centennial Airport, 7800 S Peoria Street, Englewood, CO
(Paul Krier CACNR)
May 14, 2020 3:00 p.m. Wright Brothers Room, Centennial Airport, 7800 S Peoria Street, Englewood, CO
(??? representing CACNR)

13. ADJOURN

CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE

MINUTES

February 5, 2020

DRAFT

VISION – QUIETER SKIES FOR OUR COMMUNITIES

MISSION – UTILIZING PARTNERSHIPS TO REDUCE AIRPORT NOISE FOR THE BENEFIT OF NEIGHBORING COMMUNITIES

Chair: Brad Pierce **Vice Chair:** Melissa Coudeyras **Treasurer:** Tom Dougherty **Secretary:** Alison Biggs

1. **CALL TO ORDER, ROLL CALL, and QUORUM:** The meeting was called to order at 6:30 p.m. by Chair Brad Pierce.

The following were in attendance and a quorum was present:

Arapahoe County:	Kathleen Conti	Centennial:	Candace Moon
Arapahoe County:	Paul Krier	Foxfield:	Pam Thompson
Douglas County:	Lauren Pulver	Lone Tree:	Mike Anderson
Douglas County:	Alison Biggs	AOPA:	Robert Doubek
Aurora:	Brad Pierce	CABA:	Don Kuskie
Castle Pines:	Melissa Coudeyras		

Others in attendance were Arapahoe County Alternate Representative Bill Skinner; Douglas County Alternate Representative Mark Adams; Aurora Alternate Representative Liia Koiv-Haus; Past Centennial Alternate Representative Andrea Suhaka; and ACPAA Staff Dylan Heberlein. Mark Adams was welcomed as the new Alternate Representative for Douglas County's unincorporated position; he works for United Airlines and had been at DIA for eight years.

Those absent were:

ACPAA:	Robert Olislagers/Mike Fronapfel	CDOT Aeronautics Div:	Todd Green/Vacant
Castle Rock:	Jason Gray/James Townsend	FAA APA Control Tower:	Joseph Wolters/Ron Curry
Cherry Hills Village:	Al Blum/Afshin Safavi	FAA District Office:	John Bauer/John Sweeney
Greenwood Village:	Tom Dougherty/Karen Blilie	TRACON:	Steve Martin/Bill Dunn
Parker:	Amy Holland/vacant		

Following the call to order and the roll call, the meeting was recessed so the committees could meet. The meeting was reconvened at 7:03 p.m.

2. **APPROVAL OF AGENDA:** On the motion Mike Anderson, duly seconded, the agenda was approved as presented.

3. **PUBLIC COMMENT:** Welcomed guests included Frank Lawrence from Foxfield, Josh Pruzek from AOPA, and eight members of Cub Scout Pack 131, and their leaders, from the Rolling Hills area of Centennial. Bob Doubek noted that Mr. Pruzek is responsible for AOPA activities in a 7-state area which includes Colorado; AOPA has about 10,000 members in the state.

4. **CONSENT AGENDA:** The Consent Agenda included the December 4, 2019 draft minutes, and an undated Treasurer's Report. At the request of Alison Biggs, both items were moved to Agenda Item #5.

5. **ITEM(S) REMOVED FROM CONSENT AGENDA:** In relation to the December minutes, a request to check the spelling of some names had not been accomplished, and that request did show up in the version of the minutes which had been emailed. On the motion of Alison Biggs, duly seconded, it was agreed to approve the minutes once the name spellings were checked and corrected if necessary.

The new format for the Treasurer's Report was missing a date – it was prepared as of January 31, 2020 and showed a balance of \$25,528.41. There were areas noted which needed clarification. Suggestion was made that the report should not be approved until March. On the motion of Alison Biggs, duly seconded, the report was approved on a vote of 8-1. It was noted CACNR had not received a December/Year End report for 2019. Dylan Heberlein indicated he would send that report.

It was also noted the \$1,000 invoice for N.O.I.S.E. membership had been received, as had notice of the renewal of CACNR's GoDaddy domain name. Those payments would be reflected in the next Treasurer's Report.

6. **COMMITTEE REPORTS:**

A. **COMMUNITY OUTREACH** – Melissa Coudeyras presented a mock-up of the website under development. It was anticipated the site might be active by February. Suggestions were made about such things as the photographs used, updating the Noise 101 section, changing some terminology, adding such things as annual reports, bylaws, the memorandum of understanding and work program, assuring photographs used did not depict commercial airliners, etc. Any Holland will be able to post things on the site and make other changes in the future. It was agreed to include the CACNR meeting materials packets for each month, minus the CACNR Roster. Representatives' names should be listed with their corresponding Member, and anyone wishing to contact any CACNR Representative would be referred to the CACNR email address.

B. **FLY QUIET** – Don Kuskie reported the committee was still addressing its task list from the Work Program. A mock-up of the new reflective signs was available. Four have been purchased by ACPAA and will be placed at the ends of the parallel runways where the foundations of the old signs can be used. If it is decided to place any elsewhere, such as the runup areas, foundations would have to be put in first.

There had been tracking of touch and go activity by flight schools, and today there had been sixteen beyond the requested north/south pattern in a short time. It seemed the control tower had been directing such activity, so further checking would occur, followed by some type of communication with the tower.

Development of a letter of commitment to be signed by local pilots or those who have badges for ramp access, continued to be explored. Thoughts had included perhaps offering the chance to win a gift card to those who sign on to fly quiet.

Incentives for owners of piston airplanes to install quieter exhausts were also being considered, with exploration of the whole picture, including costs and feasibility to come first.

C. **NOISE MONITORS** – Candace Moon noted the committee had not met, and it seemed to need a new chair. The TRACON tour had been attended by about 12 individuals, including one from ACPAA. The group had been split into two for part of the tour, with the activity level in the control center increasing considerably in the short time between groups. Appreciation was expressed for how the group was treated, and Candace Moon was thanked for arranging the trip. She would draft a thank-you letter for Brad Pierce to sign, with CACNR's logo.

Several observations were shared, including how helpful it had been in understanding how things work at TRACON. It had been noted that some things such as the design of DIA would have been different if air traffic controllers had been involved in the planning. The new director, with a background in Houston and elsewhere, is apparently very experienced. Although the group had been cautioned not to discuss Metroplex, it did come up occasionally, with such things as reference to the big overhaul that was pending and looking more closely at Centennial's increasing activity level in relation to that. It was noted there is a training center at TRACON for the Centennial tower and perhaps a tour of that might be arranged, if the FAA would approve.

The November 2019 Noise Report was reviewed by Dylan Heberlein. It showed there had been 26,613 total operations in November. 12,652 of those were local flights. Year to date, there had been a total of 325,934 operations.

During November, there were 23,758 noise events at the 12 noise monitors. Noise events at each monitor were:

- 6,791 events at the Golf Course monitor on airport property (4,270 in the 60-69 decibel range)
- 5,635 events at the Meridian monitor (4,341 in the 60-69 decibel range)
- 2,733 events at the Airport East monitor on airport property (1,630 in the 60-69 decibel range)
- 2,072 events at the Parker monitor (1,505 in the 60-69 decibel range)
- 2,005 events at the State Park monitor (1,983 in the 60-69 decibel range)
- 1,122 events at the Grandview Estates monitor (1,003 in the 60-69 decibel range)

- 989 events at the Castle Rock monitor (935 in the 60-69 decibel range)
- 903 events at the Greenwood Village monitor (784 in the 60-69 decibel range)
- 652 events at the Lone Tree monitor (601 in the 60-69 decibel range)
- 463 events at the Hunter's Hill monitor (399 in the 60 – 69 decibel range)
- 292 events at the Castle Pines monitor (214 in the 60-69 decibel range)
- 101 events at the Sagebrush Park monitor (92 in the 60-69 decibel range)

Eliminating the two monitors on airport property, the top five locations with noise events in the 70-79 decibel range were:

Meridian – 1,246	Parker – 270	Castle Pines – 77
State Park – 488	Grandview Estates – 110	

Eliminating the two monitors on airport property, the five locations with noise events in the 80-89 decibel range were:

Meridian – 44
Grandview Estates & State Park – 9 each
Greenwood Village – 6 Hunter's Hill – 5

Eliminating the two monitors on airport property, Meridian was the only location with noise events in excess of 90 decibels, and there had been 4.

In November, there had been 480 complaints from 30 households:

Of the 30 households, 6 each had been in Unincorporated Douglas County and Greenwood Village; 5 were in Centennial; 4 in Unincorporated Arapahoe County; 3 were in Aurora; 2 in Highlands Ranch; and 1 each from Castle Pines, Cherry Hills Village, Parker, and Other.

Of the 480 complaints, 215 had come from Centennial (45%); 120 from Aurora (25%); 58 from Unincorporated Douglas County (12%); 42 were from Unincorporated Arapahoe County (9%); 31 were from Greenwood Village (7%); 8 were from Parker (2%); 2 each from Highlands Ranch and Other (0.2%); and 1 from Cherry Hills Village (0.2%).

15 complainers had requested responses from the airport, with 9 of those requests made by email, and 6 by telephone.

Year to date, there had been 5,239 complaints from 268 households. The top five areas with complaining households were Unincorporated Arapahoe County (77); Greenwood Village (50); Unincorporated Douglas County (37); Centennial (22); and Other (18).

Other the 5,239 complaints through November, 1,709 had come from Centennial; 1,164 were from Unincorporated Arapahoe County; 840 originated from Unincorporated Douglas County; 511 were from Aurora; 482 had come from Greenwood Village; 300 from Lone Tree; 82 were from Parker; 67 from Other; 37 came from Highlands Ranch; 24 originated from Denver; 12 were from Cherry Hills Village; and 11 were from Castle Pines.

Year to date, the top five households registering complaints were from Centennial (1660); Unincorporated Arapahoe County (774); Unincorporated Douglas County (626); Aurora (345); and Aurora (161).

Of the 480 November complaints, 455 (95%) were about daytime flights and 25 (5%) were about nighttime flights. YTD, 4,693 (90%) of the complaints were about daytime flights and 546 (10 %) were about nighttime flights.

Comparatively, there were 480 complaints resulting from 26,613 operations in November 2019 (18%). There had been 211 complaints resulting from 26,240 operations in November 2018 (8%).

Jets accounted for 21% of the complaints in November; props caused 60% of the complaints; helicopters were the cause of 9%; and there were 10% unknown. Departures were responsible for 41% of the complaints; arrivals were 43%; training was 9%; and 7% were unknown.

The November complaint map showed the locations of the complaints, with 1 being outside the map boundaries in Unincorporated Douglas County south east of Castle Rock.

The Year to Date complaint map showed the wide geographic range of complaints about airport noise, not including the 19 households outside the map boundaries: Franktown, Elizabeth, Castle Rock, Jefferson County, Douglas County, Denver, Boulder, Golden, Black Hawk, and Lakewood. The Radar Track Density Map from September 2019 was again provided.

The December 2019 Noise Report was also reviewed by Dylan Heberlein. It showed there had been 29,850 total operations in December. 14,401 of those were local flights. Year to date, there had been a total of 355,784 operations, with 47% of those (167,818) being local.

During December, there were 24,205 noise events at the 12 noise monitors. Noise events at each monitor were:

- 7,520 events at the Golf Course monitor on airport property (4,808 in the 60-69 decibel range)
- 5,915 events at the Meridian monitor (4,736 in the 60-69 decibel range)
- 2,692 events at the Airport East monitor on airport property (1,552 in the 60-69 decibel range)
- 2,424 events at the State Park monitor (1,872 in the 60-69 decibel range)
- 1,311 events at the Grandview Estates monitor (1,149 in the 60-69 decibel range)
- 981 events at the Parker monitor (847 in the 60-69 decibel range)

- 794 events at the Lone Tree monitor (749 in the 60-69 decibel range)
- 761 events at the Castle Rock monitor (716 in the 60-69 decibel range)
- 669 events at the Greenwood Village monitor (572 in the 60-69 decibel range)
- 512 events at the Hunter's Hill monitor (434 in the 60 – 69 decibel range)
- 230 events at the Castle Pines monitor (212 in the 60-69 decibel range)
- 126 events at the Sagebrush Park monitor (108 in the 60-69 decibel range)

Eliminating the two monitors on airport property, the top five locations with noise events in the 70-79 decibel range were:

Meridian – 1,132	Grandview Estates – 148	Greenwood Village – 90
State Park – 538	Parker – 131	

Eliminating the two monitors on airport property, the locations with noise events in the 80-89 decibel range were:

Meridian – 36	Greenwood Village and Hunter's Hill – 6 each
Grandview Estates - 10	Parker - 3
State Park – 9	Castle Rock - 4
	Lone Tree – 2

Eliminating the two monitors on airport property, those areas with noise events in excess of 90 decibels included Meridian – 11; State Park – 5; Grandview Estates – 3; and Greenwood Village – 1.

In December, there had been 676 complaints from 40 households:

Of the 40 households, 9 had been in Unincorporated Arapahoe County; 7 were in Greenwood Village; 6 in Centennial; 5 in Unincorporated Douglas County; 4 in Parker; 2 each in Aurora, Denver and Parker; and 1 each in Castle Rock, Highlands Ranch and Lone Tree.

Of the 676 complaints, 269 had come from Aurora (40%); 151 were from Centennial (22%); 95 were from Greenwood Village (14%); 74 from Unincorporated Arapahoe County (11%); 67 from Unincorporated Douglas County (10%); 10 were from Parker (2%); 3 each from Denver and Other (4%); 2 from Castle Rock (2%); and 1 each from each from Highlands Ranch and Lone Tree.

16 complainers had requested responses from the airport, with 10 of those requests made by email, and 6 by telephone.

Year to date, there had been 5,915 complaints from 280 households. The top five areas with complaining households were Unincorporated Arapahoe County (78); Greenwood Village (51); Unincorporated Douglas County (37); Centennial (27); and Other (18).

Of the 5,915 complaints through December, 1,860 had come from Centennial; 1,238 were from Unincorporated Arapahoe County; 907 originated from Unincorporated Douglas County; 780 were from Aurora; 577 had come from Greenwood Village; 301 from Lone Tree; 92 were from Parker; 70 from Other; 38 came from Highlands Ranch; 27 originated from Denver; 12 were from Cherry Hills Village; and 11 were from Castle Pines.

For the year, the top five households registering complaints were from Centennial (1805); Unincorporated Arapahoe County (821); Unincorporated Douglas County (688); Aurora (411); and Aurora (364).

Of the 676 December complaints, 639 (90.1%) were about daytime flights and 37 (9.9%) were about nighttime flights. YTD, 5,322 (90.1%) of the complaints were about daytime flights and 583 (9.9%) were about nighttime flights.

Comparatively, there were 676 complaints resulting from 29,850 operations in December 2019 (22.6%). There had been 540 complaints resulting from 25,979 operations in December 2018 (20.8%).

Jets accounted for 36% of the complaints in December; props caused 58% of the complaints; helicopters were the cause of 2%; and 6% were unknown. Departures were responsible for 50% of the complaints; arrivals were 33%; training was 10%; 6% were unknown; and 1% had been overflights.

The Year to Date complaint map showed the locations of the complaints, with 20 being outside the map boundaries. The Radar Track Density Map from September 2019 was again provided.

D. **WORK PLAN** – The group had not met, but had a meeting scheduled for February 7. A copy of the 2019-2020 Work Program had been circulated with the meeting materials and it was noted the new bylaws call for biennial review and updating of the Work Program, not annual. Accordingly, committees should continue working on the items in that document. However, if a group felt its portion of the document needed to be revised before March 2021, it should feel free to bring that information to the committee. The Work Program should be considered a “living document,” responsive to the changing needs and interests of CACNR.

E. **STUDY GROUP** – The bylaws, adopted on December 4, 2019 had been circulated with the meeting materials, so all Representatives would have an up-to-date copy for their use and reference.

7. **FAA REPORTS:**

- A. **DISTRICT OFFICE** – None.
- B. **APA AIR TRAFFIC CONTROL TOWER** – None
- C. **TRACON** – None

8. **OTHER REGULAR MONTHLY REPORTS:**

A. **ARAPAHOE COUNTY PUBLIC AIRPORT AUTHORITY** – Robert Doubek, ACPAA Treasurer, had provided a written report from the December 12, 2019 meeting. Melissa Coudeyras had attended the meeting for CACNR.

B. **AIRPORT DIRECTOR'S REPORT** – In the absence of the Airport Director, Dylan Heberlein noted the January 24, 2020 memo which had been sent to CACNR regarding the FAA's finding that the Denver Metroplex Project had been found to have no significant Impacts in the area. Several newsprint articles about the project had been included in the emailed materials for this meeting. Suggestion was made that ACPAA reach out to leadership in Columbine Valley and Cherry Hills Village as two of the areas which strongly objected to the FAA's preferred alternative which would be made operational on March 26 per the FAA's ruling. CACNR also asked for clarity as to what legal steps ACPAA was going to be taking in light of the FAA's ruling.

C. **METROPLEX** – See above.

D. **NEXTGEN ADVISORY COMMITTEE (NAC)** – Brad Pierce had provided information from the December 12, 2019 meeting of this group. Ten minutes had been provided on the agenda for Community Engagement, but the discussion had taken 30 minutes. The slides from the presentation which resulted in the discussion were shared. Request had been made for additional time be devoted to this topic on future agendas, and there was indication that would be done. The next meeting is in April 2020.

E. **N.O.I.S.E.** – Brad Pierce also shared information from the November 20, 2019 N.O.I.S.E. Policy Summit that he had

not had time to discuss at the December CACNR meeting. Perhaps the most interesting was information about software that will correlate noise monitor data with complaints. This had been developed by personnel from ABCx2, including James Allerdice. It was agreed CACNR may wish to explore the software further, with either Allerdice or Jason Schwartz with whom we have a consulting arrangement.

Public Outreach materials that Dallas Fort Worth Airport had developed when it was going to be rehabilitating a runway were shared and seemed to be very effective examples of providing information to the public. The next N.O.I.S.E. meeting would be in Washington, DC on March 9, again in conjunction with the National League of Cities.; Brad Pierce will be attending as President of N.O.I.S.E., and CACNR can send a representative.

9. OLD BUSINESS:

A. **UC DAVIS AVIATION AND EMISSIONS SYMPOSIUM, MARCH 1-3, 2020, SAN DIEGO** – Melissa Coudeyras and Alison Biggs would attend this symposium for CACNR.

A. **2020 MEETING SCHEDULE FOR CACNR & ACPAA, INCLUDING CACNR REPRESENTATIVES TO ACPAA** – The 2020 meeting schedule was provided. Brad Pierce volunteered to represent CACNR at the February ACPAA meeting, and Paul Krier indicated he could assume that role in April.

B. **CONGRESSIONAL QUIET SKIES CAUCUS** – No report

10. NEW BUSINESS:

A. **INFORMATION SHARING** – Copies of the latest CACNR Roster, and Attendance Record were shared.

B. **NOTICE OF MARCH ELECTION OF OFFICERS** – Notice was given about the upcoming March election of officers.

11. PUBLIC COMMENT: None

12. NEXT MEETINGS:

A. **CACNR** – Mar 04, 2020 6:30 p.m. Arapahoe Board Room, 6924 S. Lima, Centennial 80112
Apr 01, 2020 6:30 p.m. Arapahoe Board Room, 6924 S. Lima, Centennial 80112
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B. **ACPAA** – Feb 13, 2020 3:00 p.m. Wright Brothers Room, Centennial Airport, 7800 S Peoria St, Englewood, CO
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(Paul Krier representing CACNR)
May 14, 2020 3:00 p.m. Wright Brothers Room, Centennial Airport, 7800 S Peoria St, Englewood, CO
(??? representing CACNR)

13. ADJOURNMENT: The meeting was adjourned at 8:52 p.m.

Alison Biggs, Secretary

MOU Contributions

ACPAA	\$10,000.00
Town of Foxfield	\$250.00
Cherry Hills Village	\$1,000.00
Greenwood Village	\$1,000.00
City of Castle Pines	\$1,000.00
Douglas County	\$2,000.00
City of Aurora	\$1,000.00
City of Lone Tree	\$1,000.00
Town of Parker	\$1,000.00
City of Centennial	1,000.00
Arapahoe County	2,000.00
Castle Rock	1,000.00

Total Contributions	<u><u>\$22,250.00</u></u>
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Remainder	\$16,539.09
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Expenses

B.P. UC Davis Expenses (post-conference)	\$2,160.00
M.C. UC Davis Expenses (post-conference)	\$1,458.76
Go Daddy 3 year Domain Renewal	\$54.51
2019 N.O.I.S.E Membership	\$1,000.00
Go Daddy 3 year Website Hosting Renewal	\$287.64
Fairfield and Woods Invoice	\$500.00
Website Acceptance of Proposal	\$250.00

Total Expenses	<u>\$5,710.91</u>
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CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE	TREASURER'S REPORT	AS OF February 28, 2020			NOTES
			CACNR 2020 BUDGET	ACTUAL TO DATE	
			Approved 10 02 19		
INCOME:	CARRY OVER FROM 2019		\$ 14,000	\$ 16,623.00	
	ACPAA		\$ 10,000	\$ 10,000.00	
	CACNR REGULAR MEMBERS		\$ 12,250	\$ -	
TOTAL INCOME:			\$ 36,250	\$ 26,623.00	
EXPENDITURES:	WORK PROGRAM				
	COMMUNITY	Community meetings and materials	\$ 1,500		
	OUTREACH	Website updating/maintenance	\$ 3,000		
		Domain Renewal for 2 Years		\$36.34	Go Daddy Domain Renewal paid by Brad Pierce 2/10/2020
	FLY QUIET	Various Projects	\$ 2,000		
	NOISE MONITOR	Data Development and Use	\$ 1,500		
	WORK PLAN	Work Plan	\$ 500		
	EDUCATION	2 Reps to UC Davis Symposium**	\$ 5,000	\$ 560.00	
		2 Reps to 2 N.O.I.S.E. Conferences***	\$ 4,000	\$ 535.00	Mike Anderson for attendance in Nov. 2019; check written in 2020; Melissa Coudeyras and Brad Pierce also attended in 2019 but not at CACNR expense.
	CONSULTATION/TASK SUPPORT	Pilot Project with Jason Schwartz	\$ 3,000		
	MEMBERSHIP DUES	N.O.I.S.E.	\$ 1,000	\$ 1,000.00	Paid 1/30/2020
	ADMINISTRATIVE	Part-time secretarial assistance prn	\$ 1,000		
		Legal	\$ 1,000		
TOTAL EXPENDITURES:			\$ 23,500	\$ 2,131.34	
BALANCE AS OF 02 28 2020:				\$ 24,491.66	
CARRY OVER TO 2021					To be determined at end of year
** Includes registration, travel, ground transportation, lodging, meals. The 2020 UC Davis Aviation Noise and Emissions Symposium will focus on ground-breaking efforts being undertaken by elected officials, airports, consultants, communities and the FAA to develop ways to work cooperatively to mitigate the environmental impacts of NextGen flight path changes. Find out from those who are leading this difficult and innovative work what lessons they have learned and successes they have had in their search for solutions to NextGen noise impacts. Get updated from the FAA on their efforts to improve outreach to communities, implications of recent health effects research, the latest technological advances, and much more. Symposium is in San Diego, March 1-3, 2020					
*** Includes registration, travel, ground transportation, lodging, meals. N.O.I.S.E. conferences are held annually in conjunction with the National League of Cities. The Spring meeting is always in the Washington, DC area, and the 2020 Fall meeting will be in Salt Lake City.					
FRAME OF REFERENCE: MOU Funding Structure adopted 12/13/2018 calls for initial funding to generate \$22,250, with \$10,000 from ACPAA and \$12,250 to come from CACNR's Regular Members.					
This funding would be in place for the next two years, subject to annual appropriations. Thereafter, CACNR will provide ACPAA and each Regular Member with a report on the previous year's expenditures, and an annual invoice accompanied by a proposed budget indicating how the requested funds would be utilized, so that funds could be appropriated for the coming year.					



Centennial Airport Monthly Noise Report



January 2020

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1 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.

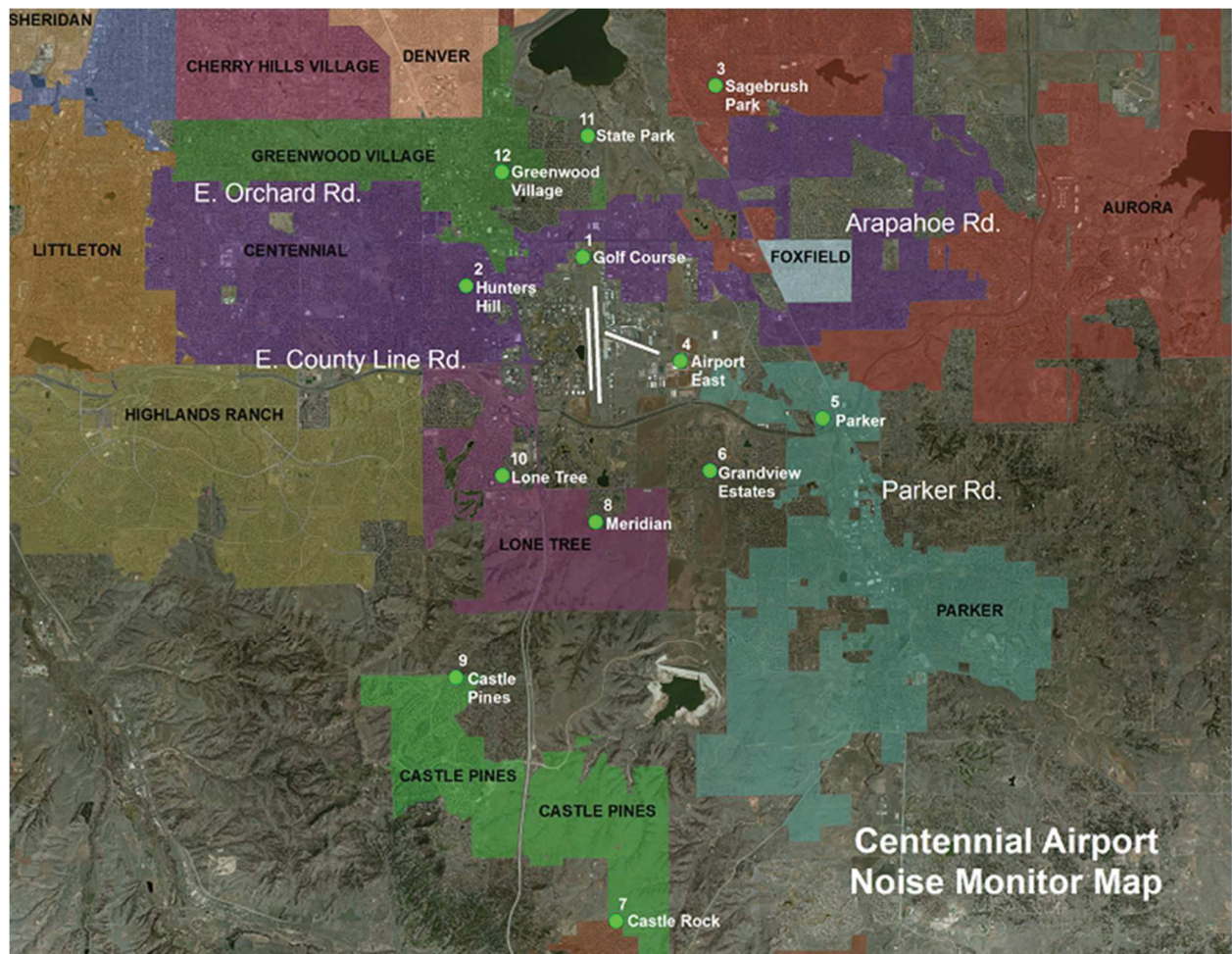
Visual Flight Rules (VFR) – A set of regulations under which a pilot operates an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going. A flight plan is not required when the pilot is operating under Visual Flight Rules.

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.

Overview

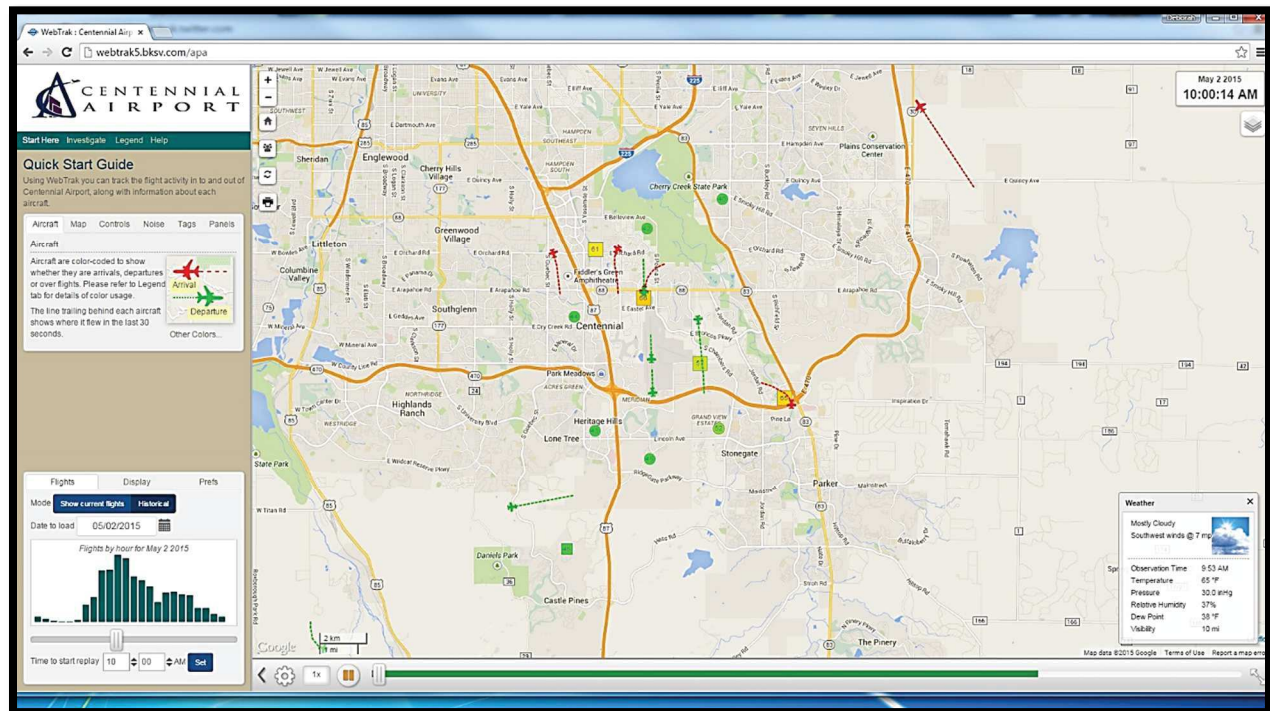
3 ABOUT APA'S NOISE MONITORING PROGRAM

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



4 ABOUT WEBTRAK™

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



How to participate

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

APA WebTrak: <https://complaint-us.emsbk.com/apa7>

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

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

APA Noise Hotline:
303-790-4709

5 OPERATIONS STATISTICS

	IFR ITINERANT				VFR ININERANT				LOCAL		
	AIR TAXI	G.A.	MILITARY	TOTAL INTINERANT	AIR TAXI	G.A.	MILITARY	TOTAL	G.A.	MILITARY	TOTAL LOCAL
January	2,258	3,326	173	5,757	528	8,585	116	9,229	14,386	52	14,438
February				0				0			0
March				0				0			0
April				0				0			0
May				0				0			0
June				0				0			0
July				0				0			0
August				0				0			0
September				0				0			0
October				0				0			0
November				0				0			0
December				0				0			0
Y-T-D Totals	2,258	3,326	173	5,757	528	8,585	116	9,229	14,386	52	14,438

	IFR OVERFLIGHTS				VFR OVERFLIGHTS					TOTAL OPERATIONS
	AIR TAXI	G.A.	MILITARY	TOTAL INTINERANT	AIR TAXI	G.A.	MILITARY	TOTAL		
January	7	13	2	22	97	390	7	494	January	29,940
February				0				0	February	
March				0				0	March	
April				0				0	April	
May				0				0	May	
June				0				0	June	
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	7	13	2	22	97	390	7	494	Y-T-D Totals	29,940

Definitions

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

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

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

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

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

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

6 NOISE MONITOR REPORTS

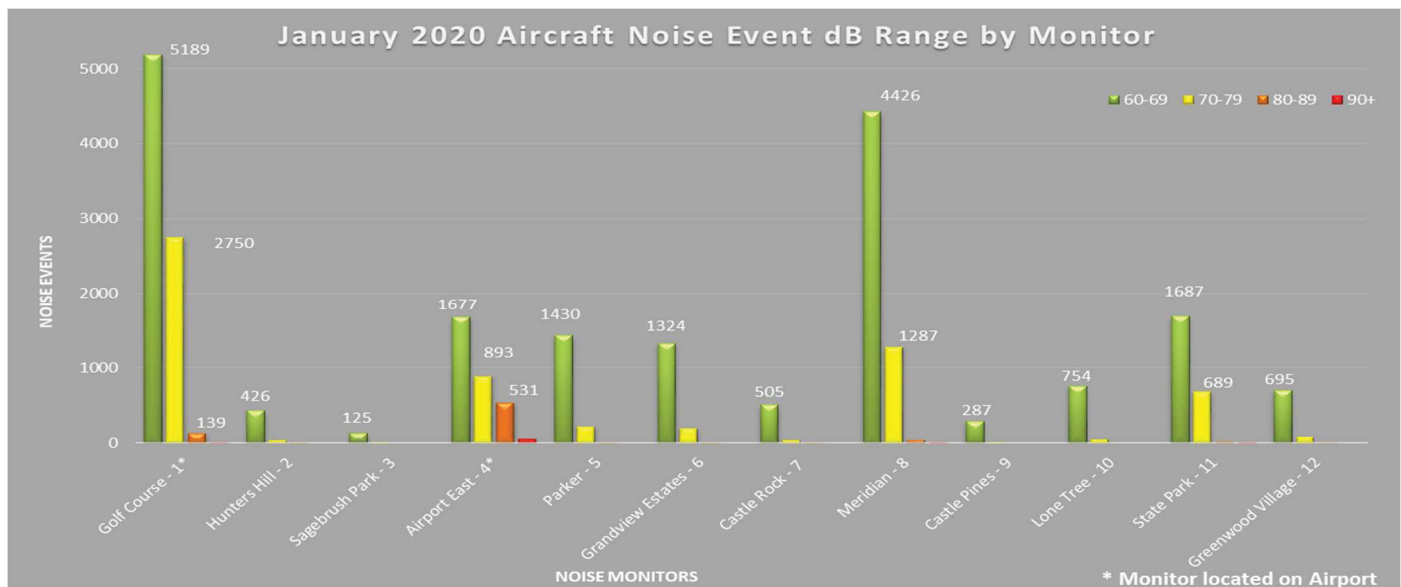
The following data displays the amount and associated decibel level of aircraft noise events at a given monitor. An aircraft noise event must contain the following characteristics:

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

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

January 2020 Aircraft Noise Event Decibel Range By Monitor					
Monitor	60-69	70-79	80-89	90+	Totals
Golf Course - 1*	5189	2750	139	12	8090
Hunters Hill - 2	426	46	3	0	475
Sagebrush Park - 3	125	8	0	0	133
Airport East - 4*	1677	893	531	51	3152
Parker - 5	1430	220	4	0	1654
Grandview Estates - 6	1324	199	9	0	1532
Castle Rock - 7	505	40	1	0	546
Meridian - 8	4426	1287	42	6	5761
Castle Pines - 9	287	10	0	0	297
Lone Tree - 10	754	53	0	0	807
State Park - 11	1687	689	19	1	2396
Greenwood Village - 12	695	88	1	0	784
Totals	18525	6283	749	70	25627

*Monitor located on Airport



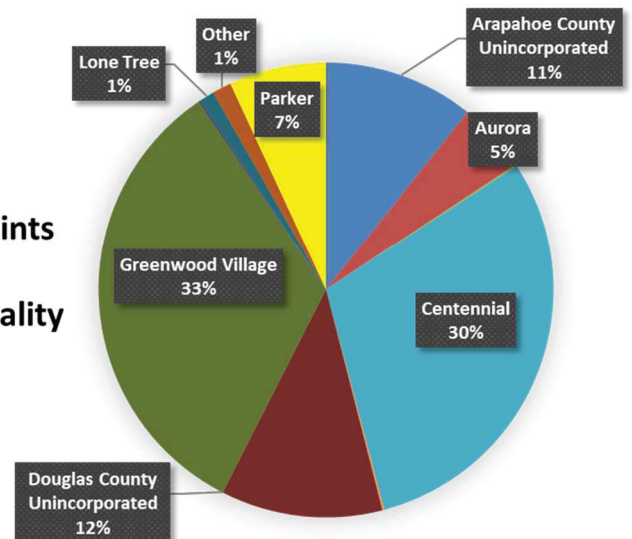
7 JANUARY 2020 NOISE COMPLAINTS

In January, Centennial Airport received 739 complaints from 43 households.

January Noise Complaints			YTD		Population
Municipality	Complaints	Households	Complaints	Households	Census 2018
Arapahoe County Unincorporated	79	11	79	11	83,764
Aurora	37	2	37	2	374,114
Castle Pines	1	1	1	1	10,507
Castle Rock	0	0	0	0	64,827
Centennial	222	2	222	2	110,831
Cherry Hills Village	1	1	1	1	6,650
Denver	0	0	0	0	716,492
Douglas County Unincorporated	85	4	85	4	100,536*
Greenwood Village	244	12	244	12	15,801
Highlands Ranch	1	1	1	1	105,264
Lone Tree	8	4	8	4	14,653
Parker	51	3	51	3	55,636
Other	10	2	10	2	UNK
Total	739	43	739	43	1,659,075

Noise Complaints Response Requested	
Email	7
Phone	9
Total	16

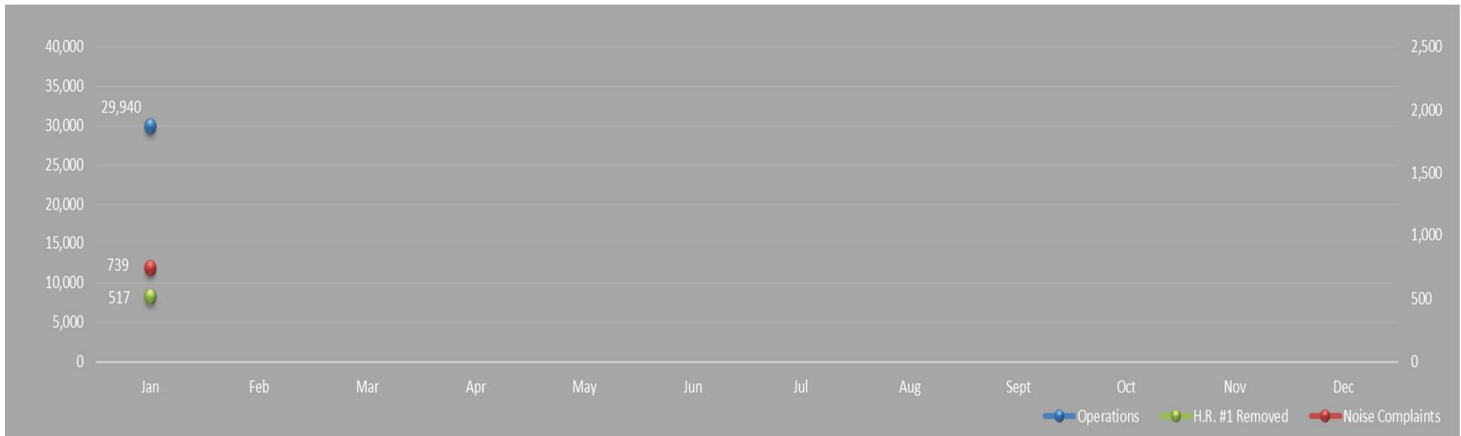
Complaints per Municipality



Time Complaint Received	Jan
Day Hours (7:00 am - 9:59pm)	681
Night Hours (10:00 pm - 6:59 am)	58
TOTAL	739

*Douglas County Unincorporated Population with Highlands Ranch Removed

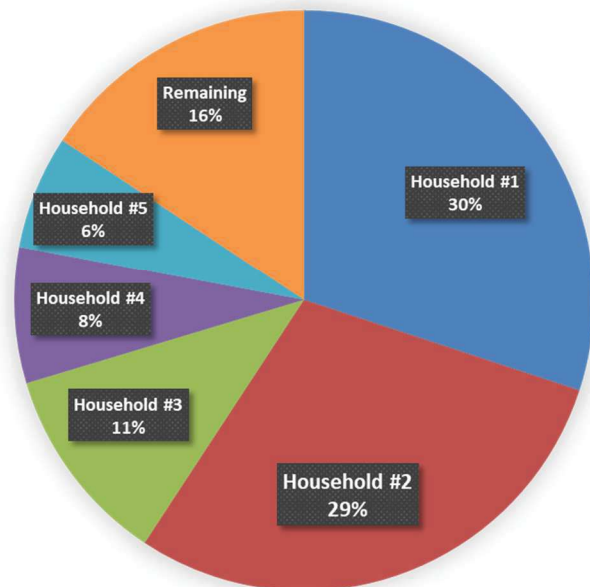
Current 12 Month Trend



Previous Year 13 Month Trend



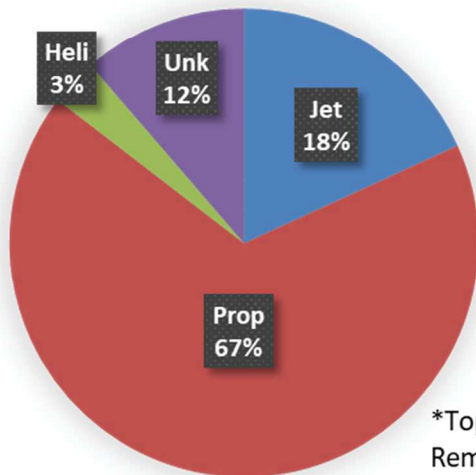
Top 5 Household Complaints YTD



Top 5 Household Complaints YTD

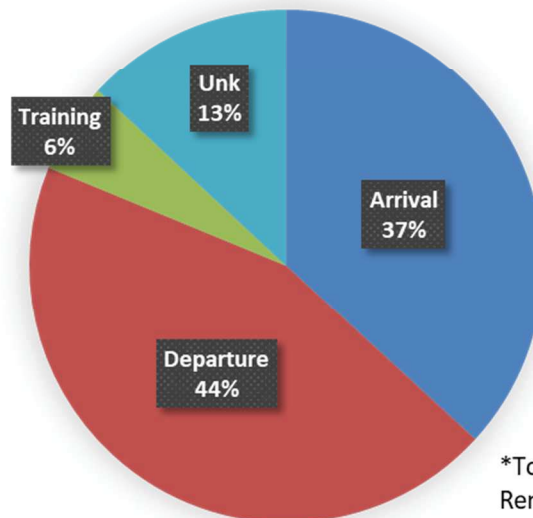
Household	Complaints	Households
Household #1	222	Greenwood Village
Household #2	216	Centennial
Household #3	82	Douglas County Unincorporated
Household #4	56	Arapahoe County Unincorporated
Household #5	47	Parker
Remaining	116	
Total	739	

Complaints by Aircraft Type



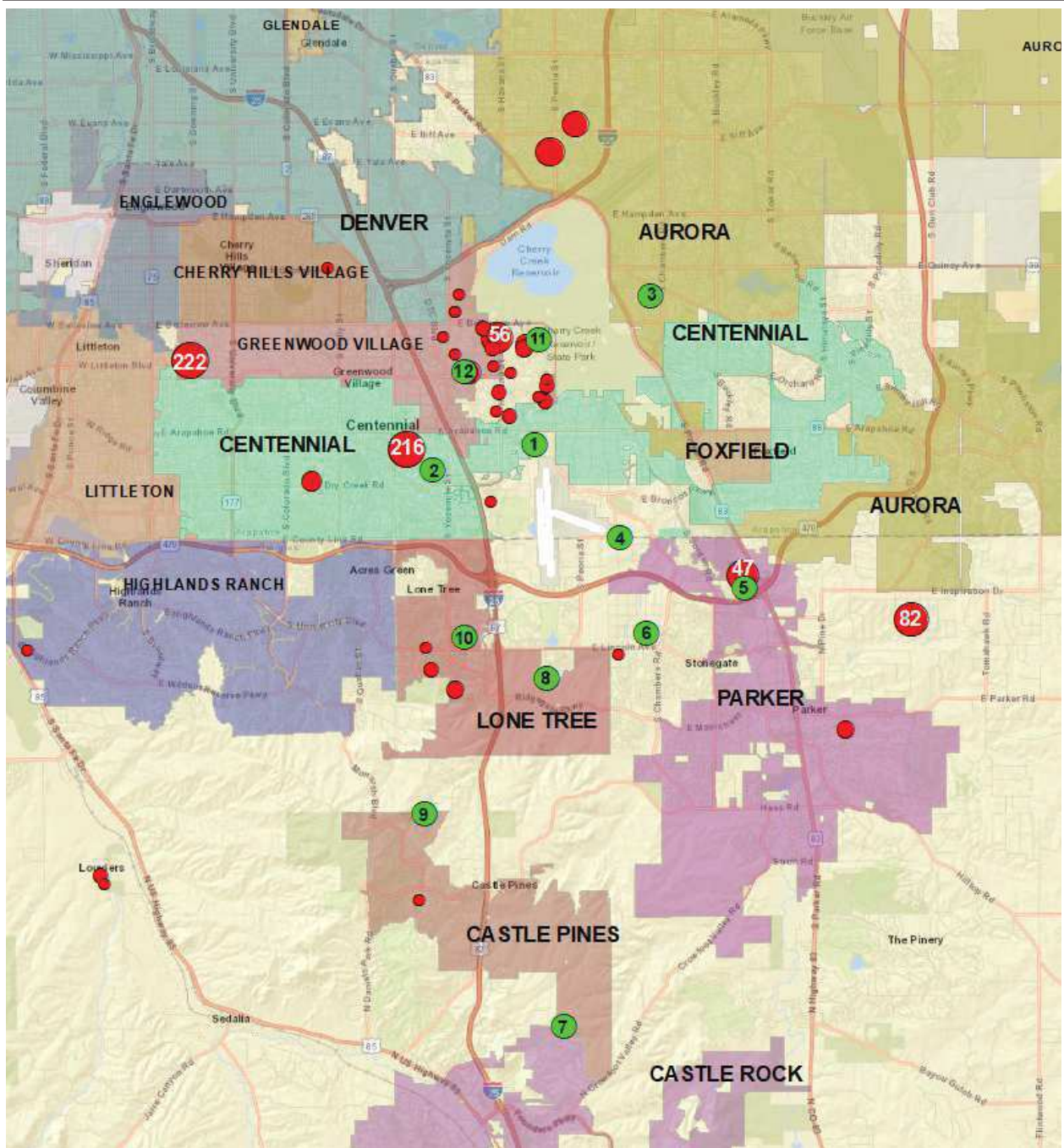
*Top Household
Removed

Complaints by Operation Type



*Top Household
Removed

8 COMPLAINT MAP



January 2020 Complaints

MAP LEGEND:

*2 households are located outside the map area

Green = Noise Monitor Locations

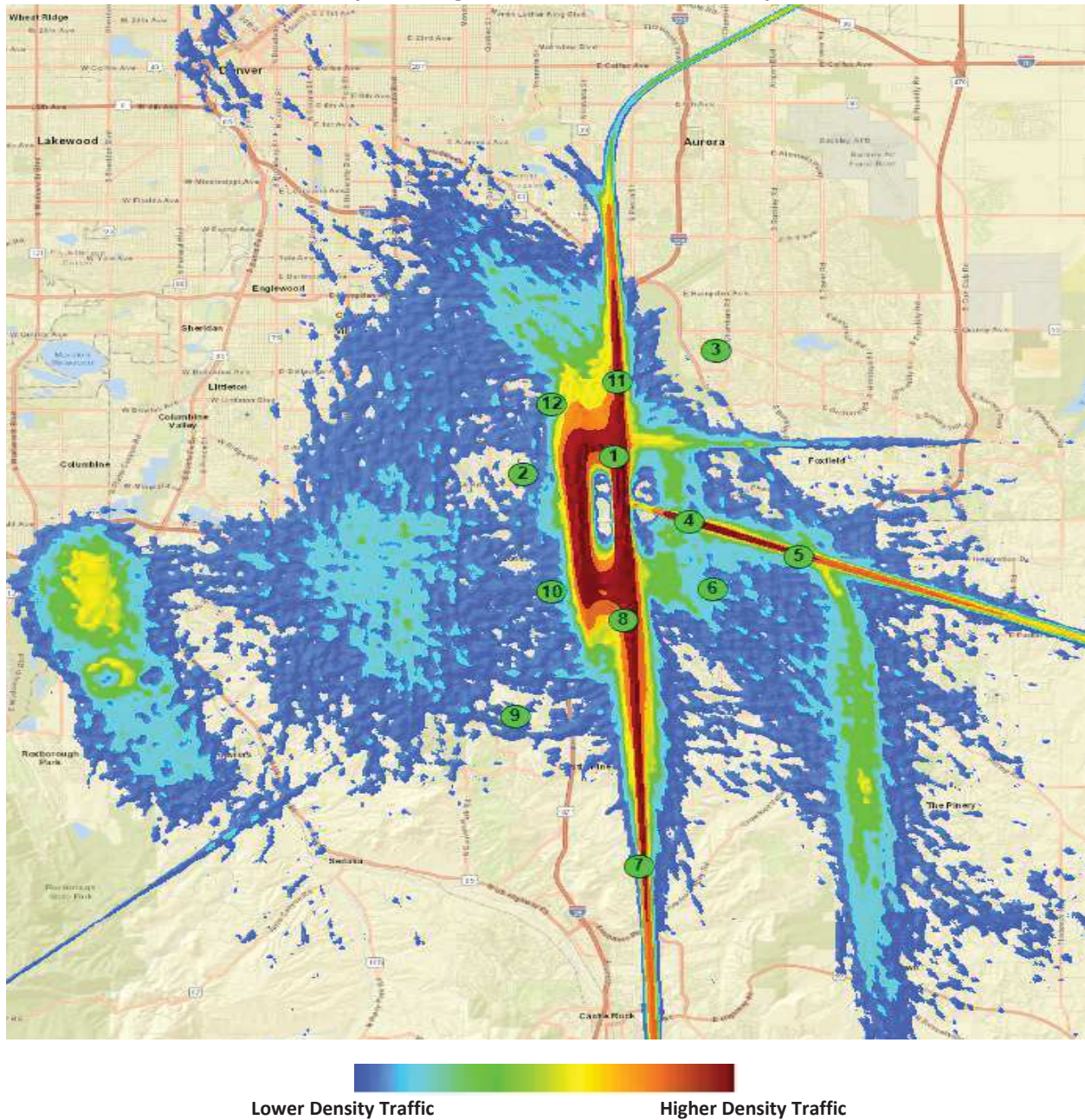
Red = Household Complaint Locations.

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

9 RADAR TRACK DENSITY MAP

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

January 2020 Flight Tracks into Centennial Airport



10 NOTES AND DISCLAIMER

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

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



Noise Hotline: 303-790-4709

www.centennialairport.com

ACPAA BOARD MEETING NOTES – FEBRUARY 13, 2020

Robert Doubek, ACPAA Treasurer

The Consent Agenda consisted of nine routine items which all were approved. No items were Presented for the Business Agenda.

The Colorado Society of the Sons of the American Revolution made a Special Presentation of the Flag of the United States of America. The society was chartered in 1896 and regularly recognizes individuals, companies and agencies who consistently and proudly display the Flag of the United States. Centennial Airport was selected to receive a flag and certificate of recognition.

Robert Olislagers proudly announced that the Centennial Airport economic impact study, presented by the CDOT Division of Aeronautics, resulted in an increase from \$1.32 Billion in 2013 to \$2.1 Billion in 2020 or nearly double in five years.

The Centennial Airport Community Noise Roundtable (CACNR) Report was presented by Brad Pierce.

rjd/2,20,2020

Centennial Airport Community Noise Roundtable Activities

To: ACPAA Board

From: Brad Pierce

Date: 2/13/2020

Re: Update on Centennial Airport Community Noise Roundtable Activities

To the Arapahoe County Public Airport Authority Board:

I pleased to provide an update on the activities of the Centennial Airport Community Noise Roundtable.

Summary of February 5, 2020 CACNR meeting

- We hired CobWeb Creations to upgrade our website. We had a demonstration of the test version of our new website. Several suggestions were made. The Community Outreach Committee will send a link to the test version and representatives will submit additional comments, if any.
- Centennial Council Member Candace Moon organized a tour of the Denver TRACON on January 29, 2020. 12 CACNR representatives attended and commented on the excellent information they learned.
- I provided a summary of the December 12, 2019 NextGen Advisory Committee (NAC) of which I'm a member. FAA staff presented an agenda item on Community Engagement. There was discussion about Noise Roundtables and Public Meetings. I talked about the CACNR and the FAA Public meetings the FAA held for the Denver Metroplex. I asked that a Community Engagement agenda item be included on every NAC agenda. Chip Childs, NAC Chair, concurred.
- I provided a summary of the November 20, 2019 N.O.I.S.E. meeting. A presentation was made by Sandy Lancaster, DFW Environmental Program Manager on the public outreach on the Rehabilitation of Runway 17C/35C. Another presentation was made by James Allerdice and Katrina Jensen, ABCx2. They have developed software that will correlate Noise Monitor Data with complaints using SWIM (System Wide Information Management) and Automatic Dependent Surveillance-Broadcast (ADS-B).
- Eight members of Scout Cub Pack 131 attended our meeting. They are working on a Merit Badge.

Sincerely,

/s/ Brad Pierce

Brad Pierce

Aurora Representative, and Chair of the Centennial Airport Community Noise Roundtable

MEMORANDUM

DATE: February 12, 2020
TO: ACPAA Board Members
FROM: Dylan Heberlein- 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 10/1/2019 through 12/31/2019:

Date	Previously Referred	Development	Location	Referring Entity	Type	Recom.
10/9/2019	<input checked="" type="checkbox"/>	The Canyons Final Plat Filing No. 1, 4th Amendment	SEC I-25 and Hess Rd.	Castle Pines	C/R	S
10/11/2019	<input type="checkbox"/>	ZoningPD Amendment to Development Guide	NEC Hess Rd. and S. Chambers Rd.	Town of Parker	R	S
10/18/2019	<input type="checkbox"/>	Inverness Filing 6, 4th Amendment, Inverness Way South ROW	SEC Inverness Way S. and Inverness Way E.	Douglas County	I	S
10/22/2019	<input type="checkbox"/>	Use by Special Review for the Cherry Creek Interceptor Proj.	NWC E470 and Parker Rd.	Town of Parker	C	A
10/23/2019	<input type="checkbox"/>	Solterra at Castle Rock Planned Development, 1st Amendment	NWC Founders Pkwy and Crowfoot Valley Rd.	Douglas County	C/R	A
11/19/2019	<input type="checkbox"/>	RidgeGate PDD 6th Amd	SEC I-25 and Lincoln Ave.	Lone Tree		A
11/21/2019	<input checked="" type="checkbox"/>	F & K Subdivision Most of L2 Replat	10255 S. Parker Rd.	Town of Parker	C	A
11/21/2019	<input type="checkbox"/>	F&K Subdivision Most of L2- Parker Animal Hospital SPA	10225 S. Parker Rd.	Town of Parker	C	A
11/22/2019	<input type="checkbox"/>	Highfield Business Park, Lot 3	NWC Grasslands Dr. and American Wy.	Douglas County	C	S
11/22/2019	<input type="checkbox"/>	Meridian International Business Center Filing 7C, 5th Amendment	SWC Chambers Rd. and Mainstreet	Douglas County	R	S
12/6/2019	<input type="checkbox"/>	Parker Auto Plaza F1 AMD2 L2A, 2B B1	9730 Twenty Mile Rd.	Town of Parker	C	A
12/19/2019	<input type="checkbox"/>	Olde Town at Parker PD Amd 3- Sanders Creek North	SWC Motsenbocker Rd. and Mainstreet	Town of Parker	R	S
12/19/2019	<input checked="" type="checkbox"/>	Olde TownSenderos Creek North Condo and Townhome Site Plan		Town of Parker	R	S
12/19/2019	<input checked="" type="checkbox"/>	Olde TownSenderos Creek North Preliminary Plan	SWC Motsenbocker Rd. and Mainstreet	Town of Parker	R	S
12/19/2019	<input checked="" type="checkbox"/>	Olde TownSenderos Creek North Sketch Plan	SWC Motsenbocker Rd. and Mainstreet	Town of Parker	R	S
12/19/2019	<input type="checkbox"/>	Peakview Office Towers Development	SWC E. Caley and S. Greenwood Plaza	City of Centennial	C	S
12/23/2019	<input type="checkbox"/>	Parker and Pine Subdivision F1	SWC Parker Rd. and Pine Ln.	Town of Parker	C	A

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

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

Date	Previously Referred	Development	Location	Referring Entity	Type Recom.
12/30/2019	<input type="checkbox"/>	Parker and Pine Planned Development Rezone	SWC Pine Ln. and Parker Rd.	Town of Parker	S

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

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

CACNR/ACPAA 2020 MEETING SCHEDULES

With

CACNR REPRESENTATIVES TO 2020 MEETINGS OF THE ARAPAHOE COUNTY PUBLIC AIRPORT AUTHORITY

3:00 p.m., Wright Brothers Room, Centennial Airport, 7800 S. Peoria Street, Englewood, CO

CACNR MEETING	ACPAA MEETING	CACNR REPRESENTATIVE	REPORT DUE DATE (to Dylan)
None	None		
February 05	February 13		February 07
March 04	March 12		March 6
April 01	April 09		April 03
May 06	May 14		May 08
June 03	June 18		June 11
July 01	None		July 03
August 05	August 13		August 07
September 02	September 10		September 04
October 07	October 08		No time to write
November 04	November 12		November 06
December 02	December 10		December 04