

**JOHN WAYNE AIRPORT
ORANGE COUNTY**



NOISE ABATEMENT PROGRAM QUARTERLY REPORT

**For the period:
October 1, 2023, through December 31, 2023**

Prepared in accordance with:

**AIRPORT NOISE STANDARD
STATE OF CALIFORNIA**

**California Code of Regulations
Airport Noise Standards
Title 21: Public Works
Division of Aeronautics (Department of Transportation)
Chapter 6. Noise Standards**

Submitted by:

DocuSigned by:
Komal Kumar on behalf of
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**Charlene V. Reynolds
Airport Director
John Wayne Airport, Orange County**

INTRODUCTION

This is the 204th Quarterly Report submitted by the County of Orange in accordance with the requirements of the California Airport Noise Standards (California Code of Regulations, Title 21: Public Works, Division 2.5, Division of Aeronautics (Department of Transportation), Chapter 6. Noise Standards). Effective January 1, 1986, the criteria for defining "Noise Impact Area" was changed from 70 dB to 65 dB Community Noise Equivalent Level (CNEL). Under this criteria, John Wayne Airport currently has a "Noise Impact Area."

NOISE IMPACT SUMMARY

Caltrans' Aeronautics Program has established guidelines in the California State Noise Standard to control residential area noise levels produced by aircraft operations using the State's airports. Under those guidelines, residential noise sensitive areas exposed to an average Community Noise Equivalent Level (CNEL) of more than 65 dB define the "Noise Impact Area." John Wayne Airport uses ten permanent remote noise monitoring stations (NMS) located in Newport Beach, Santa Ana, Tustin and Irvine to measure noise levels, at the following locations:

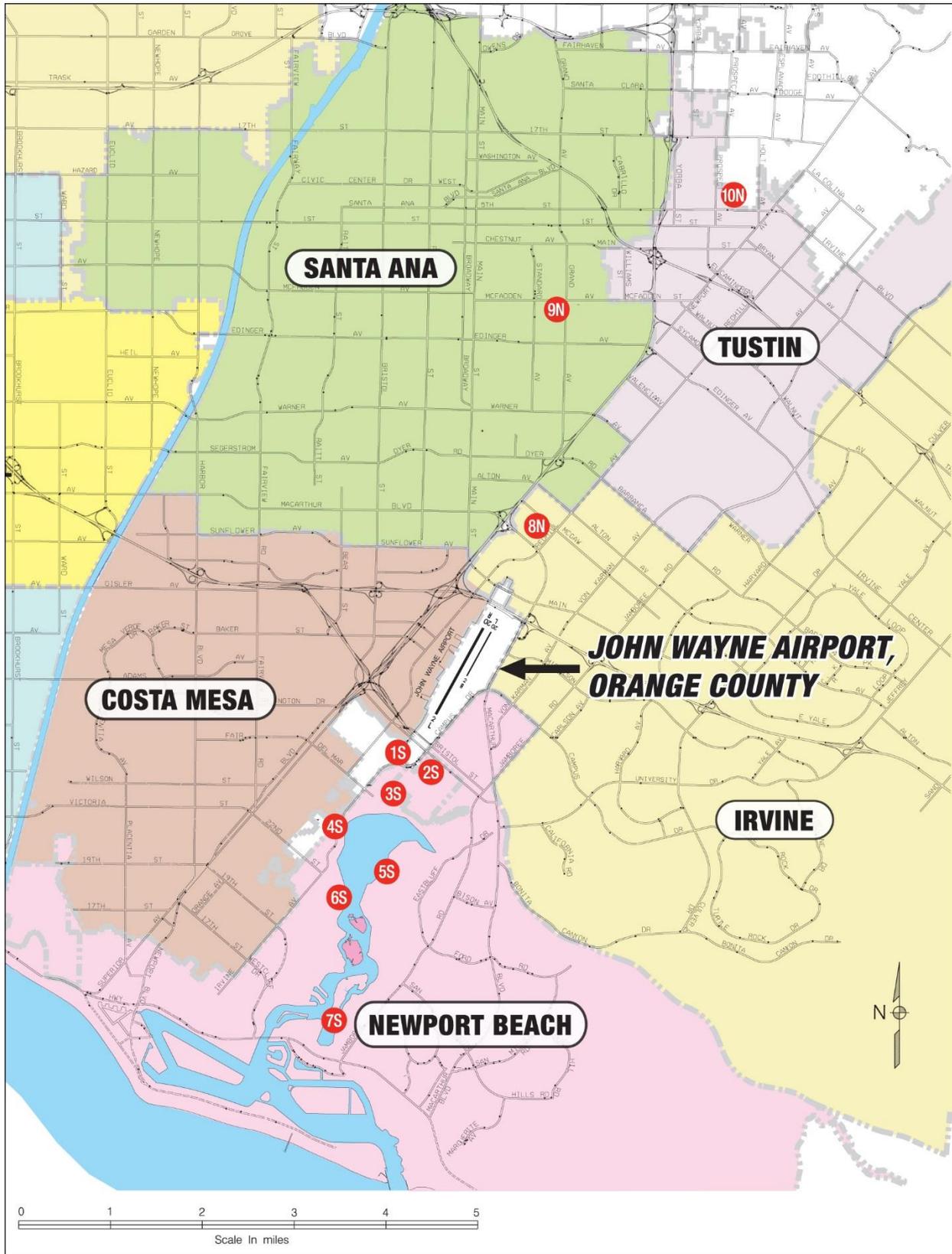
MONITOR STATIONS

NMS-1S: Golf Course, 3100 Irvine Ave., Newport Beach
NMS-2S: 20162 S.W. Birch St., Newport Beach
NMS-3S: 2139 Anniversary Lane, Newport Beach
NMS-4S: 2338 Tustin Ave., Newport Beach
NMS-5S: 324 ½ Vista Madera, Newport Beach
NMS-6S: 1912 Santiago, Newport Beach
NMS-7S: 1131 Back Bay Drive, Newport Beach
NMS-8N: 17372 Eastman Street, Irvine
NMS-9N: 1300 S. Grand Avenue, Santa Ana
NMS-10N: 17952 Beneta Way, Tustin

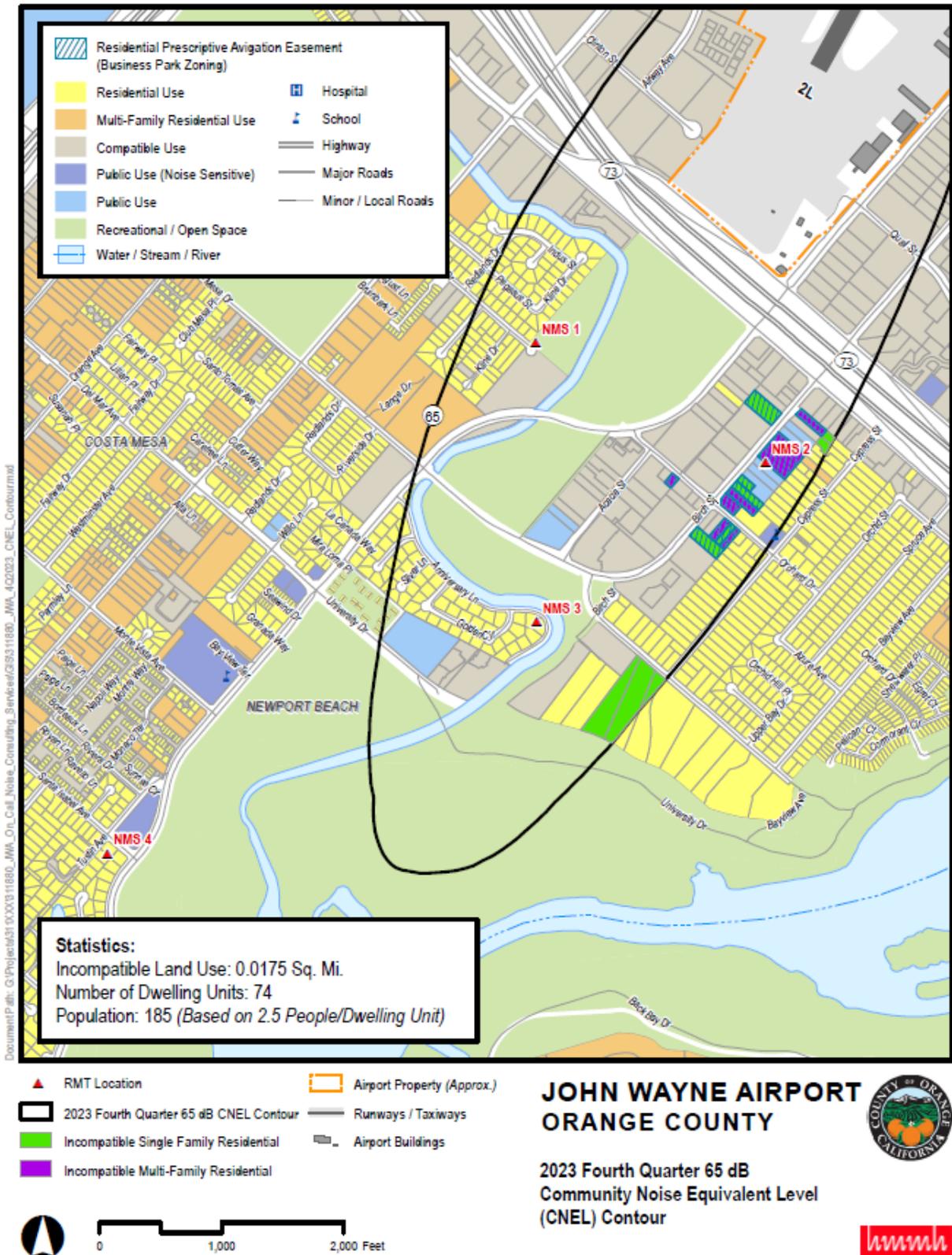
The map in Figure 1 shows the general location of each permanent remote monitor station.

Figure 2 shows the Airport's "Noise Impact Area" for the previous year (January 1, 2023 - December 31, 2023). The Figure 2 information was developed by Harris Miller Miller and Hanson Inc., in consultation with John Wayne Airport. CNEL values measured for the period and current digitized land use information were utilized to calculate the land area acreages, number of residences and estimated number of people within the "Noise Impact Area".

**FIGURE 1
NOISE MONITORING STATIONS (NMS)
LOCATION MAP**



**FIGURE 2
NOISE IMPACT AREA MAP**



AIRCRAFT TRAFFIC SUMMARY

The Airport traffic summary for this quarter is shown in Table 1 below. Air Carrier operational count histories and average daily departure counts are illustrated in Tables 9 & 11.

TABLE 1
 LANDING AND TAKEOFF OPERATIONS
 October - December 2023

Period	Carriers		GA Jet (1)	Total Operations (2)	Average Daily Jet Operations
	Jet	Prop			
October	8,510	0	4,374	25,252	416
November	8,097	0	3,740	22,839	395
December	8,091	0	3,713	22,338	381
Fourth Quarter	24,698	0	11,827	70,429	397
Twelve Months 01/01/23 - 12/31/23	100,078	0	45,558	273,175	399

NOTE: (1) GA Jet figures include a 5% factor for operations not identified by the JWA noise monitor stations.
 (2) Counts in this column are based upon records provided by the local FAA representatives.

COMMUNITY NOISE EQUIVALENT LEVELS

The monthly, quarterly, and twelve-month Community Noise Equivalent Level (CNEL) average values for each monitor station are shown in Table 2, while daily CNEL values are shown in Tables 3 through 5. Insufficient data is indicated by “#N/A” entries in each table. Also, “*#N/A” entries in each table indicate contaminated data and/or no aircraft-related noise events.

Average Single Event Noise Exposure Level (SENEL) values for Air Carrier and General Aviation Jet aircraft are shown in Tables 6 through 8.

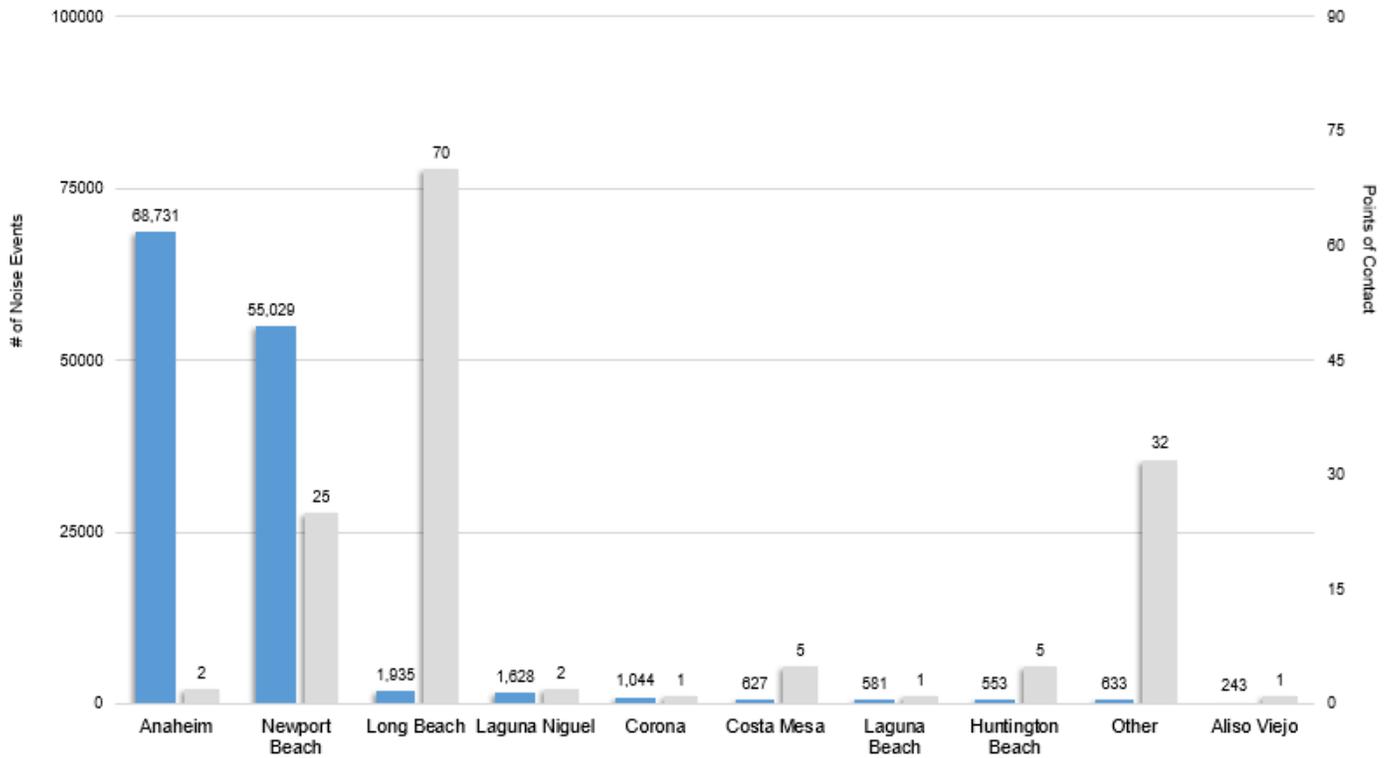
ACOUSTICAL INSULATION PROGRAM

Four hundred eighteen residences in the Santa Ana Heights area have been sound attenuated and an avigation easement reserved through the County’s Acoustical Insulation Program, which closed in December 2009. The County has also acquired 46 residences as part of the Purchase Assurance Program, many of which were acoustically insulated, an avigation easement reserved and then resold. Among these County acquired homes, those located within areas designated for Business Park uses were razed, avigation easements were reserved, and the land resold for compatible Business Park uses. A total of 464 residences in the Santa Ana Heights area have been purchased or otherwise made compatible through the County’s Purchase Assurance and Acoustical Insulation Programs. Seventy-four dwelling units in Santa Ana Heights remain in the “Noise Impacted Area” (within 65 dB CNEL contour).

COMPLAINT TOTALS (October 1, 2023 - December 31, 2023)

The Airport's Access and Noise Office receives and investigates noise complaints (noise events) from local citizens and all other sources. Figures 3.1, 3.2, and 3.3 illustrate the distribution of reported noise events from local communities, the nature of disturbance, and the method of how the noise events were reported to the Airport.

FIGURE 3.1
REPORTED NOISE EVENTS
131,004 Noise Events | 144 Points of Contact
October 1, 2023 to December 31, 2023



NOTE: The 131,004 Noise Events was a 20.9% decrease for the 165,699 Noise Events from last quarter, and a 23.0% increase from the 106,481 Noise Events from the same quarter last year.

FIGURE 3.2
NATURE OF DISTURBANCES

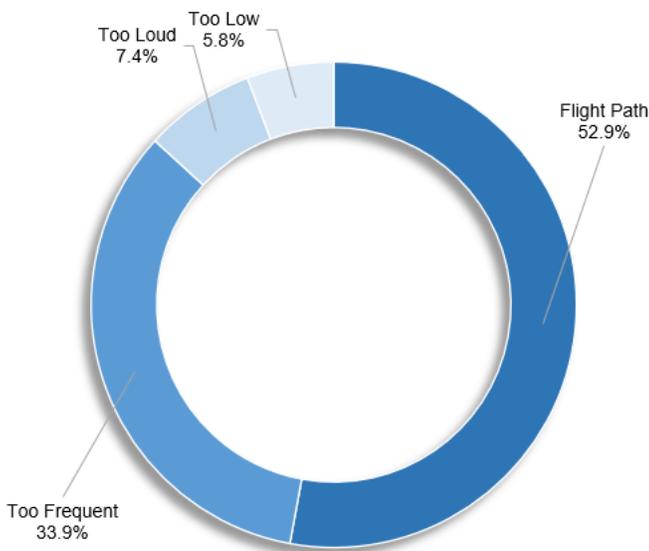


FIGURE 3.3
ENQUIRY METHOD

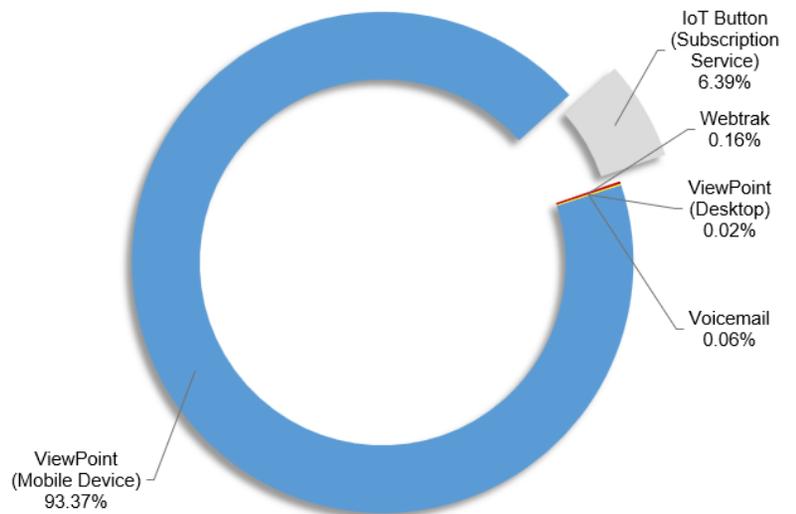


TABLE 2
LONG TERM MEASURED LEVELS
Aircraft CNEL from 01/01/23 through 12/31/23
Values in dB at Each Site

Period	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Jan 2023	67.7	66.0	66.8	59.9	59.2	61.0	57.2	67.4	#N/A	58.3
# Days	31	31	31	31	28	31	30	31	0	31
Feb 2023	67.6	66.1	66.4	59.8	59.0	59.9	56.6	68.0	#N/A	57.8
# Days	28	28	28	28	28	28	28	28	0	28
Mar 2023	68.6	66.9	67.3	60.8	60.3	61.0	58.2	68.7	44.4	58.7
# Days	31	31	31	31	31	31	31	31	15	31
Q-1 2023	68.0	66.3	66.9	60.2	59.6	60.7	57.4	68.0	44.4	58.3
# Days	90	90	90	90	87	90	89	90	15	90
Apr 2023	68.2	67.1	67.1	60.3	59.5	60.4	57.1	68.4	41.0	57.9
# Days	30	30	30	30	30	30	30	30	22	28
May 2023	68.4	67.2	67.3	60.6	59.6	60.8	57.6	68.7	43.3	58.4
# Days	31	31	31	31	31	31	31	31	25	31
Jun 2023	68.6	67.7	67.7	61.0	60.1	61.1	57.8	69.0	43.1	58.0
# Days	30	30	30	30	30	30	30	30	25	30
Q-2 2023	68.4	67.3	67.4	60.7	59.8	60.8	57.5	68.7	42.7	58.1
# Days	91	72	89							
Jul 2023	68.4	67.5	67.4	60.3	59.2	60.4	56.2	68.5	40.5	57.2
# Days	31	31	31	31	31	31	31	31	24	31
Aug 2023	68.4	67.5	67.5	60.2	59.3	60.5	56.4	68.4	41.2	57.1
# Days	31	31	31	31	31	31	31	31	24	31
Sep 2023	68.4	67.4	67.3	60.7	59.7	60.8	57.0	68.5	44.0	57.7
# Days	30	30	30	30	30	30	30	30	24	30
Q-3 2023	68.4	67.5	67.4	60.4	59.4	60.6	56.5	68.5	42.2	57.3
# Days	92	72	92							
Oct 2023	68.2	67.2	67.5	60.1	59.4	60.8	57.1	68.1	43.5	57.4
# Days	31	31	31	31	31	31	29	31	22	31
Nov 2023	67.4	66.3	66.8	59.2	58.5	60.5	55.7	67.3	43.1	56.2
# Days	30	30	30	30	30	30	30	30	24	29
Dec 2023	67.5	66.4	66.6	60.0	59.3	60.1	54.8	67.7	43.1	57.3
# Days	31	31	31	31	31	31	30	31	25	30
Q-4 2023	67.7	66.7	67.0	59.8	59.1	60.5	56.0	67.7	43.3	57.0
# Days	92	92	92	92	92	92	89	92	71	90
Q-1 2023 thru Q-4 2023										
Total	68.1	67.0	67.2	60.3	59.5	60.6	56.9	68.3	42.9	57.7
# Days	365	365	365	365	362	365	361	365	230	361
Q-4 2022 thru Q-3 2023 (Previous 4 Quarters)										
Total	68.2	67.1	67.2	60.3	59.5	60.7	57.1	68.4	42.8	57.9
# Days	365	365	354	364	359	364	363	360	226	360
Change from Previous 4 Quarters										
	-0.1	-0.1	0.0	0.0	0.0	-0.1	-0.2	-0.1	0.1	-0.2

TABLE 3
DAILY CNEL VALUES AT EACH MONITOR STATION
 October 2023

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	69.0	67.8	67.7	61.2	61.2	61.2	57.9	69.1	43.0	59.0
2	69.2	68.4	68.0	61.1	60.3	61.8	58.5	68.6	40.8	58.3
3	68.2	66.8	67.8	60.3	60.0	61.0	57.3	67.6	45.1	56.5
4	67.9	67.0	66.8	59.9	59.5	60.5	57.0	67.2	37.3	55.5
5	68.8	67.5	67.7	60.4	59.5	60.5	56.7	68.3	*#N/A	57.2
6	69.0	68.1	67.7	60.3	59.5	60.6	56.7	68.6	43.7	57.4
7	67.5	66.6	66.6	59.0	55.7	59.1	55.3	66.5	*#N/A	55.9
8	68.8	68.2	68.1	60.2	59.8	60.6	56.6	68.1	*#N/A	57.8
9	69.1	68.1	68.0	60.4	60.1	61.2	56.9	68.9	38.1	58.5
10	68.6	66.9	67.7	60.9	59.0	61.1	57.0	68.4	46.2	57.7
11	68.1	67.1	67.7	60.9	59.7	61.0	57.9	68.4	40.6	58.4
12	68.6	67.9	67.5	61.0	59.6	61.5	57.9	69.7	46.0	58.9
13	68.9	67.4	68.0	61.1	60.3	61.4	57.7	68.9	43.1	58.6
14	67.6	66.9	66.7	59.1	59.2	60.1	56.9	66.9	40.8	56.0
15	68.9	68.0	67.8	59.9	59.4	60.0	56.5	68.3	51.7	57.0
16	68.6	67.4	67.8	60.6	59.8	60.7	56.4	68.0	33.1	57.0
17	68.0	67.4	67.2	60.1	59.2	59.9	56.2	67.0	*#N/A	56.7
18	68.2	67.1	67.4	59.8	59.0	60.2	55.5	68.7	38.3	58.0
19	68.7	67.8	67.9	59.6	59.5	59.9	56.0	69.0	*#N/A	57.6
20	68.7	68.0	68.1	59.5	59.9	60.3	56.5	68.8	42.8	57.4
21	67.7	67.0	66.9	59.7	59.3	60.1	55.8	66.6	*#N/A	56.0
22	69.5	68.8	68.3	61.7	61.2	62.2	58.6	69.5	42.8	59.1
23	68.7	67.8	67.7	61.3	60.5	61.7	58.2	68.6	28.7	58.6
24	68.2	67.2	67.4	61.0	59.7	60.9	57.5	68.1	43.7	57.9
25	68.6	67.3	67.5	61.4	59.8	61.2	57.7	69.0	43.7	58.9
26	69.2	68.3	68.2	61.4	60.9	61.8	58.5	69.2	*#N/A	59.1
27	68.9	67.8	67.8	61.2	60.5	61.4	57.7	69.3	42.2	59.2
28	67.9	66.8	66.8	60.0	59.3	60.4	57.1	66.9	*#N/A	56.3
29	57.0	51.8	67.5	36.8	42.1	62.7	*#N/A	61.0	39.5	39.1
30	54.5	51.0	65.0	35.4	40.7	61.0	*#N/A	62.0	*#N/A	32.9
31	64.3	63.3	63.6	55.5	54.4	56.8	51.1	64.0	36.7	47.1
Days	31	31	31	31	31	31	29	31	22	31
En. Avg	68.2	67.2	67.5	60.1	59.4	60.8	57.1	68.1	43.5	57.4

#N/A indicates insufficient data.

*#N/A indicates contaminated data and/or no aircraft-related noise events.

TABLE 4
DAILY CNEL VALUES AT EACH MONITOR STATION
November 2023

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	66.3	65.2	64.4	57.3	56.6	57.7	53.6	66.0	36.3	53.0
2	67.1	66.7	65.9	58.3	57.7	58.5	54.4	67.3	*#N/A	55.5
3	67.7	67.1	66.7	58.9	58.4	59.1	55.0	67.8	*#N/A	56.1
4	67.4	66.6	66.2	57.9	58.1	58.5	54.4	66.4	36.9	54.6
5	68.9	68.0	67.8	60.3	59.2	60.4	56.2	68.2	*#N/A	57.5
6	68.3	67.6	67.3	60.3	59.6	60.7	56.6	68.7	43.8	58.0
7	67.4	66.5	66.3	59.7	59.3	60.1	56.8	67.8	46.6	57.6
8	63.1	61.1	68.5	54.5	54.5	63.3	52.1	63.8	40.7	45.1
9	64.9	63.5	65.3	56.1	55.4	60.0	52.6	66.4	35.9	51.2
10	67.6	66.8	66.2	58.6	57.7	58.7	54.1	67.5	42.9	55.3
11	66.5	65.7	65.4	57.1	56.7	57.5	53.1	65.3	33.8	51.8
12	67.0	66.0	65.7	58.5	57.0	58.7	54.8	67.6	42.9	54.6
13	68.0	66.7	66.5	59.9	58.3	59.5	55.6	67.8	44.9	56.5
14	67.2	66.0	65.9	59.3	58.2	59.4	55.5	66.7	*#N/A	55.8
15	68.8	66.5	67.5	61.3	59.9	60.9	58.2	68.9	46.3	59.0
16	69.3	68.2	68.1	61.6	60.9	61.8	58.5	69.2	42.1	59.0
17	69.2	67.8	67.9	61.6	60.6	61.5	55.8	69.4	45.9	58.7
18	68.2	66.7	66.5	60.3	59.3	60.4	57.0	67.6	38.3	56.9
19	68.8	67.8	67.3	60.7	60.4	61.3	58.2	69.5	48.2	58.8
20	58.0	54.5	67.3	42.7	50.5	62.8	38.3	62.1	*#N/A	*#N/A
21	64.3	62.8	67.4	54.5	55.1	62.7	50.4	64.8	41.4	48.8
22	68.0	67.2	66.7	59.3	58.9	59.6	56.6	67.2	46.1	55.6
23	64.6	63.2	62.5	57.0	54.9	56.3	53.3	63.9	*#N/A	53.5
24	68.0	66.9	66.5	60.7	59.6	60.7	55.9	67.4	45.0	57.4
25	68.7	67.4	67.2	60.9	59.6	60.7	55.9	67.6	40.9	55.6
26	63.6	62.2	68.6	54.5	55.9	64.0	49.6	64.5	38.6	47.1
27	68.1	66.8	66.9	59.7	58.8	59.7	56.9	67.8	37.8	55.8
28	67.7	66.7	66.4	59.5	59.0	59.4	57.3	67.4	44.6	56.9
29	67.4	66.7	66.4	59.8	59.6	60.2	57.9	67.5	38.0	57.4
30	68.3	66.9	67.0	61.3	60.2	61.2	58.4	68.4	40.4	58.5
Days	30	30	30	30	30	30	30	30	24	29
En. Avg	67.4	66.3	66.8	59.2	58.5	60.5	55.7	67.3	43.1	56.2

#N/A indicates insufficient data.

*#N/A indicates contaminated data and/or no aircraft-related noise events.

TABLE 5
DAILY CNEL VALUES AT EACH MONITOR STATION
December 2023

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	68.2	67.2	67.2	60.6	60.2	60.4	56.3	68.0	46.2	57.9
2	66.9	65.9	65.8	59.5	58.5	59.4	53.5	66.4	*#N/A	56.0
3	68.2	67.4	67.2	60.5	60.0	60.8	52.8	67.6	*#N/A	57.1
4	68.2	66.9	67.4	60.4	59.6	60.7	55.9	67.0	38.5	56.5
5	67.1	66.1	65.9	58.8	58.0	59.1	55.6	66.1	42.6	55.4
6	67.3	66.7	66.7	59.9	59.5	60.0	57.3	67.5	40.9	56.9
7	68.2	67.2	67.3	60.7	60.2	60.8	55.7	68.6	41.2	58.7
8	68.7	67.6	67.9	61.3	60.6	61.3	57.8	67.9	*#N/A	57.3
9	54.7	51.2	64.1	37.3	45.5	60.3	*#N/A	61.7	*#N/A	*#N/A
10	66.6	65.7	65.2	56.4	55.7	56.8	51.4	67.5	34.7	53.0
11	67.6	66.1	66.0	58.5	57.3	57.9	54.0	67.4	38.5	55.7
12	67.4	66.2	66.5	60.7	59.0	60.0	53.5	67.0	*#N/A	56.4
13	67.7	66.9	66.7	60.3	59.6	60.4	54.5	67.2	44.3	56.4
14	67.8	67.0	66.9	60.0	59.0	60.3	57.1	68.1	34.4	56.2
15	67.3	66.2	66.2	59.1	58.1	59.4	53.8	67.2	42.7	55.3
16	65.9	65.3	65.3	57.5	56.8	57.6	53.3	65.8	40.3	53.9
17	66.7	66.0	65.5	58.4	57.7	58.5	48.8	67.4	*#N/A	55.8
18	65.8	66.4	66.5	59.7	58.7	59.9	53.5	67.3	44.5	57.2
19	65.9	66.3	66.7	60.6	59.3	60.4	54.2	67.6	45.2	58.1
20	68.3	66.4	66.9	61.4	59.7	60.6	57.2	69.3	36.4	59.4
21	68.3	66.5	66.9	61.5	59.5	60.8	58.1	68.7	48.1	58.8
22	68.7	67.3	67.5	61.2	60.8	61.3	54.6	69.4	50.2	59.4
23	68.0	66.6	66.7	60.5	59.8	60.5	51.2	68.3	29.8	58.3
24	66.6	65.7	65.6	59.3	59.1	59.5	53.3	66.5	35.8	56.7
25	66.7	66.0	65.8	59.6	59.3	59.8	53.4	67.2	41.7	57.1
26	68.6	67.3	68.1	61.3	60.8	61.4	54.8	68.4	37.0	58.3
27	68.5	67.3	67.7	60.6	60.5	61.1	53.4	68.6	44.5	58.0
28	68.1	67.2	67.4	60.6	60.6	61.0	52.0	67.7	42.8	57.6
29	67.6	66.4	66.7	60.5	59.6	59.7	51.0	68.7	28.9	59.0
30	67.8	66.9	66.5	60.1	60.4	60.4	56.4	68.5	44.6	58.6
31	67.1	65.5	65.9	60.1	59.2	59.7	55.4	67.5	40.3	58.0
Days	31	31	31	31	31	31	30	31	25	30
En. Avg	67.5	66.4	66.6	60.0	59.3	60.1	54.8	67.7	43.1	57.3

#N/A indicates insufficient data.

*#N/A indicates contaminated data and/or no aircraft-related noise events.

**TABLE 6
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commercial Class A
October – December 2023**

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Air Canada	B38M	92	Average Count	92.0 (82)	91.1 (79)	91.8 (85)	84.4 (82)	83.4 (79)	84.0 (79)	80.8 (54)	88.1 (6)	85.9 (1)	#N/A (0)
Alaska	B737	309	Average Count	96.0 (281)	95.0 (279)	95.0 (288)	89.3 (286)	88.9 (288)	89.6 (277)	85.8 (237)	90.9 (18)	#N/A (0)	#N/A (0)
	B738	790	Average Count	98.1 (699)	96.7 (676)	95.7 (707)	89.1 (709)	88.8 (697)	89.9 (697)	86.7 (653)	92.1 (63)	88.4 (4)	78.7 (4)
Allegiant	A319	65	Average Count	94.2 (55)	92.9 (52)	93.2 (56)	87.4 (56)	86.0 (56)	87.4 (53)	82.8 (48)	89.9 (9)	83.7 (2)	#N/A (0)
	A320	220	Average Count	95.0 (200)	94.2 (197)	92.8 (201)	87.1 (201)	86.0 (199)	87.2 (196)	83.5 (155)	88.9 (16)	#N/A (0)	#N/A (0)
American	A21N	140	Average Count	91.9 (118)	90.5 (119)	91.8 (121)	84.9 (122)	82.9 (117)	84.0 (117)	80.3 (75)	89.0 (16)	81.8 (4)	#N/A (0)
	A319	207	Average Count	94.3 (188)	93.4 (177)	93.5 (191)	87.2 (193)	85.8 (189)	85.9 (187)	81.8 (154)	88.7 (13)	#N/A (0)	80.0 (1)
	A320	19	Average Count	94.8 (16)	94.4 (16)	93.8 (16)	86.9 (16)	85.8 (16)	85.3 (16)	82.1 (12)	88.9 (3)	#N/A (0)	#N/A (0)
	A321	112	Average Count	98.7 (99)	98.1 (89)	98.2 (103)	90.8 (101)	88.9 (98)	88.3 (95)	84.7 (72)	94.8 (8)	86.3 (1)	#N/A (0)
	B38M	209	Average Count	92.7 (189)	92.0 (183)	92.6 (189)	85.0 (187)	84.2 (184)	85.0 (181)	81.6 (136)	87.9 (19)	81.4 (1)	#N/A (0)
	B738	840	Average Count	98.8 (745)	97.8 (693)	98.2 (759)	91.1 (752)	89.9 (739)	90.1 (713)	86.8 (593)	94.3 (58)	85.9 (8)	82.7 (6)
Breeze	A223	91	Average Count	88.4 (84)	88.7 (84)	87.0 (84)	81.6 (81)	81.2 (78)	81.9 (75)	78.2 (34)	82.3 (6)	#N/A (0)	#N/A (0)
	E190	64	Average Count	91.7 (55)	91.3 (53)	90.0 (57)	85.3 (55)	85.0 (58)	86.7 (52)	84.2 (54)	88.8 (6)	#N/A (0)	#N/A (0)
Delta	A220	398	Average Count	88.7 (358)	88.6 (346)	88.3 (356)	81.0 (334)	80.0 (258)	81.0 (300)	78.8 (112)	84.2 (27)	81.7 (3)	#N/A (0)
	A223	34	Average Count	89.6 (29)	89.9 (30)	89.3 (30)	81.5 (25)	80.7 (19)	81.9 (26)	79.1 (13)	81.2 (4)	#N/A (0)	#N/A (0)
	A319	17	Average Count	96.2 (17)	94.9 (15)	95.7 (17)	90.1 (17)	87.9 (15)	88.1 (16)	83.4 (16)	#N/A (0)	#N/A (0)	#N/A (0)
	A320	2	Average Count	96.1 (2)	94.8 (2)	95.7 (2)	89.5 (2)	88.2 (2)	88.1 (2)	84.7 (2)	#N/A (0)	#N/A (0)	#N/A (0)
	B738	22	Average Count	97.9 (16)	96.7 (16)	97.3 (16)	89.5 (16)	88.2 (15)	88.0 (15)	85.4 (13)	93.8 (5)	87.9 (1)	82.2 (1)
	B752	306	Average Count	96.1 (266)	95.6 (254)	95.7 (268)	88.5 (268)	87.8 (261)	87.6 (259)	84.3 (218)	93.7 (33)	86.8 (14)	82.3 (8)
FedEx	A306	63	Average Count	97.5 (59)	96.9 (55)	94.6 (58)	88.4 (59)	87.7 (59)	89.1 (59)	85.6 (44)	91.9 (4)	79.2 (1)	#N/A (0)
Frontier	A20N	338	Average Count	88.3 (307)	88.3 (302)	87.6 (309)	81.5 (280)	79.7 (204)	82.1 (266)	79.8 (143)	82.8 (24)	#N/A (0)	#N/A (0)
	A320	30	Average Count	95.0 (29)	94.3 (29)	93.1 (28)	86.6 (29)	84.5 (29)	86.6 (29)	83.8 (23)	84.8 (1)	#N/A (0)	#N/A (0)
Horizon	E175	202	Average Count	94.2 (186)	93.0 (179)	91.1 (183)	84.8 (185)	84.4 (185)	86.9 (184)	83.8 (142)	89.1 (13)	#N/A (0)	80.8 (1)
Southwest	B38M	5	Average Count	88.4 (4)	88.0 (4)	87.6 (4)	81.8 (4)	81.0 (4)	82.2 (3)	80.0 (3)	80.6 (1)	#N/A (0)	#N/A (0)
	B737	1773	Average Count	93.5 (1604)	92.8 (1535)	90.9 (1622)	85.2 (1630)	85.2 (1605)	86.2 (1591)	83.7 (1295)	90.4 (121)	78.3 (1)	#N/A (0)
	B738	3	Average Count	90.4 (1)	91.7 (2)	89.2 (2)	83.6 (2)	83.5 (2)	84.6 (2)	82.3 (2)	86.9 (1)	#N/A (0)	#N/A (0)
Spirit	A20N	180	Average Count	89.0 (163)	88.2 (157)	88.3 (166)	83.0 (162)	81.2 (153)	83.5 (161)	80.3 (125)	84.7 (13)	#N/A (0)	#N/A (0)
	A320	145	Average Count	93.3 (130)	93.0 (127)	91.1 (134)	85.5 (132)	84.3 (130)	85.7 (131)	82.5 (103)	85.3 (10)	#N/A (0)	#N/A (0)
United	A319	131	Average Count	94.2 (119)	93.1 (116)	93.2 (119)	86.4 (117)	85.1 (114)	85.9 (117)	82.3 (75)	87.6 (12)	81.9 (1)	#N/A (0)
	A320	271	Average Count	95.5 (241)	94.6 (234)	94.4 (245)	86.8 (243)	85.7 (239)	86.2 (236)	83.0 (176)	87.7 (22)	87.8 (1)	#N/A (0)
	B38M	83	Average Count	92.9 (71)	91.9 (69)	93.2 (75)	84.5 (73)	84.2 (76)	85.1 (69)	81.8 (66)	87.7 (6)	87.1 (1)	#N/A (0)
	B737	384	Average Count	97.2 (345)	95.5 (324)	97.0 (349)	90.2 (346)	90.2 (337)	90.7 (330)	87.0 (255)	93.5 (31)	87.8 (5)	80.1 (3)
	B738	648	Average Count	99.1 (565)	97.6 (528)	98.4 (580)	90.1 (581)	89.6 (562)	90.1 (541)	87.3 (433)	93.0 (53)	87.8 (14)	82.3 (5)
UPS	A306	19	Average Count	97.9 (18)	96.9 (18)	97.1 (18)	90.8 (18)	89.4 (17)	90.4 (18)	86.9 (9)	93.0 (1)	#N/A (0)	#N/A (0)
	B752	35	Average Count	95.1 (32)	94.9 (32)	93.9 (32)	86.4 (32)	86.3 (32)	87.2 (32)	83.6 (31)	87.7 (3)	#N/A (0)	#N/A (0)
WestJet	B737	81	Average Count	95.9 (74)	94.8 (73)	95.3 (75)	89.7 (75)	89.0 (73)	90.0 (70)	85.4 (64)	91.6 (6)	#N/A (0)	#N/A (0)

TABLE 7
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commercial Class E
October - December 2023

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Delta	A220	392	Average Count	88.5 (359)	88.4 (344)	88.0 (361)	81.0 (321)	79.8 (250)	80.8 (293)	78.5 (107)	82.6 (24)	#N/A (0)	#N/A (0)
	A223	44	Average Count	89.6 (36)	89.7 (37)	89.1 (39)	81.2 (36)	79.8 (32)	80.9 (33)	78.8 (9)	82.2 (3)	#N/A (0)	#N/A (0)
SkyWest Coml.	E175	871	Average Count	91.3 (782)	90.9 (752)	89.4 (786)	84.6 (792)	83.8 (779)	85.8 (771)	82.7 (661)	88.4 (63)	#N/A (0)	79.8 (1)
Southwest	B737	2160	Average Count	91.4 (1951)	91.1 (1877)	89.2 (1973)	84.2 (1979)	84.0 (1955)	84.9 (1937)	82.7 (1567)	89.6 (151)	#N/A (0)	#N/A (0)

TABLE 8
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commuter
October - December 2023

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Delux Public Charters	E135	259	Average Count	85.8 (234)	85.7 (232)	86.6 (236)	79.8 (193)	78.6 (60)	80.3 (178)	79.4 (29)	81.9 (18)	#N/A (0)	#N/A (0)
	E145	171	Average Count	86.6 (152)	86.8 (151)	87.3 (154)	79.7 (115)	79.3 (40)	80.5 (105)	78.7 (23)	83.2 (11)	#N/A (0)	#N/A (0)
SkyWest	CRJ7	91	Average Count	88.4 (77)	88.2 (74)	86.9 (80)	80.0 (39)	80.8 (58)	81.9 (76)	81.3 (67)	87.1 (8)	#N/A (0)	#N/A (0)
	E175	5	Average Count	88.7 (3)	89.5 (3)	87.3 (3)	82.6 (2)	82.2 (3)	83.0 (3)	82.9 (2)	87.6 (2)	#N/A (0)	#N/A (0)

TABLE 8-GA
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
General Aviation
October - December 2023

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
General Aviation	Jet	5632	Average Count	87.8 (4887)	87.4 (4687)	88.9 (4831)	82.3 (2831)	82.0 (2151)	83.3 (3040)	81.2 (1462)	84.5 (291)	80.7 (10)	80.3 (5)

**TABLE 9
AIR CARRIER OPERATIONAL HISTORY**

Carrier	AC Type	Year					
		2019	2020	2021	2022	2023	
Air Canada	AC	A223			102	192	
		B38M			6	494	730
Alaska	AS	A319	244	314			
		A320	3,403	1,733	4,038	3,888	70
		B737	160	14	24	116	784
		B738	5,247	767	1,327	2,728	7,088
Allegiant	G4	A319			1,076	676	418
		A320			488	1,399	1,591
American	AA	A21N	2	2	88	51	974
		A319	432	474	220	498	1,320
		A320	634	488	783	478	660
		A321	214	571	1,035	1,099	1,255
		B38M			17	1,755	1,834
		B738	10,972	5,201	8,144	8,517	7,049
		B752	36				
Breeze	MX	A223					1,326
		E190					186
		E195					120
Compass	CP	E175	3,150	656			
Delta	DL	A220	851	1,954	4,036	3,048	4,420
		A223			4	1,934	2,181
		A319	1,987	828	952	2,071	202
		A320	11	8	3	532	24
		B712	2,495				
		B737	8	24			
		B738	40	2	12	58	84
		B752	2,889	1,065	1,423	2,010	2,654
FedEx	FM	A306	510	512	502	498	496
Frontier	F9	A20N	900	550	1,363	1,818	2,600
		A319	100	2	88		
		A320	428	392	361	310	230
Horizon	QX	DH8D	12				
		E175	4,257	2,986	3,293	1,256	1,648
SkyWest Coml.	SC	CRJ9		2			
		E175	7,686	3,535	3,711	5,446	7,168
Southwest	WN	B38M	10		683	4,038	116
		B737	29,360	14,268	22,212	31,166	31,486
		B738	134	3,780	7,738	1,720	41
Spirit	NK	A20N		180	1,735	2,220	1,492
		A319			250	158	2
		A320		19	346	1,132	1,303
Sun Country	SY	B737			238	8	
		B738			24	2	
United	UA	A319	1,216	590	819	1,047	772
		A320	3,151	1,227	1,020	2,054	1,474
		B38M					210
		B737	2,816	999	2,622	4,116	2,721
		B738	5,627	2,645	2,946	5,685	7,377
UPS	5X	B752			2		
		A306	12	18	18	48	38
WestJet	WS	B752	404	404	392	362	372
		B736	58	34			
		B737	618	126	112	632	704
Total			90,074	46,370	74,253	95,260	95,220

TABLE 10
AIRCRAFT OPERATIONAL HISTORY

Aircraft	Year				
	2019	2020	2021	2022	2023
A20N	900	730	3,098	4,038	4,092
A21N	2	2	88	51	974
A220	851	1,954	4,036	3,048	4,420
A223			106	2,126	3,507
A306	522	530	520	546	534
A319	3,979	2,208	3,405	4,450	2,714
A320	7,627	3,867	7,039	9,793	5,352
A321	214	571	1,035	1,099	1,255
B38M	10		706	6,287	2,890
B712	2,495				
B736	58	34			
B737	32,962	15,431	25,208	36,038	35,695
B738	22,020	12,395	20,191	18,710	21,639
B752	3,329	1,469	1,817	2,372	3,026
CRJ9		2			
DH8D	12				
E175	15,093	7,177	7,004	6,702	8,816
E190					186
E195					120
Total	90,074	46,370	74,253	95,260	95,220

TABLE 11
AIRCRAFT TYPE DESIGNATORS

AC Type	Manufacturer	Model/Series	AC Type	Manufacturer	Model/Series
A20N	Airbus	320-200 Neo	B737	Boeing	737-700
A21N	Airbus	320-100 Neo	B738	Boeing	737-800
A220	Airbus	220-100	B752	Boeing	757-200
A223	Airbus	220-300	CRJ7	Canadair Regional Jet	700
A306	Airbus	300-600	CRJ9	Canadair Regional Jet	900
A319	Airbus	319	DH8D	Bombardier	Dash 8
A320	Airbus	320	E135	Embraer	135
A321	Airbus	321	E145	Embraer	145
B38M	Boeing	737-MAX 8	E175	Embraer	175
B712	Boeing	717-200	E190	Embraer	190
B736	Boeing	737-600	E195	Embraer	195

**TABLE 12
AIR CARRIER AVERAGE DAILY DEPARTURE HISTORY**

Carrier	AC Type	AC	Year				
			2019	2020	2021	2022	2023
Air Canada	AC	A223			.140	.263	
		B38M			.008	.677	1.000
Alaska	AS	A319	.334	.432			
		A320	4.660	2.363	5.534	5.326	.096
		B737	.219	.022	.033	.159	1.074
		B738	7.189	1.046	1.816	3.734	9.707
Allegiant	G4	A319			1.474	.926	.573
		A320			.668	1.915	2.181
American	AA	A21N	.003	.003	.121	.068	1.332
		A319	.592	.648	.296	.682	1.808
		A320	.868	.664	1.082	.655	.904
		A321	.293	.779	1.414	1.507	1.721
		B38M			.022	2.403	2.518
		B738	15.030	7.107	11.156	11.666	9.655
		B752	.049				
Breeze	MX	A223					1.816
		E190					.255
		E195					.164
Compass	CP	E175	4.315	.896			
Delta	DL	A220	1.164	2.667	5.529	4.175	6.052
		A223			.005	2.649	2.986
		A319	2.723	1.131	1.304	2.836	.279
		A320	.014	.014	.003	.729	.033
		B712	3.419				
		B737	.011	.033			
		B738	.055	.003	.016	.079	.115
		B752	3.956	1.454	1.948	2.753	3.638
FedEx	FM	A306	.699	.699	.688	.682	.679
Frontier	F9	A20N	1.233	.751	1.866	2.490	3.562
		A319	.137	.003	.121		
		A320	.586	.536	.496	.425	.315
Horizon	QX	DH8D	.016				
		E175	5.830	4.079	4.512	1.721	2.258
SkyWest Coml.	SC	CRJ9		.003			
Southwest	WN	E175	10.529	4.833	5.085	7.460	9.816
		B38M	.014		.937	5.532	.162
		B737	40.216	19.497	30.416	42.693	43.132
Spirit	NK	B738	.184	5.161	10.605	2.353	.055
		A20N		.246	2.381	3.041	2.038
		A319			.342	.216	.003
Sun Country	SY	A320		.025	.471	1.551	1.789
		B737			.326	.011	
		B738			.033	.003	
United	UA	A319	1.666	.806	1.123	1.433	1.058
		A320	4.315	1.675	1.397	2.814	2.019
		B38M					.293
		B737	3.855	1.366	3.589	5.644	3.726
		B738	7.712	3.612	4.036	7.786	10.099
UPS	5X	B752			.003		
		A306	.016	.025	.025	.066	.052
WestJet	WS	B752	.553	.552	.537	.496	.510
		B736	.079	.046			
		B737	.847	.172	.153	.866	.964
Total			123.384	63.347	101.712	130.485	130.436

QUARTERLY NOISE MEETING

Date: December 19, 2023
Time: 2:00 pm
Place: Virtual (Zoom)

ITEMS DISCUSSED

A summary of the John Wayne Airport (JWA) October 2023 Airport statistics was provided by Ms. Cassandra Linares, Access and Noise Office (ANO) Specialist. Ms. Linares also provided a general overview of the Airport's quarterly noise report for Q3 2023.

Newport Beach resident Dr. Jim Mosher stated there were an unusual number of noise complaints submitted by Long Beach residents listed in the Q3 quarterly report. Dr. Mosher asked if the complaints from Long Beach were the result of JWA aircraft, or if the complaints were misdirected to the wrong noise office. Mr. Nikolas Gaskins, Access and Noise Manager, stated that the complaints could be a combination of misdirected complaints, as well as related to JWA operations.

Mr. Gaskins presented a brief overview of the Fly Friendly Program, as well as an update on the announcement of the 2022 Fly Friendly winners. Mr. Gaskins explained that the Airport is preparing for a special announcement to recognize the 2022 Fly Friendly Program winners. Mr. Gaskins also added that the Airport anticipates announcing the 2023 Fly Friendly Program winners in April 2024.

Mr. Gaskins provided an update on the Airport's current Million Annual Passengers (MAP) issue. Mr. Gaskins explained that Airport staff identified that passenger volume was trending high during Summer 2023. Mr. Gaskins explained that post-pandemic, it was extremely difficult for most airports throughout the nation to accurately project monthly and annual load factors, resulting in difficult to manage projections. Mr. Gaskins mentioned that industry experts had indicated that pre-pandemic passenger levels would most likely not be achieved until at least 2024. Mr. Gaskins further explained that the ANO worked extremely close with JWA carriers as early as July 2023 to receive voluntary returns of capacity, but that a sufficient decrease in passenger volume was not evident by the end of October. Mr. Gaskins stated that these circumstances led the Airport to request and receive approval from the Orange County Board of Supervisors to implement mandatory seat withdrawals. Mr. Gaskins added that the carriers are fully aware of the Airport's mandatory withdrawal process. Mr. Gaskins also mentioned that some carriers chose not to voluntarily return capacity.

Dr. Mosher stated that the Phase 2 Commercial Airline Access Plan and Regulation (Access Plan) suggests capacity should be allocated at a base level, and supplemental capacity should only be awarded based on how the Airport is trending each quarter. Dr. Mosher asked why the Airport did not allocate supplemental capacity according to the Access Plan requirements. Mr. Gaskins responded that the Airport has historically allocated base and supplemental capacity during the initial annual allocation process. Mr. Gaskins also mentioned that additional supplemental capacity may be allocated mid-Plan Year, if able. Mr. Gaskins added that the allocation of capacity and how it is allocated is at the discretion of the Airport Director, per the Access Plan. Mr. Gaskins emphasized that carriers begin planning their schedules six to nine months in advance, therefore, if the Airport were to allocate supplemental capacity on a quarterly basis, it would be difficult for some carriers to incorporate the supplemental capacity into their schedules with such short notice in the Plan Year.

Mr. Jason Herman with Air Line Pilots Association, International, asked what is being done to prevent mandatory withdrawals in future years. Mr. Gaskins stated that the Airport plans to hold an internal meeting with all carriers in early 2024 to discuss this topic.

FAA representative, Mr. Karl Zittel, asked what the load factor percentage was when the Airport determined to implement mandatory withdraws. Mr. Gaskins stated the load factor percentage was approximately 86-87 percent. Mr. Gaskins added that during the Plan Year 2023 capacity allocation process, which took place in July 2022, the Airport had projected an 81 percent load factor.

Mr. Zittel asked if the Airport has a good projection on passenger volume with the upcoming holidays. Mr. Gaskins explained that the Airport is continuing to closely monitor the situation, and expects the overall MAP to be approximately 40,000 passengers under the 11.8 MAP limitation.

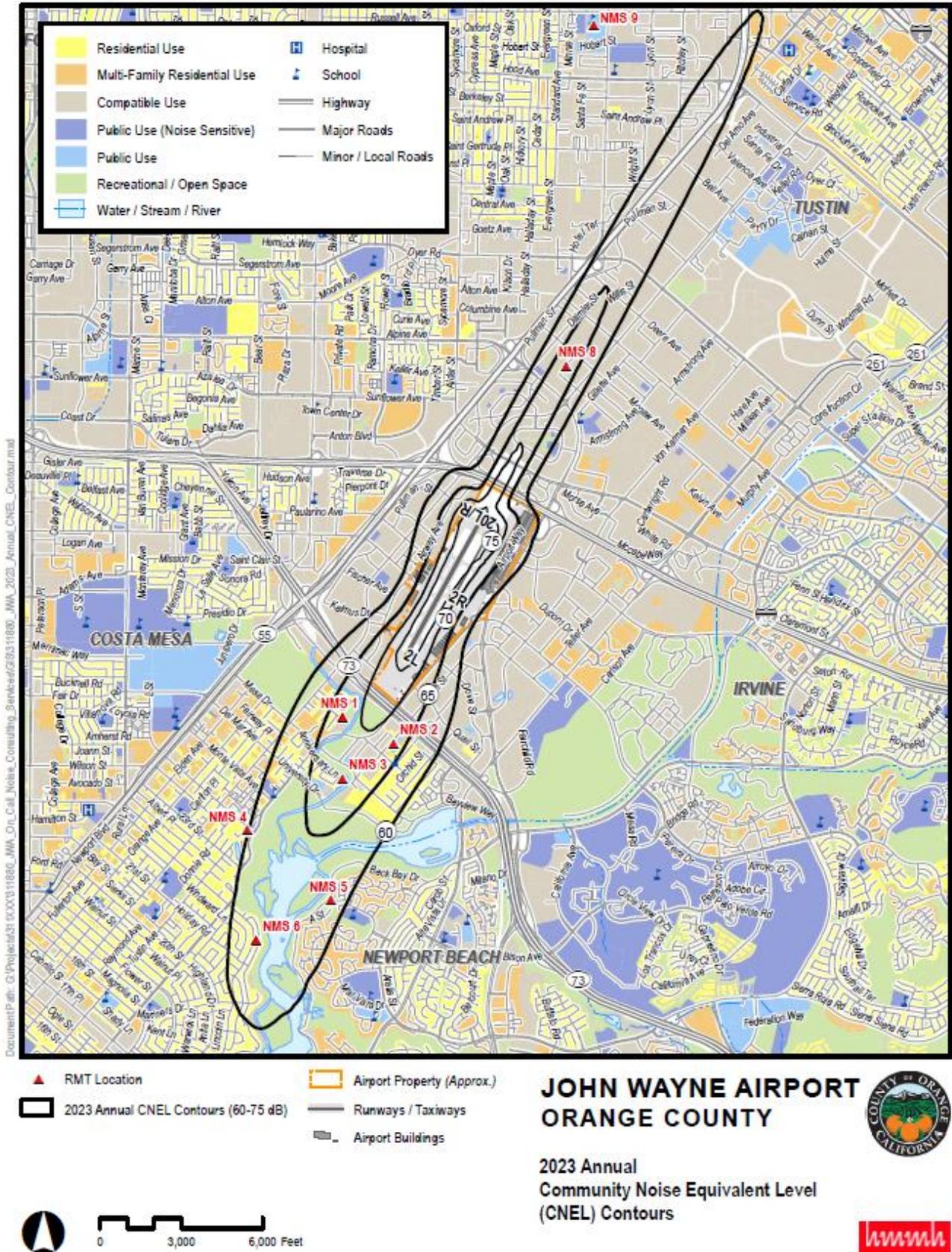
Dr. Mosher asked about an outstanding question he had asked during the June 27, 2023, quarterly noise meeting. Dr. Mosher stated that Environmental Impact Report (EIR) 617 for the 2014 Settlement Agreement amendment indicates that an insulation program is to be initiated based on the increase in noise levels. Mr. Gaskins stated that the Airport's on-call acoustical engineering consultants and Airport staff are currently monitoring these mitigation measures within EIR 617.

QUARTERLY NOISE MEETING ROSTER
December 19, 2023

NAME

ORGANIZATION

Jim Mosher	Resident – Newport Beach
Jason Herman	Air Line Pilots Association, International
Karl Zittel	FAA Representative
Nikolas Gaskins	John Wayne Airport
Anthony Cangey	John Wayne Airport
Beatrice Siercke	John Wayne Airport
Cristina Magaña	John Wayne Airport
Cassandra Linares	John Wayne Airport
Kyle Gorny	John Wayne Airport



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SUMMARY OF STATISTICAL INFORMATION
FOR
CALIFORNIA DEPARTMENT OF TRANSPORTATION

1. Size of Noise Impact Area as defined in the Noise Standards (California Code of Regulations, Title 21, chapter 2.5, Subchapter 6):
0.0175 Sq. Mi.
2. Estimated Number of dwelling units included in the Noise Impact Area as defined in the Noise Standards:
74 Units
3. Estimated number of people residing within the Noise Impact Area as defined in the Noise Standards:
185 (Based on 2.5 People/Dwelling Unit)
4. Identification of aircraft of type having highest takeoff noise level operating at this airport together with estimated number of operations by this aircraft type during the calendar quarter reporting period:
Lockheed T-33 – 2
(Arrivals + Departures)
5. Total number of aircraft operations during the calendar quarter:
70,429
6. Number of Air Carrier operations during the calendar quarter:
(Not mandatory)
24,698
7. Percentage of Air Carrier operations by aircraft certified under Federal Aviation Regulation (FAR) Part 36, Stage III:
(Not mandatory)
100%
8. Estimated number of operations by General Aviation aircraft during the calendar quarter:
(Not mandatory)
45,673
9. Estimated number of operations by Military aircraft during the calendar quarter:
(Not mandatory)
58