

**JOHN WAYNE AIRPORT
ORANGE COUNTY**



NOISE ABATEMENT PROGRAM QUARTERLY REPORT

**For the period:
October 1, 2022 through December 31, 2022**

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

C47C84A6D9054DE

**Charlene V. Reynolds
Airport Director
John Wayne Airport, Orange County**

INTRODUCTION

This is the 200th 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:

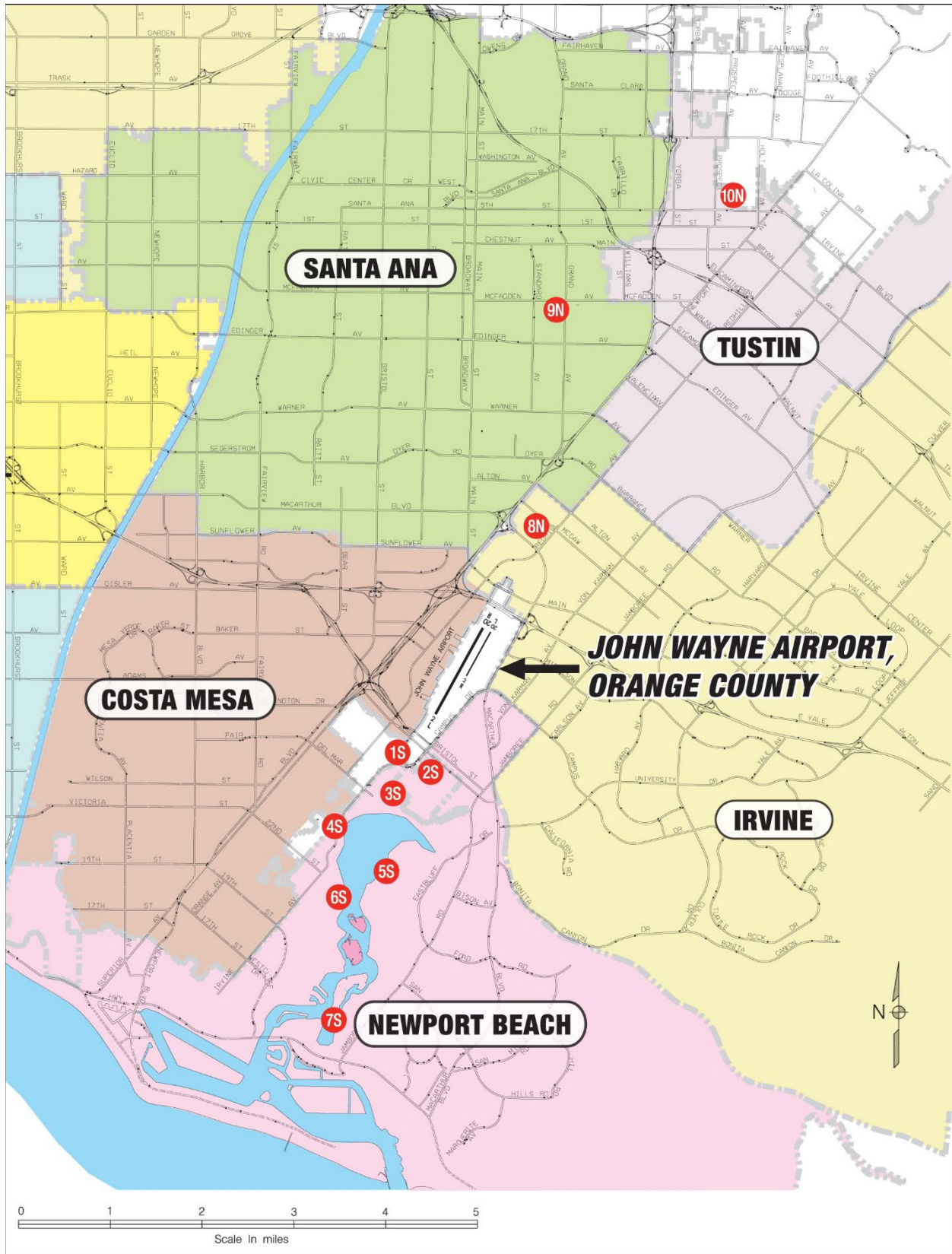
MONITOR STATIONS

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

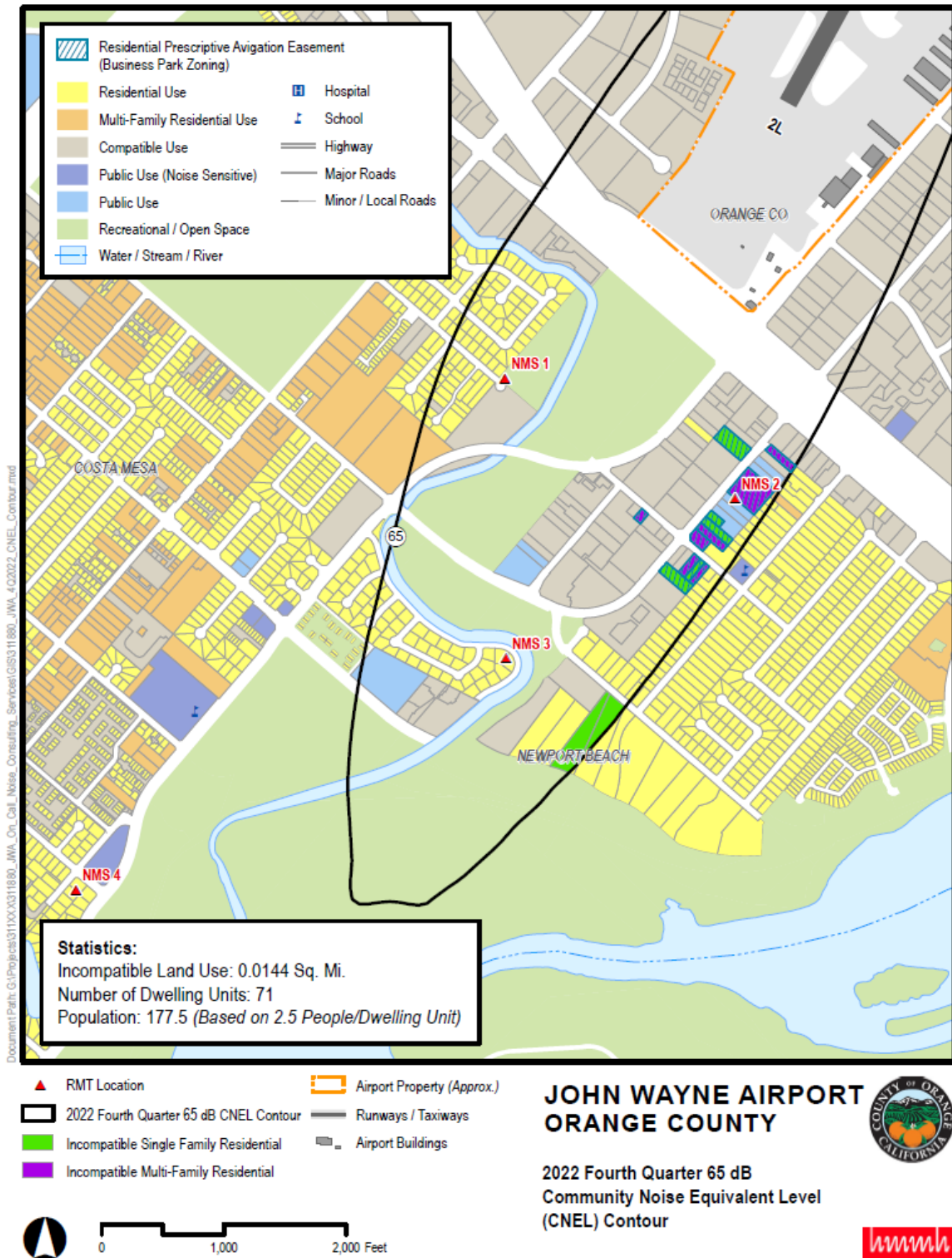
The map in Figure 1 shows the general location of each permanent remote monitor station.

Figure 2 shows the Airport's "Noise Impact Area" for the previous year (January 1, 2022 - December 31, 2022). 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
2022 FOURTH QUARTER**



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 2022

Period	Carriers		GA Jet (1)	Total Operations (2)	Average Daily Jet Operations
	Jet	Prop			
October	9,033	0	4,057	26,005	422
November	8,755	0	3,534	24,215	410
December	8,230	0	3,564	21,704	380
Fourth Quarter	26,018	0	11,155	71,924	404
Twelve Months 01/01/22 - 12/31/22	101,138	0	47,094	303,970	406

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.

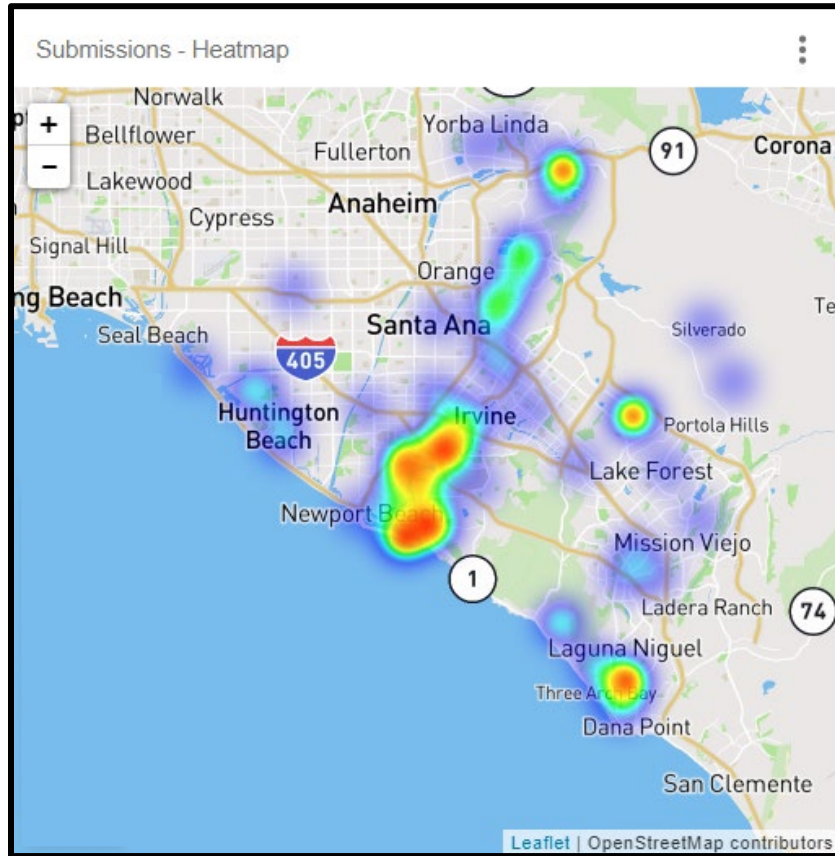
ACOUSTICAL INSULATION PROGRAM

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-one dwelling units in Santa Ana Heights remain in the “Noise Impacted Area” (within 65 dB CNEL contour).

COMPLAINT TOTALS (October 1, 2022 - December 31, 2022)

The Airport's Access and Noise Office receives and investigates noise complaints from local citizens and all other sources. From October 1, 2022, through December 31, 2022, the Office received 106,481 complaints from local citizens. This is a 27.9% increase from the 83,266 complaints received last quarter. It is a 23.7% decrease from the 139,590 complaints received during the same quarter last year. Figure 3 shows the distribution of the quarterly complaints from local communities.

FIGURE 3
REPORTED NOISE EVENTS BY COMMUNITY



Notes:

- Anaheim – 43,058 submissions from 7 different points of contact
- Newport Beach – 30,273 submissions from 29 different points of contact
- Irvine – 27,691 submissions from 7 different points of contact
- Laguna Niguel – 2,360 submissions from 4 different points of contact
- Costa Mesa – 931 submissions from 7 different points of contact
- Laguna Beach – 668 submissions from 1 point of contact
- Tustin – 561 submissions from 3 different points of contact
- Other – 380 submissions from 25 different points of contact
- Huntington Beach – 366 submissions from 5 different points of contact
- Dana Point – 193 submissions from 5 different points of contact
- 7.6% of submissions were from a complaint subscription service.

TABLE 2
LONG TERM MEASURED LEVELS
 Aircraft CNEL from 01/01/22 through 12/31/22
 Values in dB at Each Site

Period	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Jan 2022	66.5	65.0	66.0	59.3	58.4	60.0	55.8	66.5	43.0	55.8
# Days	31	31	31	30	31	31	29	31	22	29
Feb 2022	66.5	65.3	66.0	58.5	58.1	60.0	55.5	66.6	41.0	55.3
# Days	28	28	28	28	28	28	28	28	22	28
Mar 2022	67.9	66.5	67.0	60.0	59.5	60.4	56.9	68.0	44.2	57.6
# Days	31	31	31	31	31	31	31	31	26	31
Q-1 2022	67.0	65.6	66.4	59.3	58.7	60.1	56.1	67.1	43.0	56.4
# Days	90	90	90	89	90	90	88	90	70	88
Apr 2022	67.6	66.3	66.8	59.8	59.4	60.1	56.7	68.1	42.8	57.5
# Days	30	30	30	30	30	30	30	29	25	30
May 2022	68.0	66.5	67.1	60.5	59.6	60.2	57.1	68.3	41.9	57.9
# Days	31	31	31	31	31	31	31	31	23	31
Jun 2022	68.1	66.8	67.3	60.0	58.9	60.0	56.2	68.8	40.8	57.5
# Days	30	28	30	30	30	30	30	30	21	30
Q-2 2022	67.9	66.5	67.1	60.1	59.3	60.1	56.7	68.4	42.0	57.7
# Days	91	89	91	91	91	91	91	90	69	91
Jul 2022	68.0	66.7	67.1	60.1	59.3	60.4	56.1	68.7	41.9	57.4
# Days	31	31	31	31	31	31	31	30	26	31
Aug 2022	68.0	66.9	67.2	59.8	59.2	60.2	56.0	68.3	41.5	57.2
# Days	31	31	31	26	31	31	31	31	26	31
Sep 2022	67.9	66.9	67.1	59.2	59.0	60.2	56.3	68.4	43.1	57.2
# Days	30	30	30	30	30	30	30	27	21	30
Q-3 2022	68.0	66.8	67.1	59.7	59.2	60.3	56.1	68.5	42.2	57.3
# Days	92	92	92	87	92	92	92	88	73	92
Oct 2022	68.4	67.6	67.4	60.0	59.7	60.7	56.6	68.5	44.3	57.8
# Days	31	31	31	31	31	31	31	31	24	31
Nov 2022	67.7	66.6	66.8	59.8	58.4	60.6	56.5	68.2	41.7	57.7
# Days	30	30	30	29	27	30	29	29	26	28
Dec 2022	68.2	66.9	67.4	60.3	59.8	60.7	57.4	67.4	42.8	58.3
# Days	31	31	20	31	31	30	31	27	17	30
Q-4 2022	68.1	67.1	67.2	60.1	59.4	60.6	56.9	68.1	43.1	57.9
# Days	92	92	81	91	89	91	91	87	67	89
Q-1 2022 thru Q-4 2022										
Total	67.8	66.6	66.9	59.8	59.2	60.3	56.5	68.0	42.6	57.4
# Days	365	363	354	358	362	364	362	355	279	360
Q-4 2021 thru Q-3 2022 (Previous 4 Quarters)										
Total	67.6	66.3	66.9	59.7	59.1	60.3	56.4	67.9	42.4	57.2
# Days	365	363	365	359	365	365	362	359	286	350
Change from Previous 4 Quarters										
	0.2	0.3	0.0	0.1	0.1	0.0	0.1	0.1	0.2	0.2

TABLE 3
DAILY CNEL VALUES AT EACH MONITOR STATION
 October 2022

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	67.6	66.9	66.5	59.6	59.2	59.9	55.1	66.9	39.0	56.9
2	68.9	68.3	67.9	60.6	60.9	61.6	58.1	69.3	41.7	59.3
3	68.7	68.1	67.9	60.2	60.7	61.5	58.1	68.5	49.1	58.0
4	67.9	67.1	66.9	59.2	59.2	60.2	56.8	67.8	46.4	57.0
5	68.1	67.6	67.2	58.9	59.0	60.1	55.7	68.1	*#N/A	57.3
6	68.8	67.3	67.6	58.6	59.2	60.2	54.3	69.2	*#N/A	57.8
7	68.3	67.7	67.3	60.2	59.8	60.8	56.8	69.4	47.6	58.7
8	67.4	66.6	66.3	59.0	58.7	59.6	56.0	66.8	*#N/A	56.0
9	68.9	68.2	68.0	60.3	59.9	60.9	57.1	69.2	46.1	58.4
10	69.0	68.2	68.2	60.7	60.3	61.6	57.4	69.0	*#N/A	58.4
11	68.8	68.1	68.0	60.5	60.2	61.2	56.9	68.5	42.5	58.2
12	68.8	68.2	68.1	60.5	60.4	61.6	57.8	68.9	39.7	58.5
13	69.1	68.3	68.0	59.8	59.3	60.2	54.5	69.4	*#N/A	58.0
14	69.3	68.2	68.1	61.2	60.2	61.3	56.3	69.3	43.9	59.3
15	68.5	67.2	68.8	60.1	59.4	61.7	56.9	67.8	30.5	57.4
16	69.0	68.3	68.3	60.6	61.0	61.6	58.1	69.1	48.4	58.4
17	68.9	68.3	68.0	59.6	60.6	61.3	57.6	69.1	41.3	58.4
18	68.4	67.6	67.1	58.8	59.4	59.9	56.7	67.9	43.9	56.6
19	67.8	67.1	66.7	59.2	58.4	59.2	55.6	67.4	39.7	56.4
20	68.2	67.7	67.0	59.4	59.1	59.9	55.6	68.6	*#N/A	57.7
21	69.0	67.9	68.0	61.4	60.3	61.8	56.8	69.6	46.3	58.8
22	67.9	66.9	66.6	60.2	59.4	60.2	55.8	67.9	38.9	57.8
23	68.7	67.8	67.5	60.8	60.3	61.2	56.6	69.2	41.6	58.9
24	66.0	65.6	65.7	57.1	57.3	59.9	54.1	67.6	40.1	56.3
25	67.9	66.9	66.9	60.1	59.1	58.9	55.9	68.2	46.8	57.5
26	68.4	67.6	67.2	60.8	60.1	60.9	57.3	68.4	46.3	57.9
27	69.1	67.5	68.0	61.1	60.4	61.4	57.5	68.8	31.6	58.2
28	68.6	68.0	67.5	60.7	59.9	61.0	57.2	68.9	43.9	58.5
29	67.2	66.6	66.4	59.4	58.9	59.4	55.9	66.2	*#N/A	55.1
30	68.2	67.7	66.9	59.5	58.9	59.6	55.8	68.0	38.6	56.6
31	67.9	66.9	66.5	59.9	58.6	59.6	55.7	67.8	45.2	57.2
Days	31	31	31	31	31	31	31	31	24	31
En. Avg	68.4	67.6	67.4	60.0	59.7	60.7	56.6	68.5	44.3	57.8

#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 2022

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	68.1	66.5	66.7	61.0	59.1	60.4	57.0	68.8	42.1	58.6
2	67.6	67.1	66.3	59.7	60.2	60.4	57.5	68.9	*#N/A	58.5
3	68.4	68.2	67.2	59.9	57.2	61.1	58.1	68.9	33.3	58.9
4	67.9	66.5	67.1	59.9	58.5	60.4	56.0	68.9	44.5	58.3
5	67.3	66.8	66.0	59.2	57.8	59.5	56.2	66.0	35.8	55.8
6	68.4	67.5	67.2	60.5	59.2	60.9	57.5	69.2	39.4	59.0
7	68.7	67.6	67.2	61.2	58.5	61.1	58.2	69.4	45.6	59.5
8	67.7	66.2	65.9	60.1	58.9	59.5	58.4	*#N/A	42.4	60.0
9	68.5	67.4	67.3	60.8	58.1	60.8	57.9	53.8	41.9	58.9
10	68.8	67.8	67.4	60.7	61.7	60.8	57.7	71.7	39.0	57.9
11	68.0	67.1	66.7	59.8	*#N/A	60.0	56.6	69.3	34.8	57.0
12	67.5	66.7	66.3	59.7	*#N/A	59.5	56.0	69.5	43.5	57.0
13	69.0	67.7	67.7	60.8	*#N/A	61.2	57.8	70.9	29.9	58.7
14	68.8	67.9	67.5	60.6	58.0	60.8	57.4	70.3	*#N/A	58.5
15	67.3	66.1	68.3	58.6	58.7	63.3	55.6	66.3	43.0	53.3
16	56.6	54.4	66.6	#N/A	43.9	62.6	#N/A	63.6	31.9	*#N/A
17	67.5	66.5	66.5	58.7	58.2	59.0	55.0	70.5	28.3	56.7
18	68.9	67.5	67.6	60.6	59.5	60.8	56.7	70.1	37.6	57.2
19	56.5	53.6	65.9	33.8	44.3	61.9	39.7	63.7	40.8	32.9
20	66.1	65.1	65.4	56.7	56.8	58.7	53.8	68.3	30.2	53.3
21	67.6	66.8	66.4	58.4	58.0	58.7	54.9	68.3	32.8	54.7
22	68.2	67.4	66.9	59.4	58.9	59.5	55.6	67.7	43.9	55.4
23	68.8	67.8	67.5	59.9	58.9	59.8	55.7	66.8	29.6	56.0
24	61.1	58.9	64.7	51.3	49.3	59.7	45.0	59.2	*#N/A	*#N/A
25	65.3	64.4	64.6	56.1	56.0	58.1	53.0	64.7	34.2	53.4
26	67.7	66.4	66.3	59.7	58.3	59.4	54.0	66.5	*#N/A	57.2
27	69.1	68.2	68.1	61.4	60.3	61.4	57.3	68.3	49.0	59.2
28	68.9	67.4	67.5	61.8	60.3	61.6	58.0	67.7	39.8	59.7
29	68.1	66.7	66.4	60.8	59.4	60.8	57.8	67.7	46.4	59.2
30	67.7	66.5	66.3	61.0	59.6	60.8	58.3	66.8	42.4	58.7
Days	30	30	30	29	27	30	29	29	26	28
En. Avg	67.7	66.6	66.8	59.8	58.4	60.6	56.5	68.2	41.7	57.7

#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 2022

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	68.1	67.1	66.7	61.1	60.0	61.3	58.6	67.2	40.8	59.2
2	67.2	66.4	66.9	59.7	59.3	61.7	56.8	67.5	42.7	58.8
3	67.3	66.2	65.9	59.8	58.9	59.8	56.3	65.4	*#N/A	57.2
4	68.5	67.3	67.4	60.5	60.1	61.0	57.7	68.0	34.0	59.5
5	68.5	67.2	67.5	60.7	60.6	61.2	58.0	67.3	33.5	59.2
6	68.1	66.4	66.8	60.9	60.1	60.8	58.2	66.7	*#N/A	59.2
7	68.2	67.0	67.1	60.7	60.4	60.7	58.1	66.7	33.0	59.0
8	68.9	68.0	67.8	61.0	61.3	61.8	58.7	67.1	43.5	59.3
9	68.8	67.9	67.9	61.3	60.9	61.6	58.3	67.2	28.4	58.9
10	67.9	66.4	66.7	60.4	59.5	60.2	57.0	66.0	42.1	57.6
11	68.5	67.6	67.0	60.1	61.3	61.1	58.7	67.5	41.0	59.7
12	69.2	67.4	67.7	61.6	61.0	61.5	59.0	67.3	48.3	59.5
13	68.2	66.7	67.0	60.8	60.4	60.8	58.2	66.1	46.2	58.4
14	68.1	67.2	67.1	60.6	60.6	61.0	58.0	66.2	45.2	57.8
15	68.9	67.4	#N/A	61.3	61.1	61.7	58.2	67.2	42.1	58.7
16	67.9	66.9	#N/A	59.6	59.3	60.8	56.3	*#N/A	44.6	56.1
17	66.6	65.3	#N/A	58.3	57.7	58.5	54.9	*#N/A	43.3	55.9
18	68.3	67.0	#N/A	60.1	59.4	60.0	56.8	*#N/A	41.2	58.4
19	68.5	67.4	#N/A	60.5	60.1	60.7	57.4	*#N/A	41.2	57.5
20	68.3	67.2	#N/A	60.2	60.0	60.4	57.0	67.6	*#N/A	57.7
21	68.0	66.4	#N/A	59.8	59.6	60.3	57.1	68.3	#N/A	57.3
22	68.5	67.2	69.0	60.3	59.5	60.6	56.9	68.3	#N/A	#N/A
23	68.6	67.5	#N/A	59.9	59.7	60.5	57.1	68.0	#N/A	60.8
24	66.2	65.2	#N/A	57.8	57.2	58.1	54.0	65.8	#N/A	54.6
25	65.7	64.8	#N/A	57.4	56.7	57.5	53.7	66.0	#N/A	54.9
26	67.6	66.4	#N/A	59.2	58.0	#N/A	54.8	67.3	#N/A	56.5
27	68.6	66.8	68.6	60.5	59.6	61.4	56.8	68.2	#N/A	58.4
28	68.8	67.2	67.9	60.9	60.1	60.8	57.8	68.1	#N/A	58.2
29	68.7	66.7	67.5	61.4	60.2	61.1	57.9	68.3	#N/A	58.3
30	69.3	67.5	68.0	61.4	60.6	61.6	58.5	69.8	#N/A	59.9
31	67.3	65.4	65.5	59.5	57.3	59.3	56.5	68.6	#N/A	55.4
Days	31	31	20	31	31	30	31	27	17	30
En. Avg	68.2	66.9	67.4	60.3	59.8	60.7	57.4	67.4	42.8	58.3

#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 2022**

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Air Canada	B38M	89	Average Count	92.1 (86)	91.5 (83)	91.6 (78)	84.3 (82)	83.5 (76)	84.0 (83)	80.0 (63)	86.6 (3)	#N/A (0)	#N/A (0)
Alaska	A320	490	Average Count	96.1 (465)	94.9 (433)	95.5 (425)	88.2 (455)	86.8 (439)	87.5 (461)	84.9 (450)	90.6 (20)	#N/A (0)	80.3 (3)
	B737	3	Average Count	96.4 (3)	95.7 (3)	95.5 (3)	90.5 (3)	90.0 (3)	90.9 (2)	86.2 (3)	#N/A (0)	#N/A (0)	#N/A (0)
	B738	321	Average Count	98.8 (290)	97.2 (283)	96.0 (251)	89.6 (288)	89.9 (270)	90.4 (285)	87.3 (284)	93.3 (15)	90.4 (1)	79.6 (5)
Allegiant	A319	33	Average Count	93.8 (31)	92.8 (32)	92.5 (27)	86.9 (31)	85.7 (28)	86.9 (30)	82.6 (30)	88.3 (1)	#N/A (0)	#N/A (0)
	A320	178	Average Count	95.2 (176)	94.5 (168)	92.7 (160)	87.2 (173)	86.3 (155)	87.3 (172)	83.2 (168)	#N/A (0)	#N/A (0)	#N/A (0)
American	A21N	9	Average Count	90.9 (8)	90.4 (8)	89.5 (6)	82.8 (8)	81.2 (7)	82.0 (8)	#N/A (0)	84.1 (1)	#N/A (0)	#N/A (0)
	A319	91	Average Count	94.5 (89)	93.8 (81)	93.6 (77)	87.2 (87)	85.9 (78)	86.1 (85)	82.1 (75)	91.6 (2)	#N/A (0)	#N/A (0)
	A320	19	Average Count	95.3 (18)	94.3 (16)	94.0 (7)	86.5 (18)	85.3 (16)	85.0 (18)	81.6 (16)	86.7 (1)	#N/A (0)	#N/A (0)
	A321	171	Average Count	99.1 (165)	98.6 (153)	98.3 (141)	90.6 (160)	89.1 (150)	88.5 (154)	84.5 (156)	92.9 (6)	#N/A (0)	#N/A (0)
	B38M	307	Average Count	92.8 (289)	92.1 (271)	92.2 (260)	84.4 (284)	84.4 (257)	85.6 (272)	81.7 (253)	87.8 (14)	85.8 (2)	#N/A (0)
	B738	1005	Average Count	98.8 (913)	97.7 (868)	97.2 (818)	89.9 (907)	89.6 (844)	90.3 (895)	87.3 (858)	93.6 (44)	86.9 (9)	81.1 (14)
Delta	A220	77	Average Count	88.9 (74)	88.7 (72)	88.5 (63)	81.0 (67)	79.5 (51)	80.3 (56)	77.6 (6)	81.5 (2)	#N/A (0)	#N/A (0)
	A223	174	Average Count	89.7 (167)	89.6 (164)	88.9 (149)	81.2 (157)	80.7 (130)	80.7 (146)	78.1 (21)	80.4 (6)	#N/A (0)	#N/A (0)
	A319	321	Average Count	95.9 (301)	95.1 (274)	95.2 (274)	89.1 (291)	87.6 (272)	87.7 (289)	83.3 (285)	92.1 (14)	83.3 (4)	80.7 (2)
	A320	195	Average Count	96.6 (182)	95.8 (173)	95.9 (168)	89.4 (175)	88.0 (161)	88.0 (174)	83.9 (175)	91.6 (11)	#N/A (0)	#N/A (0)
	B738	10	Average Count	98.2 (9)	97.1 (9)	97.3 (8)	89.0 (8)	88.0 (7)	87.9 (9)	85.0 (8)	91.4 (1)	#N/A (0)	#N/A (0)
	B752	333	Average Count	96.4 (296)	95.7 (294)	95.9 (260)	88.8 (286)	87.9 (277)	88.2 (294)	84.2 (286)	93.2 (26)	84.8 (6)	80.4 (7)
FedEx	A306	62	Average Count	97.4 (60)	96.7 (60)	94.7 (53)	88.9 (60)	88.5 (57)	89.5 (60)	86.0 (59)	91.7 (2)	80.5 (1)	80.9 (1)
Frontier	A20N	232	Average Count	88.1 (219)	88.0 (209)	87.5 (191)	81.3 (204)	80.1 (137)	81.9 (193)	79.3 (72)	82.5 (8)	#N/A (0)	#N/A (0)
	A320	36	Average Count	94.6 (35)	94.3 (35)	92.1 (30)	85.8 (34)	84.8 (33)	86.5 (32)	84.2 (32)	84.5 (1)	#N/A (0)	#N/A (0)
Horizon	E175	69	Average Count	93.8 (62)	92.9 (60)	90.5 (54)	84.7 (64)	85.1 (58)	87.0 (63)	83.8 (59)	88.8 (5)	81.3 (1)	#N/A (0)
Southwest	B38M	670	Average Count	89.9 (619)	89.3 (591)	88.1 (562)	81.1 (562)	81.9 (538)	83.5 (587)	80.2 (456)	85.6 (34)	#N/A (0)	76.8 (1)
	B737	1100	Average Count	94.4 (1020)	93.7 (978)	91.9 (919)	85.9 (1005)	86.4 (929)	87.1 (996)	84.5 (965)	91.7 (56)	86.5 (2)	81.0 (5)
	B738	61	Average Count	94.6 (58)	93.8 (50)	91.5 (50)	85.5 (55)	86.0 (52)	86.8 (54)	84.3 (58)	90.3 (2)	#N/A (0)	#N/A (0)
Spirit	A20N	228	Average Count	88.9 (207)	88.1 (200)	88.3 (191)	82.8 (209)	81.3 (179)	83.1 (210)	79.4 (157)	84.3 (13)	#N/A (0)	#N/A (0)
	A320	222	Average Count	93.1 (211)	92.6 (199)	90.8 (179)	85.4 (206)	84.1 (189)	85.2 (204)	81.5 (192)	86.5 (9)	#N/A (0)	#N/A (0)
United	A319	108	Average Count	94.1 (105)	93.1 (96)	92.8 (94)	86.3 (102)	84.8 (92)	85.9 (102)	82.0 (92)	87.3 (2)	#N/A (0)	#N/A (0)
	A320	177	Average Count	95.5 (157)	94.5 (149)	94.4 (142)	86.8 (160)	85.9 (146)	86.2 (160)	82.9 (156)	88.7 (11)	84.6 (2)	80.4 (1)
	B737	408	Average Count	97.2 (384)	95.7 (344)	96.9 (346)	90.3 (378)	90.4 (350)	90.8 (363)	87.1 (362)	93.9 (14)	87.3 (3)	80.9 (3)
	B738	844	Average Count	99.1 (774)	97.7 (746)	98.1 (664)	90.1 (746)	89.8 (703)	90.3 (729)	87.5 (720)	93.3 (44)	86.8 (9)	80.3 (9)
UPS	A306	24	Average Count	97.8 (24)	96.8 (24)	97.4 (18)	90.5 (23)	89.6 (24)	90.4 (24)	86.5 (24)	#N/A (0)	#N/A (0)	#N/A (0)
	B752	29	Average Count	94.9 (27)	95.0 (26)	93.7 (27)	86.3 (26)	87.8 (27)	87.1 (27)	82.4 (26)	87.7 (2)	#N/A (0)	#N/A (0)
WestJet	B737	84	Average Count	96.1 (79)	95.0 (75)	95.3 (69)	89.8 (78)	89.6 (72)	90.5 (76)	85.7 (76)	92.0 (4)	#N/A (0)	#N/A (0)

TABLE 7
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commercial Class E
October - December 2022

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Delta	A220	175	Average Count	88.9 (164)	88.5 (159)	88.2 (134)	81.1 (154)	80.0 (124)	80.5 (145)	78.8 (20)	81.4 (7)	#N/A (0)	#N/A (0)
	A223	81	Average Count	89.8 (77)	90.1 (79)	89.2 (73)	81.2 (78)	80.3 (71)	80.9 (73)	77.9 (8)	86.3 (1)	#N/A (0)	#N/A (0)
SkyWest Coml.	E175	777	Average Count	91.1 (738)	90.7 (692)	89.4 (640)	84.8 (720)	84.4 (679)	85.9 (721)	83.1 (698)	88.0 (29)	#N/A (0)	79.9 (2)
Southwest	B38M	26	Average Count	89.6 (25)	89.5 (21)	87.9 (25)	81.6 (22)	81.4 (22)	83.4 (24)	79.7 (17)	#N/A (0)	#N/A (0)	#N/A (0)
	B737	2923	Average Count	92.1 (2746)	91.7 (2610)	89.9 (2446)	84.8 (2706)	84.7 (2538)	85.5 (2718)	83.2 (2596)	89.9 (127)	79.7 (2)	79.8 (6)
	B738	2	Average Count	90.1 (2)	91.6 (2)	87.6 (2)	83.3 (2)	83.4 (2)	83.3 (1)	83.1 (2)	#N/A (0)	#N/A (0)	#N/A (0)

TABLE 8
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commuter
October - December 2022

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Delux Public Charters	E135	449	Average Count	85.7 (421)	85.6 (403)	86.3 (364)	79.7 (353)	79.1 (117)	80.1 (324)	77.4 (14)	83.0 (14)	#N/A (0)	#N/A (0)
	E145	266	Average Count	86.8 (252)	86.9 (241)	87.5 (213)	79.9 (198)	79.3 (91)	80.3 (201)	77.8 (12)	83.9 (12)	#N/A (0)	#N/A (0)
SkyWest	CRJ7	86	Average Count	88.6 (79)	88.3 (75)	87.3 (71)	80.7 (49)	80.7 (63)	82.4 (77)	80.4 (64)	89.0 (3)	#N/A (0)	#N/A (0)
	E175	6	Average Count	91.5 (5)	91.2 (5)	88.7 (3)	84.5 (5)	83.9 (5)	85.0 (5)	83.7 (5)	88.0 (1)	#N/A (0)	#N/A (0)

TABLE 8-GA
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
General Aviation
October - December 2022

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
General Aviation	Jet	5312	Average Count	88.2 (4941)	87.8 (4689)	89.0 (4256)	82.3 (2970)	82.3 (2258)	83.2 (3218)	81.5 (1187)	85.6 (160)	80.4 (10)	77.7 (2)

TABLE 9
AIR CARRIER OPERATIONAL HISTORY

Carrier	AC Type	Year					
		2018	2019	2020	2021	2022	
Air Canada	AC	A223				102	192
		B38M				6	494
Alaska	AS	A319	64	244	314		
		A320	262	3,403	1,733	4,038	3,888
		B737	384	160	14	24	116
		B738	8,260	5,247	767	1,327	2,728
Allegiant	G4	A319				1,076	676
		A320				488	1,399
American	AA	A21N		2	2	88	51
		A319	722	432	474	220	498
		A320	78	634	488	783	478
		A321	4	214	571	1,035	1,099
		B38M				17	1,755
		B738	11,457	10,972	5,201	8,144	8,517
		B752	4	36			
Compass	CP	E175	3,188	3,150	656		
Delta	DL	A220		851	1,954	4,036	3,048
		A223				4	1,934
		A319	1,979	1,987	828	952	2,071
		A320	12	11	8	3	532
		B712	3,379	2,495			
		B737	188	8	24		
		B738	18	40	2	12	58
		B739	2				
		B752	2,889	2,889	1,065	1,423	2,010
		MD90	2				
FedEx	FM	A306	508	510	512	502	498
Frontier	F9	A20N	600	900	550	1,363	1,818
		A319	190	100	2	88	
		A320	654	428	392	361	310
Horizon	QX	DH8D	728	12			
		E175	2,716	4,257	2,986	3,293	1,256
SkyWest Coml.	SC	CRJ9	6		2		
		E175	6,960	7,686	3,535	3,711	5,446
Southwest	WN	B38M	14	10		683	4,038
		B737	32,380	29,360	14,268	22,212	31,166
		B738	64	134	3,780	7,738	1,720
Spirit	NK	A20N			180	1,735	2,220
		A319				250	158
		A320			19	346	1,132
Sun Country	SY	B737				238	8
		B738				24	2
United	UA	A319	999	1,216	590	819	1,047
		A320	3,927	3,151	1,227	1,020	2,054
		B737	2,987	2,816	999	2,622	4,116
		B738	5,154	5,627	2,645	2,946	5,685
		B752	4			2	
UPS	5X	A306	22	12	18	18	48
		B752	394	404	404	392	362
WestJet	WS	B736	10	58	34		
		B737	666	618	126	112	632
Total			91,875	90,074	46,370	74,253	95,260

TABLE 10
AIRCRAFT OPERATIONAL HISTORY

Aircraft	Year				
	2018	2019	2020	2021	2022
A20N	600	900	730	3,098	4,038
A21N		2	2	88	51
A220		851	1,954	4,036	3,048
A223				106	2,126
A306	530	522	530	520	546
A319	3,954	3,979	2,208	3,405	4,450
A320	4,933	7,627	3,867	7,039	9,793
A321	4	214	571	1,035	1,099
B38M	14	10		706	6,287
B712	3,379	2,495			
B736	10	58	34		
B737	36,605	32,962	15,431	25,208	36,038
B738	24,953	22,020	12,395	20,191	18,710
B739	2				
B752	3,291	3,329	1,469	1,817	2,372
CRJ9	6		2		
DH8D	728	12			
E175	12,864	15,093	7,177	7,004	6,702
MD90	2				
Total	91,875	90,074	46,370	74,253	95,260

TABLE 11
AIR CARRIER AVERAGE DAILY DEPARTURE HISTORY

Carrier	AC Type	Year					
		2018	2019	2020	2021	2022	
Air Canada	AC	A223				.140	.263
		B38M				.008	.677
Alaska	AS	A319	.088	.334	.432		
		A320	.359	4.660	2.363	5.534	5.326
		B737	.526	.219	.022	.033	.159
		B738	11.315	7.189	1.046	1.816	3.734
Allegiant	G4	A319				1.474	.926
		A320				.668	1.915
American	AA	A21N		.003	.003	.121	.068
		A319	.989	.592	.648	.296	.682
		A320	.107	.868	.664	1.082	.655
		A321	.005	.293	.779	1.414	1.507
		B38M				.022	2.403
		B738	15.696	15.030	7.107	11.156	11.666
Compass	CP	B752	.005	.049			
		E175	4.367	4.315	.896		
Delta	DL	A220		1.164	2.667	5.529	4.175
		A223				.005	2.649
		A319	2.712	2.723	1.131	1.304	2.836
		A320	.016	.014	.014	.003	.729
		B712	4.627	3.419			
		B737	.258	.011	.033		
		B738	.025	.055	.003	.016	.079
		B739	.003				
		B752	3.959	3.956	1.454	1.948	2.753
		MD90	.003				
FedEx	FM	A306	.696	.699	.699	.688	.682
Frontier	F9	A20N	.822	1.233	.751	1.866	2.490
		A319	.260	.137	.003	.121	
		A320	.896	.586	.536	.496	.425
Horizon	QX	DH8D	.997	.016			
		E175	3.721	5.830	4.079	4.512	1.721
SkyWest Coml.	SC	CRJ9	.008		.003		
		E175	9.534	10.529	4.833	5.085	7.460
Southwest	WN	B38M	.019	.014		.937	5.532
		B737	44.351	40.216	19.497	30.416	42.693
		B738	.088	.184	5.161	10.605	2.353
Spirit	NK	A20N			.246	2.381	3.041
		A319				.342	.216
		A320			.025	.471	1.551
Sun Country	SY	B737				.326	.011
		B738				.033	.003
United	UA	A319	1.373	1.666	.806	1.123	1.433
		A320	5.375	4.315	1.675	1.397	2.814
		B737	4.093	3.855	1.366	3.589	5.644
		B738	7.058	7.712	3.612	4.036	7.786
		B752	.005			.003	
UPS	5X	A306	.030	.016	.025	.025	.066
		B752	.540	.553	.552	.537	.496
WestJet	WS	B736	.014	.079	.046		
		B737	.912	.847	.172	.153	.866
Total			125.852	123.384	63.347	101.712	130.485

TABLE 12
AIRCRAFT Glossary

AC Type	Make	Model/Series
A20N	Airbus	320-200 Neo
A21N	Airbus	321 Neo
A220	Airbus	220-100
A223	Airbus	220-300
A306	Airbus	300-600
A319	Airbus	319
A320	Airbus	320
A321	Airbus	321
B38M	Boeing	737-800 Max
B712	Boeing	717-200
B737	Boeing	737-700
B738	Boeing	737-800
B739	Boeing	737-900
B752	Boeing	757-200
CRJ7	Canadair Regional Jet	700
CRJ9	Canadair Regional Jet	900
DH8D	Bombardier	Dash 8
E135	Embraer	135
E145	Embraer	145
E175	Embraer	175
MD90	McDonnell Douglas	90

QUARTERLY NOISE MEETING

Date: December 20, 2022
Time: 2:00 PM
Place: Virtual (Zoom)

ITEMS DISCUSSED

A summary of the John Wayne Airport (JWA) October 2022 airport statistics was provided by Ms. Cassandra Linares, ANO Specialist. Ms. Linares stated there was a 23.6% increase in passenger volume compared to the same period last year.

Mr. Anthony Cangey, ANO Specialist, provided a review of the Plan Year 2023 capacity allocation highlighting that 14,499,222 seats were allocated to commercial air carriers and 284,290 passengers were allocated to commuter carriers.

Mr. Nikolas Gaskins, Access and Noise Manager, provided an overview of the Federal Aviation Administration (FAA) virtual community workshop that took place on Tuesday, November 15, 2022, and Thursday, November 17, 2022.

Dr. Jim Mosher asked how “touch and go’s” were counted for each arrival and departure, and whether the operation counted if it does not touchdown on the runway. Mr. Gaskins explained that the general aviation counts are provided by the FAA through the air traffic control (ATC) tower log.

Mr. Jack Stranberg inquired why Aeromexico would not be operating at JWA after initialing receiving capacity in 2023. Mr. Gaskins explained that Aeromexico could not operate because of their current FAA Category 2 air safety rating, and their capacity allocation for Plan Year 2023 was reallocated to Breeze Airways. Mr. Jason Herman, representing the Air Line Pilots Association (ALPA), added that the International Civil Aviation Organization (ICAO) rates countries based on safety and other operational factors, and the U.S. requires a Category 1 rating for an international carrier to operate new routes in the U.S.

Dr. Mosher asked if Southern Airways Express would have to conduct an aircraft noise qualification test. Mr. Gaskins stated that Southern Airways Express would be required to conduct an aircraft noise qualification test as do all new entrant carriers, and that will most likely take place in second quarter of Plan Year 2023.

Dr. Mosher posed the question if an Advisory Circular from 30 years ago is still in effect or if pilots can choose their noise abatement departure procedure (NADP) based on a specific airport. Mr. Herman explained that the carrier he currently flies for utilizes NADP2 for noise-sensitive airports and NADP1 for the others. He further explained that they do not have a custom NADP, and are trained in both NADP1 and NADP2.

Mr. Joe August was interested in who decides if a carrier departs to the north or south. Mr. Herman clarified that takeoff direction depends on performance data such as ambient temperature, wind conditions, and aircraft weight in collaboration with the ATC tower.

Dr. Mosher asked why the Fly Friendly data on the Airport’s website is not presented as a PDF document. Mr. Gaskins indicated that the data is displayed on a dashboard and is updated monthly.

QUARTERLY NOISE MEETING ROSTER
December 20, 2022

NAME

ORGANIZATION

Joe August	Resident – Newport Beach
Jim Mosher	Resident – Newport Beach
Jason Herman	Air Line Pilots Association
Jack Stranberg	Newport Beach Aviation Committee Member
Sara Hall	Stu News
Unknown Caller	Unknown
Nikolas Gaskins	John Wayne Airport
Anthony Cangey	John Wayne Airport
Cristina Magaña	John Wayne Airport
Cassandra Linares	John Wayne Airport

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):
0.0144 Sq. Mi.
2. Estimated Number of dwelling units included in the Noise Impact Area as defined in the Noise Standards:
71
3. Estimated number of people residing within the Noise Impact Area as defined in the Noise Standards:
177.5 (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:
B738 – 4,499 (Arrivals + Departures)
5. Total number of aircraft operations during the calendar quarter:
71,924
6. Number of Air Carrier operations during the calendar quarter:
(Not mandatory)
26,018
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)
45,785
9. Estimated number of operations by Military aircraft during the calendar quarter:
(Not mandatory)
121