JOHN WAYNE AIRPORT
ORANGE COUNTY

NOISE ABATEMENT PROGRAM
QUARTERLY REPORT

For the period:
April 1, 2023 through June 30, 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:

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

INTRODUCTION

This is the 202nd 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 (July 1, 2022 - June 30, 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

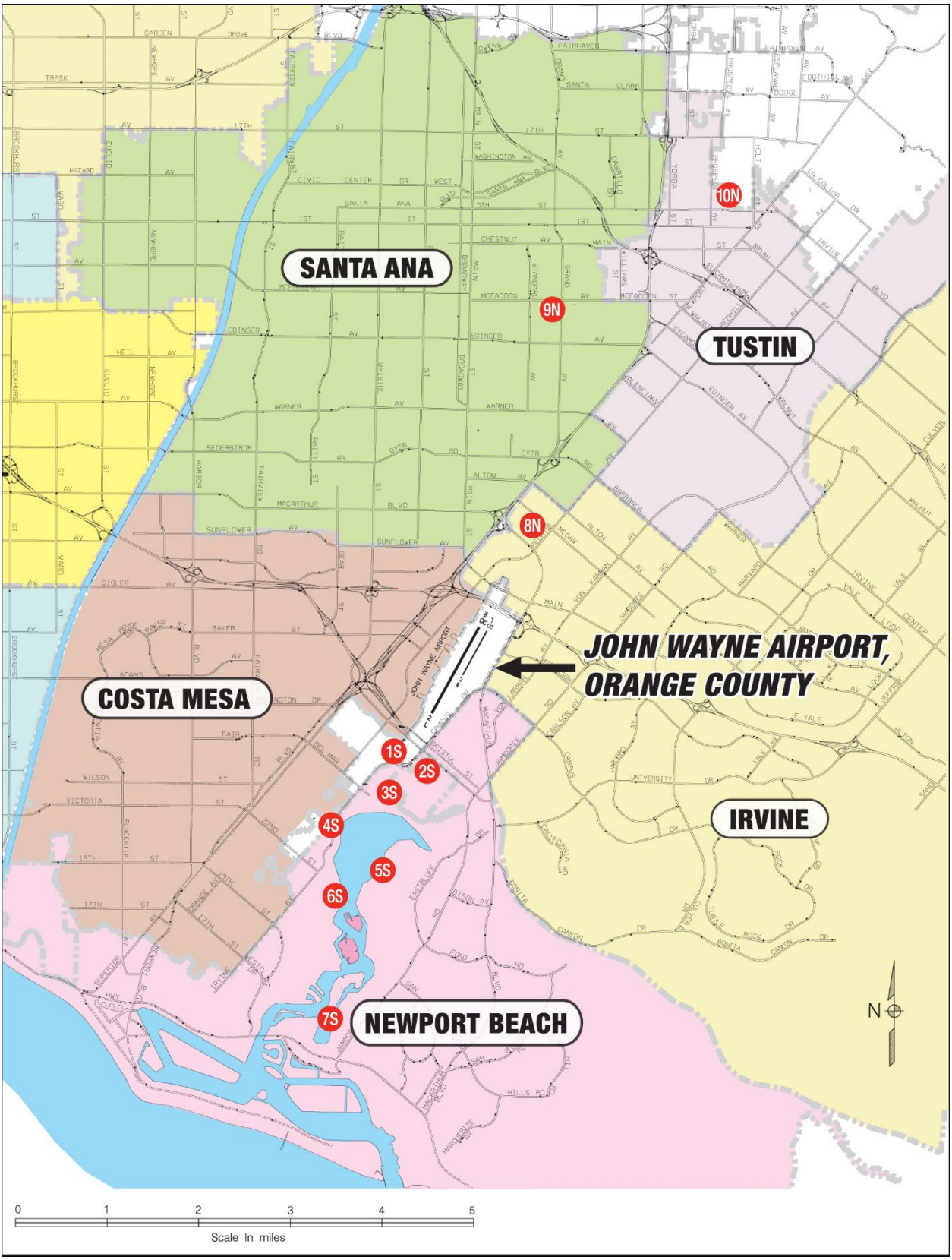
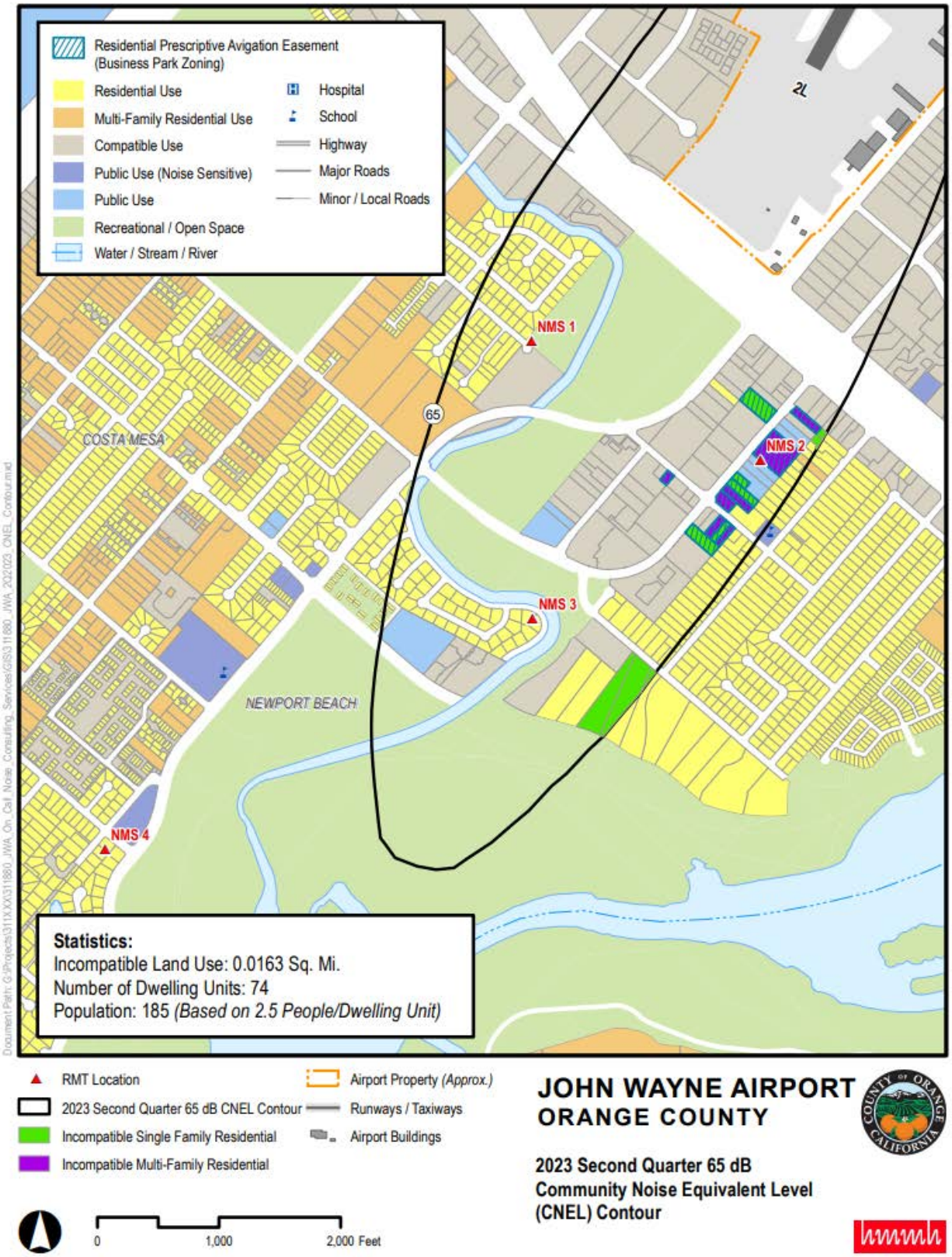


FIGURE 2
NOISE IMPACT AREA MAP



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
April - June 2023

Period	Carriers		GA Jet (1)	Total	Average Daily
	Jet	Prop		Operations (2)	Jet Operations
April	8,154	0	3,408	21,632	385
May	8,688	0	3,774	22,748	402
June	8,696	0	3,822	22,899	417
Second Quarter	25,538	0	11,004	67,279	402
Twelve Months 07/01/22 - 06/30/23	101,739	0	45,043	282,027	402

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

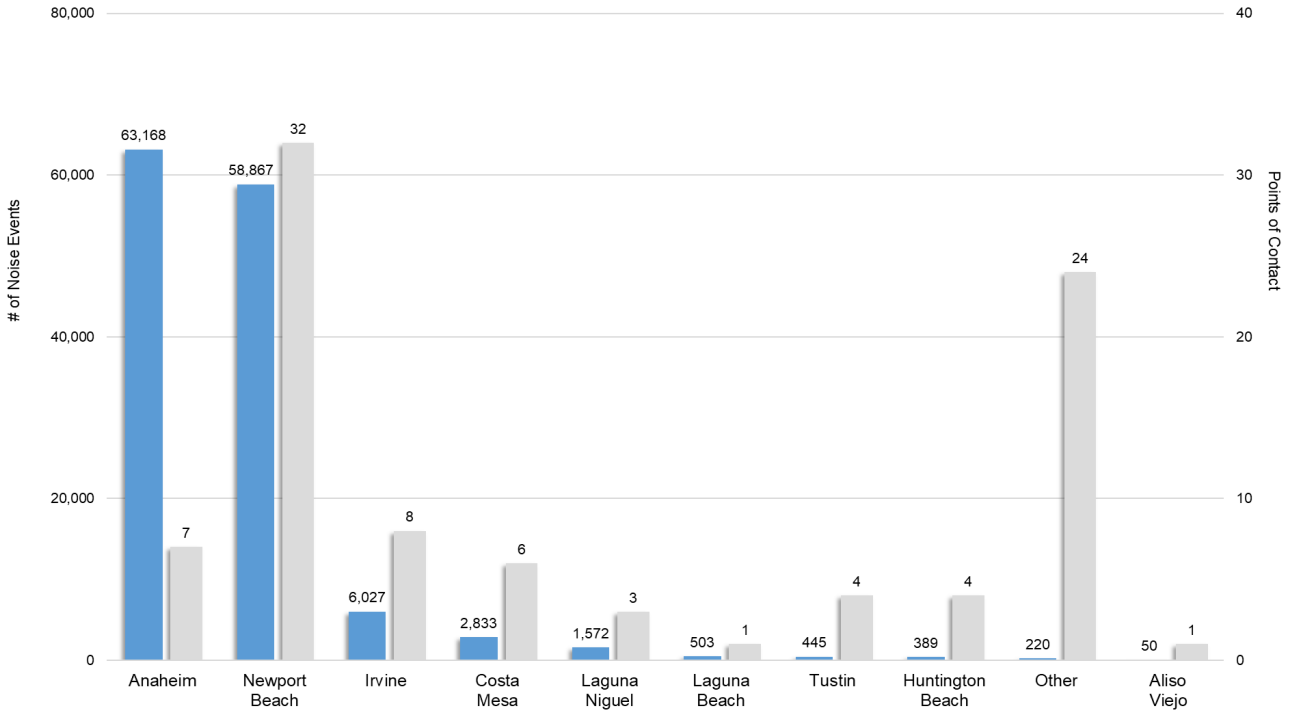
Four hundred eighteen residences in the Santa Ana Heights area have been sound attenuated and an avigation easement reserved through the County's Acoustical Insulation Program, which closed in December 2009. The County has also acquired 46 residences as part of the Purchase Assurance Program, many of 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 (April 1, 2023 - June 30, 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

134,074 Noise Events | 90 Points of Contact
April 1, 2023 to June 30, 2023



NOTE: The 134,074 Noise Events was a 83.9% increase for the 72,902 Noise Events from last quarter, and a 9.9% increase from the 121,988 Noise Events from the same quarter last year.

FIGURE 3.2
NATURE OF DISTURBANCES

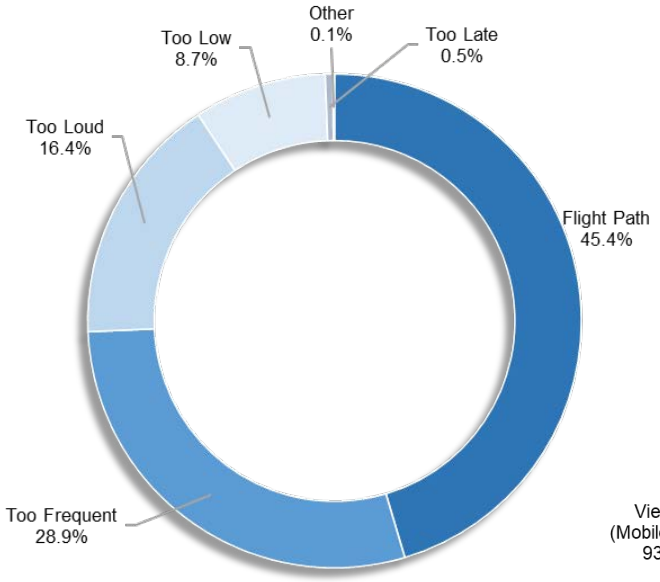


FIGURE 3.3
ENQUIRY METHOD

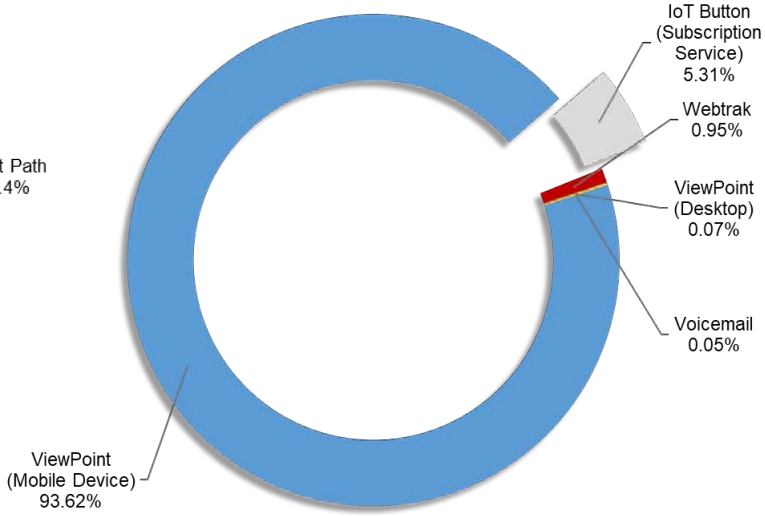


TABLE 2
LONG TERM MEASURED LEVELS
Aircraft CNEL from 07/01/22 through 06/30/23
Values in dB at Each Site

Period	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
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**
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**	**91**	**91**	**91**	**91**	**91**	**91**	**91**	**72**	**89**
Q-3 2022 thru Q-2 2023										
Total	**68.1**	**66.9**	**67.1**	**60.2**	**59.5**	**60.6**	**57.0**	**68.3**	**42.8**	**57.9**
# Days	**365**	**365**	**354**	**359**	**359**	**364**	**363**	**356**	**227**	**360**
Q-2 2022 thru Q-1 2023 (Previous 4 Quarters)										
Total	**68.0**	**66.7**	**67.1**	**60.0**	**59.4**	**60.4**	**56.8**	**68.3**	**42.6**	**57.8**
# Days	**365**	**363**	**354**	**359**	**359**	**364**	**363**	**355**	**224**	**362**
Change from Previous 4 Quarters										
	0.1	**0.2**	**0.0**	**0.2**	**0.1**	**0.2**	**0.2**	**0.0**	**0.2**	**0.1**

TABLE 3
DAILY CNEL VALUES AT EACH MONITOR STATION
April 2023

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	67.3	66.7	66.6	59.4	59.4	59.1	55.9	67.5	30.0	56.9
2	68.5	67.3	67.2	60.8	60.2	61.0	58.1	69.6	27.5	59.6
3	68.4	67.3	68.4	59.8	59.6	62.9	57.3	66.3	42.3	55.6
4	65.0	64.4	64.9	56.7	56.0	59.2	53.6	67.5	32.3	56.9
5	67.9	66.8	66.7	60.1	59.5	59.7	57.1	67.8	43.3	57.0
6	67.7	66.8	66.4	59.0	59.2	59.8	56.7	67.6	34.3	56.4
7	68.8	67.8	67.4	60.4	60.0	60.4	57.4	68.5	35.0	58.3
8	67.9	66.7	66.5	59.8	59.7	59.8	57.1	67.2	47.1	57.0
9	68.1	67.2	67.2	60.2	59.8	60.3	56.5	69.0	34.2	58.2
10	67.6	67.0	67.3	60.2	59.4	60.5	56.9	68.4	*#N/A	58.3
11	67.3	66.4	66.3	58.8	57.9	58.5	55.5	68.0	35.0	57.0
12	68.3	66.2	67.1	61.1	59.2	59.8	56.9	68.3	39.7	58.6
13	69.0	67.3	68.1	62.4	60.3	61.1	59.1	69.2	*#N/A	59.7
14	68.7	67.4	67.6	61.7	60.2	60.0	58.3	69.2	*#N/A	59.0
15	67.7	66.9	66.7	60.0	59.7	60.6	57.5	68.0	46.0	58.2
16	69.3	68.2	67.9	61.3	60.7	61.7	58.6	69.3	40.9	58.7
17	69.0	67.6	67.7	61.3	60.4	61.2	57.7	69.0	*#N/A	59.5
18	68.1	66.7	66.7	60.4	59.5	60.3	58.0	68.0	35.9	58.3
19	68.0	67.1	66.8	60.5	59.8	60.8	58.2	68.1	39.8	58.3
20	69.0	68.0	67.9	60.4	59.9	60.5	57.3	68.1	40.4	57.5
21	68.0	67.5	66.8	59.0	58.9	59.3	56.3	67.7	41.9	50.6
22	67.2	66.4	65.9	59.3	58.4	59.5	56.2	67.5	38.0	#N/A
23	69.0	67.8	67.8	61.4	60.2	61.4	58.0	69.9	46.3	#N/A
24	68.7	67.3	67.6	61.2	60.0	61.5	57.6	68.5	39.3	57.3
25	68.0	66.7	66.8	60.5	59.6	60.7	57.6	67.4	*#N/A	57.2
26	67.9	67.2	67.1	59.8	59.5	60.2	56.1	67.7	38.8	57.3
27	68.6	67.8	67.6	60.3	59.8	60.9	56.5	69.5	37.2	58.2
28	68.4	67.2	67.6	60.8	60.0	60.9	56.7	69.3	*#N/A	58.4
29	67.7	66.8	66.6	59.1	58.7	59.5	56.0	67.9	*#N/A	57.3
30	68.8	67.1	67.1	59.0	56.9	58.2	54.0	69.7	*#N/A	59.3
Days	30	30	30	30	30	30	30	30	22	28
En. Avg	68.2	67.1	67.1	60.3	59.5	60.4	57.1	68.4	41.0	57.9

#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
May 2023

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	68.5	66.9	67.2	61.4	59.8	61.3	58.6	68.8	*#N/A	59.2
2	67.1	66.3	66.5	60.0	59.7	60.7	58.2	67.5	45.3	57.3
3	68.0	66.9	66.9	60.8	59.9	60.7	58.0	68.3	34.0	58.8
4	68.4	67.3	67.1	61.2	60.4	61.3	58.8	69.9	49.9	59.8
5	68.6	67.6	67.2	60.8	60.7	60.9	58.5	69.1	34.9	59.2
6	67.2	66.7	66.2	59.8	59.7	59.8	57.2	67.4	42.9	57.1
7	68.9	68.1	67.7	61.2	60.7	61.6	58.7	69.8	44.0	59.7
8	68.6	67.4	67.5	61.1	60.1	60.8	58.5	69.2	42.7	59.1
9	67.9	67.1	66.8	60.2	59.8	59.9	57.7	68.0	48.0	57.8
10	68.3	67.2	67.4	61.2	59.6	61.3	58.4	68.6	38.0	58.3
11	69.0	68.2	68.0	61.3	60.3	61.7	58.8	68.9	42.6	58.8
12	68.8	67.6	67.9	61.1	59.2	61.1	57.9	69.2	41.5	58.9
13	68.0	66.7	67.0	59.6	57.7	59.0	55.6	67.6	43.5	56.4
14	68.6	67.4	67.4	60.6	58.9	60.4	56.7	68.9	41.1	58.3
15	69.1	67.4	68.4	60.8	59.4	61.0	56.7	68.8	37.9	57.7
16	67.8	66.7	66.9	59.6	59.1	59.9	56.4	67.9	43.5	58.5
17	68.1	66.6	67.1	59.5	58.8	60.0	56.3	68.1	*#N/A	57.5
18	68.6	67.0	67.3	60.5	59.2	60.6	56.9	69.1	41.5	58.4
19	69.3	67.6	68.1	60.7	59.1	60.5	55.8	69.1	46.8	58.5
20	68.2	67.0	67.0	59.4	58.1	59.5	55.9	67.8	41.7	57.0
21	69.0	67.8	67.7	60.4	59.2	60.6	56.6	69.5	*#N/A	57.9
22	68.5	67.3	67.3	60.0	58.8	60.4	56.7	69.4	*#N/A	58.6
23	68.2	66.6	67.1	60.7	58.9	60.4	55.4	67.9	38.0	57.6
24	68.7	67.6	67.6	61.4	59.7	61.1	57.9	68.8	43.7	58.8
25	69.1	68.0	67.5	61.7	60.9	62.1	59.1	69.6	42.5	59.6
26	69.0	68.3	67.8	61.1	61.2	62.4	58.9	69.2	46.3	59.1
27	67.5	66.6	65.9	60.2	59.7	60.3	57.9	68.0	31.3	57.2
28	67.9	66.7	66.2	60.7	59.5	60.5	57.3	68.3	*#N/A	57.7
29	68.5	67.1	67.3	61.2	59.3	61.2	58.1	69.4	33.0	58.3
30	68.2	67.2	67.2	60.3	60.0	60.7	57.9	68.6	*#N/A	58.1
31	67.2	66.4	66.6	60.2	59.4	60.3	57.6	68.0	29.7	57.4
Days	31	31	31	31	31	31	31	31	25	31
En. Avg	68.4	67.2	67.3	60.6	59.6	60.8	57.6	68.7	43.3	58.4

#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
June 2023

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	68.8	67.7	68.1	61.6	60.5	62.0	59.0	69.0	*#N/A	57.9
2	68.8	67.9	67.8	61.4	60.7	61.7	58.8	69.0	39.0	58.1
3	67.9	66.9	67.2	60.4	59.0	60.3	57.2	67.8	47.0	57.2
4	69.0	67.9	68.1	61.1	60.0	60.7	57.0	69.6	43.5	58.7
5	68.9	67.0	67.7	61.7	60.0	61.1	58.6	69.3	*#N/A	57.9
6	68.4	66.5	67.6	61.5	60.0	61.2	58.7	68.6	38.9	57.6
7	68.3	67.3	67.4	60.7	59.8	60.0	58.1	68.6	48.3	57.4
8	68.9	68.3	67.8	60.9	60.6	61.4	58.9	69.0	37.2	57.9
9	68.7	67.5	67.6	60.7	60.5	61.2	57.9	69.5	45.4	58.8
10	67.9	67.1	67.2	60.6	59.1	60.2	57.0	68.8	38.4	58.2
11	68.5	67.4	67.4	61.5	59.6	61.2	58.6	69.6	28.4	58.7
12	68.9	68.1	67.9	61.3	60.7	61.9	58.9	69.8	44.1	59.1
13	67.9	67.3	67.2	60.6	59.9	60.5	57.7	68.8	42.6	57.8
14	68.2	67.2	67.4	60.5	59.9	59.2	56.6	68.8	45.1	57.9
15	69.1	68.1	68.0	61.6	60.7	61.9	58.6	69.6	44.5	58.9
16	68.6	68.3	68.2	61.4	60.7	61.7	58.0	69.5	45.4	57.7
17	67.8	67.2	66.7	59.6	59.3	60.1	56.9	68.5	40.2	57.0
18	68.8	67.8	67.3	61.0	59.4	60.7	57.3	69.5	44.9	58.4
19	69.0	67.7	67.8	61.6	60.4	61.2	58.2	69.0	43.5	58.3
20	68.1	67.3	67.0	60.3	59.7	61.0	57.2	68.5	45.5	57.5
21	68.3	67.7	67.6	60.7	60.0	60.8	57.3	68.3	41.9	56.9
22	69.1	68.3	68.1	61.6	60.8	61.7	56.1	69.8	33.3	58.8
23	69.0	68.2	67.9	61.3	60.8	61.7	58.5	69.4	45.1	58.5
24	67.8	67.1	66.9	60.3	59.6	60.2	56.6	68.1	30.6	56.9
25	69.2	68.5	68.4	61.4	60.7	61.8	57.4	69.3	*#N/A	58.2
26	68.9	67.8	68.0	61.1	60.3	61.3	57.8	68.9	*#N/A	57.9
27	67.9	66.8	66.8	60.4	59.2	60.2	57.0	68.3	38.0	56.6
28	68.5	67.4	67.5	61.2	59.5	61.1	56.9	68.4	32.7	57.3
29	69.4	68.3	68.2	61.5	60.5	62.0	58.3	69.1	41.8	58.0
30	69.4	68.5	68.4	61.1	60.5	62.0	57.6	69.7	*#N/A	58.5
Days	30	30	30	30	30	30	30	30	25	30
En. Avg	68.6	67.7	67.7	61.0	60.1	61.1	57.8	69.0	43.1	58.0

#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
April - June 2023

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Air Canada	B38M	91	Average	92.6	91.5	92.6	85.7	84.1	85.1	81.0	#N/A	#N/A	#N/A
			Count	(89)	(87)	(90)	(88)	(83)	(81)	(81)	(0)	(0)	(0)
Alaska	B737	33	Average	95.4	94.5	94.5	88.8	88.5	89.4	85.1	#N/A	#N/A	#N/A
			Count	(33)	(33)	(33)	(33)	(32)	(32)	(33)	(0)	(0)	(0)
	B738	930	Average	97.9	96.6	95.5	89.5	89.0	90.3	87.1	93.7	90.0	81.2
			Count	(904)	(868)	(900)	(889)	(871)	(815)	(901)	(6)	(2)	(3)
Allegiant	A319	44	Average	94.0	92.8	93.0	87.8	86.3	87.7	83.5	#N/A	#N/A	#N/A
			Count	(44)	(42)	(43)	(41)	(39)	(40)	(41)	(0)	(0)	(0)
	A320	205	Average	95.3	94.5	92.9	87.7	86.3	88.0	84.0	#N/A	#N/A	#N/A
			Count	(201)	(191)	(201)	(203)	(188)	(180)	(197)	(0)	(0)	(0)
American	A21N	86	Average	92.1	91.1	92.0	85.3	83.3	84.6	80.5	#N/A	#N/A	#N/A
			Count	(86)	(81)	(85)	(84)	(81)	(77)	(51)	(0)	(0)	(0)
	A319	163	Average	94.8	93.8	94.4	88.0	86.6	87.1	82.8	90.2	#N/A	#N/A
			Count	(159)	(153)	(158)	(159)	(153)	(134)	(155)	(1)	(0)	(0)
	A320	87	Average	95.5	94.5	94.7	87.5	85.8	86.1	82.3	88.1	#N/A	#N/A
			Count	(82)	(79)	(83)	(85)	(77)	(69)	(76)	(1)	(0)	(0)
	A321	172	Average	99.3	98.7	98.8	91.4	89.4	89.2	85.3	#N/A	#N/A	#N/A
			Count	(169)	(155)	(167)	(165)	(148)	(150)	(163)	(0)	(0)	(0)
	B38M	267	Average	92.8	92.1	92.4	85.2	84.7	86.0	81.9	88.2	#N/A	#N/A
			Count	(261)	(245)	(254)	(260)	(240)	(241)	(249)	(2)	(0)	(0)
	B738	922	Average	99.2	98.0	98.3	90.8	90.0	90.7	87.5	96.1	87.6	83.8
			Count	(887)	(851)	(883)	(880)	(848)	(741)	(862)	(12)	(5)	(4)
Breeze	A223	250	Average	89.2	89.3	87.9	82.2	81.7	83.0	79.4	82.7	#N/A	#N/A
			Count	(246)	(232)	(242)	(237)	(222)	(217)	(117)	(1)	(0)	(0)
	E190	26	Average	93.0	92.3	90.8	85.8	85.2	87.1	84.2	#N/A	#N/A	#N/A
			Count	(26)	(25)	(25)	(26)	(26)	(26)	(25)	(0)	(0)	(0)
	E195	18	Average	92.2	91.8	90.7	85.6	85.4	88.0	84.8	#N/A	#N/A	#N/A
			Count	(18)	(18)	(18)	(18)	(18)	(17)	(17)	(0)	(0)	(0)
Delta	A220	278	Average	88.8	88.7	88.4	81.1	79.4	80.9	77.9	88.6	80.0	#N/A
			Count	(273)	(260)	(271)	(259)	(187)	(209)	(34)	(3)	(1)	(0)
	A223	239	Average	90.3	90.0	90.0	82.2	80.6	82.1	78.7	89.2	84.5	#N/A
			Count	(229)	(221)	(229)	(218)	(198)	(193)	(68)	(2)	(1)	(0)
	A319	2	Average	95.6	95.3	95.2	88.7	87.4	88.1	83.0	#N/A	#N/A	#N/A
			Count	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(0)	(0)	(0)
	A320	1	Average	96.7	94.7	94.9	89.5	87.4	#N/A	85.5	#N/A	#N/A	#N/A
			Count	(1)	(1)	(1)	(1)	(1)	(0)	(1)	(0)	(0)	(0)
	B752	350	Average	96.3	95.7	96.0	88.8	87.8	88.3	84.4	92.9	85.5	#N/A
			Count	(339)	(319)	(342)	(344)	(319)	(303)	(337)	(3)	(1)	(0)
FedEx	A306	63	Average	96.8	96.5	94.5	88.8	88.4	89.9	86.1	#N/A	#N/A	#N/A
			Count	(63)	(59)	(63)	(62)	(60)	(60)	(60)	(0)	(0)	(0)
Frontier	A20N	312	Average	88.4	88.2	88.0	81.8	79.8	82.6	79.5	83.0	#N/A	#N/A
			Count	(306)	(298)	(301)	(297)	(202)	(271)	(138)	(2)	(0)	(0)
	A320	37	Average	95.0	94.4	92.9	86.6	85.1	87.2	84.3	#N/A	#N/A	#N/A
			Count	(36)	(36)	(35)	(37)	(36)	(33)	(37)	(0)	(0)	(0)
Horizon	E175	216	Average	93.3	92.3	90.8	85.5	84.8	87.2	84.0	92.5	#N/A	#N/A
			Count	(212)	(205)	(207)	(211)	(205)	(196)	(208)	(1)	(0)	(0)
Southwest	B38M	5	Average	88.8	87.7	87.2	81.9	80.8	83.4	81.8	#N/A	#N/A	#N/A
			Count	(5)	(5)	(4)	(4)	(4)	(5)	(1)	(0)	(0)	(0)
	B737	1812	Average	93.8	93.1	91.6	86.1	86.0	87.2	84.2	90.8	80.3	79.0
			Count	(1764)	(1682)	(1744)	(1761)	(1711)	(1569)	(1716)	(12)	(1)	(1)
	B738	1	Average	88.1	88.3	86.7	82.9	82.4	83.3	80.3	#N/A	#N/A	#N/A
			Count	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(0)	(0)	(0)
Spirit	A20N	193	Average	88.7	88.1	88.2	83.1	81.3	83.3	79.8	86.5	#N/A	#N/A
			Count	(186)	(180)	(187)	(184)	(147)	(158)	(123)	(1)	(0)	(0)
	A320	166	Average	92.5	92.2	90.7	85.6	84.3	85.8	81.9	85.4	#N/A	#N/A
			Count	(162)	(153)	(162)	(162)	(144)	(142)	(154)	(1)	(0)	(0)
United	A319	127	Average	94.5	93.4	93.7	87.1	85.8	86.7	82.8	88.7	#N/A	#N/A
			Count	(123)	(123)	(124)	(122)	(120)	(107)	(116)	(1)	(0)	(0)
	A320	181	Average	95.5	94.7	94.7	87.1	85.9	86.6	83.2	93.0	86.2	#N/A
			Count	(175)	(166)	(175)	(172)	(163)	(152)	(165)	(5)	(4)	(0)
	B737	271	Average	97.5	95.8	97.4	90.5	90.5	91.0	87.4	95.1	88.9	82.5
			Count	(260)	(256)	(259)	(261)	(255)	(232)	(254)	(5)	(3)	(1)
	B738	1000	Average	99.0	97.6	98.3	90.4	89.8	90.5	87.6	95.0	89.3	80.9
			Count	(958)	(920)	(953)	(945)	(910)	(815)	(918)	(15)	(10)	(7)
UPS	B752	51	Average	94.8	94.7	93.4	87.0	86.5	87.7	83.1	#N/A	#N/A	#N/A
			Count	(51)	(43)	(51)	(51)	(49)	(48)	(49)	(0)	(0)	(0)
WestJet	B737	91	Average	95.8	94.9	95.4	90.0	89.3	90.6	85.7	#N/A	#N/A	#N/A
			Count	(89)	(85)	(89)	(87)	(85)	(81)	(85)	(0)	(0)	(0)

TABLE 7
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commercial Class E
April - June 2023

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Delta	A220	196	Average	88.7	88.7	88.2	81.0	79.3	80.9	77.8	86.0	#N/A	#N/A
			Count	(191)	(180)	(188)	(180)	(138)	(154)	(16)	(3)	(0)	(0)
	A223	140	Average	89.8	90.0	89.0	81.4	80.2	81.4	78.1	82.9	#N/A	#N/A
			Count	(136)	(132)	(135)	(134)	(101)	(106)	(24)	(1)	(0)	(0)
SkyWest Coml.	E175	921	Average	91.4	90.8	89.8	85.3	84.4	86.4	83.4	89.8	#N/A	#N/A
			Count	(907)	(862)	(887)	(896)	(862)	(837)	(874)	(2)	(0)	(0)
Southwest	B737	2159	Average	91.5	91.2	89.7	85.0	84.6	85.7	83.2	90.6	#N/A	#N/A
			Count	(2112)	(1986)	(2095)	(2104)	(2058)	(1931)	(2026)	(8)	(0)	(0)

TABLE 8
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commuter
April - June 2023

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Delux Public Charters	E135	319	Average	85.7	85.6	86.7	80.1	78.8	80.7	76.9	#N/A	#N/A	#N/A
			Count	(312)	(306)	(310)	(287)	(88)	(251)	(10)	(0)	(0)	(0)
	E145	218	Average	86.5	86.7	87.4	79.9	78.5	80.6	79.3	82.5	#N/A	#N/A
			Count	(215)	(200)	(211)	(172)	(54)	(168)	(8)	(1)	(0)	(0)
SkyWest	CRJ7	90	Average	88.4	88.2	87.4	81.0	81.2	82.6	81.1	#N/A	#N/A	#N/A
			Count	(88)	(84)	(87)	(42)	(76)	(80)	(78)	(0)	(0)	(0)
	E175	2	Average	91.2	91.9	89.7	83.2	83.2	84.8	81.1	#N/A	#N/A	#N/A
			Count	(2)	(1)	(2)	(2)	(1)	(1)	(1)	(0)	(0)	(0)

TABLE 8-GA
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
General Aviation
April - June 2023

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
General Aviation	Jet	5240	Average	88.0	87.5	89.0	82.7	82.2	83.5	81.6	85.7	82.3	83.5
			Count	(4999)	(4731)	(4938)	(3030)	(2125)	(3023)	(1241)	(39)	(3)	(2)

TABLE 9
AIR CARRIER OPERATIONAL HISTORY

Carrier		AC Type	Year				
			2019	2020	2021	2022	2023
Air Canada	AC	A223			102	192	
		B38M			6	494	364
Alaska	AS	A319	244	314			
		A320	3,403	1,733	4,038	3,888	70
		B737	160	14	24	116	112
		B738	5,247	767	1,327	2,728	3,461
Allegiant	G4	A319			1,076	676	188
		A320			488	1,399	779
American	AA	A21N	2	2	88	51	228
		A319	432	474	220	498	658
		A320	634	488	783	478	468
		A321	214	571	1,035	1,099	648
		B38M			17	1,755	1,070
		B738	10,972	5,201	8,144	8,517	3,620
		B752	36				
Breeze	MX	A223					678
		E190					54
		E195					46
Compass	CP	E175	3,150	656			
Delta	DL	A220	851	1,954	4,036	3,048	1,385
		A223			4	1,934	1,733
		A319	1,987	828	952	2,071	88
		A320	11	8	3	532	14
		B712	2,495				
		B737	8	24			
		B738	40	2	12	58	12
		B752	2,889	1,065	1,423	2,010	1,316
FedEx	FM	A306	510	512	502	498	244
Frontier	F9	A20N	900	550	1,363	1,818	1,268
		A319	100	2	88		
		A320	428	392	361	310	128
Horizon	QX	DH8D	12				
		E175	4,257	2,986	3,293	1,256	611
SkyWest Coml.	SC	CRJ9		2			
		E175	7,686	3,535	3,711	5,446	3,410
Southwest	WN	B38M	10		683	4,038	88
		B737	29,360	14,268	22,212	31,166	15,895
		B738	134	3,780	7,738	1,720	20
Spirit	NK	A20N		180	1,735	2,220	732
		A319			250	158	2
		A320		19	346	1,132	685
Sun Country	SY	B737			238	8	
		B738			24	2	
United	UA	A319	1,216	590	819	1,047	315
		A320	3,151	1,227	1,020	2,054	604
		B737	2,816	999	2,622	4,116	1,230
		B738	5,627	2,645	2,946	5,685	4,029
		B752			2		
UPS	5X	A306	12	18	18	48	
		B752	404	404	392	362	204
WestJet	WS	B736	58	34			
		B737	618	126	112	632	360
Total			90,074	46,370	74,253	95,260	46,817

TABLE 10
AIRCRAFT OPERATIONAL HISTORY

Aircraft	Year				
	2019	2020	2021	2022	2023
A20N	900	730	3,098	4,038	2,000
A21N	2	2	88	51	228
A220	851	1,954	4,036	3,048	1,385
A223			106	2,126	2,411
A306	522	530	520	546	244
A319	3,979	2,208	3,405	4,450	1,251
A320	7,627	3,867	7,039	9,793	2,748
A321	214	571	1,035	1,099	648
B38M	10		706	6,287	1,522
B712	2,495				
B736	58	34			
B737	32,962	15,431	25,208	36,038	17,597
B738	22,020	12,395	20,191	18,710	11,142
B752	3,329	1,469	1,817	2,372	1,520
CRJ9		2			
DH8D	12				
E175	15,093	7,177	7,004	6,702	4,021
E190					54
E195					46
Total	90,074	46,370	74,253	95,260	46,817

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	737-800 Max	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	Year				
			2019	2020	2021	2022	2023
Air Canada	AC	A223			.140	.263	
		B38M			.008	.677	.499
Alaska	AS	A319	.334	.432			
		A320	4.660	2.363	5.534	5.326	.096
		B737	.219	.022	.033	.159	.153
		B738	7.189	1.046	1.816	3.734	4.742
Allegiant	G4	A319			1.474	.926	.258
		A320			.668	1.915	1.068
American	AA	A21N	.003	.003	.121	.068	.310
		A319	.592	.648	.296	.682	.901
		A320	.868	.664	1.082	.655	.641
		A321	.293	.779	1.414	1.507	.888
		B38M			.022	2.403	1.471
		B738	15.030	7.107	11.156	11.666	4.956
		B752	.049				
Breeze	MX	A223					.929
		E190					.074
		E195					.063
Compass	CP	E175	4.315	.896			
Delta	DL	A220	1.164	2.667	5.529	4.175	1.896
		A223			.005	2.649	2.373
		A319	2.723	1.131	1.304	2.836	.123
		A320	.014	.014	.003	.729	.019
		B712	3.419				
		B737	.011	.033			
		B738	.055	.003	.016	.079	.016
		B752	3.956	1.454	1.948	2.753	1.805
FedEx	FM	A306	.699	.699	.688	.682	.334
Frontier	F9	A20N	1.233	.751	1.866	2.490	1.737
		A319	.137	.003	.121		
		A320	.586	.536	.496	.425	.175
Horizon	QX	DH8D	.016				
		E175	5.830	4.079	4.512	1.721	.836
SkyWest Coml.	SC	CRJ9		.003			
		E175	10.529	4.833	5.085	7.460	4.668
Southwest	WN	B38M	.014		.937	5.532	.123
		B737	40.216	19.497	30.416	42.693	21.773
		B738	.184	5.161	10.605	2.353	.027
Spirit	NK	A20N		.246	2.381	3.041	1.000
		A319			.342	.216	.003
		A320		.025	.471	1.551	.940
Sun Country	SY	B737			.326	.011	
		B738			.033	.003	
United	UA	A319	1.666	.806	1.123	1.433	.433
		A320	4.315	1.675	1.397	2.814	.827
		B737	3.855	1.366	3.589	5.644	1.685
		B738	7.712	3.612	4.036	7.786	5.515
		B752			.003		
UPS	5X	A306	.016	.025	.025	.066	
		B752	.553	.552	.537	.496	.279
WestJet	WS	B736	.079	.046			
		B737	.847	.172	.153	.866	.493
Total			123.384	63.347	101.712	130.485	64.132

QUARTERLY NOISE MEETING

Date: June 27, 2023
Time: 2:00 pm
Place: Virtual (Zoom)

ITEMS DISCUSSED

Anaheim Hills resident, Mr. Roger Allensworth, expressed concerns with constant aircraft noise resulting from changes in the flight path near his home. Mr. Allensworth said he contacted the Federal Aviation Administration (FAA) and Congresswoman Young Kim's office regarding his concerns. Mr. Allensworth mentioned that it appears aircraft are adjusting their rudders when overflying his neighborhood. Mr. Allensworth asked why the FAA has not reverted back to the previous flight path used before 2017. Mr. Anthony Cangey, Airport Access & Noise Specialist at John Wayne Airport, responded to Mr. Allensworth's concerns by stating he went through the proper channels by contacting the FAA. Mr. Cangey added that JWA strictly enforces aircraft access and noise restrictions, as prescribed in the Settlement Agreement and Phase 2 Access Plan. Mr. Allensworth mentioned he has spoken with other concerned neighbors and these residents feel they may be forced to move if aircraft noise continues. Mr. Allensworth also expressed that aircraft activity near his residence may negatively affect home values in his neighborhood. Mr. Cangey encouraged Mr. Allensworth to contact the JWA Access & Noise Office to further discuss these concerns.

Newport Beach resident, Dr. Jim Mosher, asked about the status of the aircraft altitude analysis and the results of that study. Mr. Cangey explained that the data used in the altitude analysis for each year is collected from the month of August, so the presentation was going to be postponed until September or October to include August 2023 data.

Dr. Mosher asked when the results of the Fly Friendly Program would be presented to the public. Mr. Cangey stated the results will be announced in Fall 2023. Mr. Cangey also added that JWA is still in communication with Fifth District County Supervisor Katrina Foley's office and the JWA Advisory Committee during this process. Mr. Cangey also added that JWA continues to collaborate with GA pilots for outreach and program improvements.

Dr. Mosher wanted to know the status of the 2024 Plan Year capacity allocations. Mr. Cangey mentioned staff recommendations would be made public on June 28, presented to the Airport Commission on July 5, followed by Board of Supervisors' action on July 15.

Dr. Mosher noticed in the Quarter 1 2023 Noise Report that commercial carriers are flying newer, quieter aircraft less frequently than in the past, and asked if this was a result of changes in capacity allocations when compared to last year. Mr. Cangey explained that the types of aircraft that commercial carriers operate at JWA are at their discretion. Mr. Cangey added that United Airlines recently submitted a noise qualification test packet to receive approval to operate the Boeing 737-8 MAX at JWA.

Dr. Mosher had commented that in ten percent of the General Aviation (GA) violations listed in the Detailed Noise Events Reports, the call sign was listed as "UNKNOWN", and he wanted to know if the Airport resolves violations that show as UNKNOWN. Mr. Cangey explained that if a call sign is listed as UNKNOWN in JWA's Airport Noise and Operations Management System (ANOMS), the ANO will utilize other sources to obtain this information and update records in ANOMS.

Dr. Mosher stated that in the General Aviation Noise Ordinance (GANO), a violation is assigned to the operator/owner of the aircraft, but in the Semi-Annual GANO report the Airport states that the violation letter is sent to the registered owner, and he is not clear who is regarded as the operator. Dr. Mosher provided a specific example and asked if Clay Lacy, who operates charter aircraft at JWA, would be considered the operator or the pilot of each aircraft under Clay Lacy. Mr. Cangey stated JWA sends GANO violations to the registered owner, the operator, and the pilot-in-command, when contact information is available. Mr. Cangey mentioned that the violation is tied to the tail number of the aircraft.

Dr. Mosher asked why the public is only made aware of the number of GANO violations throughout the year and why it appears some of those violations are excused. Dr. Mosher asked if there is any reason JWA cannot be more transparent and publish a list of the GANO violations that are waived, as the Airport does with its commercial curfew operations. Mr. Cangey said he would discuss these recommendations with Airport management.

Dr. Mosher stated that in the latest Quarterly Noise Report, JWA no longer provided the complaints heat map, but instead, now provides “doughnut” diagrams showing the "nature of the complaint." Dr. Mosher found it odd that the predominant complaint was not “too loud” but instead “off-course” or “too frequent.” Dr. Mosher asked if the system only allows the ability to submit one option for the nature of the complaint and not multiple reasons. Mr. Cangey confirmed that the system only enables complainants to submit one option for the nature of the complaint. Mr. Cangey added that for this specific report, the nature of complaints submitted from Anaheim Hills were listed as “off-course” and “too frequent”, which resulted in a higher percentage of these types.

Dr. Mosher expressed that the complaint data is not meaningful because it is a self-selected group of people affecting the statistics. Dr. Mosher asked if the ANO has attempted to see which kind of planes or carriers are generating the most complaints, like Alaska Airlines, as mentioned in previous meetings. Mr. Cangey explained that the IoT button tags the closest aircraft at the time and place of the complaint.

Dr. Mosher asked how many complaints received each quarter require a response and how much time does it take to complete that task. Mr. Cangey said that since Viewpoint was implemented, the ANO's protocol is if the Airport receives a complaint from the IoT button, we will not respond to the complaint. For all other submission methods, if a complainant requests a response, our office will respond to the first complaint submitted by that complainant for that day, which equates to approximately 6-12 daily complaints.

QUARTERLY NOISE MEETING ROSTER
June 27, 2023

NAME	ORGANIZATION
Jim Mosher	Resident – Newport Beach
Roger Allensworth	Resident – Anaheim Hills
Jason Herman	Air Line Pilots Association, International
Unknown Caller	Unknown
Anthony Cangey	John Wayne Airport
Beatrice Siercke	John Wayne Airport
Cristina Magaña	John Wayne Airport
Kyle Gorny	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):

   0.0163 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:

   Boeing 737-800 – 5,719 (Arrivals + Departures)

5. Total number of aircraft operations during the calendar quarter:

   67,279

6. Number of Air Carrier operations during the calendar quarter:
   (Not mandatory)

   25,538

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)

   41,698

9. Estimated number of operations by Military aircraft during the calendar quarter:
   (Not mandatory)

   43