

**JOHN WAYNE AIRPORT
ORANGE COUNTY**



NOISE ABATEMENT PROGRAM QUARTERLY REPORT

**For the period:
July 1, 2021 through September 30, 2021**

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:

Rick Francis

Interim Airport Director

John Wayne Airport, Orange County

INTRODUCTION

This is the 195th 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:

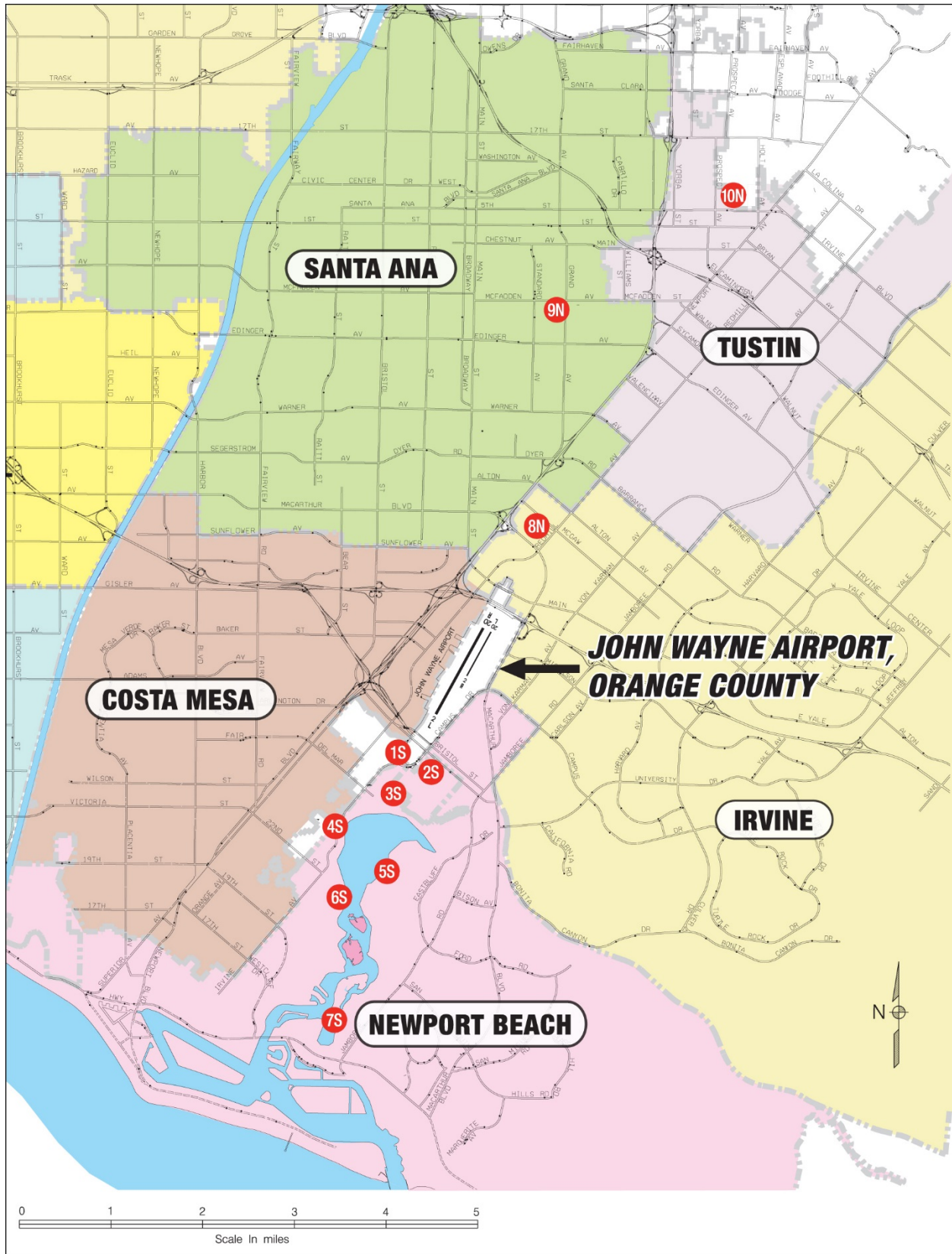
MONITOR STATIONS

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

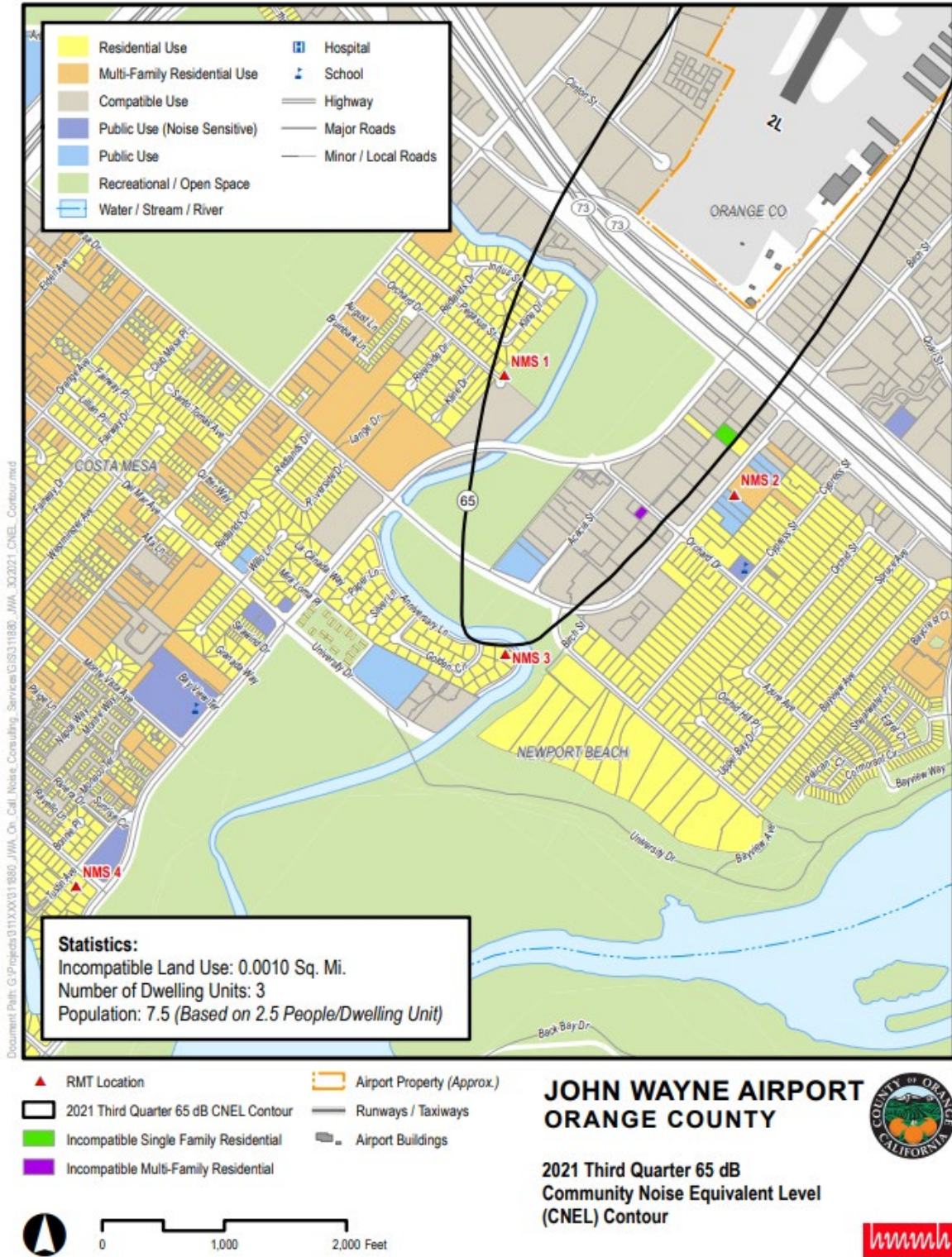
The map in Figure 1 shows the general location of each permanent remote monitor station.

Figure 2 shows the Airport's "Noise Impact Area" for the previous year (October 1, 2020 - September 30, 2021). 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
 July - September 2021

Period	Air Carriers		GA Jet (1)	Total Operations (2)	Average Daily Jet Operations
	Jet	Prop			
July	7,821	0	4,523	31,998	398
August	7,825	0	4,490	29,814	397
September	7,769	0	4,301	27,956	402
Third Quarter	23,415	0	13,314	89,768	399
Twelve Months 10/01/20 - 09/30/21	68,677	0	42,601	298,525	305

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 there were 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.

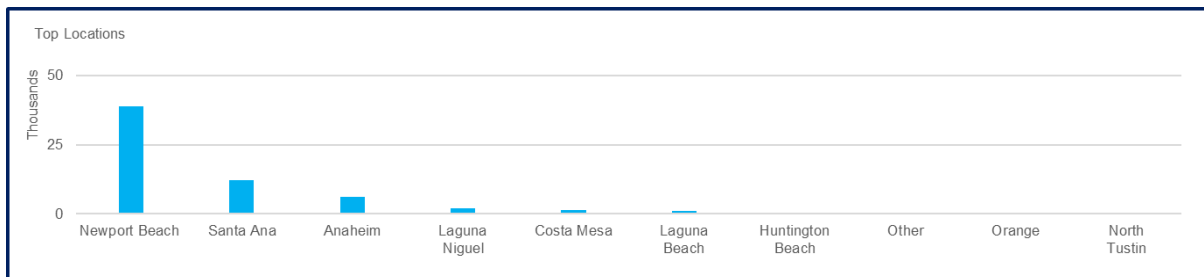
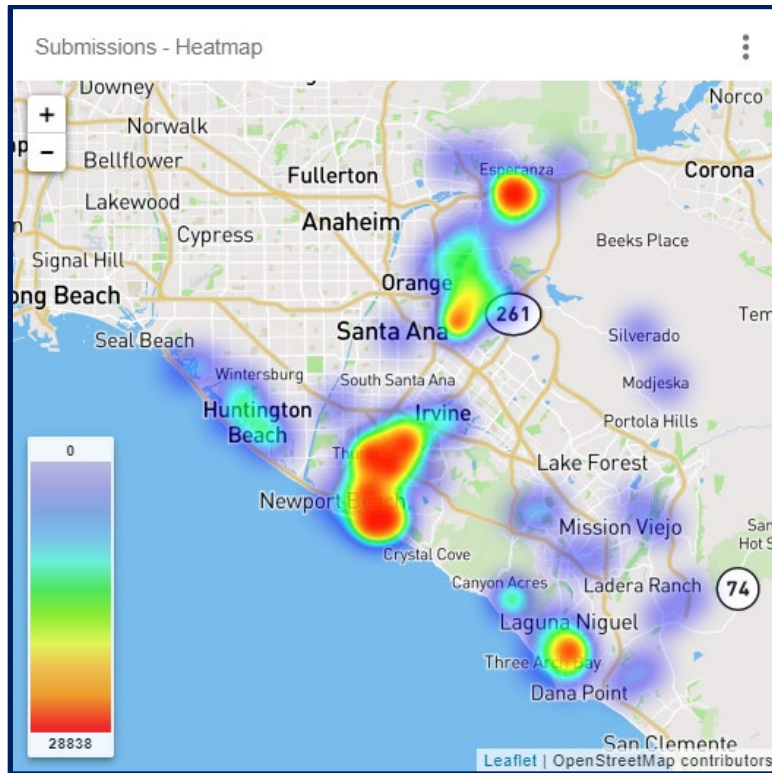
ACOUSTICAL INSULATION PROGRAM

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

COMPLAINT TOTALS (July 1, 2021 - September 30, 2021)

The Airport's Access and Noise Office receives and investigates noise complaints from local citizens and all other sources. During the period of July 1, 2021 through September 30, 2021, the Office received 63,128 complaints from local citizens. This is a 10.4% increase from the 57,197 complaints received last quarter. It is a 127.1% increase from the 27,792 complaints received during the same quarter last year. Figure 4 shows the distribution of the quarterly complaints from local communities.

**FIGURE 3
HISTOGRAM BY COMMUNITY**



Note:

- Newport Beach – 38,865 submissions from 53 different points of contact.
- Santa Ana – 12,302 submissions from 5 different points of contact.
- Anaheim – 6,214 submissions from 20 different points of contact.
- Laguna Niguel – 2,153 submissions from 4 different points of contact.
- Huntington Beach – 499 submissions from 12 different points of contact.
- Other – 298 submissions from 28 different points of contact.
- Orange – 211 submissions from 5 different points of contact.
- North Tustin – 104 submissions from 2 different points of contact.
- 22% of submissions were from a complaint subscription service.

TABLE 2
LONG TERM MEASURED LEVELS
Aircraft CNEL from 10/01/20 through 09/30/21
Values in dB at Each Site

Period	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Oct 2020	63.7	63.1	63.1	55.5	54.7	56.3	52.5	64.2	43.7	52.6
# Days	31	31	31	31	31	31	30	31	21	31
Nov 2020	63.5	63.3	62.5	56.1	55.2	56.1	52.6	64.3	41.1	52.0
# Days	30	30	28	30	30	30	30	30	23	30
Dec 2020	62.9	62.6	62.4	55.7	54.4	56.4	51.9	63.4	43.0	51.5
# Days	31	31	31	31	31	31	31	29	27	31
Q-4 2020	63.4	63.0	62.7	55.8	54.8	56.3	52.3	64.0	42.7	52.1
# Days	92	92	90	92	92	92	91	90	71	92
Jan 2021	62.6	62.3	62.0	55.7	54.7	56.3	52.3	63.4	42.2	52.2
# Days	31	31	31	31	31	31	30	24	15	31
Feb 2021	62.9	60.0	62.3	55.9	55.1	56.4	51.9	63.3	42.3	52.5
# Days	28	28	28	28	28	28	28	28	22	27
Mar 2021	64.8	61.7	63.7	57.8	57.1	57.9	54.4	65.8	43.5	55.4
# Days	31	31	31	31	31	31	31	31	23	31
Q-1 2021	63.6	61.5	62.7	56.6	55.8	56.9	53.1	64.4	42.8	53.7
# Days	90	90	90	90	90	90	89	83	60	89
Apr 2021	65.7	62.2	64.5	58.4	57.4	58.0	54.5	66.0	41.1	55.7
# Days	30	30	30	30	30	30	30	30	25	30
May 2021	66.2	62.7	65.1	59.0	57.7	58.8	54.8	66.7	41.7	56.3
# Days	31	31	31	31	31	31	31	31	27	31
Jun 2021	67.1	63.6	66.0	59.3	58.4	59.7	55.3	67.5	44.6	57.2
# Days	30	30	30	30	30	30	30	30	22	30
Q-2 2021	66.4	62.9	65.2	58.9	57.9	58.9	54.9	66.8	42.6	56.4
# Days	91	91	91	91	91	91	91	91	74	91
Jul 2021	67.9	64.4	67.0	60.0	59.1	60.3	55.5	67.9	39.4	57.2
# Days	31	31	31	31	31	31	31	31	24	31
Aug 2021	67.7	66.1	66.7	59.8	58.9	60.1	55.5	67.7	38.4	57.1
# Days	31	31	31	31	31	31	31	31	23	31
Sep 2021	67.8	66.8	66.8	59.8	59.2	60.1	55.8	67.5	41.9	57.0
# Days	30	30	30	30	30	30	30	30	23	30
Q-3 2021	67.8	65.9	66.8	59.9	59.1	60.1	55.6	67.7	40.1	57.1
# Days	92	92	92	92	92	92	92	92	70	92
Q-4 2020 thru Q-3 2021										
Total	65.7	63.6	64.8	58.1	57.2	58.3	54.2	66.0	42.2	55.3
# Days	365	365	363	365	365	365	363	356	275	364
Q-3 2020 thru Q-2 2021 (Previous 4 Quarters)										
Total	64.4	62.7	63.5	56.9	56.0	57.2	53.1	65.0	42.2	54.0
# Days	365	365	363	365	365	365	363	356	279	364
Change from Previous 4 Quarters										
	1.3	0.9	1.3	1.2	1.2	1.1	1.1	1.0	0.0	1.3

TABLE 3
DAILY CNEL VALUES AT EACH MONITOR STATION
July 2021

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	68.3	64.5	67.3	60.2	59.8	61.1	56.5	68.7	*#N/A	58.0
2	68.4	64.8	67.3	60.3	59.6	60.7	55.3	68.2	*#N/A	57.9
3	66.7	63.1	65.7	58.0	57.5	58.5	54.0	66.4	39.0	55.8
4	66.0	62.8	64.7	57.6	57.9	58.2	51.5	66.5	31.3	57.0
5	68.2	64.8	67.3	59.7	59.1	60.1	54.9	68.3	32.3	57.4
6	68.0	64.3	67.0	60.0	59.0	60.3	55.0	68.1	*#N/A	56.9
7	68.0	64.4	67.0	60.1	59.2	60.6	56.1	66.9	30.6	56.7
8	68.0	64.5	67.0	60.2	59.0	60.3	55.9	68.0	42.4	57.5
9	68.1	64.5	67.2	60.1	59.0	60.3	55.9	68.1	28.6	57.6
10	67.6	64.1	66.4	59.7	58.5	59.7	55.2	67.4	*#N/A	56.6
11	68.3	64.8	67.5	61.0	59.6	61.1	55.7	68.7	*#N/A	57.6
12	68.1	64.4	67.1	60.9	59.5	60.8	56.9	68.8	41.0	58.3
13	67.6	63.9	66.6	60.1	59.2	60.3	56.2	67.6	33.5	56.4
14	67.8	64.3	66.5	60.0	58.7	59.7	54.3	68.5	41.8	57.6
15	68.3	64.7	67.3	60.5	59.5	60.6	54.6	68.5	32.9	57.5
16	68.6	65.1	67.5	60.1	59.3	60.6	55.8	68.2	38.1	57.5
17	67.0	63.6	66.1	59.1	58.0	59.0	53.7	66.8	42.6	56.1
18	67.9	64.3	67.0	59.2	58.7	59.3	53.7	68.4	37.1	56.8
19	68.1	64.5	67.0	59.9	59.3	60.3	55.9	68.4	43.0	57.2
20	68.2	64.7	67.6	60.1	59.7	60.8	56.5	67.5	43.9	57.0
21	67.5	64.0	66.5	59.2	58.3	59.3	54.9	67.8	44.8	56.7
22	68.3	64.4	67.8	61.3	59.7	61.7	56.8	68.3	36.4	57.8
23	68.1	64.6	67.3	60.3	59.4	60.7	56.1	68.6	*#N/A	58.0
24	67.2	63.7	66.3	59.6	59.0	60.1	55.4	67.0	40.7	56.0
25	68.1	64.4	67.1	60.6	59.3	60.6	56.2	68.8	30.0	57.8
26	68.2	64.5	67.6	60.8	59.6	60.9	56.4	68.1	32.9	57.4
27	67.6	64.3	66.9	59.3	59.0	60.1	55.2	67.3	34.1	56.4
28	67.6	64.1	66.8	59.5	59.0	59.6	55.2	66.7	34.1	56.7
29	68.4	65.1	67.5	59.9	59.5	60.2	55.5	66.9	*#N/A	56.9
30	68.3	64.9	67.5	60.1	59.9	60.7	56.1	68.4	42.6	57.9
31	67.4	64.0	66.8	59.2	59.1	59.7	55.4	66.6	28.6	55.9
Days	31	31	31	31	31	31	31	31	24	31
En. Avg	67.9	64.4	67.0	60.0	59.1	60.3	55.5	67.9	39.4	57.2

#N/A indicates insufficient data.

*#N/A indicates no aircraft-related noise events.

TABLE 4
DAILY CNEL VALUES AT EACH MONITOR STATION
August 2021

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	67.4	64.1	66.6	59.0	58.9	59.5	54.8	68.0	39.3	57.1
2	68.0	64.4	67.0	58.8	58.4	59.0	54.0	67.3	39.8	56.4
3	67.5	64.0	66.3	59.3	58.4	58.9	53.7	67.6	38.4	57.0
4	67.9	64.5	67.0	60.0	59.0	60.0	54.8	66.9	34.5	57.0
5	67.9	64.5	67.1	59.8	59.6	60.9	55.9	67.7	41.6	57.2
6	68.1	64.5	67.1	60.5	59.1	60.6	55.9	68.8	41.1	58.2
7	67.1	63.3	66.1	58.8	57.6	59.2	54.8	67.2	38.2	56.6
8	67.9	64.3	67.0	60.4	58.8	60.2	55.4	68.6	35.9	57.9
9	67.9	64.5	66.8	60.4	59.5	60.7	56.2	67.8	28.5	57.1
10	67.4	64.7	66.4	58.9	58.5	59.4	54.9	68.4	40.5	57.6
11	67.6	67.0	66.4	58.6	58.1	59.2	55.1	67.8	*#N/A	57.0
12	67.9	67.0	66.8	60.0	58.6	59.8	55.5	68.1	*#N/A	57.6
13	67.6	66.8	66.6	59.6	58.4	59.4	56.0	67.5	33.6	56.6
14	67.5	66.6	66.6	60.2	58.3	62.1	55.5	66.8	*#N/A	56.1
15	67.9	67.1	67.1	60.0	59.4	61.4	56.2	68.6	35.6	57.1
16	68.0	66.8	67.1	60.5	59.0	60.8	56.3	68.0	28.7	57.6
17	67.6	66.4	66.5	60.2	58.7	60.1	55.5	67.4	38.6	57.2
18	68.2	67.2	67.3	61.2	59.7	61.2	57.1	68.1	*#N/A	58.0
19	67.8	67.0	66.8	60.3	59.6	60.8	57.3	68.2	36.7	57.4
20	67.9	67.2	67.0	60.3	59.6	60.6	56.9	68.1	*#N/A	58.1
21	66.9	65.9	65.9	59.0	58.4	59.2	55.2	67.0	*#N/A	56.3
22	67.6	67.1	66.5	60.0	59.7	60.5	56.6	68.1	36.6	57.6
23	67.8	67.2	66.9	60.2	59.7	60.4	56.5	67.9	42.2	57.1
24	67.1	66.2	66.2	59.4	59.3	60.0	55.4	67.2	37.9	57.1
25	67.4	66.8	66.8	59.3	59.0	59.6	54.6	66.9	*#N/A	56.4
26	68.0	67.2	67.2	59.3	58.8	59.5	54.5	66.9	39.2	57.1
27	68.1	67.5	67.6	60.3	58.9	59.6	53.9	66.9	38.8	56.5
28	66.5	65.4	65.3	58.6	56.9	58.0	52.3	66.5	*#N/A	56.4
29	67.8	67.2	66.7	58.8	58.4	59.2	54.5	67.9	35.9	56.4
30	67.3	66.3	66.4	60.1	58.8	60.2	55.1	67.7	40.7	57.3
31	67.3	66.4	66.2	60.2	58.2	60.2	55.5	66.8	34.0	56.5
Days	31	31	31	31	31	31	31	31	23	31
En. Avg	67.7	66.1	66.7	59.8	58.9	60.1	55.5	67.7	38.4	57.1

#N/A indicates insufficient data.

*#N/A indicates no aircraft-related noise events.

TABLE 5
DAILY CNEL VALUES AT EACH MONITOR STATION
September 2021

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	67.4	66.4	66.4	60.2	58.9	60.1	55.9	67.5	33.4	57.2
2	68.1	67.2	67.1	60.7	60.0	60.8	56.1	67.8	*#N/A	57.6
3	68.2	67.7	67.6	59.6	59.6	60.2	54.9	67.9	39.2	57.7
4	66.3	65.4	65.4	56.8	56.5	57.5	53.1	65.4	#N/A	51.1
5	66.2	65.4	65.0	57.4	56.6	57.3	52.9	67.1	44.0	56.0
6	68.0	66.6	67.0	60.4	59.0	60.3	55.5	67.9	46.0	57.5
7	68.2	67.0	67.8	60.3	59.7	61.0	56.4	66.8	31.3	56.5
8	67.3	66.5	66.3	59.0	58.8	59.7	55.2	67.2	40.2	56.9
9	68.2	67.5	67.0	60.5	59.5	60.8	55.8	68.1	*#N/A	57.3
10	68.2	67.3	67.2	60.3	59.7	60.6	56.2	67.9	*#N/A	57.1
11	66.2	65.2	65.3	57.7	57.8	58.2	54.0	65.4	*#N/A	54.5
12	68.5	67.7	67.3	59.3	58.6	59.2	54.2	68.2	40.4	57.6
13	67.5	66.5	66.0	57.7	56.6	57.2	49.9	68.0	29.2	57.1
14	67.6	66.4	66.4	59.9	58.7	59.4	53.3	67.6	38.4	57.6
15	67.5	66.9	66.6	59.8	59.6	60.5	55.1	67.3	47.0	57.3
16	68.2	67.2	67.3	60.9	60.3	61.0	56.3	67.9	*#N/A	58.2
17	68.9	67.6	67.6	61.7	60.5	61.8	57.9	68.2	30.4	58.0
18	66.4	65.3	65.2	58.3	58.1	58.2	55.3	66.1	47.1	55.9
19	69.0	67.6	67.9	60.7	60.2	61.5	57.9	68.4	44.5	57.8
20	68.4	66.6	67.5	60.7	59.8	61.1	57.0	68.3	40.7	57.6
21	67.0	66.1	66.2	58.4	57.7	58.8	55.1	66.4	29.9	55.0
22	67.4	66.7	66.5	57.9	58.4	58.9	55.7	66.5	42.9	55.6
23	68.2	67.2	66.9	59.5	58.9	59.4	54.3	68.1	*#N/A	57.1
24	68.6	67.3	67.8	60.5	60.0	61.2	56.9	68.0	40.1	58.1
25	66.7	65.7	65.6	59.0	58.9	59.5	56.1	66.5	30.7	56.1
26	68.5	67.3	67.6	60.8	60.3	61.0	56.8	69.2	31.0	58.7
27	68.4	66.8	67.4	60.7	59.8	60.7	56.4	68.4	45.4	58.5
28	67.2	65.9	66.0	60.1	59.4	60.1	57.1	67.5	40.2	57.3
29	68.2	66.9	67.3	61.4	60.4	61.2	57.5	67.1	44.1	56.7
30	68.4	67.2	67.7	58.8	58.7	59.7	55.7	67.2	35.5	55.4
Days	30	30	30	30	30	30	30	30	23	30
En. Avg	67.8	66.8	66.8	59.8	59.2	60.1	55.8	67.5	41.9	57.0

#N/A indicates insufficient data.

*#N/A indicates no aircraft-related noise events.

TABLE 6
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commercial Class A | July – September 2021

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Alaska Air	A320	568	Average Count	95.8 (563)	93.8 (547)	94.9 (563)	87.9 (553)	85.8 (551)	87.0 (563)	83.9 (556)	#N/A (0)	#N/A (0)	#N/A (0)
	B737	1	Average Count	95.1 (1)	93.9 (1)	93.8 (1)	86.9 (1)	87.2 (1)	88.3 (1)	84.7 (1)	#N/A (0)	#N/A (0)	#N/A (0)
	B738	184	Average Count	97.9 (182)	96.4 (179)	95.5 (181)	88.9 (179)	88.8 (183)	89.9 (178)	86.3 (181)	#N/A (0)	#N/A (0)	#N/A (0)
Allegiant	A319	147	Average Count	93.1 (144)	90.8 (143)	92.3 (146)	87.1 (143)	84.9 (147)	86.2 (141)	80.7 (117)	#N/A (0)	#N/A (0)	#N/A (0)
	A320	55	Average Count	94.3 (55)	92.4 (53)	92.1 (54)	87.0 (52)	85.4 (53)	86.5 (53)	81.8 (49)	#N/A (0)	#N/A (0)	#N/A (0)
American	A21N	7	Average Count	90.4 (7)	88.6 (7)	89.8 (7)	82.7 (7)	80.8 (7)	81.4 (7)	#N/A (0)	#N/A (0)	#N/A (0)	#N/A (0)
	A319	5	Average Count	93.5 (5)	92.6 (5)	92.3 (5)	84.5 (5)	83.3 (5)	83.3 (5)	78.7 (4)	#N/A (0)	#N/A (0)	#N/A (0)
	A320	76	Average Count	95.1 (75)	93.5 (73)	93.9 (76)	86.4 (73)	85.0 (70)	85.3 (74)	81.6 (65)	#N/A (0)	#N/A (0)	#N/A (0)
	A321	142	Average Count	99.2 (142)	97.9 (138)	98.7 (140)	91.2 (140)	89.1 (138)	88.4 (137)	83.6 (136)	#N/A (0)	#N/A (0)	#N/A (0)
	B38M	4	Average Count	92.6 (4)	90.4 (4)	91.9 (4)	85.3 (4)	84.1 (4)	85.4 (4)	81.1 (3)	#N/A (0)	#N/A (0)	#N/A (0)
	B738	1282	Average Count	98.6 (1264)	96.4 (1238)	97.3 (1266)	89.6 (1249)	89.3 (1260)	89.9 (1232)	86.0 (1231)	96.1 (3)	87.0 (3)	#N/A (0)
Delta	A220	439	Average Count	88.4 (435)	87.2 (432)	87.9 (436)	80.5 (393)	78.9 (257)	80.0 (333)	79.5 (8)	#N/A (0)	#N/A (0)	#N/A (0)
	A319	143	Average Count	96.0 (134)	94.3 (128)	95.9 (134)	89.5 (133)	87.7 (132)	87.7 (130)	82.4 (127)	94.1 (9)	85.2 (9)	79.9 (1)
	B752	184	Average Count	96.5 (178)	94.9 (176)	96.4 (178)	89.1 (170)	87.7 (174)	87.9 (175)	83.1 (169)	94.5 (5)	84.2 (6)	79.4 (1)
FedEx	A306	64	Average Count	97.3 (64)	96.0 (64)	94.9 (64)	89.3 (63)	88.5 (64)	89.9 (64)	85.4 (63)	#N/A (0)	#N/A (0)	#N/A (0)
Frontier Airlines	A20N	219	Average Count	87.9 (218)	86.8 (215)	87.4 (216)	81.1 (196)	79.1 (116)	81.5 (181)	78.4 (24)	#N/A (0)	#N/A (0)	#N/A (0)
	A319	4	Average Count	94.8 (4)	92.4 (4)	93.4 (3)	87.7 (4)	85.6 (4)	87.8 (4)	83.4 (4)	#N/A (0)	#N/A (0)	#N/A (0)
	A320	46	Average Count	94.9 (45)	93.2 (46)	93.1 (45)	86.4 (46)	85.0 (45)	86.8 (46)	83.8 (44)	#N/A (0)	#N/A (0)	#N/A (0)
Horizon Air	E175	471	Average Count	92.3 (468)	90.2 (459)	89.9 (460)	84.5 (461)	84.2 (464)	86.4 (462)	82.4 (444)	#N/A (0)	#N/A (0)	#N/A (0)
Southwest	B38M	82	Average Count	89.9 (82)	87.8 (79)	88.3 (80)	81.2 (75)	81.9 (74)	83.6 (77)	79.4 (51)	#N/A (0)	#N/A (0)	#N/A (0)
	B737	1132	Average Count	93.9 (1118)	92.0 (1094)	91.6 (1113)	85.6 (1105)	85.8 (1114)	86.8 (1105)	83.0 (1080)	#N/A (0)	#N/A (0)	#N/A (0)
	B738	492	Average Count	94.5 (486)	92.8 (476)	91.3 (482)	84.9 (482)	85.5 (484)	86.6 (479)	83.1 (481)	94.0 (1)	#N/A (0)	83.2 (1)
Spirit	A20N	380	Average Count	88.0 (374)	86.8 (366)	87.5 (373)	82.0 (353)	80.3 (281)	81.8 (337)	78.4 (117)	#N/A (0)	#N/A (0)	#N/A (0)
	A320	54	Average Count	91.4 (54)	90.0 (54)	89.3 (53)	83.8 (52)	82.5 (45)	83.3 (48)	79.7 (21)	#N/A (0)	#N/A (0)	#N/A (0)
Sun Country Airlines	B737	52	Average Count	95.3 (52)	93.4 (51)	95.0 (51)	89.0 (50)	88.9 (52)	88.8 (52)	84.0 (48)	#N/A (0)	#N/A (0)	#N/A (0)
	B738	1	Average Count	95.9 (1)	94.5 (1)	96.1 (1)	89.1 (1)	89.4 (1)	89.4 (1)	86.1 (1)	#N/A (0)	#N/A (0)	#N/A (0)
United	A319	61	Average Count	94.4 (61)	92.0 (59)	93.6 (61)	86.1 (57)	85.0 (57)	85.5 (59)	81.0 (54)	#N/A (0)	#N/A (0)	#N/A (0)
	A320	130	Average Count	95.2 (128)	93.5 (124)	94.1 (130)	86.5 (122)	85.1 (126)	85.6 (126)	81.5 (104)	#N/A (0)	#N/A (0)	#N/A (0)
	B737	556	Average Count	96.7 (551)	94.2 (538)	96.7 (553)	90.2 (545)	90.0 (548)	90.4 (539)	85.5 (532)	94.2 (1)	88.4 (1)	#N/A (0)
	B738	441	Average Count	98.2 (435)	95.8 (412)	97.8 (435)	89.9 (435)	89.4 (430)	89.9 (422)	86.0 (419)	94.3 (4)	89.1 (3)	80.5 (2)
UPS	B752	51	Average Count	95.3 (51)	94.1 (51)	93.9 (51)	87.1 (50)	86.5 (50)	87.7 (51)	82.6 (51)	#N/A (0)	#N/A (0)	#N/A (0)

TABLE 7
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commercial Class E
July - September 2021

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Delta	A220	66	Average Count	88.1 (66)	88.2 (63)	87.5 (65)	80.4 (59)	79.1 (50)	80.0 (54)	#N/A (0)	#N/A (0)	#N/A (0)	#N/A (0)
SkyWest Coml.	E175	523	Average Count	90.8 (516)	89.2 (512)	89.4 (513)	84.6 (512)	83.8 (511)	85.6 (514)	81.4 (490)	#N/A (0)	#N/A (0)	#N/A (0)
Southwest	B38M	59	Average Count	88.6 (57)	86.8 (56)	87.1 (56)	80.7 (48)	81.0 (47)	82.4 (54)	79.0 (17)	#N/A (0)	#N/A (0)	#N/A (0)
	B737	2227	Average Count	91.7 (2206)	90.3 (2165)	89.8 (2194)	84.7 (2192)	84.4 (2203)	85.3 (2179)	81.4 (2116)	#N/A (0)	#N/A (0)	#N/A (0)
	B738	389	Average Count	92.6 (388)	90.8 (383)	89.9 (384)	84.4 (379)	84.6 (381)	85.6 (382)	82.1 (371)	#N/A (0)	#N/A (0)	#N/A (0)

TABLE 8
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commuter
July - September 2021

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Delux Public Charters	E135	555	Average Count	85.2 (552)	84.2 (534)	86.0 (555)	79.4 (367)	78.1 (56)	79.4 (246)	82.2 (3)	#N/A (0)	#N/A (0)	#N/A (0)
	E145	121	Average Count	85.6 (119)	85.0 (120)	86.5 (120)	79.0 (72)	78.2 (12)	79.3 (53)	79.8 (1)	#N/A (0)	#N/A (0)	#N/A (0)
SkyWest	CRJ7	94	Average Count	87.5 (93)	86.2 (89)	86.2 (94)	79.9 (27)	80.2 (69)	81.0 (87)	79.5 (62)	#N/A (0)	#N/A (0)	#N/A (0)
	E175	2	Average Count	90.1 (2)	86.7 (2)	88.6 (2)	85.3 (2)	82.9 (2)	85.8 (2)	82.4 (2)	#N/A (0)	#N/A (0)	#N/A (0)

TABLE 8-GA
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
General Aviation
July - September 2021

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
General Aviation	Jet	6340	Average Count	88.0 (6085)	86.5 (5593)	89.2 (5978)	82.4 (3291)	81.9 (2468)	83.4 (3506)	81.4 (964)	84.2 (19)	80.2 (5)	#N/A (0)

TABLE 9
AIR CARRIER OPERATIONAL HISTORY

Carrier	AC Type	Year					
		2017	2018	2019	2020	2021	
Alaska Air	AS	A319		64	244	314	
		A320		262	3,403	1,733	3,477
		B734	24				
		B737	1,233	384	160	14	12
		B738	6,420	8,260	5,247	767	480
Allegiant	G4	A319					776
		A320					272
American	AA	A21N			2	2	78
		A319	332	722	432	474	214
		A320	266	78	634	488	489
		A321	56	4	214	571	787
		B38M					13
		B738	11,556	11,457	10,972	5,201	5,758
		B752	4	4	36		
Compass	CP	E170	78				
		E175	2,726	3,188	3,150	656	
Delta	DL	A220			851	1,954	2,683
		A223					4
		A319	2,053	1,979	1,987	828	580
		A320	94	12	11	8	1
		B712	3,267	3,379	2,495		
		B737	146	188	8	24	
		B738	40	18	40	2	
		B739		2			
		B752	2,137	2,889	2,889	1,065	951
	MD90		2				
FedEx	FM	A306	506	508	510	512	376
Frontier Airlines	F9	A20N*		600	900	550	951
		A319	356	190	100	2	88
		A320	628	654	428	392	237
		A32N*	438				
Horizon Air	QX	DH8D	1,456	728	12		
		E175	339	2,716	4,257	2,986	2,749
SkyWest Coml.	SC	CRJ9	1,440	6		2	
		E175	4,761	6,960	7,686	3,535	2,859
Southwest	WN	B38M	2	14	10		549
		B737	35,971	32,380	29,360	14,268	14,487
		B738	58	64	134	3,780	7,086
Spirit	NK	A20N*				180	1,174
		A320				19	268
Sun Country Airlines	SY	B737					156
		B738					2
United	UA	A319	1,470	999	1,216	590	575
		A320	3,957	3,927	3,151	1,227	566
		B737	4,044	2,987	2,816	999	1,701
		B738	3,302	5,154	5,627	2,645	1,797
		B752	2	4			
UPS	5X	A306	45	22	12	18	
		B752	369	394	404	404	302
WestJet	WS	B736	30	10	58	34	
		B737	644	666	618	126	
Total			90,250	91,875	90,074	46,370	52,498

*In 2018, the code for the Airbus A320neo was changed from A32N to A20N.

TABLE 10
AIRCRAFT OPERATIONAL HISTORY

Aircraft	Year				
	2017	2018	2019	2020	2021
A20N*		600	900	730	2,125
A21N			2	2	78
A220			851	1,954	2,683
A223					4
A306	551	530	522	530	376
A319	4,211	3,954	3,979	2,208	2,233
A320	4,945	4,933	7,627	3,867	5,310
A321	56	4	214	571	787
A32N*	438				
B38M	2	14	10		562
B712	3,267	3,379	2,495		
B734	24				
B736	30	10	58	34	
B737	42,038	36,605	32,962	15,431	16,356
B738	21,376	24,953	22,020	12,395	15,123
B739		2			
B752	2,512	3,291	3,329	1,469	1,253
CRJ9	1,440	6		2	
DH8D	1,456	728	12		
E170	78				
E175	7,826	12,864	15,093	7,177	5,608
MD90		2			
Total	90,250	91,875	90,074	46,370	52,498

*In 2018, the code for the Airbus A320neo was changed from A32N to A20N.

TABLE 11
AIR CARRIER AVERAGE DAILY DEPARTURE HISTORY

Carrier	AC Type	Year					
		2017	2018	2019	2020	2021	
Alaska Air	AS	A319		.088	.334	.432	
		A320		.359	4.660	2.363	4.762
		B734	.033				
		B737	1.693	.526	.219	.022	.016
		B738	8.789	11.315	7.189	1.046	.655
Allegiant	G4	A319				1.063	
		A320				.373	
American	AA	A21N			.003	.003	.107
		A319	.455	.989	.592	.648	.288
		A320	.364	.107	.868	.664	.679
		A321	.077	.005	.293	.779	1.074
		B38M					.016
		B738	15.827	15.696	15.030	7.107	7.888
		B752	.005	.005	.049		
Compass	CP	E170	.107				
		E175	3.734	4.367	4.315	.896	
Delta	DL	A220			1.164	2.667	3.677
		A223					.005
		A319	2.811	2.712	2.723	1.131	.795
		A320	.129	.016	.014	.014	
		B712	4.471	4.627	3.419		
		B737	.200	.258	.011	.033	
		B738	.055	.025	.055	.003	
		B739		.003			
		B752	2.926	3.959	3.956	1.454	1.301
		MD90		.003			
FedEx	FM	A306	.693	.696	.699	.699	.515
Frontier Airlines	F9	A20N*		.822	1.233	.751	1.301
		A319	.488	.260	.137	.003	.121
		A320	.860	.896	.586	.536	.326
		A32N*	.600				
Horizon Air	QX	DH8D	1.995	.997	.016		
		E175	.466	3.721	5.830	4.079	3.767
SkyWest Coml.	SC	CRJ9	1.975	.008		.003	
		E175	6.523	9.534	10.529	4.833	3.918
Southwest	WN	B38M	.003	.019	.014		.753
		B737	49.274	44.351	40.216	19.497	19.841
		B738	.079	.088	.184	5.161	9.710
Spirit	NK	A20N*				.246	1.611
		A320				.025	.364
Sun Country Airlines	SY	B737					.214
		B738					.003
United	UA	A319	2.014	1.373	1.666	.806	.789
		A320	5.422	5.375	4.315	1.675	.775
		B737	5.534	4.093	3.855	1.366	2.329
		B738	4.526	7.058	7.712	3.612	2.460
		B752	.003	.005			
UPS	5X	A306	.060	.030	.016	.025	
		B752	.507	.540	.553	.552	.414
WestJet	WS	B736	.041	.014	.079	.046	
		B737	.882	.912	.847	.172	
Total		123.622	125.852	123.384	63.347	71.910	

*In 2018, the code for the Airbus A320neo was changed from A32N to A20N.

TABLE 12
AIRCRAFT Glossary

AC Type	Make	Model/Series
A20N	Airbus	320-200 Neo
A220	Airbus	220-100
A223	Airbus	220-300
A306	Airbus	300-600
A319	Airbus	319
A320	Airbus	320
A32N	Airbus	320-200 Neo
B38M	Boeing	737-800 Max
A321	Airbus	321
A21N	Airbus	321 Neo
B712	Boeing	717-200
B734	Boeing	737-400
B736	Boeing	737-600
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
E170	Embraer	170
E175	Embraer	175
MD90	McDonnell Douglas	90

QUARTERLY NOISE MEETING

Date: September 28, 2021

Time: 2:00 PM

Place: Airport Commission Room

ITEMS DISCUSSED

Nikolas Gaskins provided an update regarding the capacity allocation process for Plan Year 2022. He mentioned that the Access & Noise Office has been working on the allocations since August, with the ASR going to the Airport Commission on October 20 and to the Board of Supervisors on November 2. Mr. Gaskins also added that next year the Access & Noise Office is planning to start the capacity allocation process earlier for Plan Year 2023.

Mr. Gaskins advised that the 2nd Quarter Noise Report is currently available on the JWA website and acknowledged that technical issues contributed to the delayed posting. Mr. Gaskins also explained that there were edits to the 1st Quarter Noise Report, and the revised report will be posted to the JWA website within the next couple of days.

Mr. Gaskins mentioned that the Access & Noise Office is adding a new Specialist on October 8. Mr. Gaskins explained that the new Specialist is filling a vacancy that had been open since April 2020.

Mr. Gaskins gave an update on commercial airline service. He stated Air Canada is starting their new international service to Vancouver on October 2, operating the A220-300 aircraft type. Mr. Gaskins also added that WestJet is resuming its service to Vancouver on October 1. Mr. Gaskins discussed that Allegiant Air is introducing service to new markets out of JWA that include: Sioux Falls Regional Airport (FSD), Phoenix-Mesa Gateway Airport (AZA), Eugene Airport (EUG), and Austin-Bergstrom International Airport (AUS). Mr. Gaskins added that United Airlines will be adding seasonal service to Aspen/Pitkin County Airport (ASE) from December 16, 2021, through March 26, 2022.

Cristina Magaña provided a summary of the JWA airport statistics for July 2021. She stated there was a 272.3% increase in passenger volume compared to July 2020. Ms. Magaña also added that JWA increased 35% in aircraft operations, 25.4% in general aviation operations, and 85.9% in commercial operations compared to July 2020.

Mr. Gaskins conducted a presentation on WebTrak, the new flight tracking system available to the public on the JWA website. Mr. Gaskins explained why the Airport transitioned from VOLANS to the WebTrak flight tracking system, and he gave a brief tutorial highlighting some of the critical features of the new system.

Newport Beach resident Joe August asked if there was any initiation from the Airport or County requesting Air Canada to fly quieter aircraft, or was it solely the airline's decision. Mr. Gaskins explained that the Access & Noise Office had been in discussions with Air Canada about what types of aircraft they were plan on using. But, it's the carrier's decision which aircraft they operate at each Airport based on their delivery schedule and network planning.

QUARTERLY NOISE MEETING

Newport Beach resident Dr. Jim Mosher asked why the historical data on WebTrak is limited to three months. Mr. Gaskins was unsure of the reasoning and would contact EVS to see if three months is the standard. Dr. Mosher also expressed his concerns with a possible technical glitch with WebTrak when the SENEL noise values switch from a circle shape to a square shape when the noise level exceeds 65 dB. He also described an issue with the playback mode where the values are not consistent at each exact second. Mr. Gaskins asked Dr. Mosher to provide examples, and our office will forward them to EVS for further explanation and analysis.

Dr. Mosher stated there was an issue with the image of the recent Quarterly Noise Report that was on the JWA website, and if Figure 2 was the annual or quarterly contour. Mr. Gaskins explained there was an issue with the network drive and the report will be replaced with the corrected image as soon as the network drive issue is resolved. Mr. Gaskins also explained that Figure 2 is the twelve-month contour, which includes 2nd Quarter, and that the annual contour is exclusively in the 4th Quarter Noise Report.

Dr. Mosher asked if Table 8 of the Quarterly Noise Report represents both commuter and charter flights for Delux Public Charters (JSX) and if the noise office can distinguish between the two. Mr. Gaskins explained Table 8 represents JSX's commuter operations; not charter operations, and confirmed the JWA Access & Noise Office has the ability to determine the difference between commuter and charter operations for JSX by reviewing the flight information in ANOMS and Access/GANO.

Dr. Mosher also wanted to know if there was a difference between the SkyWest E175 and SkyWest E75L aircraft types and if the two aircraft types could be combined together in the Detailed Noise Reports. Mr. Gaskins confirmed the two aircraft types are the same, and the two separate codes are a result of how they are labeled in ANOMS. Mr. Gaskins also added the two can probably be combined into the E175, but it could create a delay with getting the Detailed Noise Reports posted on the JWA website.

QUARTERLY NOISE MEETING ROSTER

September 28, 2021

NAME

ORGANIZATION

Joe August

Resident – Newport Beach

Jim Mosher

Resident - Newport Beach

Tara Finnigan

Newport Beach Deputy City Manager

Anthony Cangey

John Wayne Airport

Cristina Magaña

John Wayne Airport

Nikolas Gaskins

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):
0.0010 Sq. Mi.
2. Estimated Number of dwelling units included in the Noise Impact Area as defined in the Noise Standards:
3
3. Estimated number of people residing within the Noise Impact Area as defined in the Noise Standards:
7.5 (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:
B737-800 – 5,591 (Arrivals+Departures)
5. Total number of aircraft operations during the calendar quarter:
89,768
6. Number of Air Carrier operations during the calendar quarter:
(Not mandatory)
23,415
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)
66,280
9. Estimated number of operations by Military aircraft during the calendar quarter:
(Not mandatory)
73