

**JOHN WAYNE AIRPORT
ORANGE COUNTY**



NOISE ABATEMENT PROGRAM QUARTERLY REPORT

**For the period:
January 1, 2021 through March 31, 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:

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Airport Director
John Wayne Airport, Orange County**

INTRODUCTION

This is the 193rd 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 (April 1, 2020 - March 31, 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**

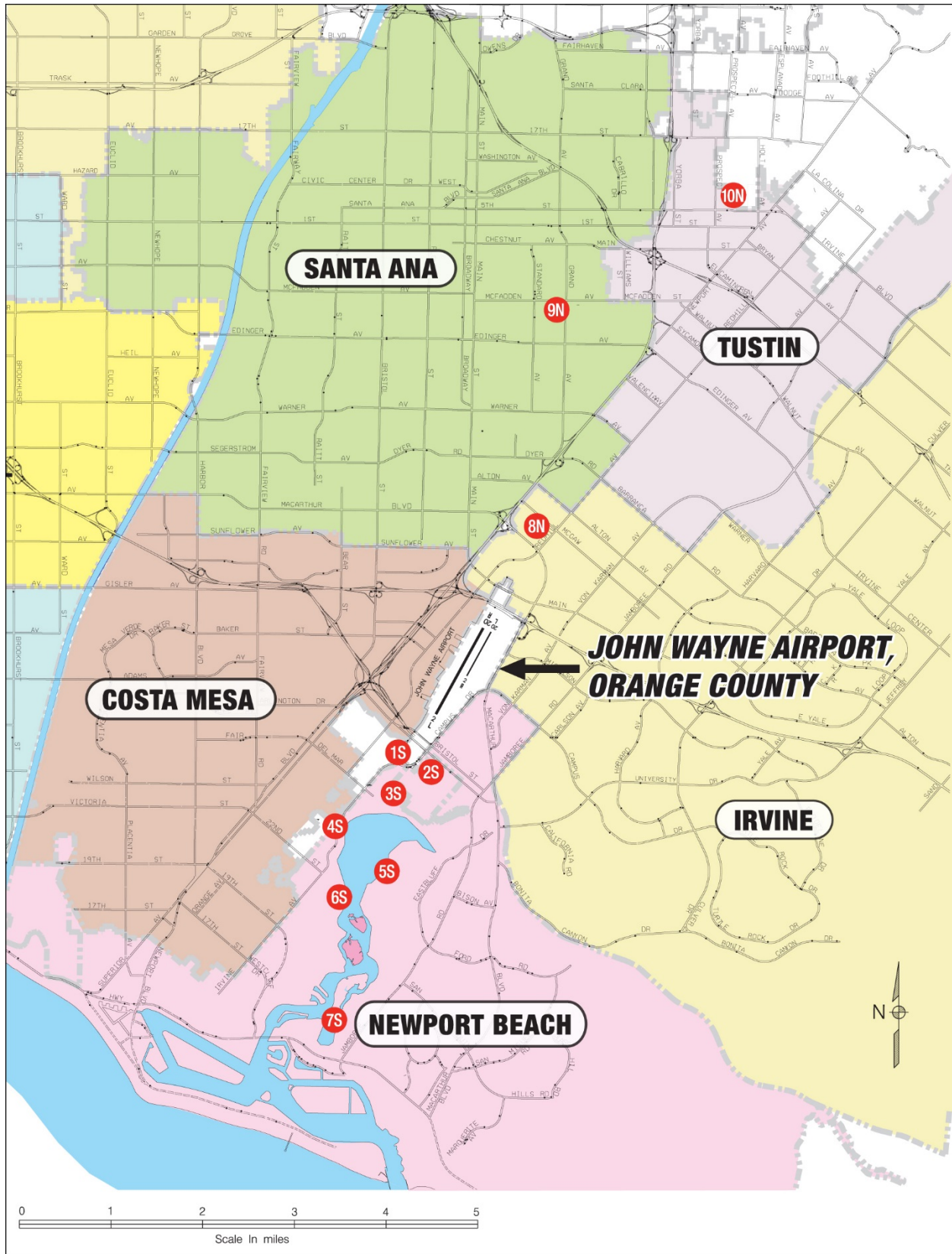
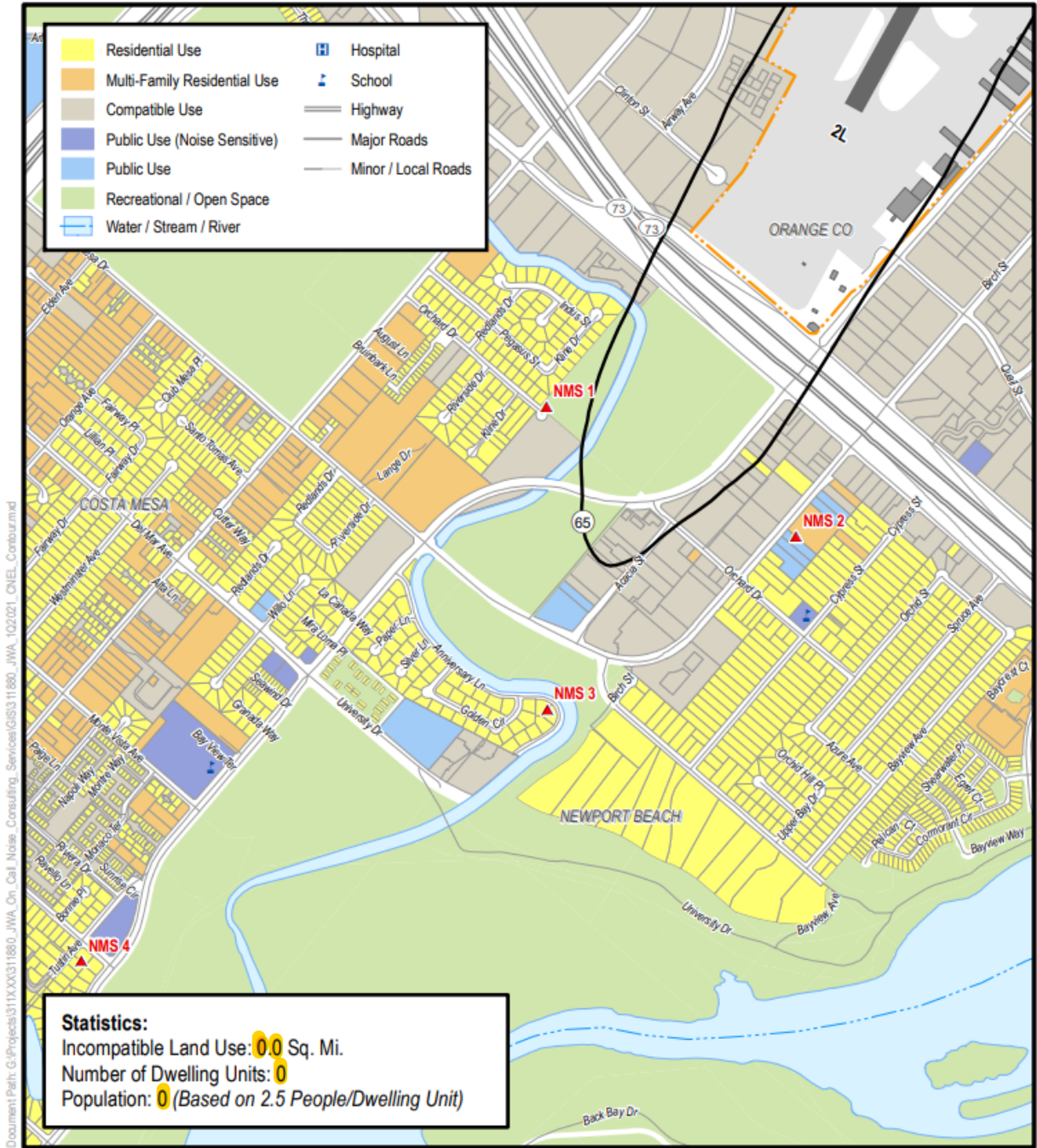


FIGURE 2





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- ▲ RMT Location
- 2021 First Quarter 65 dB CNEL Contour
- Incompatible Single Family Residential
- Incompatible Multi-Family Residential
- Airport Property (Approx.)
- Runways / Taxiways
- Airport Buildings

0 1,000 2,000 Feet

**JOHN WAYNE AIRPORT
ORANGE COUNTY**

2021 First Quarter 65 dB
Community Noise Equivalent Level
(CNEL) Contour

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
 January - March 2021

Period	Air Carriers		GA Jet (1)	Total Operations (2)	Average Daily Jet Operations
	Jet	Prop			
January	4,492	0	2,575	18,267	228
February	3,933	0	2,856	21,873	242
March	5,633	0	3,639	25,021	299
First Quarter	14,058	0	9,070	65,161	256
Twelve Months 04/01/20 - 03/31/21	45,283	0	32,461	244,384	213

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.

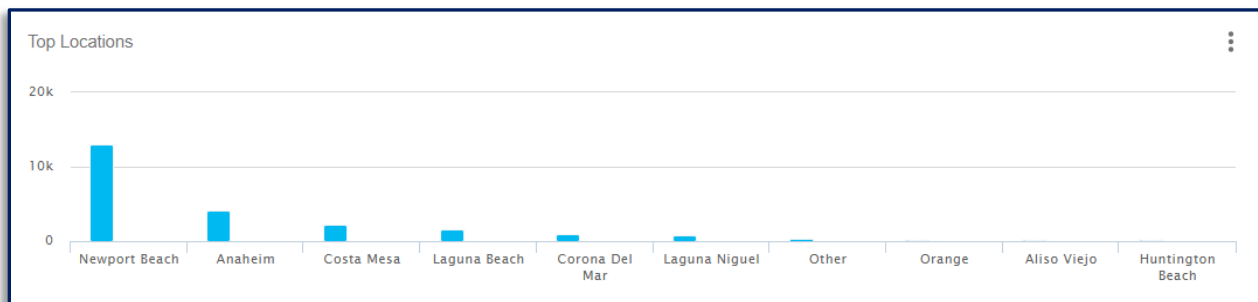
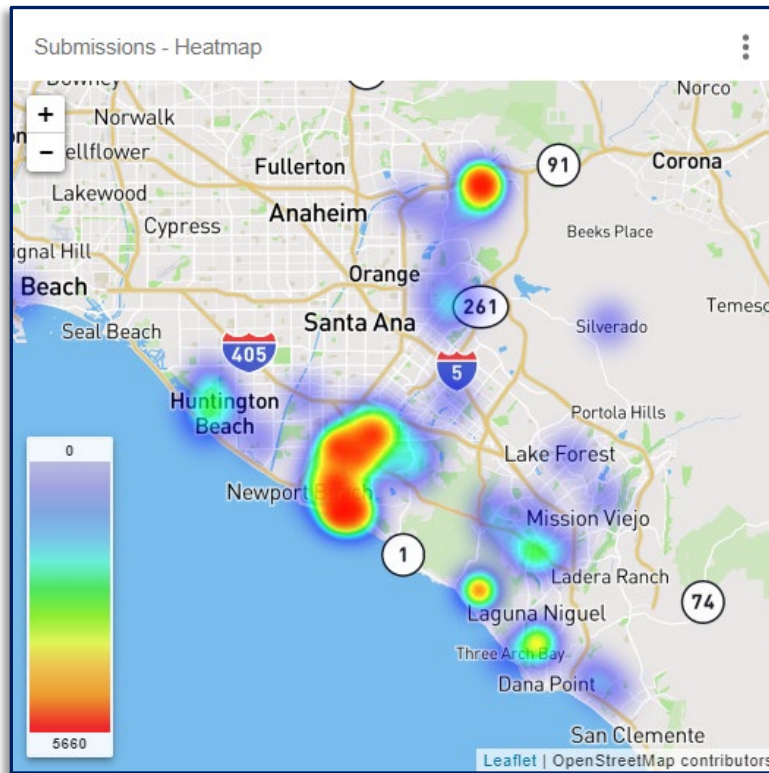
ACOUSTICAL INSULATION PROGRAM

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. One dwelling unit in Santa Ana Heights remains in the "Noise Impacted Area" (within 65 dB CNEL contour).

COMPLAINT TOTALS (January 1, 2021 - March 31, 2021)

The Airport's Access and Noise Office receives and investigates noise complaints from local citizens and all other sources. During the January 1, 2021 through March 31, 2021, the Office received **23,699** complaints from local citizens. This is a **50.6%** increase from the 15,740 complaints received last quarter. It is a **34.6%** decrease from the 36,258 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 – 13,121 submissions from 35 different points of contact.
- Anaheim – 4,171 submissions from 14 different points of contact.
- Costa Mesa – 2,197 submissions from 9 different points of contact.
- Laguna Niguel – 851 submissions from 3 different points of contact.
- Other – 358 submissions from 28 different points of contact.
- Orange – 147 submissions from 1 point of contact.
- Aliso Viejo – 146 submissions from 3 different points of contact.
- Huntington Beach – 151 submissions from 7 different points of contact.
- 46% of submissions were from a complaint subscription service.

TABLE 2
LONG TERM MEASURED LEVELS
Aircraft CNEL from 04/01/20 through 03/31/21
Values in dB at Each Site

Period	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Apr 2020	59.2	58.6	57.7	52.7	51.6	52.0	49.1	60.7	44.9	49.5
# Days	30	30	30	30	30	30	30	30	25	30
May 2020	60.0	59.5	58.9	52.9	51.5	52.4	49.1	61.0	42.4	48.8
# Days	31	31	31	31	31	31	31	31	25	31
Jun 2020	62.1	61.6	61.1	54.4	53.2	54.7	50.8	62.8	41.4	50.8
# Days	30	30	30	30	30	30	30	30	26	30
Q-2 2020	60.6	60.1	59.5	53.4	52.2	53.2	49.7	61.6	43.1	49.8
# Days	91	91	91	91	91	91	91	91	76	91
Jul 2020	63.3	63.0	62.1	55.8	54.7	56.0	51.4	64.2	40.4	52.2
# Days	31	31	31	31	31	31	31	31	25	31
Aug 2020	63.7	63.3	62.6	55.7	54.8	56.3	52.1	64.5	42.2	52.5
# Days	31	31	31	31	31	31	31	31	22	31
Sep 2020	63.7	63.3	62.8	55.1	54.2	55.6	51.2	64.0	39.4	51.9
# Days	30	30	30	30	30	30	30	30	27	30
Q-3 2020	63.6	63.2	62.5	55.5	54.6	56.0	51.6	64.2	40.7	52.2
# Days	92	92	92	92	92	92	92	92	74	92
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
Q-2 2020 thru Q-1 2021										
Total	62.9	62.1	62.0	55.5	54.5	55.8	51.8	63.7	42.4	52.1
# Days	365	365	363	365	365	365	363	356	281	364
Q-1 2020 thru Q-4 2020 (Previous 4 Quarters)										
Total	64.1	63.5	63.2	56.5	55.8	57.1	53.2	64.7	42.6	53.1
# Days	366	366	364	364	366	366	364	363	306	366
Change from Previous 4 Quarters										
	-1.2	-1.4	-1.2	-1.0	-1.3	-1.3	-1.4	-1.0	-0.2	-1.0

TABLE 3
DAILY CNEL VALUES AT EACH MONITOR STATION
 January 2021

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	52.9	51.7	58.9	44.2	44.8	54.9	40.8	#N/A	32.2	50.4
2	64.2	63.6	63.0	57.6	56.0	56.7	53.5	#N/A	38.4	53.8
3	65.0	64.7	64.3	58.4	57.9	58.3	55.3	#N/A	39.4	55.2
4	63.9	63.9	63.0	56.7	56.7	57.2	54.1	#N/A	48.8	54.3
5	64.0	63.3	62.7	56.5	55.9	56.8	52.9	#N/A	38.7	52.3
6	63.1	63.0	61.8	55.9	55.3	55.3	51.7	65.8	44.3	52.7
7	63.6	63.4	62.2	56.0	54.6	55.6	51.4	#N/A	*#N/A	52.6
8	62.8	62.9	62.0	55.7	54.9	55.4	51.5	66.7	*#N/A	53.1
9	62.1	61.5	61.2	55.0	53.7	54.8	51.0	#N/A	*#N/A	47.5
10	61.7	61.6	60.4	53.7	53.4	53.9	50.5	63.5	*#N/A	51.4
11	62.3	62.1	61.3	55.7	54.2	55.1	51.4	62.7	*#N/A	50.1
12	62.0	61.5	61.3	55.2	53.9	55.1	51.8	62.4	*#N/A	50.5
13	62.6	62.4	61.2	55.2	53.6	54.4	50.5	61.5	*#N/A	49.6
14	63.3	62.8	63.2	55.3	53.4	56.9	51.2	60.5	*#N/A	48.1
15	60.5	60.4	60.6	51.3	49.7	55.1	46.7	62.2	*#N/A	48.9
16	60.6	60.1	59.5	53.5	50.9	53.1	48.6	60.3	*#N/A	46.5
17	61.0	60.8	59.6	53.2	51.6	52.6	49.1	62.6	*#N/A	49.5
18	63.0	62.5	61.9	56.0	54.4	55.8	52.9	64.2	*#N/A	52.7
19	55.0	52.0	63.9	44.1	46.5	60.4	42.2	60.1	*#N/A	40.6
20	54.2	52.2	63.2	40.0	46.3	59.6	*#N/A	59.3	*#N/A	40.4
21	63.7	63.6	62.4	57.2	56.0	56.9	53.4	63.7	41.6	53.4
22	63.2	63.3	62.7	57.3	56.0	57.0	54.0	64.9	34.5	54.9
23	61.8	61.5	61.1	56.3	54.8	55.3	52.2	62.4	34.5	52.3
24	63.4	63.5	62.3	57.0	56.4	56.7	54.4	65.5	*#N/A	54.8
25	62.9	63.5	61.8	55.1	56.9	56.3	51.3	63.3	42.2	53.4
26	62.2	61.9	61.0	56.4	55.1	55.2	52.9	62.9	45.9	52.6
27	63.4	62.8	62.2	57.1	55.2	56.2	53.7	63.6	38.0	52.7
28	63.4	62.5	62.0	57.5	55.5	56.6	54.0	64.3	*#N/A	54.2
29	64.1	63.9	63.0	57.6	57.1	57.5	55.3	63.9	42.7	54.1
30	62.1	61.8	60.9	55.9	54.9	54.6	52.4	61.5	39.9	51.6
31	63.1	62.9	62.3	56.1	54.9	55.8	52.5	64.7	40.1	53.1
Days	31	31	31	31	31	31	30	24	15	31
En. Avg	62.6	62.3	62.0	55.7	54.7	56.3	52.3	63.4	42.2	52.2

#N/A indicates insufficient data.

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

TABLE 4
DAILY CNEL VALUES AT EACH MONITOR STATION
February 2021

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	63.2	63.0	62.1	56.5	55.4	55.9	52.3	63.1	37.2	52.6
2	62.5	62.3	61.0	55.5	55.4	55.7	52.8	62.5	47.4	52.3
3	62.3	62.3	61.3	55.9	55.3	55.9	52.0	63.4	40.2	53.1
4	63.7	60.4	62.7	57.6	56.2	57.1	53.5	64.1	*#N/A	54.0
5	63.7	60.5	62.5	56.2	56.2	56.4	52.2	63.7	45.8	53.2
6	61.9	58.6	60.8	55.0	53.0	54.0	49.4	62.0	28.2	50.1
7	61.8	58.7	60.5	54.4	53.8	54.4	50.4	64.1	*#N/A	52.8
8	63.9	60.5	62.9	57.4	55.9	57.1	53.2	64.1	32.8	54.0
9	63.3	59.9	62.1	57.3	55.8	56.8	52.4	62.5	43.0	53.2
10	63.8	60.8	63.1	57.3	56.9	56.3	53.6	63.1	35.8	53.8
11	65.3	62.0	64.4	58.3	57.6	58.8	55.3	65.2	*#N/A	55.2
12	64.6	61.8	63.8	57.6	57.4	57.9	54.1	64.6	32.1	53.8
13	63.0	59.3	62.4	56.3	55.4	56.1	52.3	62.2	41.5	51.8
14	62.5	59.2	61.4	55.7	54.5	54.6	51.3	62.6	33.5	51.5
15	64.7	61.0	63.6	57.9	57.0	57.7	54.2	65.6	*#N/A	55.0
16	63.8	60.7	63.1	56.6	56.4	57.4	53.5	64.2	*#N/A	53.9
17	62.9	59.3	62.7	56.1	55.0	55.8	51.9	63.6	43.1	52.1
18	59.7	57.2	60.2	51.6	53.8	55.4	49.3	63.0	39.8	49.4
19	63.6	60.1	62.4	56.5	55.1	56.1	51.7	64.3	30.9	53.1
20	61.7	58.8	60.9	54.9	53.2	54.9	50.1	61.9	42.6	49.6
21	55.2	46.8	64.3	42.5	46.0	59.9	41.0	59.9	32.8	*#N/A
22	62.9	59.4	61.9	54.8	53.9	55.0	50.2	61.8	40.4	49.5
23	62.5	59.3	61.4	54.3	53.6	53.9	50.2	61.6	47.4	51.1
24	63.8	60.3	63.3	57.2	55.2	56.6	52.2	62.9	44.6	52.7
25	60.4	57.0	61.1	51.9	51.2	56.2	46.1	62.4	39.9	48.3
26	63.7	60.3	62.0	55.3	54.2	54.7	49.7	63.8	42.8	52.7
27	62.2	58.8	61.4	55.8	54.7	55.7	52.0	62.4	46.3	51.6
28	58.9	55.0	60.6	49.8	49.8	56.1	45.5	62.5	*#N/A	43.8
Days	28	28	28	28	28	28	28	28	22	27
En. Avg	62.9	60.0	62.3	55.9	55.1	56.4	51.9	63.3	42.3	52.5

#N/A indicates insufficient data.

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

TABLE 5
DAILY CNEL VALUES AT EACH MONITOR STATION
 March 2021

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	61.8	58.2	60.1	52.7	51.5	52.8	46.7	62.4	32.1	48.2
2	61.0	57.7	59.8	52.7	50.6	52.4	47.8	62.4	*#N/A	50.9
3	63.9	60.3	62.7	57.6	55.6	56.6	53.2	64.2	46.4	54.4
4	65.4	62.5	64.7	58.4	57.9	59.1	54.6	65.4	48.0	54.6
5	65.2	62.1	63.8	57.2	56.9	57.2	53.1	64.0	38.1	54.6
6	62.2	58.7	61.1	56.3	55.2	55.2	51.5	63.4	38.5	53.2
7	64.6	61.0	63.5	58.4	57.0	58.1	54.3	65.9	47.9	55.8
8	64.5	61.3	63.5	58.3	57.3	57.8	54.2	65.0	36.8	55.1
9	63.1	61.4	62.4	57.0	57.1	56.9	54.2	65.2	49.7	55.5
10	63.9	61.4	62.9	57.3	56.9	57.1	53.9	65.5	*#N/A	56.2
11	65.4	62.2	64.4	59.1	58.4	58.9	56.2	67.2	39.3	56.8
12	65.3	62.4	64.1	58.8	58.3	58.7	55.8	67.2	40.3	56.9
13	63.1	60.2	61.5	56.9	55.8	56.5	53.4	64.8	*#N/A	55.2
14	65.2	61.7	63.6	58.3	57.6	58.2	54.9	67.9	38.7	57.3
15	65.1	62.6	63.6	57.8	58.3	58.4	55.8	67.6	43.4	57.0
16	64.5	61.4	63.4	58.2	57.3	57.4	55.4	65.1	34.7	54.9
17	65.3	62.2	64.3	58.5	57.7	58.6	55.5	65.7	39.6	55.5
18	66.6	63.5	65.5	59.7	59.2	60.2	55.7	66.7	40.4	56.6
19	66.1	63.1	65.0	58.3	58.6	59.5	55.9	67.0	29.5	56.6
20	64.6	61.4	63.5	57.8	57.2	57.6	54.4	65.2	*#N/A	55.1
21	66.1	62.9	64.8	58.7	58.0	58.7	55.5	67.4	47.9	57.1
22	65.6	62.1	64.4	58.9	57.5	58.7	55.2	66.2	46.5	56.0
23	65.1	62.5	64.0	57.9	58.2	58.6	55.3	65.5	31.9	55.6
24	63.9	61.4	63.1	55.3	55.9	57.7	52.8	65.3	*#N/A	53.5
25	65.8	62.8	64.2	59.5	58.5	59.3	56.9	67.7	*#N/A	57.5
26	66.6	63.4	65.9	59.7	58.6	60.1	56.2	66.0	36.8	56.4
27	64.3	60.9	63.1	56.2	55.8	56.0	53.0	63.8	*#N/A	53.8
28	65.2	62.2	64.1	56.0	56.2	56.9	53.3	66.2	*#N/A	54.5
29	65.7	61.5	64.2	58.4	57.1	58.0	54.3	67.0	44.9	56.7
30	65.2	61.6	64.0	58.6	57.3	58.6	55.1	65.9	41.0	55.2
31	62.6	58.6	62.6	53.4	52.0	55.5	47.9	63.6	33.7	47.8
Days	31	31	31	31	31	31	31	31	23	31
En. Avg	64.8	61.7	63.7	57.8	57.1	57.9	54.4	65.8	43.5	55.4

#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
January - March 2021

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Alaska Air	A320	524	Average Count	93.9 (488)	91.9 (469)	91.8 (484)	86.2 (479)	84.5 (476)	85.4 (483)	82.7 (469)	86.9 (23)	#N/A (0)	#N/A (0)
	B738	12	Average Count	95.5 (12)	93.1 (12)	94.2 (12)	87.9 (12)	88.2 (12)	88.7 (12)	85.0 (12)	#N/A (0)	#N/A (0)	#N/A (0)
Allegiant	A319	76	Average Count	91.5 (71)	87.8 (70)	90.7 (71)	86.1 (71)	84.4 (70)	85.1 (69)	80.5 (43)	85.5 (4)	#N/A (0)	#N/A (0)
	A320	27	Average Count	93.1 (26)	89.8 (27)	91.7 (26)	86.9 (27)	85.9 (27)	86.4 (27)	82.0 (24)	#N/A (0)	#N/A (0)	#N/A (0)
American	A21N	3	Average Count	88.0 (3)	86.3 (3)	86.9 (3)	81.1 (3)	80.8 (2)	80.8 (3)	77.8 (1)	#N/A (0)	#N/A (0)	#N/A (0)
	A319	28	Average Count	92.4 (28)	90.4 (27)	90.8 (28)	85.4 (27)	84.6 (27)	84.7 (26)	80.3 (21)	#N/A (0)	#N/A (0)	#N/A (0)
	A320	116	Average Count	93.3 (104)	91.8 (103)	91.6 (104)	85.1 (103)	83.9 (101)	84.1 (101)	81.0 (74)	87.4 (9)	80.5 (1)	#N/A (0)
	A321	121	Average Count	97.4 (107)	95.8 (108)	95.7 (106)	88.2 (105)	86.8 (108)	86.5 (104)	82.6 (104)	90.3 (6)	#N/A (0)	#N/A (0)
	B738	578	Average Count	96.8 (523)	94.8 (502)	95.2 (523)	90.3 (519)	89.6 (519)	89.7 (506)	85.7 (523)	91.6 (29)	90.2 (1)	78.8 (2)
Delta	A220	378	Average Count	86.5 (346)	85.5 (333)	84.9 (340)	80.5 (268)	79.3 (172)	79.6 (178)	79.8 (5)	80.1 (11)	#N/A (0)	#N/A (0)
	A223	2	Average Count	86.6 (2)	87.7 (2)	84.7 (2)	80.4 (1)	79.5 (1)	78.6 (1)	#N/A (0)	#N/A (0)	#N/A (0)	#N/A (0)
	A319	82	Average Count	94.8 (77)	93.0 (71)	93.9 (78)	87.9 (77)	86.9 (76)	86.9 (75)	82.5 (70)	90.2 (1)	#N/A (0)	#N/A (0)
	B752	141	Average Count	95.1 (131)	93.4 (129)	93.9 (130)	88.0 (129)	87.0 (131)	86.9 (128)	82.7 (126)	88.6 (7)	#N/A (0)	#N/A (0)
FedEx	A306	60	Average Count	96.8 (58)	95.1 (58)	94.3 (56)	88.5 (57)	88.2 (58)	89.0 (58)	85.4 (56)	94.6 (2)	#N/A (0)	83.2 (2)
Frontier Airlines	A20N	84	Average Count	87.9 (81)	86.3 (77)	87.0 (79)	81.7 (68)	80.4 (45)	81.6 (58)	79.7 (14)	81.1 (1)	#N/A (0)	#N/A (0)
	A319	18	Average Count	94.2 (18)	91.0 (18)	93.1 (17)	87.2 (17)	86.4 (18)	87.4 (18)	83.9 (18)	#N/A (0)	#N/A (0)	#N/A (0)
	A320	37	Average Count	93.9 (32)	91.9 (32)	91.9 (32)	86.1 (33)	85.1 (31)	86.4 (31)	84.1 (31)	87.7 (3)	#N/A (0)	#N/A (0)
Horizon Air	E175	375	Average Count	91.0 (339)	89.3 (328)	89.3 (337)	85.3 (335)	84.6 (337)	85.8 (322)	83.4 (322)	89.4 (22)	#N/A (0)	#N/A (0)
Southwest	B737	728	Average Count	90.3 (659)	88.8 (641)	88.5 (663)	84.0 (657)	83.8 (658)	84.3 (643)	82.5 (619)	89.8 (41)	81.1 (1)	76.7 (1)
	B738	1043	Average Count	90.5 (956)	89.0 (921)	88.1 (956)	83.4 (941)	83.6 (944)	83.9 (930)	82.6 (908)	89.8 (52)	#N/A (0)	83.0 (2)
Spirit	A20N	144	Average Count	87.3 (131)	86.8 (126)	86.9 (131)	81.8 (128)	80.9 (101)	81.6 (125)	78.9 (43)	85.2 (6)	#N/A (0)	#N/A (0)
	A320	38	Average Count	90.3 (37)	89.0 (37)	88.9 (37)	83.6 (37)	82.6 (34)	82.7 (35)	79.7 (17)	84.6 (1)	#N/A (0)	#N/A (0)
United	A319	81	Average Count	93.2 (74)	90.0 (71)	92.2 (74)	86.3 (75)	85.0 (73)	85.6 (73)	81.4 (65)	86.7 (4)	#N/A (0)	#N/A (0)
	A320	103	Average Count	93.9 (91)	92.7 (89)	92.3 (95)	85.9 (94)	84.9 (94)	85.2 (89)	81.7 (87)	89.6 (4)	#N/A (0)	#N/A (0)
	B737	91	Average Count	94.2 (88)	91.3 (85)	94.1 (88)	90.1 (85)	89.9 (86)	89.9 (82)	85.3 (86)	91.3 (2)	#N/A (0)	79.4 (1)
	B738	238	Average Count	96.8 (208)	94.2 (205)	96.4 (214)	90.2 (213)	90.1 (212)	90.3 (193)	86.9 (209)	92.9 (11)	#N/A (0)	79.2 (2)
UPS	B752	49	Average Count	94.4 (47)	92.9 (46)	93.0 (47)	86.3 (47)	86.0 (47)	86.7 (47)	82.0 (43)	89.2 (2)	#N/A (0)	#N/A (0)

TABLE 7
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commercial Class E
January - March 2021

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
SkyWest Coml.	E175	392	Average Count	89.3 (358)	88.0 (343)	88.6 (359)	84.8 (351)	84.1 (347)	84.7 (345)	82.8 (338)	87.6 (19)	#N/A (0)	#N/A (0)
Southwest	B737	516	Average Count	89.0 (466)	88.0 (442)	87.4 (463)	83.2 (452)	83.0 (455)	83.3 (441)	81.9 (420)	88.7 (41)	#N/A (0)	#N/A (0)
	B738	455	Average Count	90.8 (441)	88.2 (422)	88.6 (426)	83.9 (429)	84.3 (435)	84.7 (431)	83.2 (422)	88.0 (9)	#N/A (0)	#N/A (0)

TABLE 8
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commuter
January - March 2021

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Delux Public Charters	E135	285	Average Count	85.1 (265)	83.9 (253)	86.0 (262)	80.0 (209)	78.9 (82)	80.0 (193)	80.0 (3)	82.9 (12)	#N/A (0)	#N/A (0)
	E145	69	Average Count	85.4 (66)	84.5 (66)	86.2 (65)	79.7 (45)	78.6 (21)	80.1 (44)	#N/A (0)	80.1 (2)	#N/A (0)	#N/A (0)
SkyWest	E175	90	Average Count	89.8 (86)	88.4 (83)	88.7 (86)	84.6 (84)	84.2 (85)	85.2 (84)	83.0 (80)	88.7 (2)	#N/A (0)	#N/A (0)

TABLE 8-GA
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
General Aviation
January - March 2021

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
General Aviation	Jet	4319	Average Count	88.1 (3851)	86.1 (3355)	89.1 (3773)	83.2 (2294)	82.8 (1807)	83.9 (2409)	82.0 (972)	84.7 (177)	81.3 (6)	81.6 (4)

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	1,049
		B734	24				
		B737	1,233	384	160	14	
		B738	6,420	8,260	5,247	767	24
Allegiant	G4	A319					152
		A320					54
American	AA	A21N			2	2	6
		A319	332	722	432	474	62
		A320	266	78	634	488	226
		A321	56	4	214	571	242
		B738	11,556	11,457	10,972	5,201	1,155
Compass	CP	B752	4	4	36		
		E170	78				
Compass	CP	E175	2,726	3,188	3,150	656	
		A220			851	1,954	754
Delta	DL	A223					4
		A319	2,053	1,979	1,987	828	165
		A320	94	12	11	8	
		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	283
		MD90		2			
FedEx	FM	A306	506	508	510	512	120
Frontier Airlines	F9	A20N*		600	900	550	168
		A319	356	190	100	2	36
		A320	628	654	428	392	74
		A32N*	438				
Horizon Air	QX	DH8D	1,456	728	12		
		E175	339	2,716	4,257	2,986	754
SkyWest Coml.	SC	CRJ9	1,440	6		2	
		E175	4,761	6,960	7,686	3,535	784
Southwest	WN	B38M	2	14	10		
		B737	35,971	32,380	29,360	14,268	2,568
		B738	58	64	134	3,780	3,000
Spirit	NK	A20N*				180	284
		A320				19	79
United	UA	A319	1,470	999	1,216	590	163
		A320	3,957	3,927	3,151	1,227	207
		B737	4,044	2,987	2,816	999	183
		B738	3,302	5,154	5,627	2,645	475
		B752	2	4			
UPS	5X	A306	45	22	12	18	
		B752	369	394	404	404	98
WestJet	WS	B736	30	10	58	34	
		B737	644	666	618	126	
Total			90,250	91,875	90,074	46,370	13,169

*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	452
A21N			2	2	6
A220			851	1,954	754
A223					4
A306	551	530	522	530	120
A319	4,211	3,954	3,979	2,208	578
A320	4,945	4,933	7,627	3,867	1,689
A321	56	4	214	571	242
A32N*	438				
B38M	2	14	10		
B712	3,267	3,379	2,495		
B734	24				
B736	30	10	58	34	
B737	42,038	36,605	32,962	15,431	2,751
B738	21,376	24,953	22,020	12,395	4,654
B739		2			
B752	2,512	3,291	3,329	1,469	381
CRJ9	1,440	6		2	
DH8D	1,456	728	12		
E170	78				
E175	7,826	12,864	15,093	7,177	1,538
MD90		2			
Total	90,250	91,875	90,074	46,370	13,169

*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	1.436
		B734	.033				
		B737	1.693	.526	.219	.022	
		B738	8.789	11.315	7.189	1.046	.033
Allegiant	G4	A319					.208
		A320					.074
American	AA	A21N			.003	.003	.008
		A319	.455	.989	.592	.648	.082
		A320	.364	.107	.868	.664	.312
		A321	.077	.005	.293	.779	.332
		B738	15.827	15.696	15.030	7.107	1.584
		B752	.005	.005	.049		
Compass	CP	E170	.107				
		E175	3.734	4.367	4.315	.896	
Delta	DL	A220			1.164	2.667	1.036
		A223					.005
		A319	2.811	2.712	2.723	1.131	.225
		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	.386
		MD90		.003			
FedEx	FM	A306	.693	.696	.699	.699	.164
Frontier Airlines	F9	A20N*		.822	1.233	.751	.230
		A319	.488	.260	.137	.003	.049
		A320	.860	.896	.586	.536	.101
		A32N*	.600				
Horizon Air	QX	DH8D	1.995	.997	.016		
		E175	.466	3.721	5.830	4.079	1.033
SkyWest Coml.	SC	CRJ9	1.975	.008		.003	
		E175	6.523	9.534	10.529	4.833	1.074
Southwest	WN	B38M	.003	.019	.014		
		B737	49.274	44.351	40.216	19.497	3.521
		B738	.079	.088	.184	5.161	4.104
Spirit	NK	A20N*				.246	.395
		A320				.025	.104
United	UA	A319	2.014	1.373	1.666	.806	.222
		A320	5.422	5.375	4.315	1.675	.285
		B737	5.534	4.093	3.855	1.366	.249
		B738	4.526	7.058	7.712	3.612	.652
		B752	.003	.005			
UPS	5X	A306	.060	.030	.016	.025	
		B752	.507	.540	.553	.552	.134
WestJet	WS	B736	.041	.014	.079	.046	
		B737	.882	.912	.847	.172	
Total			123.622	125.852	123.384	63.347	18.038

*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
A310	Airbus	310-200
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: March 23, 2021

Time: 2:00 PM

Place: Airport Commission Room/ Virtual Teleconference

ITEMS DISCUSSED

Nikolas Gaskins presented a brief review of the 2021 Plan Year allocations, with an updated total of the Covid-19 pandemic-related capacity returns for Q1 and Q2. Mr. Gaskins reiterated the Airport was waiving cumulative return time penalties for Q1 and Q2 but will be enforcing the minimum use requirements. As a result, JWA is currently projecting between 7.2 million and 7.3 million passengers for Plan Year 2021, down from 11.6 million projected passengers from the approved capacity allocation. Mr. Gaskins mentioned the 2022 Capacity Allocation process will begin in Aug/Sep 2021 and will go to the Board in November 2021.

Mr. Gaskins also presented an update on the status of the new entrant carriers and new markets at JWA. He discussed that Allegiant Air began service with the Airbus 319 & 320 in February 2021 to seven markets (five new markets) four days a week. Mr. Gaskins added that Sun Country recently conducted a successful Boeing 737-700 qualification noise test in March 2021 and will begin service to DFW and MSP. He also mentioned that Air Canada would have to delay their inaugural service to YVR due to the Canadian pandemic travel restriction. Mr. Gaskins added that United Airlines announced daily service to Honolulu (HNL), and American Airlines announced daily service to New York, New York (JFK) with the Airbus A321T later this year.

A summary of the JWA airport statistics for the month of January 2021 was provided by Beatrice Siercke. Through January, there was a 75% decrease in passenger volume compared to the same period last year. Ms. Siercke mentioned that there had been a decrease in general aviation operations, commercial operations, and there were no international operations due to the pandemic travel restrictions.

Justin Cook, HMMH, presented an overview of the results of the FAA's Neighborhood Environmental Survey (NES). Mr. Cook discussed the motivation and goal of the survey, the methodology that was used, the primary results of the survey and comparisons to other studies, and what are the next steps.

Newport Beach resident Dennis Bress expressed his concerns with the total number of general aviation departures that are not included in the quarterly report, thus making the report inaccurate. Mr. Bress requested that every flight be counted as a noise event regardless if the operation was "too quiet to pick up." Justin Cook of HMMH explained that every flight is run through the system to generate the 65 dB CNEL contour in the quarterly report and the challenge to lowering or eliminating the threshold settings within the system is that it would be difficult to separate community noise from aircraft noise events.

Newport Beach Aviation Committee member Alex Gunther asked who, when, and why the VOLANS flight tracking system is being replaced at JWA. Nikolas Gaskins advised that VOLANS is being replaced with WebTrak which is supported by Envirosuite, the same vendor that supports ANOMS. Mr. Gaskins explained the reasoning for the change was the current VOLANS contract is ending, and WebTrak is an integrated software component of ANOMS and Viewpoint.

QUARTERLY NOISE MEETING

Mr. Gunther inquired if the fleet makeup of Sun Country was taken into consideration as a new entrant because although a representative from Sun Country stated the airline operates a “Modern Fleet” of aircraft, the average age of Sun Country’s fleet is 16.2 years. Mr. Gunther expressed Sun Country’s fleet is old, loud and polluting and was curious to why JWA would allow Sun Country to operate as a new entrant. Mr. Gaskins advised that JWA has to accept new entrants based on the new entrant wait list as prescribed in the Access Plan.

Newport Beach resident Dr. Jim Mosher inquired if the Airport issues a “three strike ban” to the general aviation pilot, company, or tail number that violate the noise limits in accordance with the General Aviation Noise Ordinance (GANO). Mr. Gaskins advised the Airport database assigns the denial of use to the aircraft tail number.

Dr. Mosher asked if the NES survey took into account the CNEL noise values for airports within California, and does the quarterly noise report take into account propeller aircraft types. Justin Cook of HMMH explained the contour model is based on the NMS results then adjusts by aircraft noise not covered by the NMS based on modeling tools.

Dr. Mosher asked if Sun Country would have passed the Class E noise limits with the results of their Class A noise qualification test. Mr. Gaskins responded that Sun Country would not have passed the Class E noise test with the results.

QUARTERLY NOISE MEETING ROSTER

March 23, 2021

<u>NAME</u>	<u>ORGANIZATION</u>
Alan Guenther	Member, Newport Beach Aviation Committee
Dennis Bress	Resident – Newport Beach
Jim Mosher	Resident - Newport Beach
Tara Finnigan	Newport Beach Deputy City Manager
Justin Cook	HMMH
Anthony Cangey	John Wayne Airport
Beatrice Siercke	John Wayne Airport
Cristina Magaña	John Wayne Airport
Nikolas Gaskins	John Wayne Airport
Call-in Line_2	Unknown
Call-in Line_3	Unknown
Call-in Line_4	Unknown

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):
0.0 Sq. Mi.
2. Estimated Number of dwelling units included in the Noise Impact Area as defined in the Noise Standards:
0
3. Estimated number of people residing within the Noise Impact Area as defined in the Noise Standards:
0 (Based on 2.5 People/Dwelling Unit)
4. Identification of aircraft 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 – 4,654 (Arrivals+Departures)
5. Total number of aircraft operations during the calendar quarter:
65,161
6. Number of Air Carrier operations during the calendar quarter:
(Not mandatory)
14,058
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)
50,986
9. Estimated number of operations by Military aircraft during the calendar quarter:
(Not mandatory)
117