# NOISE ABATEMENT PROGRAM QUARTERLY REPORT

For the period: July 1, 2019 through September 30, 2019

Prepared in accordance with:

**AIRPORT NOISE STANDARD** 

STATE OF CALIFORNIA

California Code of Regulations
Airport Noise Standards
Title 21: Public Works

Division 2.5 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 187<sup>th</sup> 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**

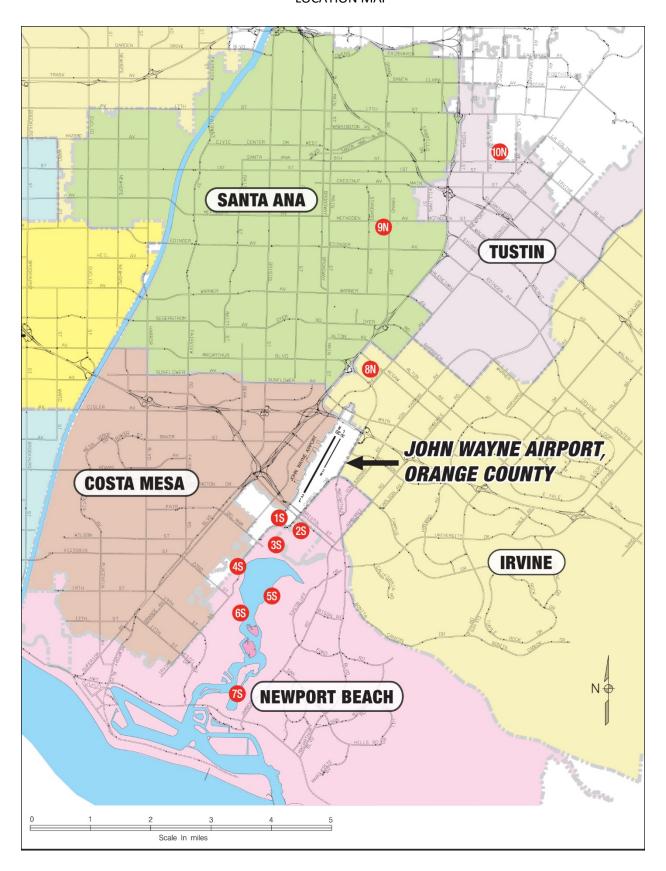
NMS-1S: Golf Course, 3100 Irvine Ave., Newport Beach
NMS-2S: 20162 S.W. Birch St., Newport Beach
NMS-3S: 2139 Anniversary Lane, Newport Beach
NMS-4S: 2338 Tustin Ave., Newport Beach
NMS-5S: 324 ½ Vista Madera, Newport Beach
NMS-10N: 17952 Beneta Way, Tustin

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

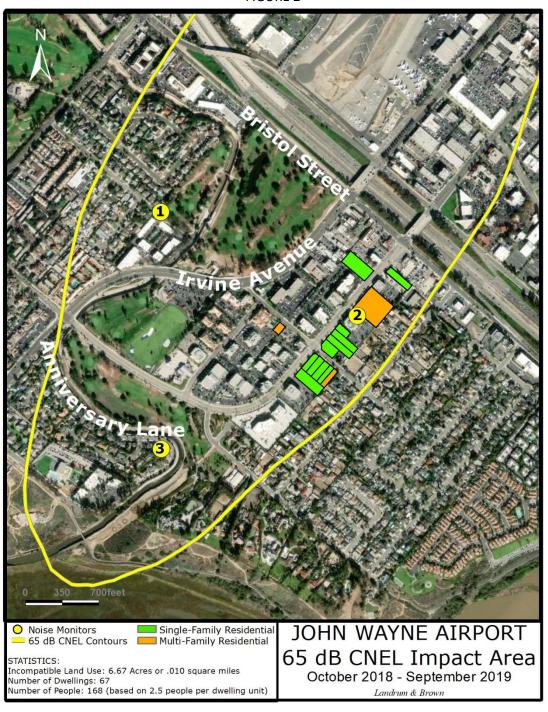
Figure 2 shows the Airport's "Noise Impact Area" for the previous year (October 1, 2018 - September 30, 2019). The Figure 2 information was developed by Landrum and Brown, in consultation with John Wayne Airport. CNEL values measured for the period and current digitized land use information were utilized 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





#### 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 2019

Period	Air Carı	riers	GA Jet (1)	Total	Average Daily
	Jet	Prop		Operations (2)	Jet Operations
July	8,242	0	3,068	27,520	365
August	8,266	0	3,381	29,921	376
September	7,805	0	3,100	26,218	364
Third Quarter	24,313	0	9,549	83,659	368
Twelve Months 10/01/18 - 09/30/19	95,517	190	36,286	310,585	361

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.

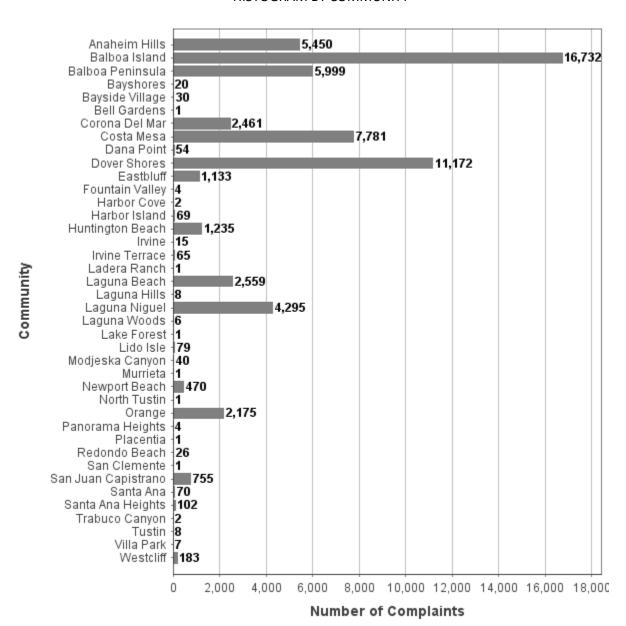
### **ACOUSTICAL INSULATION PROGRAM**

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. Sixty-seven dwelling units in Santa Ana Heights remain in the "Noise Impacted Area" (within 65 dB CNEL contour).

### COMPLAINT TOTALS (July 1, 2019 - September 30, 2019)

The Airport's Access and Noise Office receives and investigates noise complaints from local citizens and all other sources. During the July 1, 2019 through September 30, 2019, the Office received 63,018 complaints from local citizens. This is a 44.0% increase from the 43,772 complaints received last quarter. It is a 1566.7% increase from the 3,781 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:

- City of Newport Beach 38,439 total number of complaints.
- 96% of complaints were from a complaint subscription service.
- 58% of complaints from "Anaheim Hills" category were from one point of contact.
- 95% of complaints from "Balboa Peninsula" category were from one point of contact.
- 98% of complaints from "Corona del Mar" category were from one point of contact.
- 84% of complaints from "Costa Mesa" category were from one point of contact.
  62% of complaints from "Dover Shores" category were from one point of contact.
- 83% of complaints from "Laguna Beach" category were from one point of contact.
- 53% of complaints from "Laguna Niguel" category were from one point of contact.
- 64% of complaints from "Orange" category were from one point of contact.
- 91% of complaints from "San Juan Capistrano" category were from one point of contact.
- 95% of complaints from "Westcliff" category were from one point of contact.



## TABLE 2 LONG TERM MEASURED LEVELS Aircraft CNEL from 10/01/18 through 09/30/19 Values in dB at Each Site

Period					NMS	Site				
	15	25	3S	45	<b>5</b> S	6S	<b>7</b> S	8N	9N	10N
Oct 2018	68.4	67.2	66.9	59.9	59.8	60.9	56.9	68.0	43.3	56.8
# Days	31	31	31	31	31	31	31	31	30	31
Nov 2018	67.5	66.4	66.4	59.5	59.0	60.7	56.7	67.3	44.8	55.8
# Days	30	30	30	29	30	30	28	30	28	30
Dec 2018	67.6	66.6	66.8	59.6	59.6	61.4	57.0	67.6	45.0	56.3
# Days	31	31	31	31	31	31	30	31	30	31
Q-4 2018	67.9	66.8	66.7	59.7	59.5	61.0	56.9	67.6	44.4	56.3
# Days	92	92	92	91	92	92	89	92	88	92
Jan 2019	67.7	66.6	66.5	59.9	59.5	60.7	57.0	67.9	43.4	57.1
# Days	31	31	31	31	31	31	31	31	28	29
Feb 2019	67.9	66.7	66.6	60.2	60.0	60.8	57.7	68.6	45.4	57.9
# Days	28	28	28	28	28	28	28	28	27	28
Mar 2019	67.9	66.9	66.9	60.2	59.9	61.2	57.4	68.5	43.8	57.6
# Days	30	31	31	31	31	31	31	31	28	31
Q-1 2019	67.8	66.8	66.7	60.1	59.8	60.9	57.3	68.3	44.3	57.5
# Days	89	90	90	90	90	90	90	90	83	88
Apr 2019	68.1	67.2	66.6	60.3	59.6	61.1	57.4	68.6	42.2	57.7
# Days	30	30	30	30	30	30	30	30	25	30
May 2019	68.3 31	67.5 31	66.8 31	60.6 31	59.8 31	61.2 31	57.9 31	69.1 31	43.3 29	58.3 31
# Days										
Jun 2019 # Days	68.5 30	67.6 30	67.1 30	60.3 30	59.2 30	60.8 30	57.0 30	68.9 30	41.4 25	57.7 30
# Days Q-2 2019	68.3	6 <b>7.5</b>	66.8	60.4	<b>59.5</b>	61.0	<b>57.5</b>	<b>68.9</b>	42.4	<b>57.9</b>
# Days	91	91	91	91	91	91	91	91	79	91
Jul 2019	68.4	67.5	67.2	60.3	59.7	60.6	56.9	68.4	41.5	57.1
# Days	31	31	31	31	31	31	31	31	24	31
Aug 2019	68.4	67.5	67.3	60.2	59.6	60.4	56.1	68.3	41.0	56.9
# Days	31	31	31	31	31	31	31	31	21	31
Sep 2019	68.1	67.2	66.9	60.0	59.4	60.3	56.5	67.8	43.6	56.7
# Days	30	30	30	30	30	30	30	27	21	30
Q-3 2019	68.3	67.4	67.1	60.2	59.6	60.4	56.5	68.2	42.1	56.9
# Days	92	92	92	92	92	92	92	89	66	92
Q-4 2018 thru	ı Q-3 2019									
Total	68.1	67.1	66.8	60.1	59.6	60.9		68.3	43.5	57.2
# Days	364	365	365	364	365	365	362	362	316	363
Q-3 2018 thru	ı Q-2 2019	(Previous 4	Quarters)							
Total	68.1	67.1	66.8	60.1	59.6	60.9		68.3	43.7	57.1
# Days	364	365	365	364	365	365	362	365	335	363
Change from	Previous 4	Quarters								
	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.2	0.1



## TABLE 3 DAILY CNEL VALUES AT EACH MONITOR STATION July 2019

Date					NMS	Site				
	15	2S	3S	<b>4</b> S	5\$	6S	<b>7</b> S	8N	9N	10N
1	68.0	67.3	66.7	59.9	58.7	60.5	56.5	67.8	39.4	56.2
2	68.2	67.3	66.6	60.3	59.6	60.4	56.9	68.1	42.7	57.1
3	68.2	66.9	66.7	60.9	59.9	61.1	57.8	68.6	40.8	57.9
4	66.2	65.5	64.8	58.3	58.2	59.4	55.7	65.7	39.9	55.2
5	67.3	66.3	65.9	59.7	59.0	60.2	56.6	67.8	42.3	56.4
6	67.9	66.9	66.5	59.5	59.2	60.1	55.7	67.4	39.8	56.3
7	68.8	67.8	67.2	60.9	60.1	61.3	57.5	69.4	*#N/A	58.5
8	68.6	67.8	67.4	61.0	60.3	61.1	58.2	68.7	*#N/A	57.6
9	68.4	67.7	67.1	60.6	60.4	61.1	57.8	68.4	42.6	57.4
10	68.4	67.8	67.2	60.2	60.1	60.6	57.4	68.5	32.2	57.0
11	68.8	68.0	67.5	60.2	60.0	60.1	57.4	69.0	*#N/A	57.5
12	68.5	67.6	67.5	60.0	59.6	59.7	56.7	69.0	43.0	57.1
13	66.9	65.9	65.3	57.8	57.3	57.5	54.6	67.1	*#N/A	55.4
14	68.7	67.9	67.5	60.1	60.2	60.3	56.6	69.3	44.7	58.0
15	68.6	67.7	67.1	59.7	59.3	59.1	56.3	68.5	31.8	57.4
16	68.1	67.3	66.9	60.5	59.2	60.3	56.2	69.0	*#N/A	57.6
17	68.9	67.8	67.5	61.5	59.8	61.3	57.5	68.9	36.9	57.5
18	69.2	68.4	68.0	61.1	60.8	61.9	56.5	69.2	*#N/A	58.1
19	69.0	68.0	67.8	61.2	60.2	61.9	58.0	68.9	34.2	57.7
20	67.4	66.5	66.1	59.0	59.1	60.0	56.7	66.8	35.9	55.5
21	69.0	68.3	67.9	60.6	60.6	61.6	57.5	68.9	48.3	57.3
22	68.7	67.9	68.1	60.4	60.1	61.2	57.3	68.6	37.4	57.2
23	68.3	67.6	67.4	59.9	59.6	60.2	56.3	68.1	38.8	56.6
24	68.6	67.8	67.5	60.2	59.3	60.2	56.5	68.7	40.2	56.8
25	68.5	67.6	67.1	59.9	59.5	60.1	56.6	69.0	38.9	56.6
26	68.5	67.8	67.9	60.2	59.9	60.9	56.8	68.4	*#N/A	56.2
27	67.2	66.1	66.1	59.0	58.3	58.9	55.3	66.6	39.8	55.0
28	68.5	67.7	67.5	60.8	60.0	61.1	56.8	68.6	38.8	57.2
29	68.8	68.1	67.7	60.8	59.5	60.8	56.3	68.4	46.3	57.0
30	69.1	68.0	67.7	61.4	60.5	61.6	57.5	68.8	38.4	57.6
31	69.1	68.3	67.9	61.0	60.2	61.3	57.6	68.9	40.7	57.7
Days	31	31	31	31	31	31	31	31	24	31
En. Avg	68.4	67.5	67.2	60.3	59.7	60.6	56.9	68.4	41.5	57.1

#N/A indicates insufficient data.

<sup>\*#</sup>N/A indicates no aircraft-related noise events.



## TABLE 4 DAILY CNEL VALUES AT EACH MONITOR STATION August 2019

Date					NMS	Site				
	15	25	3S	<b>4</b> S	5S	6S	<b>7</b> S	8N	9N	10N
1	68.8	68.1	67.8	60.1	59.9	60.4	55.9	68.7	36.6	57.2
2	68.0	67.6	66.6	59.0	58.3	58.3	54.9	66.3	39.9	53.6
3	67.5	66.4	65.6	58.7	58.0	58.7	54.7	67.5	*#N/A	56.3
4	68.7	67.9	67.6	60.7	60.1	60.8	56.6	68.8	40.1	57.0
5	68.9	68.0	67.9	60.1	60.1	60.5	56.0	68.5	*#N/A	57.2
6	68.7	67.7	67.7	61.1	60.3	60.9	56.4	69.2	37.7	58.6
7	68.3	67.7	67.3	60.7	59.8	60.7	56.6	69.2	45.3	57.5
8	69.0	68.3	68.2	60.8	60.3	61.1	56.7	69.2	41.9	57.5
9	68.8	67.9	67.3	60.7	59.8	60.6	56.6	69.1	*#N/A	58.0
10	67.5	66.5	66.1	59.2	58.7	59.5	56.1	66.7	*#N/A	54.9
11	68.5	67.7	67.4	60.7	60.3	61.2	57.2	69.0	45.7	57.1
12	68.3	67.8	67.5	60.4	60.0	61.1	56.7	68.5	*#N/A	57.6
13	68.6	67.9	67.7	60.2	59.7	60.2	55.6	68.3	*#N/A	57.3
14	68.9	68.1	67.9	60.2	59.4	59.8	54.2	68.5	41.2	57.5
15	68.8	68.0	67.7	59.5	58.5	58.4	53.5	68.6	32.8	57.1
16	68.9	67.8	67.7	60.7	59.5	60.5	55.6	68.9	*#N/A	57.6
17	67.5	66.4	66.3	59.8	58.5	59.7	55.3	66.6	43.1	55.5
18	68.6	67.9	67.4	60.7	60.2	61.5	57.4	68.8	38.5	57.3
19	68.5	67.8	67.5	60.4	60.1	61.0	56.3	68.1	29.5	57.4
20	68.3	67.6	67.2	60.2	59.8	60.2	56.2	67.9	44.3	57.0
21	68.5	67.6	67.6	60.1	59.6	60.9	56.7	68.1	41.8	56.7
22	69.0	67.8	67.8	61.4	60.1	61.7	57.3	68.6	40.8	57.1
23	68.5	67.3	67.3	61.2	59.6	61.2	57.3	68.8	42.6	57.1
24	66.8	66.0	65.9	58.5	58.0	58.9	55.1	65.7	38.7	53.9
25	68.2	67.4	67.0	59.6	59.1	59.8	56.2	67.6	*#N/A	56.4
26	68.3	67.3	67.2	60.0	59.3	60.1	55.8	68.6	*#N/A	57.1
27	68.2	67.3	67.1	60.5	59.3	60.6	55.6	68.4	38.5	57.2
28	68.5	67.4	67.4	61.0	59.9	61.0	56.5	68.7	39.5	57.3
29	68.7	68.1	67.9	60.5	60.4	61.5	57.4	68.0	35.8	57.1
30	68.4	67.4	67.5	60.1	59.9	60.4	56.4	69.1	*#N/A	57.3
31	67.0	65.9	66.0	57.6	57.7	58.5	53.9	65.2	32.8	53.5
Days	31	31	31	31	31	31	31	31	21	31
En. Avg	68.4	67.5	67.3	60.2	59.6	60.4	56.1	68.3	41.0	56.9

#N/A indicates insufficient data.

<sup>\*#</sup>N/A indicates no aircraft-related noise events.



## TABLE 5 DAILY CNEL VALUES AT EACH MONITOR STATION September 2019

Date					NMS	Site				
	15	25	3S	<b>4</b> S	<b>5</b> S	6S	<b>7</b> S	8N	9N	10N
1	66.7	65.7	65.6	58.7	57.9	58.7	52.6	67.4	35.5	55.8
2	68.1	67.0	66.8	60.1	58.9	60.0	56.2	68.0	49.7	55.8
3	68.1	67.3	66.9	59.4	59.0	59.8	56.2	67.3	*#N/A	55.8
4	67.8	66.1	66.8	59.3	58.6	59.5	55.7	67.8	44.9	55.7
5	67.7	66.9	66.4	59.4	58.8	59.9	56.0	67.6	*#N/A	56.5
6	68.4	67.5	67.0	59.7	59.2	60.1	56.1	67.7	*#N/A	56.5
7	66.7	65.9	65.5	58.6	58.3	59.1	55.5	65.8	*#N/A	54.6
8	68.5	67.6	67.3	60.6	60.1	61.1	57.7	68.8	*#N/A	57.7
9	68.2	67.1	66.9	60.8	59.7	60.9	57.3	68.2	*#N/A	57.0
10	67.9	66.8	66.6	60.8	59.8	60.6	57.3	68.2	39.7	57.4
11	67.9	67.4	67.0	60.3	60.1	60.9	57.3	68.3	38.9	57.0
12	68.9	67.9	68.3	60.5	60.4	61.2	56.9	68.7	39.1	56.8
13	68.2	67.5	67.3	58.9	59.2	59.5	55.7	44.3	38.7	55.9
14	66.6	65.7	65.4	57.4	57.0	57.8	53.1	#N/A	*#N/A	53.2
15	68.6	67.7	67.4	59.7	59.1	59.8	56.0	#N/A	36.6	57.0
16	68.6	67.8	67.3	60.5	59.7	60.5	56.4	#N/A	46.2	57.5
17	67.9	67.0	66.6	60.0	59.8	60.7	56.9	69.9	43.1	56.7
18	68.2	67.1	66.6	60.3	59.7	60.5	56.6	68.0	46.8	56.4
19	67.9	67.3	67.0	60.7	60.1	61.0	57.5	68.5	44.0	57.8
20	68.5	67.7	67.4	60.3	59.9	61.1	57.8	68.5	43.1	57.4
21	66.9	66.1	65.8	58.8	58.5	59.0	55.4	65.6	45.6	53.8
22	68.5	67.5	67.4	60.1	59.0	60.1	56.1	68.5	38.6	56.6
23	68.6	67.7	67.2	60.5	59.9	61.1	56.9	68.3	45.3	57.0
24	68.0	67.2	67.0	59.2	59.5	60.1	56.4	67.4	37.2	55.8
25	68.3	67.2	66.8	60.3	58.4	60.3	56.1	68.4	*#N/A	57.4
26	68.7	67.9	67.4	61.0	60.1	61.3	57.3	68.8	45.6	58.2
27	68.5	68.0	67.4	60.8	60.5	61.4	57.8	64.1	*#N/A	58.3
28	66.6	66.0	65.4	58.8	58.4	59.2	55.5	66.1	43.5	56.2
29	68.4	67.9	67.1	60.7	60.1	60.9	55.9	68.5	37.0	58.0
30	68.3	67.7	67.0	60.4	60.2	61.0	57.5	67.7	40.7	57.3
Days	30	30	30	30	30	30	30	27	21	30
En. Avg	68.1	67.2	66.9	60.0	59.4	60.3	56.5	67.8	43.6	56.7

#N/A indicates insufficient data.

<sup>\*#</sup>N/A indicates no aircraft-related noise events.



## TABLE 6 MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS Commercial Class A July - September 2019

Carrier	AC Type	# Deps						NMS	Site				
		·		1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Alaska Air	A320	447	Average	95.7	94.9	94.7	87.9	85.9	87.1	84.1	#N/A	#N/A	#N/A
	B737	17	Count Average	(443) 95.7	(438) 94.8	(442) 94.5	(438) 89.4	(429) 88.4	(433) 89.0	` '	(0) #N/A	(0) #N/A	(0) #N/A
	B/3/	17	Count	(17)	(17)	(16)	(17)	(17)	(15)	(14)	(0)	(0)	(0)
	B738	685	Average	98.0	96.8	95.3	88.7	88.9	89.7	86.2	#N/A	#N/A	#N/A
			Count	(680)	(667)	(675)	(654)	(671)	(670)	` '	(0)	(0)	(0)
American	A21N	1	Average Count	89.9 (1)	89.9 (1)	88.4 (1)	82.7 (1)	81.3 (1)	83.2 (1)	81.9 (1)	#N/A (0)	#N/A (0)	#N/A (0)
	A320	148	Average Count	94.9 (147)	94.2 (145)	93.3 (146)	85.9 (144)	85.1 (140)	86.6 (146)		#N/A (0)	#N/A (0)	#N/A (0)
	A321	24	Average	99.2	98.5	97.4	88.6	87.3	88.2	85.2	#N/A	#N/A	#N/A
	A321	24	Count	(24)	(23)	(24)	(24)	(24)	(24)	(24)	(0)	(0)	(0)
	B738	1447	Average	99.0	97.7	97.5	89.4	88.8	89.8		96.8	88.6	81.7
			Count	(1421)	(1409)	(1420)	(1397)	(1379)	(1371)	` ′	(8)	(9)	(1)
Compass	E175	427	Average Count	95.6 (425)	95.1 (412)	96.1 (423)	89.4 (415)	88.7 (418)	89.0 (409)		#N/A (0)	#N/A (0)	#N/A (0)
Delta	A220	19	Average	87.5	88.0	86.2	80.5	80.1	81.0		#N/A	#N/A	#N/A
20.00	7.220		Count	(19)	(19)	(18)	(19)	(17)	(19)		(0)	(0)	(0)
	A319	261	Average	96.1	95.3	95.3	88.1	87.2	88.1	83.5	94.3	87.2	81.2
	A320	1	Count	(247) 96.6	(241) 95.7	(249) 96.1	(236) 86.6	(237) 85.3	(237) 86.5	(240) 84.9	(12) #N/A	(9) #N/A	(3) #N/A
	A320	1	Average Count	96.6	95.7	(1)	(1)	85.3 (1)	86.5		#N/A (0)	#N/A (0)	#N/A (0)
	B712	24	Average	92.4	92.6	88.2	79.7	79.1	81.0		#N/A	#N/A	#N/A
			Count	(24)	(24)	(23)	(14)	(16)	(22)	` '	(0)	(0)	(0)
	B738	9	Average Count	95.7	94.8	93.3	87.6	88.2	89.0		#N/A	#N/A	#N/A
	B752	400	Average	(9) 96.6	(7) 96.1	(9) 96.4	(8) 88.9	(9) 87.8	(8) 88.1	(9) 83.7	(0) 94.4	(0) 85.7	(0) #N/A
	B/32	400	Count	(393)	(387)	(391)	(378)	(381)	(376)		(5)	(6)	(0)
FedEx	A306	64	Average	96.4	96.2	94.0	88.0	87.1	88.5	84.1	#N/A	#N/A	#N/A
			Count	(64)	(64)	(64)	(63)	(64)	(61)		(0)	(0)	(0)
Frontier Airlines	A20N	126	Average Count	88.9 (125)	88.9 (122)	88.2 (124)	81.8 (110)	79.9 (81)	82.5 (112)		#N/A (0)	#N/A (0)	#N/A (0)
	A320	54	Average	95.4	94.9	93.3	86.7	85.6	87.6	85.0	#N/A	#N/A	#N/A
			Count	(53)	(53)	(52)	(53)	(49)	(53)		(0)	(0)	(0)
Horizon Air	E175	218	Average Count	91.5 (216)	91.0	89.3 (211)	84.7 (216)	84.2 (212)	86.2 (216)	82.6 (206)	#N/A (0)	#N/A	#N/A
Southwest	B737	15/10	Average	92.8	(205) 92.3	90.3	84.8	85.0	85.7	82.5	(0) #N/A	(0) #N/A	(0) #N/A
Southwest	B/3/		Count	(1532)	(1518)						(0)	(0)	(0)
	B738	12	Average	92.4	92.1	89.4	84.1	84.2	84.9		#N/A	#N/A	#N/A
United	A320	590	Count Average	(12) 95.0	(12) 94.3	(12) 94.1	(12) 87.0	(12) 85.6	(12) 86.5		(0) #N/A	(0) #N/A	(0) #N/A
oniteu	M320	380	Count	95.0 (577)	94.3 (567)	(574)	(556)	(553)	66.5 (552)		#IN/A (0)	#N/A (0)	#N/A (0)
	B737	398	Average	96.9	95.5	96.6	90.1	90.2	90.4	86.1	96.5	88.6	82.8
			Count	(390)	(383)	(393)	(391)	(388)	(375)		(4)	(5)	(2)
	B738	702	Average Count	98.7 (686)	97.3 (673)	97.9 (683)	90.9 (676)	90.1 (666)	90.1 (648)	86.5 (665)	97.9 (9)	88.9 (9)	83.2 (4)
UPS	B752	52	Average	95.4	95.3	93.6	86.6	86.2	87.2		#N/A	#N/A	#N/A
			Count	(51)	(51)	(51)	(51)	(50)	(50)		(0)	(0)	(0)
WestJet	B737		Average	95.4	94.2		89.3	88.7	89.8		#N/A	#N/A	#N/A
			Count	(90)	(90)	(91)	(88)	(89)	(89)	(91)	(0)	(0)	(0)



## TABLE 7 MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS Commercial Class E July - September 2019

Carrier	AC Type	# Deps		NMS Site									
				15	25	3S	<b>4</b> S	5S	6S	<b>7</b> S	8N	9N	10N
Delta	B712	377	Average	92.3	92.5	88.4	80.1	79.7	81.7	78.9	#N/A	#N/A	#N/A
			Count	(374)	(368)	(373)	(270)	(272)	(355)	(208)	(0)	(0)	(0)
Horizon Air	E175	327	Average	91.0	90.6	89.1	84.7	83.9	85.8	82.4	#N/A	#N/A	#N/A
			Count	(323)	(313)	(319)	(319)	(320)	(307)	(295)	(0)	(0)	(0)
SkyWest Coml.	E175	958	Average	90.2	90.0	89.0	84.7	83.9	85.5	82.1	#N/A	#N/A	#N/A
			Count	(947)	(911)	(945)	(937)	(926)	(926)	(887)	(0)	(0)	(0)
Southwest	B737	1971	Average	91.7	91.5	89.7	84.7	84.7	85.5	82.1	94.2	#N/A	84.5
			Count	(1955)	(1894)	(1928)	(1932)	(1929)	(1896)	(1874)	(2)	(0)	(1)

# TABLE 8 MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS Commuter July - September 2019

Carrier	AC Type	# Deps						NMS	Site				
				<b>1</b> S	25	3S	<b>4</b> S	5S	6S	<b>7</b> S	8N	9N	10N
Delux Public Charters	E135	666	Average	85.4	85.5	86.2	79.6	78.5	79.7	79.9	#N/A	#N/A	#N/A
			Count	(658)	(638)	(653)	(470)	(90)	(371)	(6)	(0)	(0)	(0)
SkyWest	CRJ7	87	Average	87.2	87.4	86.5	79.5	80.3	81.5	79.6	#N/A	#N/A	#N/A
			Count	(87)	(82)	(85)	(41)	(71)	(83)	(63)	(0)	(0)	(0)

## TABLE 8-GA MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS General Aviation July - September 2019

Carrier	AC Type	# Deps		NMS Site									
				<b>1</b> S	2S	3S	<b>4</b> S	5S	6S	<b>7</b> S	8N	9N	10N
General Aviation	Jet	4547	Average	87.9	87.3	89.0	82.5	82.0	83.5	81.7	88.4	81.4	88.0
			Count	(4344)	(4182)	(4245)	(2188)	(1678)	(2480)	(809)	(21)	(5)	(2)



### TABLE 9 AIR CARRIER OPERATIONAL HISTORY

Alaska Air  AS  A319  A320  B734  B734  B737  A80  A76  A24  B737  A80  B738  A.590  A.439  A.420  A321  A320  A320  B738  A4.590  A4.439  A4.439  A4.20  A321  A320  A344  B868  A321  A320  B738  B738  B738  B738  B752  B752  B751  B775  B775  B775  B777  B777  B778  B779  B7	Carrier		AC Type			Year		
A320				2015	2016	2017	2018	2019
B734	Alaska Air	AS	A319				64	184
B737			A320				262	3.016
B738			B734	80	76	24		
American  AA  A319  A319  A319  A320  A344  B68  A321  A326  A321  A326  B738  B738  B752  Compass  CP  E170  E175  E175  E175  E175  E175  E175  E176  E175  E176  E176  E176  E176  E176  E177  E176  E177  E176  E177  E177  E178  E178  E178  E179  E179			B737	2,666	3,258	1,233	384	126
A319			B738	4,590	4,439	6,420	8,260	3,536
A320	American	AA	A21N					2
A321   326   563   56				42	178	332	722	332
B738   9.090   10.538   11.556   11.457   8.4			A320	344	868	266	78	324
B752			A321	326	563	56	4	55
Compass         CP         E170         152         78           Delta         DL         A220         3,188         2,3           A319         3,352         3,444         2,053         1,979         1,2           B712         3,267         3,379         2,2         8737         146         188           B738         4         40         18         8739         2         2         2           B752         2,130         2,128         2,137         2,889         2,1         2           FedEx         FM         A306         508         510         506         508         3           Frontier Airlines         F9         A200*         600         6         6         6         6           Frontier Airlines         F9         A200*         646         356         190         6 <t< td=""><td></td><td></td><td>B738</td><td>9,090</td><td>10,538</td><td>11,556</td><td>11,457</td><td>8,471</td></t<>			B738	9,090	10,538	11,556	11,457	8,471
E175			B752	22	74	4	4	
Delta         DL         A220         A319         3,352         3,444         2,053         1,979         1,24           A320         162         160         94         12         3,267         3,379         2,4           B737         146         188         8738         4         40         18         19         18         18         18         18         18         18         19         18	Compass	CP	E170		152	78		
A319			E175		1,669	2,726	3,188	2,350
A320	Delta	DL	A220					39
B712   3,267   3,379   2,4			A319	3,352	3,444	2,053	1,979	1,470
B737			A320	162	160	94	12	4
B738			B712			3,267	3,379	2,495
B739   2			B737			146	188	8
B752   2,130   2,128   2,137   2,889   2,1			B738	4		40	18	28
MD90			B739	2			2	
FedEx         FM         A306         508         510         506         508         3           Frontier Airlines         F9         A20N*         600         6         600         6           A319         1.497         646         356         190         356         30         32         30         10         32         32         30         10         32         32         30         10         32         32         30         10         32         32         30         10         32         30         10         32         30         10         32         30         10         32         30         10         32         30         10         32         30         10         32         30			B752	2,130	2,128	2,137	2,889	2,190
Frontier Airlines  F9  A20N*  A319  1.497  646  356  190  A320  154  740  628  654  3  A321  2  A32N*  Horizon Air  QX  DH8D  E175  SkyWest Coml.  SC  CRJ9  1.922  1.899  1.440  6  E175  3.392  7.16  8737  37.101  B738  2.586  1.144  58  64  A320  A320  A321  A320  E175  A320  E175  A320  CRJ9  1.922  1.899  1.440  6  E175  Southwest  WN  B38M  B737  37.101  41.806  35.971  32.380  22.3  United  UA  A319  A320  A3207  A3207  B738  1.893  1.999  1.470  999  1.60  A320  A3207  B738  1.853  1.252  3.302  5.154  4.3  UPS  SX  A306  S2  B752  A40  B752  A40  A319  A320  A320			MD90				2	
A319 1,497 646 356 190 A320 154 740 628 654 3 A321 2 A32N* 12 438  Horizon Air QX DH8D 1.156 1,456 728 E175 339 2,716 3,3  SkyWest Coml. SC CRJ9 1.922 1,899 1,440 6 E175 3,554 4,761 6,960 5,5  Southwest WN B38M 2 14 B737 37,101 41,806 35,971 32,380 22,3 B738 2,586 1,144 58 64 1  United UA A319 1,393 1,999 1,470 999 1,6 A320 3,207 2,670 3,957 3,927 2,1 B737 4,523 5,246 4,044 2,987 2,1 B738 1,853 1,252 3,302 5,154 4,3 B752 44 2 4  UPS SX A306 52 52 45 22 B752 366 370 369 394 3  US Airways AW A319 240 A320 1,476 A321 740 B752 98  WestJet WS B736 32 30 10 B737 718 642 644 666 4	FedEx	FM	A306	508	510	506	508	382
A320	Frontier Airlines	F9	A20N*				600	656
A320 154 740 628 654 3 A321 2 438  Horizon Air QX DH8D 1.156 1.456 728 E175 339 2,716 3,1  SkyWest Coml. SC CRJ9 1.922 1.899 1.440 6 E175 3,554 4,761 6,960 5,5  Southwest WN B38M 2 14  B737 37,101 41.806 35,971 32,380 22,3 B738 2.586 1.144 58 64 1  United UA A319 1.393 1.999 1.470 999 1.0  A320 3,207 2,670 3,957 3,927 2,1  B738 1.853 1,252 3,302 5,154 4,3  B752 44 2 4  UPS 5X A306 52 52 45 22  B752 366 370 369 394 3  US Airways AW A319 240  A320 1,476 A320 740 B752 98  WestJet WS B736 32 30 10  B737 718 642 644 666 4			A319	1,497	646	356	190	98
Horizon Air			A320	154	740	628	654	326
Horizon Air   QX   DH8D   1,156   1,456   728   E175   339   2,716   3,1			A321		2			
E175   339   2,716   3,1			A32N*		12	438		
SkyWest Coml.         SC         CRJ9 E175         1,922         1,899         1,440         6           Southwest         WN         B38M         2         14           B737         37,101         41,806         35,971         32,380         22,3           B738         2,586         1,144         58         64         1           United         UA         A319         1,393         1,999         1,470         999         1,0           A320         3,207         2,670         3,957         3,927         2,1           B737         4,523         5,246         4,044         2,987         2,1           B738         1,853         1,252         3,302         5,154         4,3           B752         44         2         4         2         4           UPS         5X         A306         52         52         45         22           B752         366         370         369         394         3           US Airways         AW         A319         240         4         4         4         4         4         4         4         4         4         4         4         4 <td>Horizon Air</td> <td>QX</td> <td>DH8D</td> <td></td> <td>1,156</td> <td>1,456</td> <td>728</td> <td>12</td>	Horizon Air	QX	DH8D		1,156	1,456	728	12
E175			E175			339	2,716	3,199
E175	SkyWest Coml.	SC		1,922	1,899	1,440	6	
Southwest         WN         B38M         2         14           B737         37,101         41,806         35,971         32,380         22,3           B738         2,586         1,144         58         64         1           United         UA         A319         1,393         1,999         1,470         999         1,0           A320         3,207         2,670         3,957         3,927         2,1         8737         4,523         5,246         4,044         2,987         2,1           B738         1,853         1,252         3,302         5,154         4,3           B752         44         2         4         2         4           UPS         5X         A306         52         52         45         22           B752         366         370         369         394         3           US Airways         AW         A319         240         4         4           A321         740         740         740         740         740         740         740         740         740         740         740         740         740         740         740         740         740					3,554	4,761	6,960	5,563
B737 37.101 41.806 35.971 32.380 22.3 B738 2.586 1.144 58 64 1  United UA A319 1.393 1.999 1.470 999 1.0  A320 3.207 2.670 3.957 3.927 2.1  B737 4.523 5.246 4.044 2.987 2.1  B738 1.853 1.252 3.302 5.154 4.3  B752 44 2 4  UPS 5X A306 52 52 45 22  B752 366 370 369 394 3  US Airways AW A319 240  A320 1.476  A321 740  B752 98  WestJet WS B736 32 30 10  B737 718 642 644 666 4	Southwest	WN					14	10
B738   2.586   1.144   58   64   1				37,101	41,806	35,971	32,380	22,322
United    A319							64	114
A320 3,207 2,670 3,957 3,927 2,1 B737 4,523 5,246 4,044 2,987 2,1 B738 1,853 1,252 3,302 5,154 4,3 B752 44 2 4  UPS 5X A306 52 52 45 22 B752 366 370 369 394 3  US Airways AW A319 240 A320 1,476 A321 740 B752 98  WestJet WS B736 32 30 10 B737 718 642 644 666 4	United	UA			1,999	1,470	999	1,074
B737								2,138
B738 1.853 1.252 3.302 5.154 4.3  B752 44 2 2 4  UPS 5X A306 52 52 45 22  B752 366 370 369 394 3  US Airways AW A319 240								2,100
B752 44 2 4  UPS 5X A306 52 52 45 22  B752 366 370 369 394 3  US Airways AW A319 240  A320 1.476  A321 740  B752 98  WestJet WS B736 32 30 10  B737 718 642 644 666 4				1				4,384
UPS 5X A306 52 52 45 22  B752 366 370 369 394 3  US Airways AW A319 240  A320 1.476  A321 740  B752 98  WestJet WS B736 32 30 10  B737 718 642 644 666 4							_	
B752 366 370 369 394 3 US Airways AW A319 240	UPS	5X		1	52			
US Airways AW A319 240								310
A320     1,476       A321     740       B752     98       WestJet     WS       B736     32       B737     718       642     644       666     4	US Airwavs	AW		1	0.0		- 331	
A321     740       B752     98       WestJet     WS       B736     32       B737     718       642     644       666     4		<del>-</del>						
B752     98       WestJet     WS       B736     32       B737     718       642     644       666     4								
WestJet         WS         B736         32         30         10           B737         718         642         644         666         4								
B737 718 642 644 666 4	Westlet	W/S			32	30	10	14
F F F		**3		710				498
Total 81,288 91,279 90,250 91,875 67,83	Total		5/5/	ſ				67,830

<sup>\*</sup>In 2018, the code for the Airbus A320neo was changed from A32N to A20N.



TABLE 10
AIR CARRIER AIRCRAFT OPERATIONAL HISTORY

Aircraft			Year		
	2015	2016	2017	2018	2019
A20N*				600	656
A21N					2
A220					39
A306	560	562	551	530	382
A319	6,524	6,267	4,211	3,954	3,158
A320	5,343	4,438	4,945	4,933	5,808
A321	1,066	565	56	4	55
A32N*		12	438		
B38M			2	14	10
B712			3,267	3,379	2,495
B734	80	76	24		
B736		32	30	10	14
B737	45,008	50,952	42,038	36,605	25,054
B738	18,123	17,373	21,376	24,953	16,533
B739	2			2	
B752	2,660	2,572	2,512	3,291	2,500
CRJ9	1,922	1,899	1,440	6	
DH8D		1,156	1,456	728	12
E170		152	78		
E175		5,223	7,826	12,864	11,112
MD90				2	
Total	81,288	91,279	90,250	91,875	67,830

<sup>\*</sup>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		
			2015	2016	2017	2018	2019
Alaska Air	AS	A319				.088	.252
		A320				.359	4.132
		B734	.110	.104	.033		
		B737	3.652	4.451	1.693	.526	.173
		B738	6.288	6.066	8.789	11.315	4.844
American	AA	A21N					.003
		A319	.058	.243	.455	.989	.455
		A320	.471	1.186	.364	.107	.444
		A321	.447	.770	.077	.005	.074
		B738	12.452	14.402	15.827	15.696	11.605
		B752	.030	.101	.005	.005	
Compass	CP	E170		.208	.107		
		E175		2.279	3.734	4.367	3.219
Delta	DL	A220					.052
		A319	4.592	4.705	2.811	2.712	2.014
		A320	.222	.219	.129	.016	.005
		B712			4.471	4.627	3.419
		B737			.200	.258	.011
		B738	.005		.055	.025	.038
		B739	.003			.003	
		B752	2.918	2.910	2.926	3.959	3.000
		MD90				.003	
FedEx	FM	A306	.696	.697	.693	.696	.523
Frontier Airlines	F9	A20N*				.822	.899
		A319	2.052	.883	.488	.260	.134
		A320	.211	1.011	.860	.896	.447
		A321		.003			
		A32N*		.016	.600		
Horizon Air	QX	DH8D		1.579	1.995	.997	.016
		E175			.466	3.721	4.381
SkyWest Coml.	SC	CRJ9	2.633	2.593	1.975	.008	
		E175		4.855	6.523	9.534	7.622
Southwest	WN	B38M			.003	.019	.014
		B737	50.819	57.104	49.274	44.351	30.575
		B738	3.542	1.563	.079	.088	
United	UA	A319	1.910		2.014	1.373	1.471
		A320	4.395	3.648	5.422	5.375	2.929
		B737	6.195	7.169	5.534	4.093	2.874
		B738	2.537	1.710	4.526	7.058	6.008
		B752	.060		.003	.005	
UPS	5X	A306	.071	.071	.060	.030	
		B752	.501	.505	.507	.540	.425
US Airways	AW	A319	.329				
,-		A320	2.022				_
		A321	1.014				
		B752	.134				
WestJet	WS	B736	1.154	.044	.041	.014	.019
		B737	.984	.877	.882	.912	.682
Total	_	5/5/	111.351	124.699	123.622	125.852	92.915
Total			111.331	124.099	123.022	123.832	32.313

<sup>\*</sup>In 2018, the code for the Airbus A320neo was changed from A32N to A20N.



### TABLE 12 AIRCRAFT Glossary

АС Туре	Make	Model/Series
A20N	Airbus	320-200 Neo
A21N	Airbus	321 Neo
A220	Airbus	220-100
A306	Airbus	300-600
A310	Airbus	310-200
A320	Airbus	320
A32N	Airbus	320-200 Neo
B38M	Boeing	737-800 Max
B712	Boeing	717-200
B733	Boeing	737-300
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
E170	Embraer	170
E175	Embraer	175
MD90	McDonnell Douglas	90



### **QUARTERLY NOISE MEETING**

Date: September 18, 2019

Time: 2:00 PM

Place: Airport Commission Room

### **ITEMS DISCUSSED**

Louie Ilustrisimo provided a summary of the JWA airport statistics for July 2019.

Nikolas Gaskins stated that Alaska Airlines discontinued international service to Mexico on August 6, 2019, and thus international passenger and operation levels will decline in the coming months.

Anthony Cangey presented an overview of Delta Air Lines Airbus A220 operations at JWA. Mr. Cangey explained that the Airbus A220 is a significantly quieter aircraft compared to other commercial aircraft in service at JWA. Mr. Cangey stated that Delta plans to replace its Boeing B717 operations at JWA with the Airbus A220, which is qualified to fly both Class A and Class E capacity.

David Cook of the Airport Working Group of Orange County asked if Delta's Boeing B717 operations are being flown as Class E. Mr. Gaskins explained that Delta was utilizing the Boeing B717 in both Class A and Class E categories.

Mr. Gaskins discussed the Plan Year 2020 allocations. Mr. Gaskins stated there would be a decrease in seats allocated to commercial air carriers versus previous years and a withholding of supplemental Class A ADDs. Mr. Gaskins mentioned Delta would be operating commuter capacity through its partnership with SkyWest Airlines. Mr. Gaskins also explained that Delux's (JSX) Plan Year 2020 allocation is conditional based on their decision on continuing operations at the Fixed Based Operator (FBO) (95,070 passengers) or if they will begin operations at the passenger terminal (200,000 passengers).

Mr. Gaskins discussed the status of the Viewpoint Noise Event Portal, which allows the community to submit noise events via their mobile or desktop devices and through an automated phone system. Mr. Gaskins also stated that a detailed noise event report would also be launched following the launch of Viewpoint.

Newport Beach resident Dr. Mosher inquired as to whether the noise data included within the noise report would consist of non-aviation related noise events. Mr. Gaskins stated that only noise events correlated to an aircraft operation would be included in the report.

Dr. Mosher advised that the community is interested in learning how the number of General Aviation jet departures during the nighttime curfew hours have changed over time.



### **QUARTERLY NOISE MEETING ROSTER**

### **September 18, 2019**

<u>NAME</u> <u>ORGANIZATION</u>

Jim Mosher Resident – Newport Beach

David Cook Resident – Newport Beach | AWG

Nikolas Gaskins John Wayne Airport

Bonnie Frisch John Wayne Airport

Anthony Cangey John Wayne Airport

Beatrice Siercke John Wayne Airport

Louie Ilustrisimo John Wayne Airport

Venus Benavides 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):

6.67 acres (or 0.010 square miles)

2. Estimated Number of dwelling units included in the Noise Impact Area as defined in the Noise Standards:

67

- 3. Estimated number of people residing within the Noise Impact Area as defined in the Noise Standards:

  168 (based on 2.5 people per 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:

  8737-800 5,718 (Arrivals + Departures)
- 5. Total number of aircraft operations during the calendar quarter:

83,659

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

24,313

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)

59,023

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

323