

NOISE ABATEMENT PROGRAM QUARTERLY REPORT

For the period:
October 1, 2019 through December 31, 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:



Barry A. Rondinella, A.A.E./C.A.E.

Airport Director

John Wayne Airport, Orange County



INTRODUCTION

This is the 188th 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-6S: 1912 Santiago, Newport Beach |
| NMS-2S: 20162 S.W. Birch St., Newport Beach | NMS-7S: 1131 Back Bay Drive, Newport Beach |
| NMS-3S: 2139 Anniversary Lane, Newport Beach | NMS-8N: 17372 Eastman Street, Irvine |
| NMS-4S: 2338 Tustin Ave., Newport Beach | NMS-9N: 1300 S. Grand Avenue, Santa Ana |
| 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 (January 1, 2019 - December 31, 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

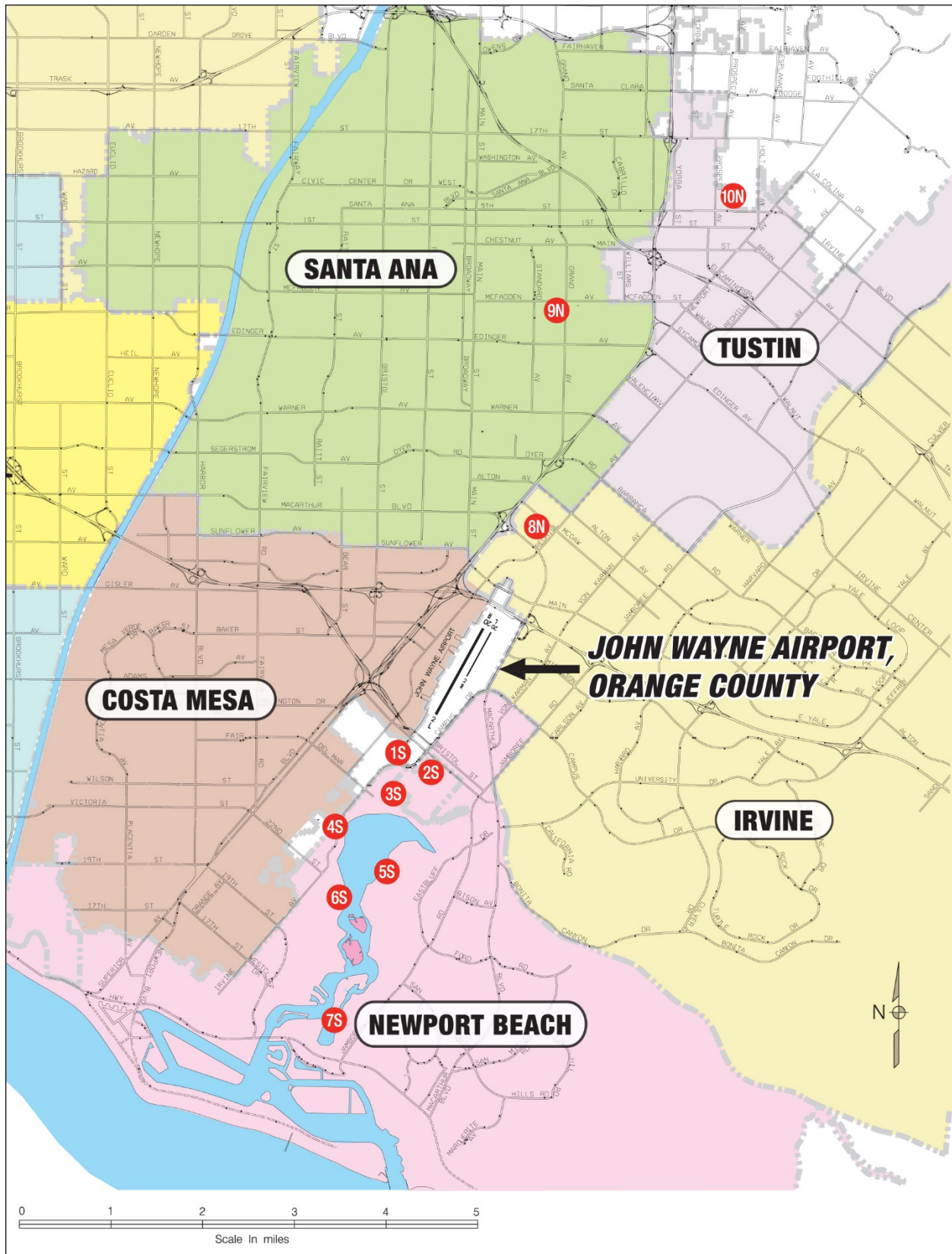


FIGURE 2



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
October - December 2019

| Period | Air Carriers | | GA Jet (1) | Total Operations (2) | Average Daily Jet Operations |
|--------------------------------------|--------------|------|------------|----------------------|------------------------------|
| | Jet | Prop | | | |
| October | 8,032 | 0 | 3,322 | 25,468 | 366 |
| November | 7,591 | 0 | 2,745 | 22,014 | 345 |
| December | 7,955 | 0 | 2,835 | 20,718 | 348 |
| Fourth Quarter | 23,578 | 0 | 8,902 | 68,200 | 353 |
| Twelve Months 01/01/19 - 12/31/19 | 95,422 | 12 | 36,424 | 301,098 | 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.

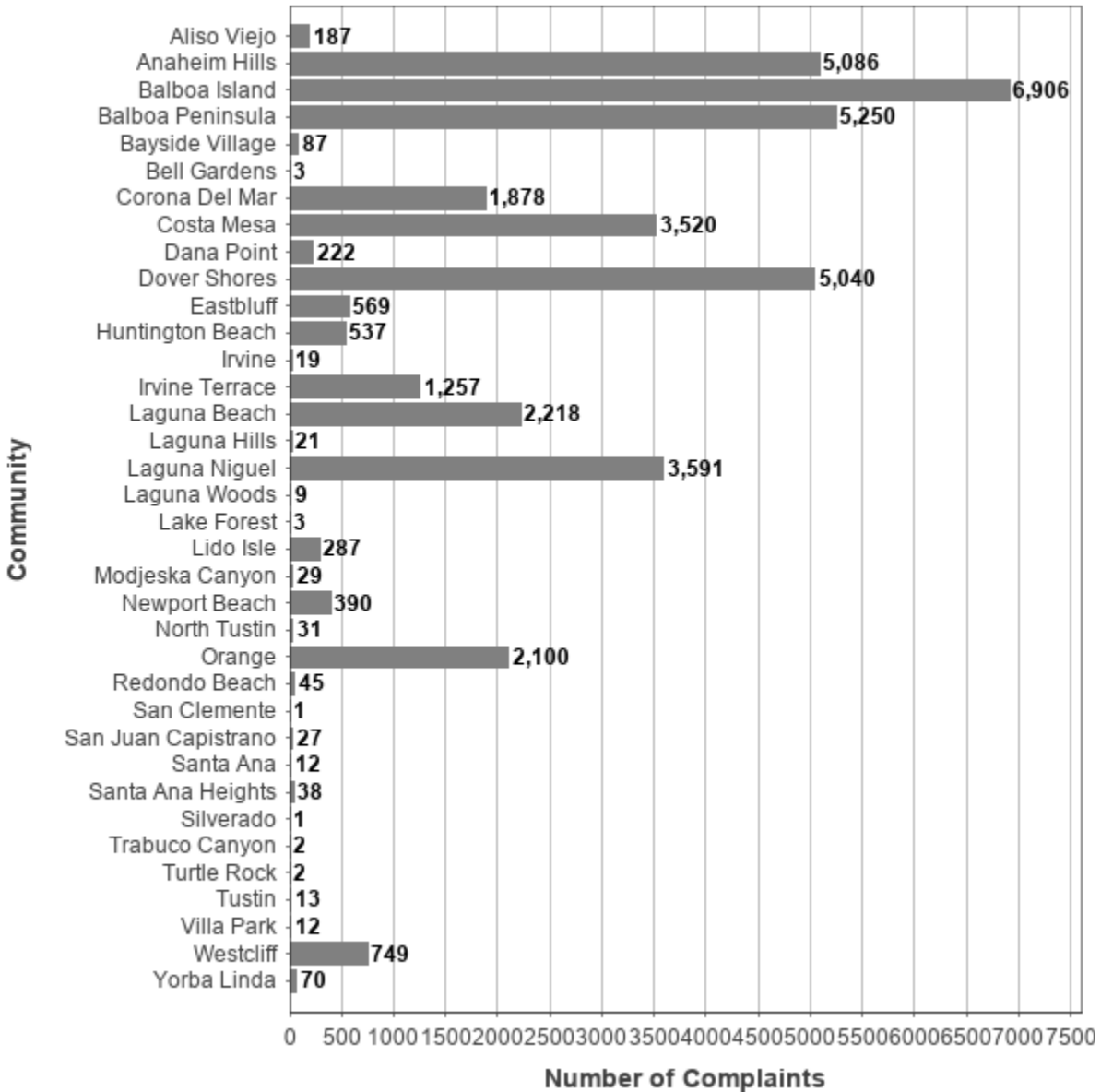
ACOUSTICAL INSULATION PROGRAM

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 (October 1, 2019 - December 31, 2019)

The Airport's Access and Noise Office receives and investigates noise complaints from local citizens and all other sources. During the October 1, 2019 through December 31, 2019, the Office received 40,212 complaints from local citizens. This is a 36.2% decrease from the 63,018 complaints received last quarter. It is a 204.7% increase from the 13, 198 complaints received during the same quarter last year. Figure 3 shows the distribution of the quarterly complaints from local communities.

FIGURE 3
HISTOGRAM BY COMMUNITY



Note:

- City of Newport Beach – 22,412 total number of complaints.
- 81% of complaints were from a complaint subscription service.
- 95% of complaints from “Aliso Viejo” category were from one point of contact.
- 98% of complaints from “Balboa Peninsula” category were from one point of contact.
- 51% of complaints from “Corona del Mar” category were from one point of contact.
- 94% of complaints from “Costa Mesa” category were from one point of contact.
- 90% of complaints from “Dana Point” category were from one point of contact.
- 85% of complaints from “Dover Shores” category were from one point of contact.
- 100% of complaints from “Irvine Terrace” category were from one point of contact.
- 77% of complaints from “Laguna Beach” category were from one point of contact.
- 56% of complaints from “Laguna Niguel” category were from one point of contact.
- 75% of complaints from “Orange” category were from one point of contact.
- 93% of complaints from “Westcliff” category were from one point of contact.

TABLE 2
LONG TERM MEASURED LEVELS
Aircraft CNEL from 01/01/19 through 12/31/19
Values in dB at Each Site

| Period | NMS Site | | | | | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1S | 2S | 3S | 4S | 5S | 6S | 7S | 8N | 9N | 10N |
| 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 | 67.5 | 66.8 | 60.6 | 59.8 | 61.2 | 57.9 | 69.1 | 43.3 | 58.3 |
| # Days | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 29 | 31 |
| Jun 2019 | 68.5 | 67.6 | 67.1 | 60.3 | 59.2 | 60.8 | 57.0 | 68.9 | 41.4 | 57.7 |
| # Days | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 25 | 30 |
| Q-2 2019 | 68.3 | 67.5 | 66.8 | 60.4 | 59.5 | 61.0 | 57.5 | 68.9 | 42.4 | 57.9 |
| # 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 |
| Oct 2019 | 67.5 | 66.6 | 66.3 | 59.2 | 58.7 | 60.1 | 55.9 | 67.4 | 40.7 | 56.1 |
| # Days | 31 | 31 | 31 | 30 | 31 | 31 | 31 | 31 | 23 | 31 |
| Nov 2019 | 67.8 | 66.9 | 66.6 | 59.3 | 59.2 | 60.5 | 56.4 | 67.6 | 42.7 | 56.6 |
| # Days | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 25 | 30 |
| Dec 2019 | 68.0 | 66.8 | 66.9 | 60.0 | 59.8 | 61.4 | 57.2 | 68.1 | 45.3 | 57.4 |
| # Days | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 28 | 31 |
| Q-4 2019 | 67.7 | 66.8 | 66.6 | 59.5 | 59.3 | 60.7 | 56.5 | 67.7 | 43.4 | 56.7 |
| # Days | 92 | 92 | 92 | 91 | 92 | 92 | 92 | 92 | 76 | 92 |
| Q-1 2019 thru Q-4 2019 | | | | | | | | | | |
| Total | 68.0 | 67.1 | 66.8 | 60.0 | 59.5 | 60.8 | 57.0 | 68.3 | 43.2 | 57.3 |
| # Days | 364 | 365 | 365 | 364 | 365 | 365 | 365 | 362 | 304 | 363 |
| Q-4 2018 thru Q-3 2019 (Previous 4 Quarters) | | | | | | | | | | |
| Total | 68.1 | 67.1 | 66.8 | 60.1 | 59.6 | 60.9 | 57.1 | 68.3 | 43.5 | 57.2 |
| # Days | 364 | 365 | 365 | 364 | 365 | 365 | 362 | 362 | 316 | 363 |
| Change from Previous 4 Quarters | | | | | | | | | | |
| | -0.1 | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 | -0.3 | 0.1 |

TABLE 3
DAILY CNEL VALUES AT EACH MONITOR STATION
October 2019

| Date | NMS Site | | | | | | | | | |
|---------|----------|------|------|------|------|------|------|------|-------|------|
| | 1S | 2S | 3S | 4S | 5S | 6S | 7S | 8N | 9N | 10N |
| 1 | 67.9 | 66.8 | 66.5 | 60.4 | 59.9 | 60.5 | 57.5 | 67.6 | *#N/A | 57.3 |
| 2 | 67.9 | 67.2 | 66.7 | 60.2 | 60.0 | 60.6 | 56.1 | 68.2 | 29.7 | 58.0 |
| 3 | 68.6 | 67.9 | 67.1 | 60.7 | 60.2 | 61.1 | 57.6 | 68.9 | 46.6 | 57.7 |
| 4 | 68.4 | 67.8 | 66.9 | 60.1 | 60.5 | 60.9 | 57.5 | 68.1 | 43.6 | 57.3 |
| 5 | 66.3 | 65.9 | 64.9 | 58.3 | 57.8 | 58.7 | 55.3 | 64.7 | 44.2 | 53.7 |
| 6 | 68.5 | 67.6 | 67.3 | 59.4 | 59.1 | 59.7 | 55.4 | 68.5 | 40.2 | 57.5 |
| 7 | 68.5 | 68.0 | 67.2 | 59.7 | 59.4 | 60.1 | 56.0 | 67.9 | *#N/A | 56.8 |
| 8 | 67.5 | 67.0 | 65.8 | 58.2 | 57.9 | 58.3 | 54.6 | 68.1 | 35.5 | 56.9 |
| 9 | 68.3 | 67.2 | 66.6 | 60.9 | 59.9 | 61.1 | 56.8 | 68.6 | 42.5 | 58.8 |
| 10 | 68.9 | 67.9 | 67.5 | 60.1 | 59.5 | 61.2 | 57.3 | 66.7 | *#N/A | 50.8 |
| 11 | 64.4 | 63.7 | 63.9 | 54.5 | 54.7 | 58.1 | 51.9 | 66.7 | 35.6 | 50.6 |
| 12 | 66.2 | 65.6 | 64.4 | 56.8 | 56.3 | 57.1 | 53.1 | 65.3 | 36.4 | 53.2 |
| 13 | 68.3 | 67.3 | 67.1 | 60.7 | 60.3 | 61.3 | 57.5 | 69.0 | *#N/A | 58.4 |
| 14 | 68.8 | 68.2 | 67.6 | 60.6 | 60.5 | 61.7 | 58.3 | 68.1 | 42.2 | 57.7 |
| 15 | 68.6 | 67.9 | 67.5 | 59.5 | 60.0 | 60.3 | 57.2 | 67.2 | 32.1 | 56.2 |
| 16 | 68.2 | 67.2 | 67.2 | 59.7 | 59.3 | 60.6 | 56.7 | 68.3 | 40.8 | 57.5 |
| 17 | 68.9 | 67.6 | 67.6 | 61.3 | 60.3 | 61.5 | 57.9 | 69.2 | 41.4 | 59.2 |
| 18 | 68.8 | 67.9 | 67.0 | 60.1 | 60.3 | 61.3 | 57.7 | 68.5 | 39.8 | 57.8 |
| 19 | 67.7 | 66.7 | 65.8 | 59.4 | 58.9 | 60.0 | 55.5 | 65.4 | 43.0 | 54.4 |
| 20 | 68.6 | 67.7 | 67.0 | 59.2 | 59.8 | 60.8 | 57.5 | 68.3 | 43.1 | 55.7 |
| 21 | 68.1 | 67.1 | 66.9 | 58.6 | 58.7 | 59.8 | 56.3 | 66.8 | 36.1 | 55.3 |
| 22 | 67.6 | 66.7 | 66.2 | 57.9 | 58.1 | 59.3 | 55.5 | 66.9 | *#N/A | 55.5 |
| 23 | 67.6 | 66.7 | 66.0 | 59.3 | 58.5 | 59.6 | 55.5 | 67.8 | *#N/A | 56.0 |
| 24 | 60.5 | 59.0 | 66.2 | 50.4 | 48.8 | 61.2 | 47.7 | 61.6 | 39.4 | 35.3 |
| 25 | 65.9 | 65.2 | 64.2 | 55.8 | 56.2 | 57.7 | 53.2 | 66.8 | *#N/A | 53.6 |
| 26 | 65.8 | 64.3 | 63.6 | 56.7 | 55.5 | 56.8 | 51.9 | 64.4 | *#N/A | 52.9 |
| 27 | 67.6 | 66.6 | 66.1 | 60.6 | 59.2 | 61.0 | 57.3 | 69.3 | 33.6 | 57.7 |
| 28 | 64.8 | 64.3 | 64.1 | 55.5 | 55.7 | 58.5 | 51.8 | 66.6 | 32.0 | 54.0 |
| 29 | 67.5 | 66.4 | 65.8 | 60.2 | 59.3 | 60.3 | 56.3 | 68.2 | 39.6 | 58.2 |
| 30 | 50.8 | 48.1 | 65.4 | #N/A | 34.8 | 60.3 | 32.7 | 60.4 | 33.8 | 29.4 |
| 31 | 63.8 | 63.2 | 62.4 | 54.3 | 53.5 | 54.7 | 50.2 | 65.6 | 40.3 | 48.7 |
| Days | 31 | 31 | 31 | 30 | 31 | 31 | 31 | 31 | 23 | 31 |
| En. Avg | 67.5 | 66.6 | 66.3 | 59.2 | 58.7 | 60.1 | 55.9 | 67.4 | 40.7 | 56.1 |

#N/A indicates insufficient data.

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

TABLE 4
DAILY CNEL VALUES AT EACH MONITOR STATION
November 2019

| Date | NMS Site | | | | | | | | | |
|---------|----------|------|------|------|------|------|------|------|-------|------|
| | 1S | 2S | 3S | 4S | 5S | 6S | 7S | 8N | 9N | 10N |
| 1 | 66.3 | 65.7 | 64.7 | 56.3 | 55.8 | 57.0 | 51.6 | 67.0 | 33.2 | 53.8 |
| 2 | 65.3 | 64.5 | 63.5 | 54.9 | 54.3 | 55.6 | 49.1 | 64.5 | *#N/A | 49.8 |
| 3 | 67.5 | 66.5 | 65.5 | 57.6 | 57.5 | 58.3 | 54.4 | 67.2 | 40.6 | 55.0 |
| 4 | 68.2 | 67.3 | 67.0 | 58.7 | 58.9 | 59.4 | 55.3 | 67.2 | 44.2 | 55.5 |
| 5 | 68.1 | 67.5 | 66.6 | 59.3 | 59.4 | 60.0 | 55.8 | 67.5 | *#N/A | 56.5 |
| 6 | 68.4 | 67.4 | 66.9 | 60.2 | 59.8 | 60.9 | 56.9 | 69.1 | 39.3 | 58.0 |
| 7 | 68.8 | 68.1 | 67.8 | 60.0 | 60.4 | 61.2 | 57.1 | 68.5 | 40.7 | 57.9 |
| 8 | 68.4 | 67.7 | 67.4 | 58.5 | 59.1 | 60.1 | 56.3 | 67.7 | 39.8 | 55.6 |
| 9 | 66.5 | 65.6 | 65.0 | 57.0 | 56.7 | 57.6 | 53.9 | 64.2 | *#N/A | 51.7 |
| 10 | 68.4 | 67.3 | 66.9 | 60.2 | 59.9 | 60.9 | 56.9 | 68.6 | 46.6 | 57.2 |
| 11 | 68.5 | 67.9 | 67.2 | 60.3 | 60.3 | 61.3 | 57.2 | 68.6 | 44.0 | 57.5 |
| 12 | 68.2 | 67.7 | 66.9 | 59.1 | 59.5 | 59.9 | 55.9 | 67.7 | 43.7 | 57.0 |
| 13 | 68.0 | 67.5 | 66.9 | 59.4 | 59.6 | 60.5 | 56.2 | 68.7 | 34.3 | 58.6 |
| 14 | 68.7 | 67.8 | 67.2 | 60.2 | 60.5 | 61.2 | 57.1 | 68.6 | 42.6 | 58.4 |
| 15 | 68.7 | 68.0 | 67.3 | 60.7 | 60.6 | 61.7 | 57.9 | 68.6 | *#N/A | 57.7 |
| 16 | 66.7 | 66.2 | 65.6 | 58.3 | 58.5 | 59.4 | 55.6 | 65.0 | 40.6 | 53.3 |
| 17 | 67.8 | 66.4 | 66.8 | 58.0 | 57.8 | 59.2 | 55.4 | 66.4 | 34.8 | 53.0 |
| 18 | 67.5 | 66.7 | 65.9 | 57.9 | 57.6 | 58.6 | 54.8 | 67.2 | 43.4 | 55.3 |
| 19 | 68.0 | 66.9 | 66.2 | 60.3 | 58.6 | 59.9 | 56.7 | 68.2 | 40.5 | 57.8 |
| 20 | 66.4 | 64.8 | 68.6 | 58.7 | 58.6 | 64.7 | 55.5 | 66.4 | 48.8 | 54.5 |
| 21 | 68.8 | 67.4 | 67.4 | 61.5 | 60.5 | 61.5 | 58.4 | 69.0 | 40.6 | 58.6 |
| 22 | 68.8 | 67.5 | 67.4 | 60.9 | 60.8 | 61.3 | 58.2 | 68.2 | 40.5 | 57.0 |
| 23 | 67.0 | 65.7 | 66.2 | 59.3 | 58.6 | 59.9 | 56.3 | 65.5 | 35.5 | 53.3 |
| 24 | 67.7 | 66.9 | 66.3 | 59.1 | 59.2 | 60.0 | 56.4 | 67.2 | 43.7 | 56.3 |
| 25 | 68.0 | 66.3 | 66.1 | 60.6 | 59.7 | 60.9 | 57.6 | 68.4 | 39.6 | 58.1 |
| 26 | 67.1 | 66.4 | 65.9 | 58.7 | 58.7 | 60.2 | 57.3 | 67.7 | 42.0 | 57.1 |
| 27 | 68.7 | 68.2 | 67.2 | 61.0 | 61.2 | 61.8 | 58.9 | 69.3 | *#N/A | 59.9 |
| 28 | 63.0 | 61.3 | 65.6 | 55.3 | 55.4 | 61.2 | 51.7 | 63.8 | 46.4 | 50.6 |
| 29 | 66.8 | 66.2 | 65.4 | 59.0 | 59.7 | 59.9 | 57.7 | 67.5 | 41.4 | 57.4 |
| 30 | 68.7 | 67.4 | 67.4 | 61.1 | 61.0 | 61.6 | 57.2 | 67.7 | 43.6 | 57.5 |
| Days | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 25 | 30 |
| En. Avg | 67.8 | 66.9 | 66.6 | 59.3 | 59.2 | 60.5 | 56.4 | 67.6 | 42.7 | 56.6 |

#N/A indicates insufficient data.

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

TABLE 5
DAILY CNEL VALUES AT EACH MONITOR STATION
December 2019

| Date | NMS Site | | | | | | | | | |
|---------|----------|------|------|------|------|------|------|------|-------|------|
| | 1S | 2S | 3S | 4S | 5S | 6S | 7S | 8N | 9N | 10N |
| 1 | 69.2 | 68.5 | 67.9 | 61.1 | 61.2 | 61.8 | 58.4 | 69.3 | 51.2 | 58.4 |
| 2 | 68.8 | 67.6 | 67.5 | 60.2 | 60.8 | 61.3 | 58.0 | 68.5 | 38.9 | 57.9 |
| 3 | 68.7 | 67.1 | 67.1 | 60.8 | 60.2 | 61.0 | 58.0 | 68.7 | 44.2 | 58.2 |
| 4 | 69.1 | 67.7 | 67.5 | 61.6 | 61.2 | 61.6 | 58.8 | 69.6 | 41.7 | 59.6 |
| 5 | 68.5 | 67.1 | 66.9 | 60.7 | 60.9 | 61.3 | 58.3 | 68.6 | 43.9 | 58.8 |
| 6 | 69.2 | 67.7 | 68.0 | 61.6 | 61.1 | 61.9 | 57.6 | 68.1 | *#N/A | 58.0 |
| 7 | 67.0 | 65.9 | 65.7 | 59.5 | 58.9 | 59.7 | 56.4 | 66.3 | 47.2 | 56.4 |
| 8 | 68.3 | 67.7 | 66.9 | 60.0 | 60.9 | 60.9 | 58.2 | 69.3 | 37.1 | 58.8 |
| 9 | 69.1 | 67.9 | 67.7 | 61.3 | 61.2 | 61.9 | 58.9 | 68.2 | 49.7 | 57.9 |
| 10 | 69.0 | 67.9 | 67.6 | 61.1 | 60.8 | 61.6 | 58.0 | 68.2 | 40.3 | 57.7 |
| 11 | 68.5 | 67.9 | 67.3 | 60.5 | 60.7 | 61.3 | 58.0 | 68.1 | 46.7 | 58.1 |
| 12 | 69.0 | 67.5 | 67.6 | 61.1 | 60.8 | 61.6 | 58.5 | 68.7 | 43.0 | 58.2 |
| 13 | 68.5 | 67.6 | 67.1 | 59.4 | 60.0 | 60.9 | 57.5 | 69.8 | 33.3 | 57.8 |
| 14 | 66.6 | 65.4 | 65.0 | 59.0 | 58.9 | 59.6 | 55.7 | 66.9 | 47.7 | 56.6 |
| 15 | 67.6 | 67.3 | 66.1 | 58.8 | 59.9 | 60.1 | 57.6 | 67.7 | *#N/A | 56.7 |
| 16 | 63.5 | 59.5 | 67.7 | 53.0 | 54.0 | 63.4 | 50.4 | 62.5 | *#N/A | 40.4 |
| 17 | 64.8 | 63.8 | 63.8 | 55.8 | 54.8 | 57.7 | 51.9 | 66.7 | 35.7 | 51.6 |
| 18 | 67.8 | 67.2 | 66.1 | 59.6 | 59.6 | 59.9 | 56.6 | 67.7 | 37.2 | 56.7 |
| 19 | 68.8 | 67.1 | 67.4 | 60.6 | 60.4 | 61.1 | 57.7 | 68.4 | 42.0 | 56.0 |
| 20 | 68.4 | 66.9 | 67.4 | 59.5 | 59.1 | 60.4 | 56.7 | 67.8 | 39.9 | 56.2 |
| 21 | 67.7 | 66.3 | 66.0 | 58.7 | 57.8 | 59.4 | 55.2 | 66.8 | 44.5 | 55.5 |
| 22 | 68.6 | 67.0 | 66.6 | 61.4 | 59.8 | 61.0 | 58.3 | 69.2 | 40.4 | 58.7 |
| 23 | 68.3 | 66.9 | 66.5 | 60.2 | 59.8 | 61.9 | 57.4 | 69.7 | 51.6 | 59.2 |
| 24 | 67.3 | 66.6 | 65.0 | 59.5 | 60.0 | 60.2 | 57.9 | 67.3 | 31.2 | 57.5 |
| 25 | 67.1 | 65.8 | 64.9 | 59.8 | 59.3 | 59.7 | 57.4 | 67.6 | 38.8 | 58.2 |
| 26 | 67.9 | 66.1 | 68.2 | 60.1 | 59.6 | 63.7 | 56.6 | 68.6 | 47.5 | 56.9 |
| 27 | 69.2 | 68.0 | 67.5 | 61.4 | 61.2 | 61.7 | 58.7 | 69.2 | 39.5 | 58.7 |
| 28 | 68.5 | 67.4 | 66.8 | 60.9 | 60.3 | 61.0 | 57.6 | 68.6 | 47.6 | 58.4 |
| 29 | 68.7 | 67.6 | 66.9 | 61.2 | 60.6 | 61.3 | 57.2 | 68.8 | 30.2 | 58.2 |
| 30 | 60.5 | 57.5 | 69.0 | 49.7 | 54.5 | 66.1 | 42.5 | 65.1 | 48.1 | 47.5 |
| 31 | 63.2 | 62.5 | 64.6 | 55.6 | 55.2 | 60.4 | 50.9 | 65.9 | 45.1 | 52.9 |
| Days | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 28 | 31 |
| En. Avg | 68.0 | 66.8 | 66.9 | 60.0 | 59.8 | 61.4 | 57.2 | 68.1 | 45.3 | 57.4 |

#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
October - December 2019

| Carrier | AC Type | # Deps | | NMS Site | | | | | | | | | |
|-------------------|---------|--------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------|--------------|
| | | | | 1S | 2S | 3S | 4S | 5S | 6S | 7S | 8N | 9N | 10N |
| Alaska Air | A320 | 222 | Average Count | 95.7 (205) | 94.8 (199) | 94.8 (204) | 87.7 (205) | 86.1 (204) | 86.9 (205) | 84.2 (196) | 89.6 (15) | 82.2 (2) | 86.4 (3) |
| | B737 | 17 | Average Count | 95.2 (17) | 94.6 (14) | 93.9 (17) | 88.2 (17) | 88.2 (17) | 88.5 (17) | 84.0 (17) | #N/A (0) | #N/A (0) | #N/A (0) |
| | B738 | 855 | Average Count | 98.1 (770) | 96.9 (728) | 95.5 (764) | 89.0 (760) | 89.2 (773) | 89.9 (762) | 86.6 (744) | 93.0 (74) | 82.4 (22) | 81.8 (27) |
| American | A320 | 205 | Average Count | 94.9 (188) | 94.3 (177) | 93.2 (184) | 85.6 (186) | 84.9 (184) | 86.1 (184) | 83.9 (176) | 88.2 (16) | 78.6 (1) | 78.2 (2) |
| | A321 | 80 | Average Count | 99.1 (72) | 98.5 (67) | 97.1 (67) | 88.5 (72) | 87.5 (72) | 88.3 (70) | 85.4 (72) | 92.6 (7) | 77.9 (2) | 79.7 (1) |
| | B738 | 1249 | Average Count | 99.0 (1098) | 97.6 (1046) | 97.6 (1092) | 89.5 (1098) | 89.2 (1116) | 89.9 (1092) | 86.7 (1089) | 93.2 (119) | 84.6 (41) | 81.5 (38) |
| | B752 | 18 | Average Count | 94.6 (17) | 95.1 (17) | 92.1 (17) | 85.9 (15) | 84.7 (17) | 85.1 (17) | 81.2 (13) | 86.4 (1) | #N/A (0) | #N/A (0) |
| Compass | E175 | 400 | Average Count | 95.8 (366) | 95.2 (353) | 96.2 (364) | 89.5 (358) | 89.1 (367) | 89.3 (361) | 84.9 (350) | 92.8 (28) | 80.6 (2) | 80.3 (2) |
| Delta | A319 | 259 | Average Count | 96.0 (211) | 95.2 (201) | 95.3 (208) | 88.1 (212) | 87.5 (209) | 88.0 (209) | 83.9 (194) | 91.6 (43) | 85.3 (21) | 81.7 (10) |
| | A320 | 3 | Average Count | 95.5 (3) | 94.6 (3) | 94.5 (2) | 87.2 (3) | 86.6 (3) | 87.3 (3) | 85.2 (2) | #N/A (0) | #N/A (0) | #N/A (0) |
| | B738 | 6 | Average Count | 96.3 (5) | 95.9 (4) | 93.5 (5) | 88.1 (5) | 88.0 (5) | 88.9 (5) | 85.7 (3) | 93.4 (1) | 82.7 (1) | #N/A (0) |
| | B752 | 349 | Average Count | 96.4 (301) | 95.8 (288) | 96.0 (300) | 88.8 (292) | 88.0 (298) | 88.1 (290) | 84.2 (281) | 92.7 (44) | 85.4 (18) | 80.7 (14) |
| FedEx | A306 | 64 | Average Count | 97.3 (58) | 96.8 (56) | 94.3 (57) | 88.0 (58) | 87.5 (58) | 88.5 (58) | 84.7 (55) | 93.0 (6) | 81.6 (3) | 82.4 (3) |
| Frontier Airlines | A20N | 122 | Average Count | 88.5 (113) | 88.5 (110) | 87.7 (114) | 81.7 (97) | 80.3 (76) | 82.2 (99) | 79.5 (39) | 85.4 (6) | #N/A (0) | #N/A (0) |
| | A319 | 1 | Average Count | 93.3 (1) | 92.5 (1) | 91.8 (1) | 85.7 (1) | 84.7 (1) | 85.8 (1) | 82.9 (1) | #N/A (0) | #N/A (0) | #N/A (0) |
| | A320 | 51 | Average Count | 94.9 (45) | 94.4 (41) | 92.9 (45) | 86.0 (45) | 85.1 (43) | 86.6 (44) | 84.5 (38) | 87.4 (6) | #N/A (0) | 77.6 (1) |
| Horizon Air | E175 | 267 | Average Count | 92.2 (245) | 91.6 (236) | 89.7 (240) | 84.8 (240) | 84.6 (242) | 86.1 (242) | 83.3 (222) | 90.7 (22) | #N/A (0) | 79.8 (5) |
| Southwest | B737 | 1553 | Average Count | 92.8 (1389) | 92.4 (1331) | 90.2 (1369) | 84.8 (1397) | 85.1 (1397) | 85.7 (1388) | 83.3 (1301) | 91.7 (138) | 81.3 (15) | 80.0 (26) |
| | B738 | 10 | Average Count | 93.6 (10) | 93.3 (10) | 89.4 (9) | 83.5 (10) | 84.1 (9) | 84.3 (10) | 82.4 (10) | #N/A (0) | #N/A (0) | #N/A (0) |
| United | A320 | 577 | Average Count | 94.6 (519) | 93.9 (504) | 92.5 (518) | 85.9 (513) | 85.7 (518) | 87.8 (516) | 85.5 (504) | 92.0 (51) | 84.3 (9) | 79.9 (9) |
| | B737 | 358 | Average Count | 96.8 (321) | 95.4 (310) | 96.3 (318) | 89.2 (319) | 90.1 (327) | 90.6 (319) | 86.5 (311) | 93.2 (29) | 83.3 (11) | 81.4 (7) |
| | B738 | 622 | Average Count | 98.4 (537) | 97.1 (510) | 96.5 (537) | 89.1 (540) | 89.6 (542) | 90.4 (534) | 87.0 (526) | 93.2 (68) | 86.2 (22) | 82.0 (19) |
| UPS | A306 | 6 | Average Count | 98.4 (6) | 97.4 (6) | 98.3 (6) | 91.1 (6) | 89.7 (6) | 90.4 (6) | 87.2 (6) | #N/A (0) | #N/A (0) | #N/A (0) |
| | B752 | 47 | Average Count | 96.0 (41) | 95.6 (41) | 95.2 (39) | 87.7 (41) | 87.0 (41) | 87.8 (41) | 82.9 (41) | 89.8 (6) | #N/A (0) | #N/A (0) |
| WestJet | B736 | 22 | Average Count | 94.7 (19) | 93.3 (19) | 94.1 (19) | 88.0 (19) | 87.4 (19) | 87.5 (18) | 82.9 (17) | 91.2 (3) | 79.7 (1) | #N/A (0) |
| | B737 | 60 | Average Count | 95.4 (57) | 94.2 (56) | 94.7 (55) | 88.9 (57) | 88.9 (57) | 89.6 (56) | 84.4 (55) | 92.6 (3) | 81.1 (2) | 80.9 (1) |

TABLE 7
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commercial Class E
October - December 2019

| Carrier | AC Type | # Deps | | NMS Site | | | | | | | | | |
|---------------|---------|--------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------|--------------|
| | | | | 1S | 2S | 3S | 4S | 5S | 6S | 7S | 8N | 9N | 10N |
| Delta | A220 | 406 | Average Count | 87.9 (365) | 87.9 (345) | 86.3 (361) | 81.0 (312) | 80.1 (288) | 80.9 (299) | 78.0 (36) | 84.5 (32) | 79.4 (1) | #N/A (0) |
| Horizon Air | E175 | 260 | Average Count | 91.6 (231) | 91.3 (215) | 89.4 (233) | 84.9 (231) | 84.5 (233) | 85.9 (232) | 83.2 (210) | 90.3 (22) | 78.1 (1) | 79.9 (2) |
| SkyWest Coml. | E175 | 1060 | Average Count | 90.6 (960) | 90.3 (899) | 89.1 (957) | 84.8 (957) | 84.3 (961) | 85.5 (954) | 82.8 (892) | 89.8 (83) | #N/A (0) | 78.7 (15) |
| Southwest | B737 | 1959 | Average Count | 92.1 (1754) | 91.9 (1681) | 89.8 (1737) | 84.6 (1739) | 84.8 (1751) | 85.4 (1723) | 82.8 (1650) | 91.0 (179) | 79.9 (13) | 79.9 (32) |

TABLE 8
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commuter
October - December 2019

| Carrier | AC Type | # Deps | | NMS Site | | | | | | | | | |
|-----------------------|---------|--------|------------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|-------------|-------------|
| | | | | 1S | 2S | 3S | 4S | 5S | 6S | 7S | 8N | 9N | 10N |
| Delux Public Charters | E135 | 548 | Average Count | 85.6 (498) | 85.7 (487) | 86.3 (493) | 80.2 (400) | 78.9 (178) | 80.3 (352) | 79.6 (12) | 83.7 (37) | #N/A (0) | 81.0 (1) |
| | E145 | 13 | Average Count | 86.0 (11) | 86.3 (10) | 87.0 (10) | 80.1 (11) | 79.4 (7) | 80.3 (10) | 76.4 (1) | 82.8 (2) | #N/A (0) | #N/A (0) |
| SkyWest | CL60 | 1 | Average Count | 86.8 (1) | 84.8 (1) | 88.9 (1) | 79.4 (1) | #N/A (0) | 80.9 (1) | #N/A (0) | #N/A (0) | #N/A (0) | #N/A (0) |
| | CRJ7 | 105 | Average Count | 88.3 (97) | 88.2 (95) | 87.2 (96) | 80.1 (58) | 81.0 (81) | 82.0 (94) | 80.2 (73) | 89.5 (7) | 78.8 (1) | #N/A (0) |

TABLE 8-GA
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
General Aviation
October - December 2019

| Carrier | AC Type | # Deps | | NMS Site | | | | | | | | | |
|------------------|---------|--------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|---------------|--------------|-------------|
| | | | | 1S | 2S | 3S | 4S | 5S | 6S | 7S | 8N | 9N | 10N |
| General Aviation | Jet | 4239 | Average Count | 88.0 (3723) | 87.5 (3555) | 89.0 (3618) | 82.7 (2061) | 82.4 (1647) | 83.6 (2231) | 82.0 (809) | 86.2 (271) | 83.3 (14) | 82.6 (7) |

TABLE 9
AIR CARRIER OPERATIONAL HISTORY

| Carrier | AC Type | Year | | | | | |
|-------------------|---------|-------|---------------|---------------|---------------|---------------|---------------|
| | | 2015 | 2016 | 2017 | 2018 | 2019 | |
| Alaska Air | AS | A319 | | | | 64 | 244 |
| | | A320 | | | | 262 | 3,403 |
| | | B734 | 80 | 76 | 24 | | |
| | | B737 | 2,666 | 3,258 | 1,233 | 384 | 160 |
| | | B738 | 4,590 | 4,439 | 6,420 | 8,260 | 5,247 |
| American | AA | A21N | | | | | 2 |
| | | A319 | 42 | 178 | 332 | 722 | 432 |
| | | A320 | 344 | 868 | 266 | 78 | 634 |
| | | A321 | 326 | 563 | 56 | 4 | 214 |
| | | B738 | 9,090 | 10,538 | 11,556 | 11,457 | 10,972 |
| | | B752 | 22 | 74 | 4 | 4 | 36 |
| Compass | CP | E170 | | 152 | 78 | | |
| | | E175 | | 1,669 | 2,726 | 3,188 | 3,150 |
| Delta | DL | A220 | | | | | 851 |
| | | A319 | 3,352 | 3,444 | 2,053 | 1,979 | 1,987 |
| | | A320 | 162 | 160 | 94 | 12 | 11 |
| | | B712 | | | 3,267 | 3,379 | 2,495 |
| | | B737 | | | 146 | 188 | 8 |
| | | B738 | 4 | | 40 | 18 | 40 |
| | | B739 | 2 | | | 2 | |
| | | B752 | 2,130 | 2,128 | 2,137 | 2,889 | 2,889 |
| | | MD90 | | | | 2 | |
| FedEx | FM | A306 | 508 | 510 | 506 | 508 | 510 |
| Frontier Airlines | F9 | A20N* | | | | 600 | 900 |
| | | A319 | 1,497 | 646 | 356 | 190 | 100 |
| | | A320 | 154 | 740 | 628 | 654 | 428 |
| | | A321 | | 2 | | | |
| | | A32N* | | 12 | 438 | | |
| Horizon Air | QX | DH8D | | 1,156 | 1,456 | 728 | 12 |
| | | E175 | | | 339 | 2,716 | 4,257 |
| SkyWest Coml. | SC | CRJ9 | 1,922 | 1,899 | 1,440 | 6 | |
| | | E175 | | 3,554 | 4,761 | 6,960 | 7,686 |
| Southwest | WN | B38M | | | 2 | 14 | 10 |
| | | B737 | 37,101 | 41,806 | 35,971 | 32,380 | 29,360 |
| | | B738 | 2,586 | 1,144 | 58 | 64 | 134 |
| United | UA | A319 | 1,393 | 1,999 | 1,470 | 999 | 1,216 |
| | | A320 | 3,207 | 2,670 | 3,957 | 3,927 | 3,151 |
| | | B737 | 4,523 | 5,246 | 4,044 | 2,987 | 2,816 |
| | | B738 | 1,853 | 1,252 | 3,302 | 5,154 | 5,627 |
| | | B752 | 44 | | 2 | 4 | |
| UPS | 5X | A306 | 52 | 52 | 45 | 22 | 12 |
| | | B752 | 366 | 370 | 369 | 394 | 404 |
| US Airways | AW | A319 | 240 | | | | |
| | | A320 | 1,476 | | | | |
| | | A321 | 740 | | | | |
| | | B752 | 98 | | | | |
| WestJet | WS | B736 | | 32 | 30 | 10 | 58 |
| | | B737 | 718 | 642 | 644 | 666 | 618 |
| Total | | | 81,288 | 91,279 | 90,250 | 91,875 | 90,074 |

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

TABLE 10
AIRCRAFT OPERATIONAL HISTORY

| Aircraft | Year | | | | |
|--------------|---------------|---------------|---------------|---------------|---------------|
| | 2015 | 2016 | 2017 | 2018 | 2019 |
| A20N* | | | | 600 | 900 |
| A21N | | | | | 2 |
| A220 | | | | | 851 |
| A306 | 560 | 562 | 551 | 530 | 522 |
| A319 | 6,524 | 6,267 | 4,211 | 3,954 | 3,979 |
| A320 | 5,343 | 4,438 | 4,945 | 4,933 | 7,627 |
| A321 | 1,066 | 565 | 56 | 4 | 214 |
| A32N* | | 12 | 438 | | |
| B38M | | | 2 | 14 | 10 |
| B712 | | | 3,267 | 3,379 | 2,495 |
| B734 | 80 | 76 | 24 | | |
| B736 | | 32 | 30 | 10 | 58 |
| B737 | 45,008 | 50,952 | 42,038 | 36,605 | 32,962 |
| B738 | 18,123 | 17,373 | 21,376 | 24,953 | 22,020 |
| B739 | 2 | | | 2 | |
| B752 | 2,660 | 2,572 | 2,512 | 3,291 | 3,329 |
| 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 | 15,093 |
| MD90 | | | | 2 | |
| Total | 81,288 | 91,279 | 90,250 | 91,875 | 90,074 |

*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 | .334 |
| | | A320 | | | | .359 | 4.660 |
| | | B734 | .110 | .104 | .033 | | |
| | | B737 | 3.652 | 4.451 | 1.693 | .526 | .219 |
| | | B738 | 6.288 | 6.066 | 8.789 | 11.315 | 7.189 |
| American | AA | A21N | | | | | .003 |
| | | A319 | .058 | .243 | .455 | .989 | .592 |
| | | A320 | .471 | 1.186 | .364 | .107 | .868 |
| | | A321 | .447 | .770 | .077 | .005 | .293 |
| | | B738 | 12.452 | 14.402 | 15.827 | 15.696 | 15.030 |
| Compass | CP | E170 | | .208 | .107 | | |
| | | E175 | | 2.279 | 3.734 | 4.367 | 4.315 |
| Delta | DL | A220 | | | | | 1.164 |
| | | A319 | 4.592 | 4.705 | 2.811 | 2.712 | 2.723 |
| | | A320 | .222 | .219 | .129 | .016 | .014 |
| | | B712 | | | 4.471 | 4.627 | 3.419 |
| | | B737 | | | .200 | .258 | .011 |
| | | B738 | .005 | | .055 | .025 | .055 |
| | | B739 | .003 | | | .003 | |
| | | B752 | 2.918 | 2.910 | 2.926 | 3.959 | 3.956 |
| FedEx | FM | A306 | .696 | .697 | .693 | .696 | .699 |
| | | | | | | | |
| Frontier Airlines | F9 | A20N* | | | | .822 | 1.233 |
| | | A319 | 2.052 | .883 | .488 | .260 | .137 |
| | | A320 | .211 | 1.011 | .860 | .896 | .586 |
| | | A321 | | .003 | | | |
| Horizon Air | QX | DH8D | | 1.579 | 1.995 | .997 | .016 |
| | | E175 | | | .466 | 3.721 | 5.830 |
| SkyWest Coml. | SC | CRJ9 | 2.633 | 2.593 | 1.975 | .008 | |
| | | E175 | | 4.855 | 6.523 | 9.534 | 10.529 |
| Southwest | WN | B38M | | | .003 | .019 | .014 |
| | | B737 | 50.819 | 57.104 | 49.274 | 44.351 | 40.216 |
| | | B738 | 3.542 | 1.563 | .079 | .088 | .184 |
| United | UA | A319 | 1.910 | 2.730 | 2.014 | 1.373 | 1.666 |
| | | A320 | 4.395 | 3.648 | 5.422 | 5.375 | 4.315 |
| | | B737 | 6.195 | 7.169 | 5.534 | 4.093 | 3.855 |
| | | B738 | 2.537 | 1.710 | 4.526 | 7.058 | 7.712 |
| | | B752 | .060 | | .003 | .005 | |
| UPS | 5X | A306 | .071 | .071 | .060 | .030 | .016 |
| | | B752 | .501 | .505 | .507 | .540 | .553 |
| US Airways | AW | A319 | .329 | | | | |
| | | A320 | 2.022 | | | | |
| | | A321 | 1.014 | | | | |
| | | B752 | .134 | | | | |
| WestJet | WS | B736 | | .044 | .041 | .014 | .079 |
| | | B737 | .984 | .877 | .882 | .912 | .847 |
| Total | | | 111.351 | 124.699 | 123.622 | 125.852 | 123.384 |

*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 |
| 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: December 18, 2019

Time: 2:00 PM

Place: Airport Commission Room

ITEMS DISCUSSED

Newport Beach resident Dr. Jim Mosher asked when the Detailed Noise Event Reports would be published. Nikolas Gaskins stated the Detailed Noise Event Reports would be delayed due to unforeseen vendor issues in replicating the noise data.

Newport Beach resident Mr. Alan Gunther suggested the air carriers who exceed the noise limits be contacted and asked that their noise be reduced. Mr. Gaskins explained the air carriers are meeting the quarterly noise limits.

Newport Beach resident Joe August questioned why the quarterly noise limit at Noise Monitoring Station 6S had been raised when the Settlement Agreement was amended. Mr. Gaskins explained the issue of parity between the old noise monitoring system and the new noise monitoring system.

Mr. Gunther asked if the Plan Year 2020 capacity allocation has been set for JetSuiteX. Mr. Gaskins stated that the Airport is waiting on a response from JetSuiteX regarding JetSuiteX's final Plan Year 2020 capacity allocation to either operate 65,070 passengers from the FBO or up to 200,000 at the Riley Terminal.

Mr. Gunther also stated he had noticed a difference in altitudes of up to 1,000 Ft. in the first 30 minutes of aircraft departing at 7:00 AM between Southwest Airlines, United Airlines, and American Airlines. Mr. Gaskins explained there are many variables and factors that could affect an aircraft's altitude.

Mr. August asked if the Settlement Agreement placed any limit on the number of air carriers who can use the Noise Abatement Departure Profile (NADP) 2. Mr. Gaskins stated the Settlement Agreement sets a limit on Class A Average Daily Departures (ADD), and not on the number of NADP 1 or NADP 2 operations.

QUARTERLY NOISE MEETING ROSTER

December 18, 2019

| <u>NAME</u> | <u>ORGANIZATION</u> |
|-------------------|--|
| Jim Mosher | Resident – Newport Beach |
| Joe August | Resident – Newport Beach |
| Alan Gunther | Resident – Newport Beach NB Aviation Committee |
| Steve Livingston | Resident – Newport Beach NB Aviation Committee |
| 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 |



**JOHN WAYNE AIRPORT
2019 ANNUAL 60-75 (5 dB intervals)
CNEL NOISE CONTOURS**

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:
B737-800 - 5,433 (Arrivals + Departures)
5. Total number of aircraft operations during the calendar quarter:
68,200
6. Number of Air Carrier operations during the calendar quarter:
(Not mandatory)
23,578
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)
44,390
9. Estimated number of operations by Military aircraft during the calendar quarter:
(Not mandatory)
232