

Quarterly Noise Report

Prepared For:
California Department of Transportation (Caltrans)
Division of Aeronautics

4th Quarter 2020
October 1, 2020 – December 31, 2020



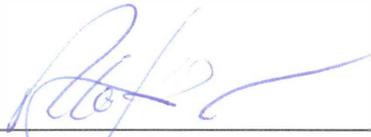
Airport Noise Office

January 27, 2021

Quarterly Noise Report
4th Quarter 2020
(October 1, 2020 through December 31, 2020)

On May 24, 2012, the California Department of Transportation (Caltrans), Division of Aeronautics, confirmed via a correspondence letter that the County of Santa Clara verified Norman Y. Mineta San Jose International Airport (SJC) achieved a zero noise impact area pursuant to the California Code of Regulations, Title 21 (Public Works), Division 2.5 (Division of Aeronautics), Chapter 6 (Noise Standards), Article 1 (General), Section 5012 (Airport Noise Standard) as of its 2nd Quarter 2011 Quarterly Noise Report. The letter went on to state that having met the standard, SJC no longer requires a variance.

This Quarterly Noise Report for the 4th Quarter of 2020 was prepared by the Airport Noise Office at Norman Y. Mineta San Jose International Airport (SJC), in accordance with the California Noise Standards (California Code of Regulations, Title 21, Section 5000 et seq.).



Robert Lockhart
Deputy Director of Aviation
Norman Y. Mineta San Jose International Airport

Table of Contents

Summary of Statistical Information for the California Department of Transportation (Caltrans) Division of Aeronautics	1
Aircraft Noise Measurements and Modeling.....	2
Table 1 – Total Aircraft Operations	3
Table 2 – Remote Monitoring Terminal (RMT) Locations	4
Table 3 – Daily Community Noise Equivalent Level (CNEL) Values – October 2020	5
Table 4 – Daily Community Noise Equivalent Level (CNEL) Values – November 2020	6
Table 5 – Daily Community Noise Equivalent Level (CNEL) Values – December 2020	7
Table 6 – Monthly Community Noise Equivalent Level (CNEL) Values	8
Table 7 – Annual Community Noise Equivalent Level (CNEL) Values.....	9

Summary of Statistical Information for the California Department of Transportation (Caltrans) Division of Aeronautics

1. Size of Noise Impact Area as defined in the Noise Standards (California Code of Regulations, Title 21, Chapter 2.5, Subchapter 6):
o Square Miles

2. Estimated number of dwelling units included in the Noise Impact Area as defined in the Noise Standards*:
o Dwelling Units

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

4. Identification of the aircraft type having the highest takeoff noise level operating at this airport together with the estimated number of operations by this aircraft type during the calendar quarter reporting period:
Boeing 737-800 (B738); 1,938 Departure Operations

5. Total number of aircraft operations during the calendar quarter: (Not Mandatory)
25,861

6. Number of Air Carrier operations during the calendar quarter: (Not Mandatory)
14,113

7. Percentage of Air Carrier operations by aircraft certificated 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)
7,520

9. Estimated number of operations by Military aircraft during the calendar quarter: (Not Mandatory)
83

10. Estimated number of operations by Taxi/Commuter aircraft during the calendar quarter: (Not Mandatory)
4,145

Form DOA 617, Dated 10/89

* Calculations Based Upon 2010 Census Block Boundary Data.

Aircraft Noise Measurements and Modeling

Table 1 contains statistics of aircraft operations based upon the Federal Aviation Administration (FAA) Air Traffic Control Tower (ATCT) counts at Norman Y. Mineta San Jose International Airport (SJC).

Data contained within Tables 2-7 below was obtained from queries and reports run within Envirosuite ANOMS. Table 2 contains the locations of the permanent Remote Monitoring Terminals (RMT) maintained by Envirosuite in the surrounding communities of Norman Y. Mineta San Jose International Airport (SJC).

Tables 3-5 contains a summary of daily local aircraft measured noise levels (dB CNEL) for the three (3) months of the calendar quarter reporting period. Table 6 contains a summary of the monthly local aircraft measured noise levels (dB CNEL). Table 7 contains a summary of the annual local aircraft measured noise levels (dB CNEL).

The 65 dB CNEL noise contour for the period between January 1, 2020 through December 31, 2020 accompanies this report as an attachment. The noise contour was prepared using the Federal Aviation Administration's (FAA) Aviation Environmental Design Tool (AEDT) software. The noise contour figure depicts the locations of the permanent RMTs that were utilized for validation.

The FAA AEDT software is a state-of-the-art software system that models aircraft performance in space and time to estimate fuel consumption, emissions, noise, and air quality consequences. The modeling methodology fulfills the requirements of the State of California, Title 21, California Noise Standards.

Table 1 – Total Aircraft Operations

Operations	4th Quarter 2020	3rd Quarter 2020	2nd Quarter 2020	1st Quarter 2020
Total	25,861	26,672	17,706	45,656
Air Carrier/Cargo	14,113	15,552	9,728	33,420
General Aviation	7,520	6,877	5,434	6,734
Military	83	54	83	22
Taxi/Commuter	4,145	4,189	2,461	4,896

Table 2 – Remote Monitoring Terminal (RMT) Locations

RMT #	Location	Latitude	Longitude
101	Oak Street, San Jose, CA	37.321292	-121.881981
102	Center for Performing Arts, San Jose, CA	37.329572	-121.892365
104	Bellarmine Prep School, San Jose, CA	37.340997	-121.917993
105	Rosemary Garden, San Jose, CA	37.362400	-121.914750
106	St. John/Autumn, San Jose, CA	37.334240	-121.899946
107	Fire Station 6, Santa Clara, CA	37.395160	-121.949916
108	MacGregor Lane, Santa Clara, CA	37.386895	-121.946527
109	Lake Santa Clara, Santa Clara, CA	37.392133	-121.967717
110	Chestnut Street, Santa Clara, CA	37.390153	-121.959598
111	Fuller Street Park, Santa Clara, CA	37.397987	-121.965516
112	Mountain View/Alviso, Santa Clara, CA	37.409690	-121.979440
114	Fairway Glen Park, Santa Clara, CA	37.405623	-121.961404
115	3rd/Reed, San Jose, CA	37.328608	-121.882987

Table 3 – Daily Community Noise Equivalent Level (CNEL) Values – October 2020

Day	Remote Monitoring Terminal (RMT)												
	101	102	104	105	106	107	108	109	110	111	112	114	115
1	56.5	60.1	47.6	54.3	59.4	54.6	58.0	54.3	62.3	57.6	*	52.6	48.5
2	57.3	59.7	47.3	51.2	59.4	54.7	58.4	55.3	57.8	55.9	49.8	51.7	54.9
3	57.4	59.4	49.1	47.8	59.2	54.1	57.9	54.2	56.8	54.5	49.0	51.1	48.4
4	56.8	59.3	51.0	46.7	59.7	52.6	57.3	54.2	79.8	54.6	49.7	52.3	47.9
5	57.6	60.1	48.0	45.3	60.2	54.1	58.4	55.7	78.7	56.4	55.0	52.2	48.9
6	56.8	59.5	53.2	50.1	59.4	55.7	59.4	55.6	76.9	56.2	51.6	52.4	48.4
7	56.9	60.0	46.6	54.7	59.6	55.1	59.4	56.2	59.0	56.8	52.3	53.4	48.6
8	57.2	60.3	48.9	47.8	59.9	56.1	59.4	56.8	59.6	57.3	53.3	53.9	49.1
9	57.9	60.3	47.5	48.6	57.7	55.9	59.2	56.6	59.5	57.1	53.6	53.8	48.5
10	57.1	60.2	46.5	49.4	58.6	54.7	58.2	55.5	57.8	55.6	51.4	53.2	50.8
11	57.7	60.9	50.8	50.8	60.8	55.3	59.3	56.6	59.1	56.8	52.4	54.0	49.7
12	57.1	60.6	52.2	51.7	59.8	55.2	58.7	56.4	58.8	56.4	52.0	53.5	51.0
13	58.5	60.1	52.2	51.3	59.2	54.6	58.2	53.7	57.0	56.0	51.1	52.5	54.0
14	57.4	60.6	51.1	53.6	60.4	54.2	58.0	55.3	57.7	55.5	51.4	52.4	48.2
15	56.3	59.2	52.3	52.3	60.4	53.1	55.7	53.4	62.2	54.6	*	50.8	50.0
16	56.4	59.3	51.7	56.9	60.1	53.9	58.4	54.9	63.8	55.4	*	52.3	46.9
17	54.5	58.1	52.4	52.0	58.3	53.0	57.2	51.6	56.6	54.1	49.0	50.5	42.5
18	56.9	59.8	46.7	50.1	59.7	55.1	58.5	55.8	58.9	56.0	52.4	52.6	46.6
19	56.7	60.4	48.6	49.7	59.8	55.5	59.2	56.6	58.8	56.4	52.3	53.4	48.7
20	56.8	59.5	52.4	52.0	59.2	54.8	58.8	56.3	58.5	56.3	53.1	53.0	48.9
21	57.8	60.2	53.4	54.5	59.4	54.7	58.6	56.0	58.4	56.1	52.6	53.4	53.0
22	57.5	61.1	50.8	52.9	59.9	55.5	60.1	56.5	59.5	57.6	53.2	53.6	51.8
23	58.0	61.1	46.1	49.6	61.6	56.0	59.7	56.6	59.1	57.0	53.7	54.9	49.6
24	56.8	59.5	46.8	47.3	59.1	55.4	58.8	55.7	58.7	56.2	51.3	54.7	58.2
25	57.7	60.9	48.7	51.9	60.5	55.5	58.4	55.7	78.6	56.0	51.9	52.9	51.2
26	54.5	57.5	52.2	47.3	57.6	49.4	53.8	50.9	53.9	56.4	46.9	48.6	46.8
27	56.6	58.7	52.8	54.1	58.5	58.1	56.7	53.4	55.7	54.7	49.4	52.0	52.5
28	55.5	59.2	50.9	51.7	57.8	55.2	58.8	52.9	58.7	56.3	52.2	53.3	48.2
29	56.8	61.1	53.5	53.3	60.5	55.4	58.8	55.8	59.5	56.1	52.5	53.1	50.6
30	57.5	60.6	49.7	51.1	59.3	56.5	59.4	56.8	69.0	56.4	52.3	53.3	50.0
31	57.2	60.5	53.6	51.3	57.6	60.3	58.0	55.3	57.6	55.6	51.0	52.0	53.4
Average	57.0	60.0	50.8	51.8	59.5	55.3	58.5	55.4	70.1	56.1	52.0	52.9	51.0
# of Days	31	31	31	31	31	31	31	31	31	31	28	31	31

Table 4 – Daily Community Noise Equivalent Level (CNEL) Values – November 2020

Day	Remote Monitoring Terminal (RMT)												
	101	102	104	105	106	107	108	109	110	111	112	114	115
1	56.5	59.9	55.5	56.6	59.1	54.3	58.5	55.3	58.0	55.6	51.1	52.0	50.0
2	57.1	60.4	56.6	56.4	59.6	55.0	59.2	56.2	58.6	56.4	52.1	52.9	51.5
3	57.8	60.3	58.0	52.5	59.8	53.7	58.8	55.6	57.4	55.4	50.1	52.0	51.3
4	58.8	62.4	*	52.5	61.5	*	58.6	*	58.9	56.9	53.1	53.7	49.8
5	58.2	61.2	*	51.9	64.0	*	60.4	*	60.2	58.5	54.8	54.8	50.0
6	59.5	61.7	*	57.3	61.2	*	60.5	*	59.7	57.6	54.2	55.8	51.1
7	57.5	61.1	*	*	60.3	*	58.7	*	58.0	56.0	52.1	53.6	54.9
8	59.0	62.0	*	*	61.4	*	60.4	*	58.8	56.8	53.9	56.0	52.6
9	59.1	62.1	*	*	61.0	*	58.8	*	58.2	56.5	52.3	53.9	52.4
10	58.1	61.0	*	*	60.4	*	59.0	*	66.2	56.3	52.1	53.2	49.6
11	58.3	61.3	*	*	61.2	*	59.6	*	59.2	57.4	53.4	54.6	51.9
12	59.8	62.6	*	*	61.4	*	60.6	*	60.1	58.2	54.5	55.4	52.5
13	56.9	60.9	*	*	60.2	*	58.6	*	62.8	60.2	57.7	53.6	57.3
14	57.9	62.6	*	*	60.4	*	57.7	*	58.5	54.3	50.4	51.1	52.4
15	59.0	61.8	*	*	61.1	*	60.0	*	58.9	56.5	51.7	53.7	53.1
16	56.8	60.1	*	*	59.4	*	60.6	*	61.3	59.4	55.5	55.1	49.3
17	55.8	61.0	*	57.5	58.8	*	57.3	*	66.5	59.3	55.8	51.0	57.9
18	58.6	62.6	*	55.7	62.0	*	56.2	*	59.0	56.3	*	50.5	56.5
19	59.6	62.3	*	54.8	61.9	*	60.6	*	59.8	57.6	53.7	55.4	52.8
20	60.1	62.1	*	59.5	61.8	*	60.8	*	61.2	58.2	55.2	54.8	51.5
21	58.9	63.7	*	58.8	61.7	*	59.2	*	73.2	56.4	51.8	53.3	51.5
22	60.0	63.3	*	56.9	62.0	*	60.4	*	59.4	57.1	*	54.2	54.5
23	61.0	63.5	*	50.8	63.0	*	61.3	*	60.5	59.0	*	56.6	54.9
24	60.5	63.7	*	53.5	63.4	*	62.1	*	61.1	58.7	*	56.9	55.2
25	60.7	63.6	*	57.1	63.6	*	61.9	*	60.6	58.4	*	56.5	53.2
26	55.9	58.3	*	51.4	58.4	*	57.3	*	56.7	54.2	*	52.1	47.1
27	59.2	60.0	*	55.0	60.1	*	58.7	*	78.4	55.4	*	52.7	49.7
28	58.5	62.8	*	56.8	60.9	56.0	59.4	*	58.6	56.0	*	53.4	50.1
29	59.7	62.2	*	57.8	62.1	57.6	61.5	*	60.5	57.9	*	55.0	52.1
30	60.6	62.3	54.6	57.9	62.8	58.1	61.1	*	59.9	57.1	*	55.4	54.0
Average	58.9	61.9	56.4	56.2	61.4	56.1	59.8	55.7	66.1	57.4	53.7	54.3	53.1
# of Days	30	30	4	20	30	6	30	3	30	30	20	30	30

Table 5 – Daily Community Noise Equivalent Level (CNEL) Values – December 2020

Day	Remote Monitoring Terminal (RMT)												
	101	102	104	105	106	107	108	109	110	111	112	114	115
1	58.9	61.8	47.5	54.3	62.0	59.3	60.7	30.7	60.0	57.7	*	54.2	50.3
2	58.5	61.8	49.3	57.3	60.8	56.6	59.8	53.0	58.8	56.7	*	54.9	50.7
3	57.0	60.0	48.3	53.3	59.9	56.5	60.0	56.8	59.6	58.2	*	54.8	56.5
4	59.3	60.4	49.7	56.8	60.8	56.5	60.0	57.1	59.3	57.1	*	54.1	51.4
5	57.7	60.9	46.1	56.6	61.1	55.0	58.8	55.2	57.8	55.7	*	53.1	54.9
6	59.0	62.2	42.2	51.8	62.0	54.8	58.8	55.5	57.8	55.7	*	53.0	53.9
7	58.0	58.9	51.3	58.4	55.9	54.8	58.4	54.9	57.0	56.8	*	53.0	53.1
8	58.3	60.4	52.5	60.8	59.1	54.9	58.3	54.6	57.7	55.3	*	52.2	54.4
9	57.5	60.9	52.9	58.2	60.6	54.9	58.5	55.3	57.7	56.1	*	53.5	54.4
10	58.3	61.2	55.9	56.2	61.0	55.7	59.2	55.5	57.9	55.7	*	53.3	53.0
11	55.5	58.9	50.9	50.7	59.3	57.0	60.3	57.9	62.1	59.7	57.0	54.7	50.5
12	57.7	60.7	55.4	54.4	60.6	55.4	59.2	56.0	58.7	56.1	52.0	53.7	58.0
13	58.6	61.3	55.1	57.0	61.7	57.6	54.2	53.5	68.7	55.0	52.8	48.9	57.5
14	57.5	60.1	56.5	58.1	60.6	56.7	59.7	57.2	73.6	56.4	53.7	55.3	50.4
15	57.8	60.3	53.8	54.1	60.4	54.9	58.6	55.1	57.5	56.4	54.5	53.4	52.6
16	59.3	61.4	49.8	58.0	61.8	57.5	61.4	58.0	60.8	58.7	56.2	56.0	51.1
17	60.6	63.0	55.8	58.8	63.3	60.9	61.8	58.2	80.0	58.4	55.4	57.0	53.8
18	59.9	62.0	57.2	59.6	62.8	57.8	61.2	58.3	77.3	58.4	54.8	55.8	51.8
19	59.8	62.3	52.0	58.3	61.9	59.4	61.2	57.5	60.5	58.1	54.2	55.4	53.1
20	59.2	61.7	55.7	58.1	61.9	56.5	60.5	56.9	59.7	57.5	52.9	54.3	52.1
21	59.9	63.3	57.2	57.6	62.7	57.5	61.0	57.3	60.0	58.0	53.4	55.4	55.4
22	60.6	62.6	56.1	56.6	62.2	57.0	60.2	57.1	59.4	57.1	53.3	54.9	54.7
23	58.7	62.3	54.8	59.0	62.3	57.2	60.6	57.1	60.4	57.6	53.9	55.1	54.6
24	56.4	59.0	54.5	55.4	58.8	56.5	60.1	57.2	59.8	58.0	54.2	55.8	49.7
25	52.4	56.1	51.8	54.6	55.8	49.1	54.6	55.2	60.6	58.2	56.4	48.2	54.0
26	59.6	62.0	52.6	55.4	62.2	57.2	60.5	57.2	76.3	57.4	53.3	55.8	51.9
27	56.5	59.7	56.4	56.2	60.5	55.6	59.9	58.2	76.7	61.4	58.4	54.2	56.1
28	59.9	62.4	57.7	56.7	62.4	56.7	59.8	57.2	68.3	57.9	54.6	54.9	54.9
29	57.7	60.8	55.5	58.3	60.7	56.5	60.2	56.5	63.1	56.7	52.8	54.1	50.3
30	59.2	62.2	49.6	55.2	61.6	56.6	*	56.9	80.3	57.4	55.1	54.7	52.5
31	58.4	61.2	54.1	55.8	59.7	57.1	*	56.5	58.6	56.8	53.3	54.6	51.6
Average	58.6	61.2	54.0	57.0	61.1	56.8	59.8	56.5	71.2	57.5	54.7	54.4	53.8
# of Days	31	31	31	31	31	31	29	31	31	31	21	31	31

Table 6 – Monthly Community Noise Equivalent Level (CNEL) Values

Month, Year	Remote Monitoring Terminal (RMT)												
	101	102	104	105	106	107	108	109	110	111	112	114	115
January, 2020	63.2	67.9	60.4	61.0	66.2	62.5	65.5	62.7	65.9	63.9	60.3	60.4	60.1
# of Days	31	31	31	31	31	31	31	31	31	31	31	31	31
February, 2020	62.6	67.0	59.2	60.6	65.3	62.0	65.0	61.9	64.9	63.0	58.9	59.9	56.6
# of Days	29	29	29	29	29	29	29	29	29	29	29	29	29
March, 2020	61.6	65.3	57.5	59.7	64.6	60.5	63.3	60.8	64.3	62.1	58.9	58.2	58.5
# of Days	31	31	31	31	31	31	31	31	31	31	31	31	31
1st Quarter 2020	62.5	66.8	59.2	60.5	65.4	61.8	64.7	61.9	65.1	63.1	59.4	59.6	58.6
# of Days	91	91	91	91	91	91	91	91	91	91	91	91	91
April, 2020	55.8	58.8	49.9	52.7	57.8	54.2	57.1	54.1	56.7	54.1	50.8	51.5	51.9
# of Days	30	30	30	30	30	30	30	30	30	30	30	30	30
May, 2020	54.6	58.1	48.7	49.6	57.3	52.3	55.1	52.5	55.8	53.3	49.9	50.1	52.0
# of Days	31	31	31	31	31	31	31	31	31	31	31	31	31
June, 2020	56.8	60.8	49.7	50.9	58.8	54.6	57.2	54.6	57.4	55.0	51.2	52.2	53.0
# of Days	30	27	30	30	30	30	30	30	30	30	30	30	30
2nd Quarter 2020	55.8	59.4	49.5	51.3	58.0	53.8	56.5	53.8	56.7	54.2	50.7	51.3	52.3
# of Days	91	88	91	91	91	91	91	91	91	91	91	91	91
July, 2020	58.1	61.5	51.1	52.5	59.5	55.3	58.8	56.0	61.1	56.5	52.5	53.3	54.4
# of Days	31	31	31	31	31	31	31	31	31	31	31	31	31
August, 2020	57.6	61.3	49.6	51.5	59.3	56.3	59.5	56.5	64.8	57.3	52.7	54.1	51.6
# of Days	31	31	31	31	31	31	31	31	31	31	31	31	31
September, 2020	57.5	61.0	50.0	50.9	60.1	55.3	58.8	56.2	60.1	56.8	63.7	53.3	50.0
# of Days	30	30	30	30	28	30	28	30	30	30	13	30	30
3rd Quarter 2020	57.7	61.3	50.3	51.7	59.7	55.6	59.0	56.2	62.5	56.9	59.5	53.6	52.4
# of Days	92	92	92	92	90	92	90	92	92	92	75	92	92
October, 2020	57.0	60.0	50.8	51.8	59.5	55.3	58.5	55.4	70.1	56.1	52.0	52.9	51.0
# of Days	31	31	31	31	31	31	31	31	31	31	28	31	31
November, 2020	58.9	61.9	56.4	56.2	61.4	56.1	59.8	55.7	66.1	57.4	53.7	54.3	53.1
# of Days	30	30	4	20	30	6	30	3	30	30	20	30	30
December, 2020	58.6	61.2	54.0	57.0	61.1	56.8	59.8	56.5	71.2	57.5	54.7	54.4	53.8
# of Days	31	31	31	31	31	31	29	31	31	31	21	31	31
4th Quarter 2020	58.2	61.1	54.3	55.5	60.8	56.1	59.4	55.9	69.6	57.0	53.6	53.9	52.8
# of Days	92	92	66	82	92	68	90	65	92	92	69	92	92
Annual	59.3	61.4	55.1	56.4	61.9	58.0	60.4	58.1	65.6	59.2	57.2	55.8	55.0
# of Days	366	363	340	356	364	342	362	339	366	366	326	366	366
Online Percentage	100%	99%	93%	97%	99%	93%	99%	93%	100%	100%	89%	100%	100%

Table 7 – Annual Community Noise Equivalent Level (CNEL) Values

RMT #	Remote Monitoring Terminal (RMT)			
	4th Quarter 2020	3rd Quarter 2020	2nd Quarter 2020	1st Quarter 2020
101	58.2	57.7	55.8	62.5
102	61.1	61.3	59.4	66.8
104	54.3	50.3	49.5	59.2
105	55.5	51.7	51.3	60.5
106	60.8	59.7	58.0	65.4
107	56.1	55.6	53.8	61.8
108	59.4	59.0	56.5	64.7
109	55.9	56.2	53.8	61.9
110	69.6	62.5	56.7	65.1
111	57.0	56.9	54.2	63.1
112	53.6	59.5	50.7	59.4
114	53.9	53.6	51.3	59.6
115	52.8	52.4	52.3	58.6