

Quarterly Noise Report

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

3rd Quarter 2022
July 1, 2022 – September 30, 2022



Airport Noise Office

November 9, 2022

NORMAN Y. MINETA
SAN JOSE
INTERNATIONAL
AIRPORT



SILICON VALLEY'S AIRPORT

Quarterly Noise Report
3rd Quarter 2022
(July 1, 2022 through September 30, 2022)

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 3rd Quarter of 2022 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.).

Rosalyn Bond
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 – July 2022	5
Table 4 – Daily Community Noise Equivalent Level (CNEL) Values – August 2022	6
Table 5 – Daily Community Noise Equivalent Level (CNEL) Values – September 2022	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):
0 Square Miles

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

3. Estimated number of people residing within the Noise Impact Area as defined in the Noise Standards*:
0 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:
Bombardier Challenger 300 (CL30); 415 Departure Operations

5. Total number of aircraft operations during the calendar quarter: (Not Mandatory)
45,463

6. Number of Air Carrier operations during the calendar quarter: (Not Mandatory)
30,819

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)
8,616

9. Estimated number of operations by Military aircraft during the calendar quarter: (Not Mandatory)
249

10. Estimated number of operations by Taxi/Commuter aircraft during the calendar quarter: (Not Mandatory)
5,779

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 Airport Noise and Operations Monitoring System (ANOMS) installed at SJC. Table 2 contains the locations of the permanent Remote Monitoring Terminals (RMT) maintained by Envirosuite in the surrounding communities of SJC.

Tables 3-5 contains a summary of daily Community Noise Equivalent Level (CNEL) measurements correlated to local aircraft operations 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 April 1, 2021 through March 31, 2022 is included at the end of this report. The noise contour was prepared using the Federal Aviation Administration's (FAA) Aviation Environmental Design Tool (AEDT) software and adjusted using the actual CNEL measurements at RMT sites located in areas capable of determining the extent of the CNEL contour or closure points. The noise contour figure includes the locations of the permanent RMTs for reference.

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, specifically section 5032. Validation of the Noise Impact Boundary, which is the 65 dB CNEL contour.

Table 1 – Total Aircraft Operations

Operations	3rd Quarter 2022	2nd Quarter 2022	1st Quarter 2022	4th Quarter 2021
Total	45,463	42,779	35,437	38,079
Air Carrier/Cargo	30,819	28,299	22,081	24,065
General Aviation	8,616	8,615	7,944	8,056
Military	249	362	271	118
Taxi/Commuter	5,779	5,503	5,141	5,840

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	Bellarmino 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 – July 2022

Day	Remote Monitoring Terminal (RMT)												
	101	102	104	105	106	107	108	109	110	111	112	114	115
1	63.5	66.4	52.7	52.6	66.3	61.9	65.0	62.7	65.7	63.7	59.6	60.7	57.8
2	62.5	65.0	50.3	53.2	64.8	61.6	63.5	61.5	65.2	62.5	58.2	59.5	55.5
3	63.8	65.7	52.5	52.4	66.2	61.2	64.2	61.8	64.5	62.2	58.0	60.0	55.3
4	64.7	66.5	52.1	52.6	66.2	61.0	64.0	61.4	64.3	64.7	58.1	61.9	55.7
5	63.6	66.3	52.7	53.6	66.1	59.9	62.9	62.4	63.6	62.7	59.1	58.9	56.7
6	63.2	66.3	53.5	56.2	66.0	62.1	64.5	61.9	64.6	62.3	58.8	60.3	55.3
7	63.2	66.4	53.3	54.8	66.1	61.4	64.4	61.7	64.1	62.1	57.8	60.0	56.0
8	63.5	65.8	56.6	49.4	65.9	61.7	64.7	62.4	65.1	62.8	58.7	60.4	55.2
9	62.1	65.0	51.2	48.0	64.3	60.4	63.2	60.7	63.6	61.4	57.2	59.2	55.3
10	62.8	65.7	54.3	52.7	65.6	60.7	64.4	61.9	64.8	62.5	57.9	59.2	54.3
11	62.8	65.9	51.7	58.2	65.6	61.4	64.9	61.9	65.2	63.3	58.5	60.0	55.5
12	63.3	66.4	57.3	57.6	66.0	59.0	61.9	60.2	63.8	61.7	58.3	57.9	60.3
13	62.9	66.3	51.3	53.4	66.3	62.5	64.9	62.3	65.2	63.0	59.1	60.4	54.7
14	63.2	66.1	53.8	51.4	66.3	62.3	65.2	63.0	65.9	63.9	59.3	60.6	55.1
15	63.1	66.0	53.8	53.6	65.7	62.5	65.8	63.2	66.4	64.3	59.1	61.0	54.9
16	61.2	63.8	50.1	50.6	63.5	60.3	63.2	60.4	63.8	61.6	56.4	57.7	54.8
17	62.4	65.5	50.1	50.1	65.7	61.3	64.9	62.3	65.5	63.3	58.2	59.9	52.9
18	62.4	65.6	52.5	51.0	65.9	58.3	62.4	63.2	63.8	63.2	59.6	57.3	53.6
19	62.2	65.5	53.5	52.3	65.8	58.9	62.6	63.4	64.1	63.2	59.2	57.8	53.6
20	62.9	66.1	52.8	52.1	66.3	58.4	62.5	63.1	63.9	62.9	58.5	57.6	54.3
21	62.8	66.1	50.9	51.3	66.7	59.0	64.0	63.4	64.2	63.0	58.7	57.2	55.1
22	63.0	66.3	53.0	52.3	66.3	61.3	65.2	63.9	65.2	64.3	59.1	59.4	55.4
23	60.4	63.4	49.6	50.9	63.4	60.2	64.0	61.7	64.9	62.9	58.3	59.4	54.0
24	63.9	67.6	57.4	58.7	67.1	62.6	63.3	61.8	65.2	63.2	59.5	58.8	62.1
25	63.0	66.2	53.5	57.0	66.2	62.0	65.4	63.1	65.9	63.9	59.7	60.6	55.6
26	62.9	65.8	50.2	55.0	65.6	61.7	65.1	62.5	65.2	63.3	59.2	60.2	55.7
27	62.9	65.8	51.3	53.7	65.7	61.7	65.6	62.5	65.5	64.1	58.3	60.0	54.9
28	63.0	65.9	54.7	54.2	66.0	62.3	65.6	62.8	65.8	63.9	59.5	60.7	55.0
29	64.4	66.4	56.3	53.0	66.7	62.8	65.7	63.7	66.2	66.1	60.5	61.1	54.7
30	61.4	64.3	51.7	47.8	63.8	60.9	64.0	61.6	64.8	62.7	58.7	59.3	54.1
31	62.9	67.0	52.2	52.8	66.4	61.3	64.9	62.5	65.7	63.6	59.5	60.3	55.0
Average	63.0	65.9	53.3	53.8	65.8	61.2	64.4	62.4	65.0	63.3	58.8	59.7	55.9
# of Days	31	31	31	31	31	31	31	31	31	31	31	31	31

Note: * indicates days with missing NMT data

Table 4 – Daily Community Noise Equivalent Level (CNEL) Values – August 2022

Day	Remote Monitoring Terminal (RMT)												
	101	102	104	105	106	107	108	109	110	111	112	114	115
1	62.2	65.5	50.9	53.8	65.5	61.2	65.4	62.2	65.3	63.3	59.3	59.8	53.4
2	63.2	65.6	53.1	54.0	65.3	61.1	65.1	61.7	64.6	62.7	58.5	59.5	55.4
3	62.8	65.3	52.5	52.5	66.3	61.0	65.0	62.0	64.6	62.6	58.1	59.1	54.9
4	63.1	66.4	51.1	53.1	65.9	62.0	65.8	63.5	66.0	64.5	60.0	60.2	55.6
5	63.2	66.9	55.7	54.9	66.2	62.5	65.8	63.7	65.9	64.5	60.6	60.9	56.0
6	62.6	65.6	49.8	53.4	64.6	60.5	64.0	61.6	64.0	62.3	57.6	58.4	55.2
7	64.0	67.1	54.0	55.0	66.5	61.6	65.0	62.6	65.0	63.2	59.1	59.6	56.5
8	64.4	67.5	57.5	65.9	66.8	61.7	65.5	62.5	64.8	62.8	59.1	60.0	57.1
9	63.5	66.5	55.0	55.7	65.3	61.6	65.2	62.1	64.5	62.8	59.1	59.8	57.2
10	63.3	66.6	54.3	63.6	65.6	63.1	66.0	62.5	65.1	63.0	59.2	60.2	55.4
11	64.4	67.5	56.7	56.8	66.6	61.9	65.6	62.7	65.3	63.4	59.2	60.3	58.4
12	64.0	67.3	62.0	54.8	*	62.0	66.5	63.9	66.4	64.7	60.4	61.3	56.8
13	62.1	65.4	52.6	52.4	64.3	*	64.0	61.1	64.0	62.0	57.3	58.4	57.7
14	63.2	66.0	50.9	55.1	65.2	*	65.2	62.1	64.9	62.9	57.9	59.2	58.5
15	63.4	66.1	51.1	55.6	64.8	*	65.4	61.7	64.6	62.6	57.9	58.7	56.0
16	62.6	65.6	55.1	54.6	64.4	*	65.0	61.0	64.1	62.0	57.2	58.2	55.8
17	62.4	65.4	52.4	53.8	64.4	*	65.5	62.2	65.1	63.6	58.5	59.0	54.0
18	62.4	65.6	53.1	54.8	64.7	*	65.9	62.7	65.5	63.5	58.5	59.2	54.8
19	64.2	66.7	51.3	54.7	65.6	*	65.8	63.0	65.8	63.7	58.5	59.5	56.1
20	61.6	65.7	47.9	54.3	64.0	*	64.6	61.6	64.9	63.1	58.4	59.0	55.9
21	62.7	65.4	50.8	53.6	64.5	59.2	65.9	*	65.8	64.1	59.6	60.3	55.6
22	64.4	67.3	53.5	51.8	65.9	58.4	66.0	*	65.2	63.2	58.7	60.0	57.0
23	63.0	66.0	52.6	56.8	64.6	*	65.8	*	64.6	63.0	58.5	58.7	56.3
24	63.0	66.0	51.1	52.4	65.2	44.4	66.7	*	65.8	63.8	59.3	60.0	55.0
25	63.8	67.7	57.9	63.4	66.5	*	64.2	*	64.7	63.4	59.5	57.8	60.4
26	63.2	66.2	51.6	58.5	65.4	42.0	66.4	*	66.2	64.2	60.1	60.0	54.6
27	63.1	66.5	57.6	59.7	65.5	*	60.1	*	61.3	59.3	56.3	54.4	61.4
28	63.8	66.9	56.8	58.4	66.0	*	63.2	*	64.5	62.5	59.1	57.8	59.8
29	63.6	67.4	52.7	58.4	65.5	61.1	65.9	*	65.1	63.2	59.4	60.1	56.3
30	62.9	66.0	51.4	55.4	64.9	*	65.4	*	64.6	63.2	58.7	59.5	56.7
31	63.0	66.6	54.3	54.4	65.0	60.8	65.3	*	64.4	62.0	57.1	57.5	54.6
Average	63.3	66.4	54.6	57.7	65.4	60.9	65.3	62.4	65.0	63.2	58.8	59.4	56.8
# of Days	31	31	31	31	30	18	31	20	31	31	31	31	31

Note: * indicates days with missing NMT data

Table 5 – Daily Community Noise Equivalent Level (CNEL) Values – September 2022

Day	Remote Monitoring Terminal (RMT)												
	101	102	104	105	106	107	108	109	110	111	112	114	115
1	63.0	66.3	61.9	54.8	65.5	60.9	65.6	*	64.7	62.9	58.1	58.4	55.3
2	64.4	66.9	53.7	53.3	66.0	62.1	65.7	*	67.0	62.7	57.5	58.7	56.4
3	61.5	64.4	51.9	54.6	63.5	60.7	64.4	*	63.8	61.6	57.2	58.0	54.9
4	60.6	65.3	57.7	53.7	65.4	57.9	63.0	*	62.4	60.1	55.7	55.6	52.1
5	62.3	65.2	58.4	55.9	64.5	58.8	63.2	*	59.1	59.8	55.3	55.4	53.4
6	61.2	64.6	53.4	51.1	64.4	58.0	62.8	*	*	60.8	55.8	55.4	52.0
7	61.7	65.1	52.3	51.1	64.5	58.7	64.0	*	*	61.1	54.1	55.9	53.1
8	62.6	66.0	56.5	52.6	66.3	58.8	63.7	*	*	60.6	56.3	55.6	54.2
9	63.6	66.0	52.7	53.4	68.2	60.1	65.5	*	61.4	62.7	*	57.3	54.9
10	60.9	64.4	52.5	54.3	63.1	56.8	63.0	*	63.7	62.2	57.3	56.5	56.2
11	63.0	66.3	53.2	52.2	65.9	60.2	65.4	*	64.6	62.9	58.1	58.5	54.4
12	63.8	66.9	55.2	56.8	67.5	59.8	65.6	*	64.5	62.7	58.1	58.9	56.4
13	62.8	65.9	54.0	52.8	69.9	60.3	64.9	*	63.6	62.0	57.8	58.8	55.3
14	61.4	64.8	53.3	56.5	65.7	61.1	65.0	*	63.7	62.5	58.6	58.9	53.9
15	63.8	67.3	54.2	57.3	66.8	61.4	66.6	63.0	65.3	63.7	59.8	60.6	55.9
16	65.4	69.1	58.7	58.4	67.5	59.4	64.0	60.9	63.7	62.1	58.7	57.5	62.5
17	63.3	66.5	57.3	57.0	65.2	*	61.5	56.5	61.9	60.3	57.2	55.7	60.6
18	61.9	65.2	60.6	61.1	64.6	*	55.1	*	67.0	64.5	63.0	46.7	64.0
19	62.9	66.5	59.9	61.6	66.2	*	60.4	*	65.7	63.8	61.7	53.2	62.5
20	62.7	65.9	55.3	53.5	65.3	*	64.8	*	64.0	62.8	58.8	59.4	55.1
21	63.2	66.5	53.3	56.7	66.7	*	65.1	60.0	64.2	63.0	59.1	59.6	55.5
22	64.2	67.2	56.6	58.1	66.5	59.6	65.7	*	64.7	63.2	59.3	59.9	56.1
23	63.5	66.5	56.3	57.2	66.8	61.9	66.3	*	64.9	65.4	59.2	59.7	66.1
24	61.1	64.1	52.5	57.5	63.7	59.2	63.4	*	63.0	61.5	57.1	57.3	54.1
25	63.2	66.6	52.4	54.4	65.7	60.5	64.7	*	64.1	62.8	58.1	58.6	55.2
26	63.5	66.8	54.5	59.9	66.7	61.0	65.7	*	64.4	62.9	58.4	58.9	56.4
27	62.6	65.7	53.0	54.8	64.5	61.1	65.3	*	63.7	62.4	57.9	59.1	55.5
28	63.8	66.4	60.3	52.5	65.3	63.1	65.6	*	63.8	62.5	58.0	59.3	55.4
29	63.9	67.1	58.5	57.8	66.0	61.7	66.3	*	64.9	63.7	59.4	60.2	56.2
30	63.8	67.1	57.8	58.8	66.3	61.9	66.1	*	64.8	63.4	59.4	59.6	55.8
Average	63.0	66.2	56.6	56.6	66.1	60.4	64.7	60.7	64.3	62.6	58.5	58.1	58.1
# of Days	30	30	30	30	30	25	30	4	27	30	29	30	30

Note: * indicates days with missing NMT data

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
October, 2021	61.7	65.1	55.3	59.5	64.4	60.0	62.8	60.6	70.2	61.7	58.3	57.8	58.1
# of Days	31	31	31	31	31	31	31	31	31	31	31	31	31
November, 2021	62.1	65.7	58.6	60.8	64.8	60.4	63.2	61.0	63.9	62.0	58.3	58.3	58.5
# of Days	30	30	30	30	30	30	30	30	30	30	30	30	30
December, 2021	61.8	65.7	57.6	60.0	65.2	60.1	62.7	61.1	64.5	62.6	59.7	57.9	59.6
# of Days	31	31	31	31	31	31	31	31	31	31	31	31	31
4th Quarter 2021	61.9	65.5	57.4	60.1	64.8	60.2	62.9	60.9	67.2	62.1	58.8	58.0	58.8
# of Days	92	92	92	92	92	92	92	92	92	92	92	92	92
January, 2022	61.1	64.5	57.1	58.8	64.9	59.0	62.1	59.6	62.5	60.4	56.8	57.2	57.8
# of Days	31	31	31	31	31	31	31	31	31	31	31	31	31
February, 2022	61.0	63.8	57.3	58.8	63.7	59.3	62.1	59.4	62.1	60.0	55.7	57.4	54.0
# of Days	28	28	28	28	28	28	28	28	28	28	18	28	28
March, 2022	62.0	64.9	56.4	57.3	65.0	60.3	63.0	60.6	63.5	61.3	*	58.5	56.2
# of Days	31	31	31	31	31	29	31	31	31	31	0	31	31
1st Quarter 2022	61.4	64.4	56.9	58.3	64.6	59.6	62.4	59.9	62.7	60.6	56.3	57.7	56.3
# of Days	90	90	90	90	90	88	90	90	90	90	49	90	90
April, 2022	63.2	63.2	56.9	58.3	66.1	61.6	63.8	61.3	64.6	62.3	59.4	59.3	58.6
# of Days	30	30	30	30	30	12	30	30	30	30	18	30	30
May, 2022	63.0	65.8	53.9	56.4	65.7	61.5	64.1	61.5	64.4	62.2	58.2	59.7	56.4
# of Days	31	31	31	31	31	31	31	31	31	31	31	31	31
June, 2022	63.0	66.7	54.0	55.0	65.3	61.4	64.2	61.7	64.7	62.5	58.3	59.6	56.9
# of Days	30	28	30	30	30	30	30	30	30	30	30	30	30
2nd Quarter 2022	63.1	65.5	55.2	56.8	65.7	61.5	64.0	61.5	64.6	62.3	58.8	59.5	57.4
# of Days	91	89	91	91	91	73	91	91	91	91	79	91	91
July, 2022	63.0	65.9	53.3	53.8	65.8	61.2	64.4	62.4	65.0	63.3	58.8	59.7	55.9
# of Days	31	31	31	31	31	31	31	31	31	31	31	31	31
August, 2022	63.3	66.4	54.6	57.7	65.4	60.9	65.3	62.4	65.0	63.2	58.8	59.4	56.8
# of Days	31	31	31	31	30	18	31	20	31	31	31	31	31
September, 2022	63.0	66.2	56.6	56.6	66.1	60.4	64.7	60.7	64.3	62.6	58.5	58.1	58.1
# of Days	30	30	30	30	30	25	30	4	27	30	29	30	30
3rd Quarter 2022	63.1	66.2	55.1	56.3	65.8	60.9	64.8	61.9	64.8	63.0	58.8	59.1	57.0
# of Days	92	92	92	92	91	74	92	55	89	92	91	92	92
Annual	62.4	65.4	56.3	58.2	65.2	60.6	63.6	61.1	65.1	62.1	58.4	58.7	57.5
# of Days	365	363	365	365	364	327	365	328	362	365	311	365	365
Online Percentage	100%	99%	100%	100%	100%	90%	100%	90%	99%	100%	85%	100%	100%

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

RMT #	Remote Monitoring Terminal (RMT)			
	3rd Quarter 2022	2nd Quarter 2022	1st Quarter 2022	4th Quarter 2021
101	62.4	62.0	61.5	61.0
102	65.4	65.2	64.9	64.5
104	56.3	56.0	55.9	55.3
105	58.2	58.3	57.9	57.5
106	65.2	64.9	64.4	63.9
107	60.6	60.2	59.4	58.8
108	63.6	63.0	62.5	62.0
109	61.1	60.6	60.0	59.5
110	65.1	65.2	65.5	66.1
111	62.1	61.7	61.1	60.6
112	58.4	57.8	57.1	56.7
114	58.7	58.1	57.3	56.6
115	57.5	57.2	56.8	56.3

Note:

The reported noise levels from NMT 110 were not used to determine the extent of the CNEL contour or closure point to the northwest due to likely contamination from construction near the monitor during this review period.