

Quarterly Noise Report

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

3rd Quarter 2023
July 1, 2023 – September 30, 2023



Airport Noise Office

December 1, 2023



Quarterly Noise Report
3rd Quarter 2023
(July 1, 2023 through September 30, 2023)

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 San Jose Mineta 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 2023 was prepared by the Airport Noise Office at San Jose Mineta International Airport (SJC), in accordance with the California Noise Standards (California Code of Regulations, Title 21, Section 5000 et seq.).

A handwritten signature in blue ink, appearing to read "Rosalyn Bond", is written over a horizontal line. The signature is fluid and cursive, extending to the right of the line.

Rosalyn Bond
Deputy Director of Aviation
San Jose Mineta International Airport

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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:
Embraer 175 (E175L); 1,281 Departures

5. Total number of aircraft operations during the calendar quarter: (Not Mandatory)
42,369

6. Number of Air Carrier operations during the calendar quarter: (Not Mandatory)
29,076

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)
7,867

9. Estimated number of operations by Military aircraft during the calendar quarter: (Not Mandatory)
44

10. Estimated number of operations by Taxi/Commuter aircraft during the calendar quarter: (Not Mandatory)
5,382

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 San Jose Mineta 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 October 1, 2022 through September 30, 2023 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 2023	2nd Quarter 2023	1st Quarter 2023	4th Quarter 2022
Total	42,369	41,515	39,472	42,359
Air Carrier/Cargo	29,076	28,414	27,208	28,567
General Aviation	7,867	7,754	6,707	7,676
Military	44	43	81	185
Taxi/Commuter	5,382	5,304	5,476	5,931

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 2023

Day	Remote Monitoring Terminal (RMT)												
	101	102	104	105	106	107	108	109	110	111	112	114	115
1	61.7	64.6	50.7	53.1	65.5	60.0	65.3	61.8	64.0	62.9	*	58.5	51.9
2	62.0	65.4	51.5	51.6	63.4	58.6	64.1	60.5	62.7	61.7	*	57.2	54.5
3	62.6	65.5	49.4	56.2	64.6	61.4	65.8	62.8	64.8	63.7	*	59.4	54.1
4	66.3	68.7	59.9	58.3	66.0	57.0	61.4	58.9	61.2	62.7	*	57.9	62.0
5	65.9	68.0	58.1	58.4	66.4	58.7	63.2	60.7	62.8	62.0	*	57.3	61.1
6	63.6	66.8	51.8	55.8	65.1	61.3	65.9	62.5	64.5	63.4	58.9	59.3	56.6
7	64.5	66.6	56.6	56.0	65.7	62.1	65.8	63.5	64.8	63.9	59.3	60.3	55.8
8	62.1	65.1	56.3	55.0	63.6	60.3	64.6	62.0	63.5	62.7	58.8	59.2	54.4
9	63.6	66.7	54.8	53.8	65.7	60.6	65.1	62.5	64.2	63.3	59.1	59.7	56.0
10	64.6	67.1	56.6	56.0	66.2	58.2	63.2	63.6	63.8	63.2	59.7	57.7	55.4
11	62.9	66.7	56.6	60.8	65.7	60.3	63.2	63.9	64.0	64.0	60.2	57.4	56.4
12	62.7	66.3	53.0	59.7	65.3	58.8	62.8	63.7	63.3	63.3	60.0	56.6	53.8
13	63.4	66.3	54.4	62.3	65.4	58.7	63.4	64.1	64.0	64.0	60.6	57.3	53.9
14	63.2	66.0	51.3	52.4	64.8	59.4	63.7	63.0	64.1	63.3	59.5	57.0	54.0
15	62.1	64.6	50.4	50.1	63.2	57.3	62.8	60.3	62.5	61.4	57.1	55.7	54.2
16	62.0	64.8	50.4	51.0	63.8	59.3	65.1	61.7	64.3	63.1	58.4	57.4	52.5
17	62.6	65.3	49.9	54.6	64.2	61.0	66.2	62.9	65.4	64.4	59.7	59.1	53.5
18	62.7	65.9	52.8	53.6	64.9	60.9	65.9	63.0	65.3	64.5	59.3	59.8	54.1
19	62.8	66.1	53.6	50.9	65.0	60.7	65.2	61.7	64.1	63.0	*	58.3	54.4
20	63.3	66.5	57.5	51.8	65.1	62.0	65.5	62.7	64.7	63.6	*	59.2	55.1
21	63.4	66.4	51.9	55.7	65.4	60.5	65.7	62.5	64.5	63.1	*	58.1	56.2
22	61.8	64.4	50.2	48.9	63.4	59.0	63.7	60.6	63.0	61.6	*	56.6	52.0
23	62.2	65.3	53.8	50.6	64.4	59.9	65.2	62.2	64.5	63.2	*	58.4	53.3
24	63.6	66.8	58.7	58.6	65.6	61.5	65.8	63.5	64.7	63.6	*	59.6	55.3
25	63.4	66.2	54.3	54.8	64.7	60.7	65.1	61.7	63.7	62.9	56.9	58.8	54.9
26	63.2	66.2	60.9	53.7	65.2	60.3	65.1	62.5	64.3	63.5	59.1	58.6	55.1
27	65.0	68.2	63.4	63.6	66.8	60.1	63.9	61.6	63.8	62.6	58.4	58.0	61.6
28	64.0	67.0	54.9	55.3	65.5	61.6	65.9	63.1	64.6	63.6	58.9	59.7	56.7
29	62.1	66.2	52.0	51.9	64.0	60.1	64.6	62.0	63.9	63.2	58.3	58.8	55.2
30	62.7	65.8	53.7	52.8	64.9	60.8	65.7	63.0	64.9	63.5	58.8	58.8	54.3
31	63.2	66.6	55.5	56.6	65.4	61.2	66.0	63.1	65.1	64.0	59.3	60.1	55.5
Average	63.4	66.3	55.9	56.6	65.1	60.3	64.8	62.5	64.1	63.3	59.1	58.5	56.1
# of Days	31	31	31	31	31	31	31	31	31	31	20	31	31

Note: * indicates days with missing NMT data

Table 4 – Daily Community Noise Equivalent Level (CNEL) Values – August 2023

Day	Remote Monitoring Terminal (RMT)												
	101	102	104	105	106	107	108	109	110	111	112	114	115
1	63.1	66.4	51.0	56.4	64.9	61.2	65.7	63.0	64.6	63.9	59.6	60.2	56.0
2	63.4	66.8	56.7	53.1	65.1	61.1	65.1	62.4	63.9	62.7	58.4	59.2	56.7
3	63.6	67.2	53.6	56.2	65.7	62.1	65.9	63.7	64.8	63.6	59.4	60.6	56.1
4	64.5	67.1	54.4	55.3	67.4	61.7	66.3	63.4	65.2	64.1	59.9	60.0	56.2
5	61.8	65.0	53.1	56.8	63.8	59.1	64.0	61.7	63.5	62.5	58.3	57.5	53.7
6	62.0	65.7	56.1	52.0	63.9	59.4	64.7	61.4	63.4	62.2	57.4	57.8	53.5
7	63.4	66.6	55.3	55.3	65.5	60.4	65.5	62.3	64.6	63.2	57.7	58.1	56.3
8	64.1	67.9	59.7	58.9	65.9	57.3	60.9	59.7	63.0	61.7	58.8	55.8	61.5
9	63.7	67.7	58.6	70.6	66.2	57.7	61.6	59.5	62.7	60.6	57.6	55.8	61.4
10	64.2	67.7	59.9	59.6	66.5	58.4	62.4	60.5	63.7	61.6	58.5	57.0	61.4
11	62.9	66.1	52.7	51.7	65.2	61.5	65.9	63.0	65.6	63.8	60.3	60.3	54.6
12	61.1	64.6	49.0	53.8	63.8	59.6	63.9	61.1	63.8	62.0	58.4	58.7	58.7
13	61.6	64.8	49.1	50.3	64.2	60.2	65.2	61.6	64.4	62.5	58.2	58.8	53.3
14	62.6	64.3	54.2	55.2	64.8	62.4	65.0	61.9	64.5	62.3	58.1	59.1	54.3
15	62.0	65.0	49.2	52.1	64.0	60.2	64.5	61.4	64.0	62.0	58.0	58.7	53.3
16	61.2	64.7	49.5	51.6	63.6	60.6	64.8	61.7	64.4	62.6	58.0	58.5	52.1
17	62.3	65.4	51.5	52.4	64.2	61.9	65.1	62.1	65.0	63.2	59.0	59.3	54.0
18	63.6	67.2	57.6	57.2	66.4	59.0	63.0	60.2	63.3	61.4	58.4	57.2	59.8
19	60.5	64.0	46.9	52.1	63.1	64.3	64.2	61.2	64.5	62.9	59.4	58.5	50.1
20	62.0	65.2	51.5	52.0	64.7	58.4	63.4	60.5	63.2	61.5	57.8	57.3	51.9
21	59.7	63.6	57.0	60.4	61.8	57.8	62.9	62.0	67.1	64.5	62.2	56.8	59.7
22	62.4	65.2	49.0	52.9	63.9	60.4	64.3	61.2	63.7	61.9	58.2	58.9	53.5
23	61.6	65.0	57.0	52.9	63.8	60.0	64.0	61.8	63.9	61.5	58.0	58.7	53.2
24	62.1	65.2	53.1	54.6	64.5	60.8	65.1	62.7	65.3	63.2	59.9	59.5	55.3
25	62.5	66.0	53.1	54.7	65.0	61.5	65.6	63.0	65.2	63.3	59.5	59.9	54.4
26	60.6	63.2	51.7	48.9	63.5	58.6	63.6	59.6	63.1	60.8	56.2	56.2	52.6
27	62.4	63.3	50.4	52.0	64.9	60.1	64.5	60.9	63.8	61.9	57.6	58.5	53.9
28	62.2	65.8	57.4	59.1	64.9	60.3	64.5	61.0	63.7	61.5	57.5	58.4	54.7
29	63.2	65.8	53.0	56.8	64.6	59.9	64.1	60.9	64.3	61.0	56.7	58.6	53.7
30	61.6	65.2	57.8	55.7	64.2	59.9	64.1	61.7	64.0	61.6	58.1	58.2	52.4
31	60.6	64.0	56.2	57.1	63.7	65.4	64.6	62.5	66.9	64.4	61.7	59.1	57.9
Average	62.5	65.7	55.0	58.5	64.8	60.8	64.5	61.7	64.4	62.6	58.8	58.6	56.5
# of Days	31	31	31	31	31	31	31	31	31	31	31	31	31

Note: * indicates days with missing NMT data

Table 5 – Daily Community Noise Equivalent Level (CNEL) Values – September 2023

Day	Remote Monitoring Terminal (RMT)												
	101	102	104	105	106	107	108	109	110	111	112	114	115
1	64.9	68.6	58.7	58.5	67.7	59.3	63.1	60.8	63.9	62.0	58.7	58.0	61.7
2	61.0	64.7	47.1	51.8	64.3	59.7	64.3	61.3	64.1	62.4	58.7	58.9	58.4
3	61.7	65.3	51.4	50.5	65.2	59.3	62.9	60.2	62.5	60.8	57.3	57.8	53.0
4	62.6	66.0	55.3	54.0	65.6	60.5	64.6	61.9	64.2	62.1	58.1	59.2	54.0
5	61.8	64.9	50.6	52.9	64.0	60.5	63.9	61.1	63.9	62.2	58.2	58.4	52.8
6	62.6	67.0	57.7	57.7	65.4	58.0	60.2	58.3	61.4	59.2	56.7	55.3	59.9
7	62.5	65.7	53.9	51.6	64.5	61.1	64.6	61.2	64.2	62.1	59.2	58.9	54.7
8	62.3	65.5	53.9	57.6	64.6	60.9	65.0	62.2	65.1	63.3	59.7	59.5	55.3
9	60.4	63.8	57.1	54.4	63.2	59.6	63.6	60.7	63.3	61.7	57.4	58.4	52.9
10	62.0	65.4	51.0	51.0	64.8	59.9	64.6	61.0	63.8	61.8	57.4	58.5	53.9
11	63.1	63.2	53.1	57.1	65.4	61.3	64.6	61.4	63.9	61.7	57.8	59.1	55.1
12	62.6	*	56.2	56.7	65.3	57.8	60.5	58.8	61.8	59.8	56.5	55.6	58.8
13	63.0	*	57.5	57.2	65.6	57.2	59.6	58.0	61.6	58.9	56.1	53.9	60.2
14	63.6	67.5	57.4	58.7	66.4	59.0	62.8	60.7	63.7	61.7	59.1	57.4	60.4
15	64.1	67.2	57.4	57.6	66.1	59.1	63.2	60.8	63.6	61.8	58.5	57.8	59.7
16	61.3	64.7	52.9	54.9	63.9	59.8	64.1	60.8	63.4	61.6	57.4	58.0	53.5
17	62.5	67.0	52.4	51.0	65.4	60.6	64.8	62.0	64.4	62.6	58.8	59.7	55.0
18	63.4	67.1	53.3	57.6	65.8	60.9	64.6	61.9	63.8	62.0	58.7	59.4	55.3
19	61.5	65.3	55.0	55.9	64.3	60.2	64.2	61.3	63.8	61.9	58.6	59.1	53.0
20	61.9	66.4	57.9	57.8	64.8	57.0	60.4	60.5	64.9	62.7	60.3	55.2	61.0
21	64.0	67.8	59.4	60.2	67.0	61.3	62.8	62.9	65.4	66.0	60.0	57.1	61.4
22	64.4	68.1	58.0	59.7	66.8	59.8	63.6	63.6	63.7	62.0	58.5	58.6	67.2
23	61.0	64.6	47.7	55.7	63.9	59.7	64.2	61.6	64.1	62.5	58.9	58.7	52.6
24	62.4	65.6	54.6	47.4	65.0	61.1	64.6	61.6	64.1	62.4	58.8	59.1	53.8
25	62.7	65.9	57.3	59.1	64.9	60.3	64.1	61.3	64.5	62.1	60.1	58.7	58.5
26	63.5	66.9	58.6	57.0	65.7	59.9	61.1	58.6	61.3	59.6	56.9	55.8	60.2
27	62.2	65.8	58.8	55.1	64.9	60.6	64.1	61.4	63.6	61.6	58.9	58.9	53.3
28	62.8	66.2	52.3	55.3	65.3	61.7	65.4	62.6	65.2	63.5	60.5	60.0	55.3
29	63.3	66.6	54.8	57.4	65.9	62.1	65.7	62.5	65.2	63.4	59.4	60.5	58.2
30	61.2	64.7	51.2	61.0	63.8	59.9	64.2	60.8	63.5	61.6	57.8	58.6	53.0
Average	62.7	66.2	55.8	56.7	65.3	60.1	63.8	61.2	63.9	62.1	58.6	58.4	58.6
# of Days	30	28	30	30	30	30	30	30	30	30	30	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, 2022	63.5	66.5	56.5	57.2	65.5	61.0	65.0	61.7	63.9	62.7	58.3	58.9	56.6
# of Days	31	31	31	31	31	31	31	22	31	31	31	31	31
November, 2022	63.7	67.0	60.9	63.3	65.5	61.5	65.0	62.1	64.4	63.3	60.2	59.6	59.0
# of Days	30	30	22	30	30	30	30	30	30	30	30	30	30
December, 2022	63.1	66.8	59.4	61.1	65.8	60.5	64.2	62.1	64.6	63.3	60.2	58.5	60.4
# of Days	31	31	31	31	31	31	31	30	31	31	31	31	31
4th Quarter 2022	63.5	66.7	59.3	61.2	65.6	61.0	64.8	62.0	64.3	63.1	59.6	59.0	58.9
# of Days	92	92	84	92	92	92	92	82	92	92	92	92	92
January, 2023	62.6	66.3	59.4	61.8	65.3	60.0	62.8	61.2	76.0	63.0	60.6	56.9	61.1
# of Days	31	28	24	31	31	31	31	31	31	31	31	31	31
February, 2023	63.2	66.2	57.3	59.1	65.7	61.0	64.4	61.7	68.2	62.9	59.2	59.1	58.3
# of Days	28	27	28	28	28	17	28	28	28	28	28	28	28
March, 2023	63.3	66.7	58.9	60.8	66.0	61.5	64.4	61.9	65.3	63.3	60.5	58.8	60.6
# of Days	31	31	28	31	31	9	31	31	31	31	31	31	31
1st Quarter 2023	63.0	66.4	58.6	60.7	65.7	60.9	63.9	61.6	72.2	63.1	60.2	58.4	60.2
# of Days	90	86	80	90	90	57	90	90	90	90	90	90	90
April, 2023	63.8	66.7	58.3	58.4	65.9	62.3	65.2	62.1	63.3	62.7	59.0	59.6	56.9
# of Days	30	30	13	30	30	5	30	30	30	30	30	30	30
May, 2023	64.1	66.8	58.4	58.5	65.8	59.1	64.5	61.8	63.9	62.9	59.4	58.7	59.6
# of Days	31	31	31	31	31	4	31	31	31	31	31	31	31
June, 2023	64.2	67.0	57.5	58.2	65.4	60.8	64.8	62.4	64.4	63.3	59.5	59.2	59.7
# of Days	30	30	29	30	30	30	30	30	30	30	26	30	30
2nd Quarter 2023	64.0	66.8	58.1	58.4	65.7	60.9	64.8	62.1	63.9	63.0	59.3	59.2	58.9
# of Days	91	91	73	91	91	39	91	91	91	91	87	91	91
July, 2023	63.4	66.3	55.9	56.6	65.1	60.3	64.8	62.5	64.1	63.3	59.1	58.5	56.1
# of Days	31	31	31	31	31	31	31	31	31	31	20	31	31
August, 2023	62.5	65.7	55.0	58.5	64.8	60.8	64.5	61.7	64.4	62.6	58.8	58.6	56.5
# of Days	31	31	31	31	31	31	31	31	31	31	31	31	31
September, 2023	62.7	66.2	55.8	56.7	65.3	60.1	63.8	61.2	63.9	62.1	58.6	58.4	58.6
# of Days	30	28	30	30	30	30	30	30	30	30	30	30	30
3rd Quarter 2023	62.9	66.1	55.6	57.4	65.1	60.4	64.4	61.8	64.1	62.7	58.8	58.5	57.2
# of Days	92	90	92	92	92	92	92	92	92	92	81	92	92
Annual	63.4	66.5	58.1	59.7	65.5	60.8	64.5	61.9	67.8	63.0	59.5	58.8	58.9
# of Days	365	359	329	365	365	280	365	355	365	365	350	365	365
Online Percentage	100%	98%	90%	100%	100%	77%	100%	97%	100%	100%	96%	100%	100%

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

RMT #	Remote Monitoring Terminal (RMT)			
	3rd Quarter 2023	2nd Quarter 2023	1st Quarter 2023	4th Quarter 2022
101	62.9	64.0	63.0	63.5
102	66.1	66.8	66.4	66.7
104	55.6	58.1	58.6	59.3
105	57.4	58.4	60.7	61.2
106	65.1	65.7	65.7	65.6
107	60.4	60.9	60.9	61.0
108	64.4	64.8	63.9	64.8
109	61.8	62.1	61.6	62.0
110	64.1	63.9	72.2	64.3
111	62.7	63.0	63.1	63.1
112	58.8	59.3	60.2	59.6
114	58.5	59.2	58.4	59.0
115	57.2	58.9	60.2	58.9