

NOISE FORUM SUMMARY

North/South Field Working Groups



NOISE ABATEMENT REPORT

SECOND QUARTER 2023

Disclaimer

The Port of Oakland's Airport Noise and Operations Monitoring System (ANOMS) is the source of the data used in this report. Although ANOMS is a very sophisticated computer program that provides a state-of-the-art solution for collecting aircraft noise complaints. The number of aircraft noise complaints in the report are for informational purposes. Airport staff carefully reviews the data for accuracy and will make corrections whenever possible.

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**Compliance Monitoring Quarterly Summary Comparison
Second Quarter 2023**

	2022Q2		2023Q2	
	Compl.	N/C	Compl.	N/C
Runway 28R/L Jet Departure Compliance	93%	7%	93%	7%
Total Airport-wide Corporate Jet Departures	2,442	172	2,061	159
Runway 10R/L Jet Landing Compliance	86%	14%	75%	25%
Total Southeast Plan Corporate Jet Landings	30	5	36	12
North Field VFR Departure Compliance	86%	14%	96%	4%
Total Runways 28R/L & 33 Departures	258	41	249	11
North Field Quiet Hours Compliance	72%	28%	86%	14%
Total North Field Quiet Hours Departures	114	44	168	28
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	17,737	3	16,661	2
Night Time Departure Compliance	99%	1%	99%	1%
Total Runway 30 Night Turbojet Departures	3,422	32	3,571	46
Runway 12 Night Departure Compliance	98%	2%	96%	4%
Total Runway 12 Night Turbojet Departures	49	1	64	3
Runway 30 East Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 East Turn Departures	4,109	5	3,953	1
100 Degree Radial Turbojet Landing Compliance	99%	1%	98%	2%
Total 100 Degree Radial Turbojet Landings	1,138	12	749	13
Engine Runup Program Compliance	100%	0%	100%	0%
Total Evening and Nighttime Engine Runups	6	0	9	0
Note: N/C means non-compliant. Percentage values are rounded out.				

Operation Details
Beacon Code: 3373
AC Type: H25C
Operation Type: Departure
Runway: 28L
Date/Time: 12/13/2016 8:26:14 AM

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Runway 28R/L Jet Departure NAP

2023Q2
93% Compliance
(2,220 total departures)
(159 non-compliant)

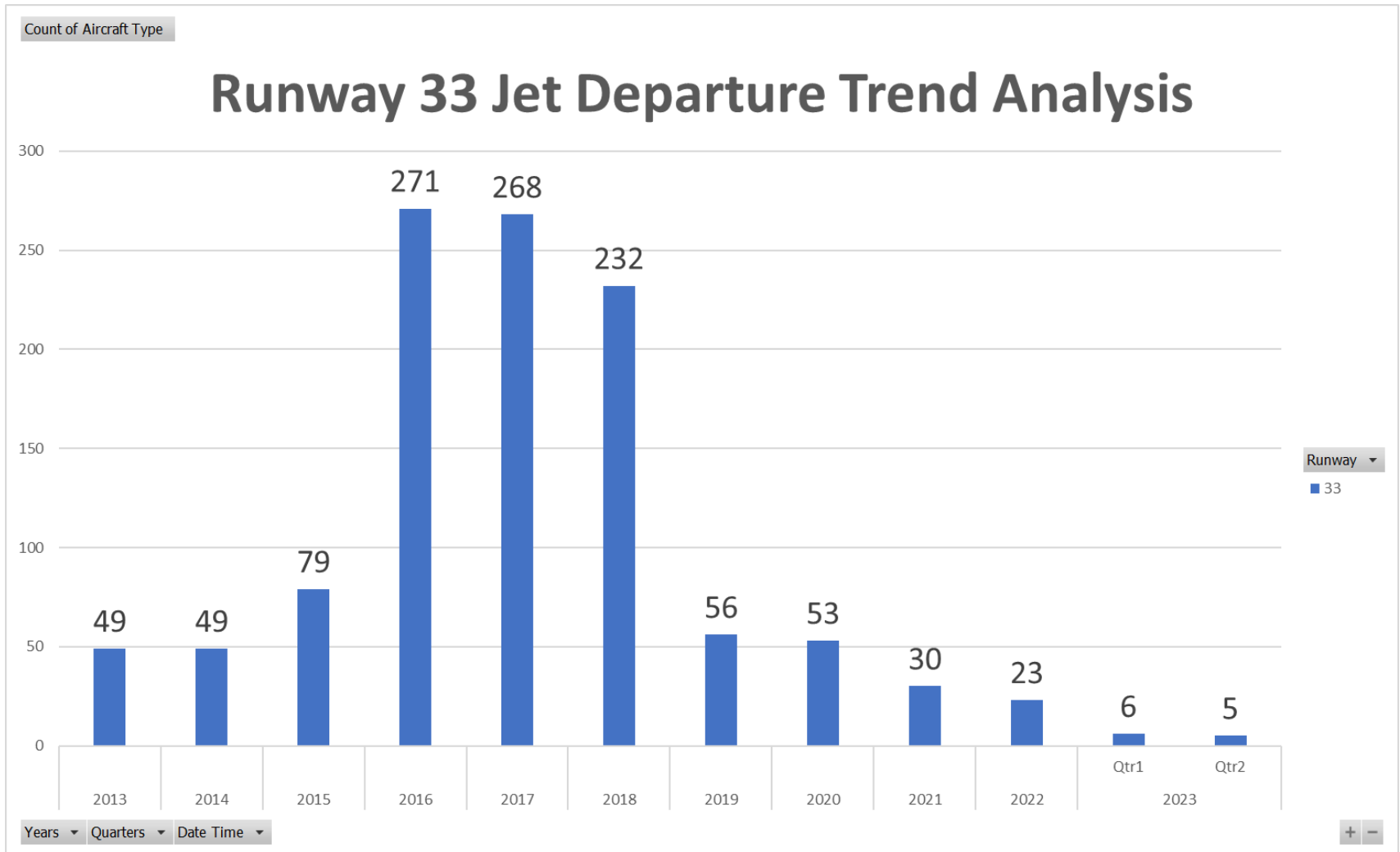
2022Q2
93% Compliance
(2,614 total departures)
(172 non-compliant)

Heading: 325
Elevation: 15

Arrivals
Departures
Touch and Go
Overflights

RUNWAY 33 JET DEPARTURES

SECOND Quarter 2023



Operation Details
Beacon Code: 4564
AC Type: C550
Operation Type: Arrival
Runway: 10R
Date/Time: 12/15/2016 8:15:42 PM

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Runway 10R/L Jet Landing NAP

2023Q2

**75% Compliance
(48 total landings)
(12 non-compliant)**

2022Q2

**86% Compliance
(35 total landings)
(5 non-compliant)**

Heading: 325
Elevation: 15

Arrivals
Departures
Touch and Go
Overflights

Operation Details
Beacon Code: 4544
AC Type: P28A
Operation Type: Departure
Runway: 28R
Date/Time: 6/1/2016 6:27:01 PM

Heading: 338
Elevation: 29



VFR Aircraft Departure NAP

2023Q2

96% Compliance
(260 total departures)
(11 non-compliant)

2022Q2

86% Compliance
(299 total departures)
(41 non-compliant)

Operation Details
Beacon Code: 3351
AC Type: PC12
Operation Type: Departure
Runway: 28R
Date/Time: 12/13/2016 6:02:33 AM

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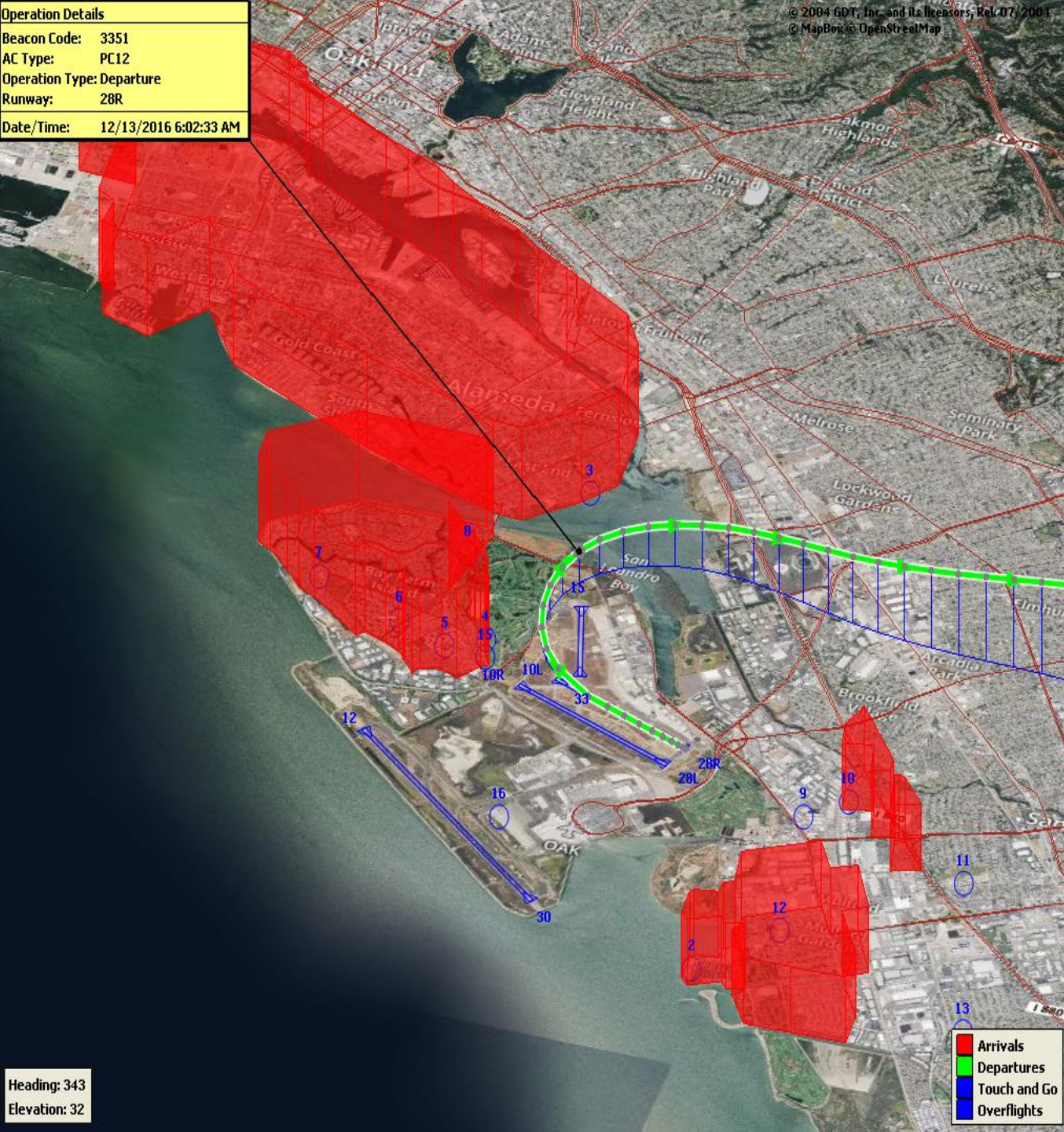
North Field Quiet Hours NAP

2023Q2
86% Compliance
(196 total departures)
(28 non-compliant)

2022Q2
72% Compliance
(158 total departures)
(44 non-compliant)

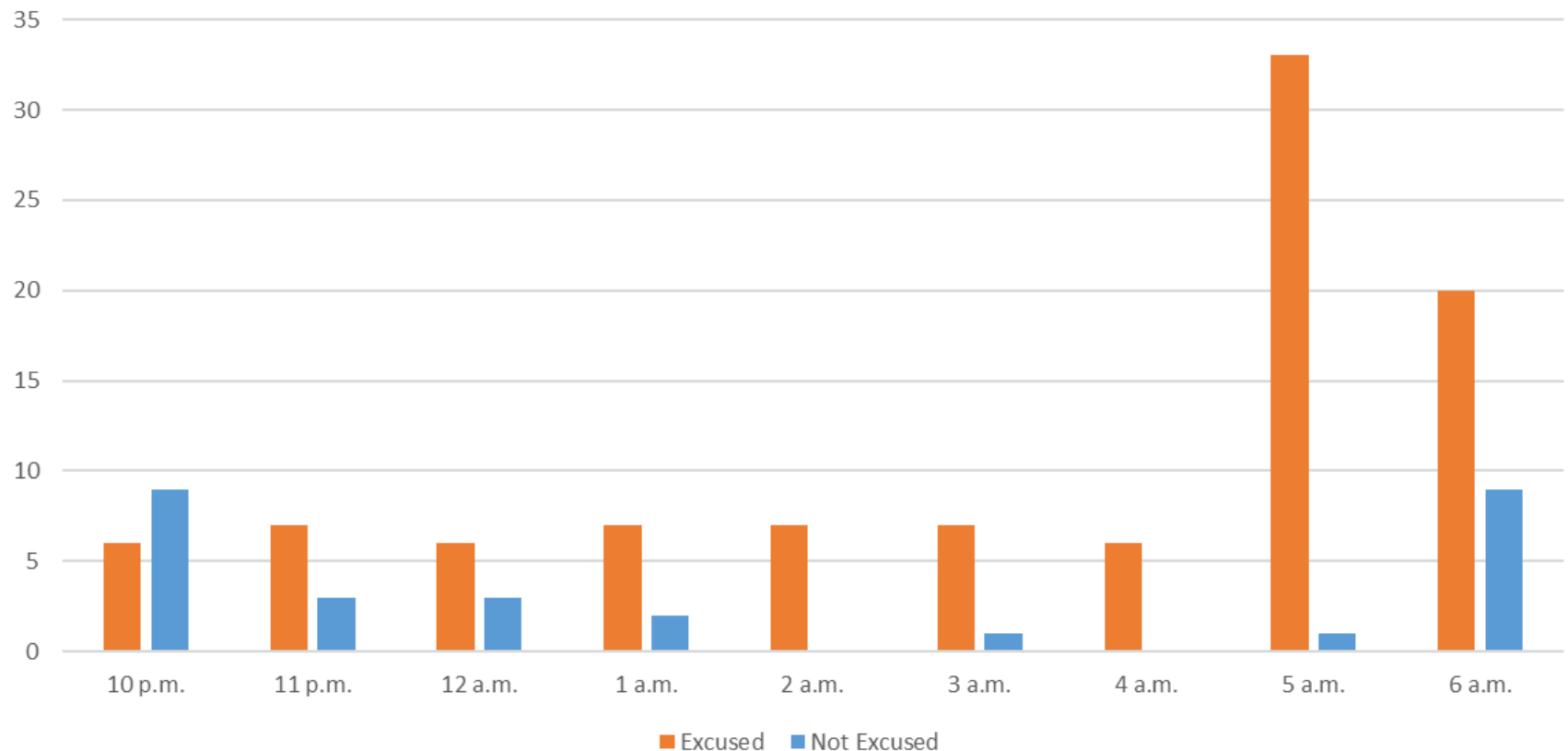
Heading: 343
Elevation: 32

Arrivals
Departures
Touch and Go
Overflights



Quartely North Field Quiet Hours NAP Non-Compliant Per Quarter

Excused/Not Excused Violation Count Per Quarter



Operation Details
Beacon Code: 3641
AC Type: B737
Operation Type: Departure
Runway: 30
Date/Time: 8/22/2017 10:16:59 PM



Night Time Departure NAP

2023Q2

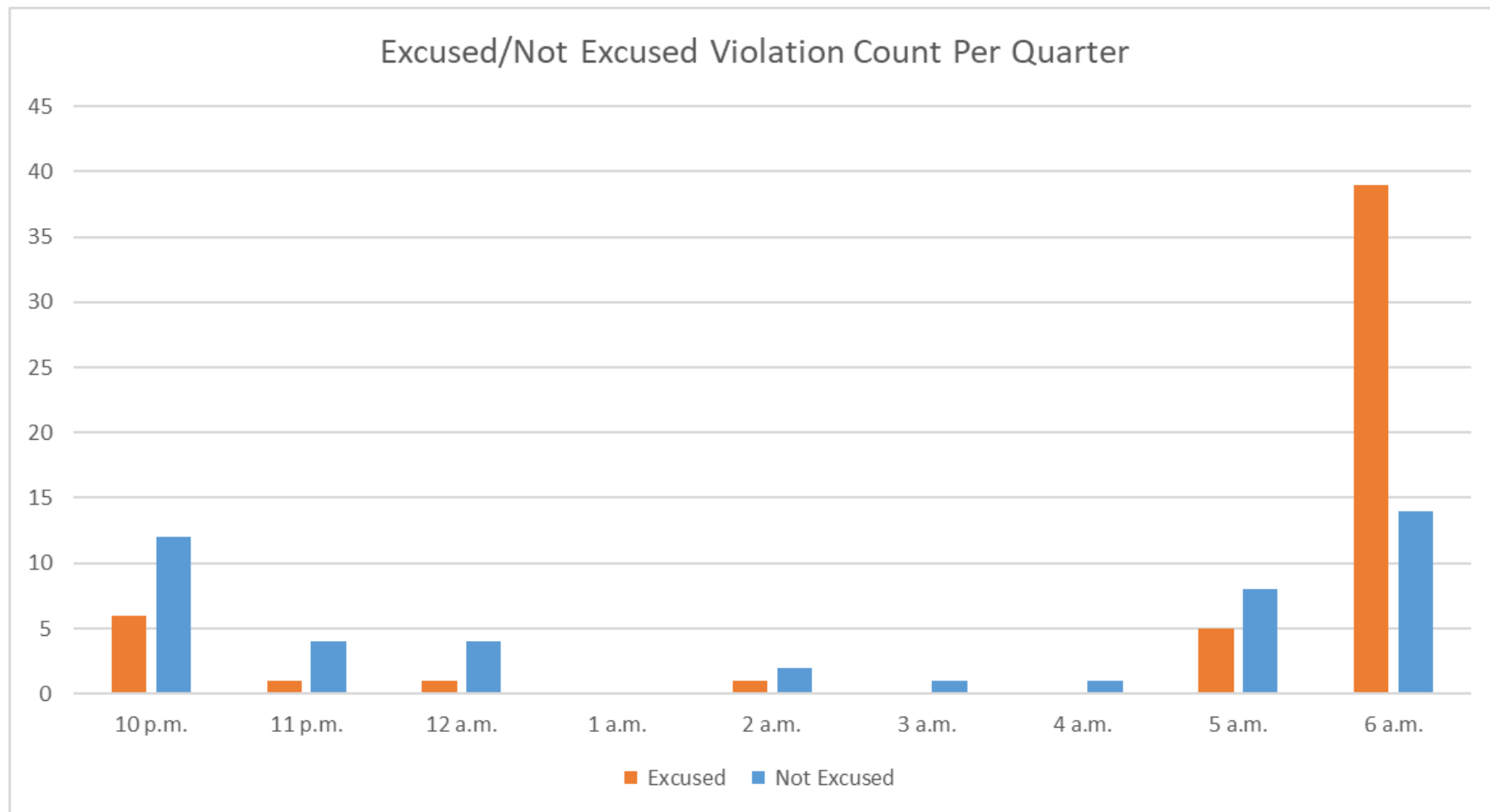
**99% Compliance
(3,617 total departures)
(46 non-compliant)**

***REBAS Gate non-compliant = 46**

2022Q2

**99% Compliance
(3,454 total departures)
(32 non-compliant)**

Quarterly Night Time NAP Non-Compliant Count Per Quarter



Operation Details
Beacon Code: 3345
AC Type: B763
Operation Type: Departure
Runway: 12
Date/Time: 12/15/2016 3:12:56 AM

Heading: 1
Elevation: 38



Runway 12 Night Departure NAP

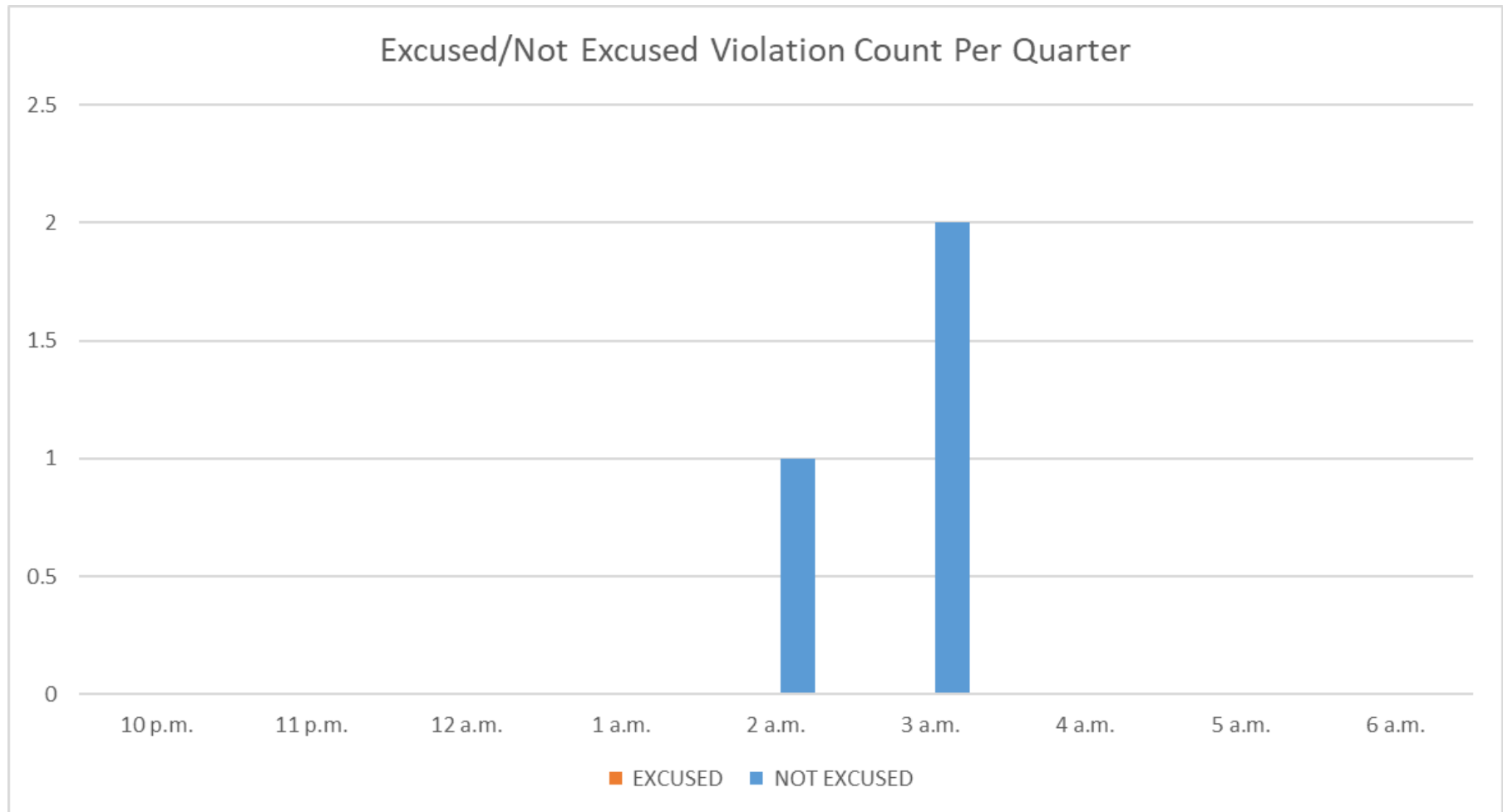
2023Q2

96% Compliance
(67 total departures)
(3 non-compliant)

2022Q2

98% Compliance
(50 total departures)
(1 non-compliant)

Quartely Runway 12 Night Departure Non-Compliant Count Per Quarter



Operation Details	
Beacon Code:	3374
AC Type:	B737
Operation Type:	Departure
Runway:	30
Date/Time:	1/7/2019 8:57:05 AM

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Runway 30 Bay Farm Right Turn NAP

2023Q2
100% Compliance
(16,663 total departures)
(2 non-compliant)

2022Q2
100% Compliance
(17,740 total departures)
(3 non-compliant)

Heading: 299
Elevation: 36



Arrivals
Departures
Touch and Go
Overflights

Runway 30 East Turn NAP

2023Q2
100% Compliance
(3,954 total departures)
(1 non-compliant)

*Excused Departures = 12

2022Q2
100% Compliance
(4,114 total departures)
(5 non-compliant)

Operation Details

Beacon Code: 3777

AC Type: B737

Operation Type: Departure

Runway: 30

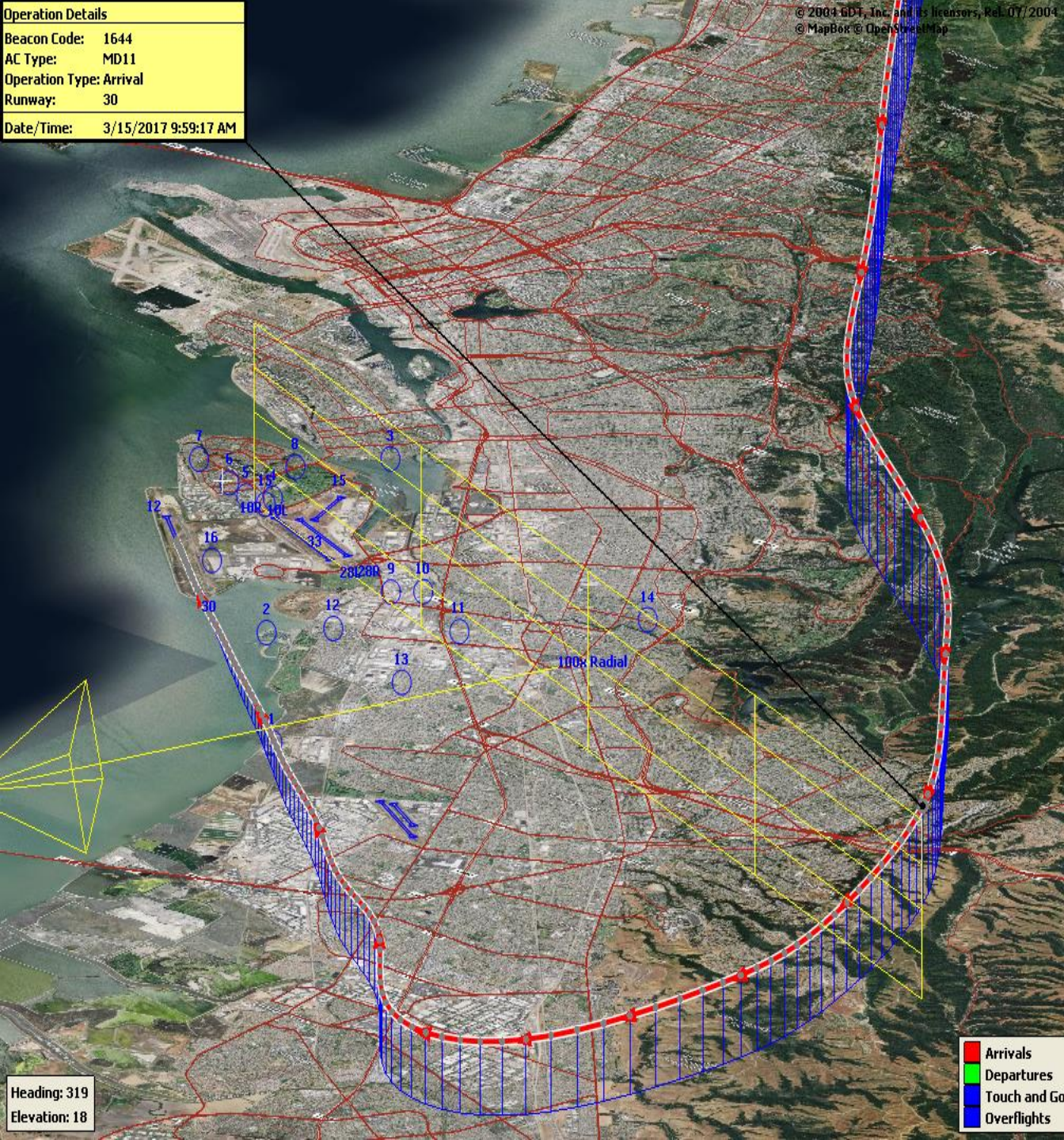
Date/Time: 3/15/2017 9:53:47 AM

Alameda Rwy 30



Operation Details	
Beacon Code:	1644
AC Type:	MD11
Operation Type:	Arrival
Runway:	30
Date/Time:	3/15/2017 9:59:17 AM

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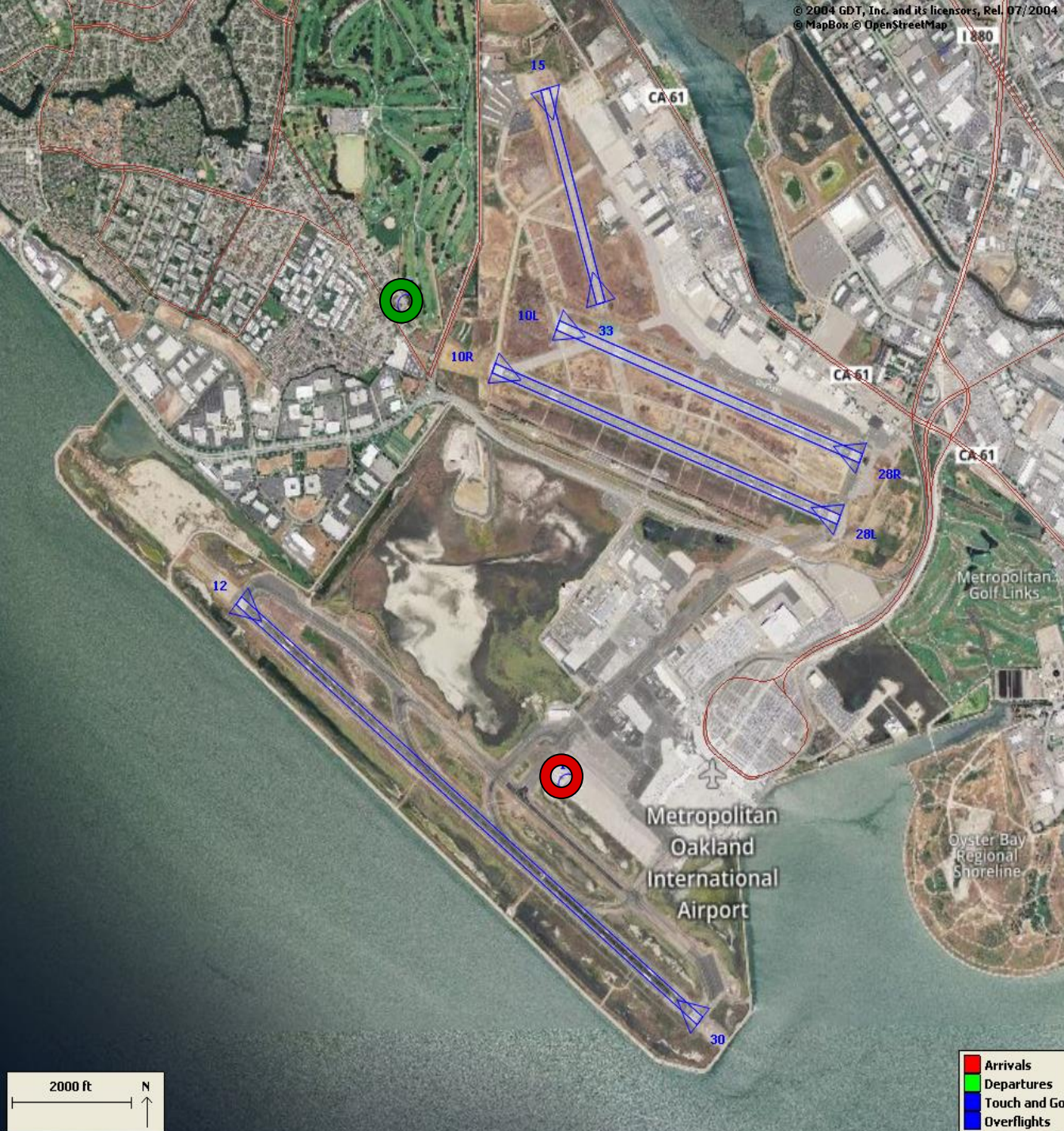
100 Degree Radial At 3,000 ft. NAP

2023Q2
98% Compliance
(762 total landings)
(13 non-compliant)

2022Q2
99% Compliance
(1,150 total landings)
(12 non-compliant)

Heading: 319
Elevation: 18

- Arrivals
- Departures
- Touch and Go
- Overflights



Engine Run-up NAP

2023Q2

**100% Compliance
(9 engine run-ups)*
(0 non-compliant)**

2022Q2

**100% Compliance
(6 engine run-ups)
(0 non-compliant)**

***Only above idle-power run-ups
recorded.**

**Compliance Monitoring Quarterly Summary Comparison
Second Quarter 2023 - Quarter-to-Quarter**

	2023Q1		2023Q2	
	Compl.	N/C	Compl.	N/C
Runway 28R/L Jet Departure Compliance	94%	6%	93%	7%
Total Airport-wide Corporate Jet Departures	2,400	156	2,061	159
Runway 10R/L Jet Landing Compliance	84%	16%	75%	25%
Total Southeast Plan Corporate Jet Landings	566	107	36	12
North Field VFR Departure Compliance	92%	8%	96%	4%
Total Runways 28R/L & 33 Departures	172	15	249	11
North Field Quiet Hours Compliance	85%	15%	86%	16%
Total North Field Quiet Hours Departures	150	26	168	28
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	12,497	7	16,661	2
Night Time Departure Compliance	99%	1%	99%	1%
Total Runway 30 Night Turbojet Departures	2,366	19	3,571	46
Runway 12 Night Departure Compliance	94%	6%	96%	4%
Total Runway 12 Night Turbojet Departures	769	52	64	3
Runway 30 East Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 East Turn Departures	2,759	2	3,953	1
100 Degree Radial Turbojet Landing Compliance	98%	2%	98%	2%
Total 100 Degree Radial Turbojet Landings	737	18	749	13
Engine Runup Program Compliance	100%	0%	100%	0%
Total Evening and Nighttime Engine Runups	8	0	9	0

Note: N/C means non-compliant. Percentage values are rounded out.

Table 1. North Field Night Aircraft Departure SEL Noise Measurements
Total Aircraft Departures = 196

Second Quarter 2023 (10:00 p.m. to 7:00 a.m.)

NMT Number	Aircraft Noise Events Below SEL 80 dBA	Aircraft Noise Events SEL 80 - 84.9 dBA			Aircraft Noise Events SEL 85 - 89.9 dBA			Aircraft Noise Events SEL ≥ 90 dBA			Total Aircraft Noise Events
		Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	
1	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
2	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
3	37	2	0.0	0.4%	0	0.0	0.0%	0	0.0	0.0%	39
4	65	53	0.6	9.3%	28	0.3	4.9%	42	0.5	7.4%	188
5	69	15	0.2	2.6%	16	0.2	2.8%	47	0.5	8.3%	147
6	58	13	0.1	2.3%	23	0.3	4.1%	32	0.4	5.6%	126
7	19	17	0.2	3.0%	34	0.4	6.0%	11	0.1	1.9%	81
8	42	31	0.3	5.5%	3	0.0	0.5%	0	0.0	0.0%	76
9	9	5	0.1	0.9%	3	0.0	0.5%	0	0.0	0.0%	17
10	45	6	0.1	1.1%	3	0.0	0.5%	0	0.0	0.0%	54
11	4	2	0.0	0.4%	0	0.0	0.0%	0	0.0	0.0%	6
12	2	0	0.0	0.0%	1	0.0	0.2%	0	0.0	0.0%	3
13	2	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	2
14	28	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	28
All NMTs	380	144	2	0	111	1	0	132	1	0	767

Table 2. Aircraft SEL Noise Measurements in Alameda - Total Aircraft Departures = 185

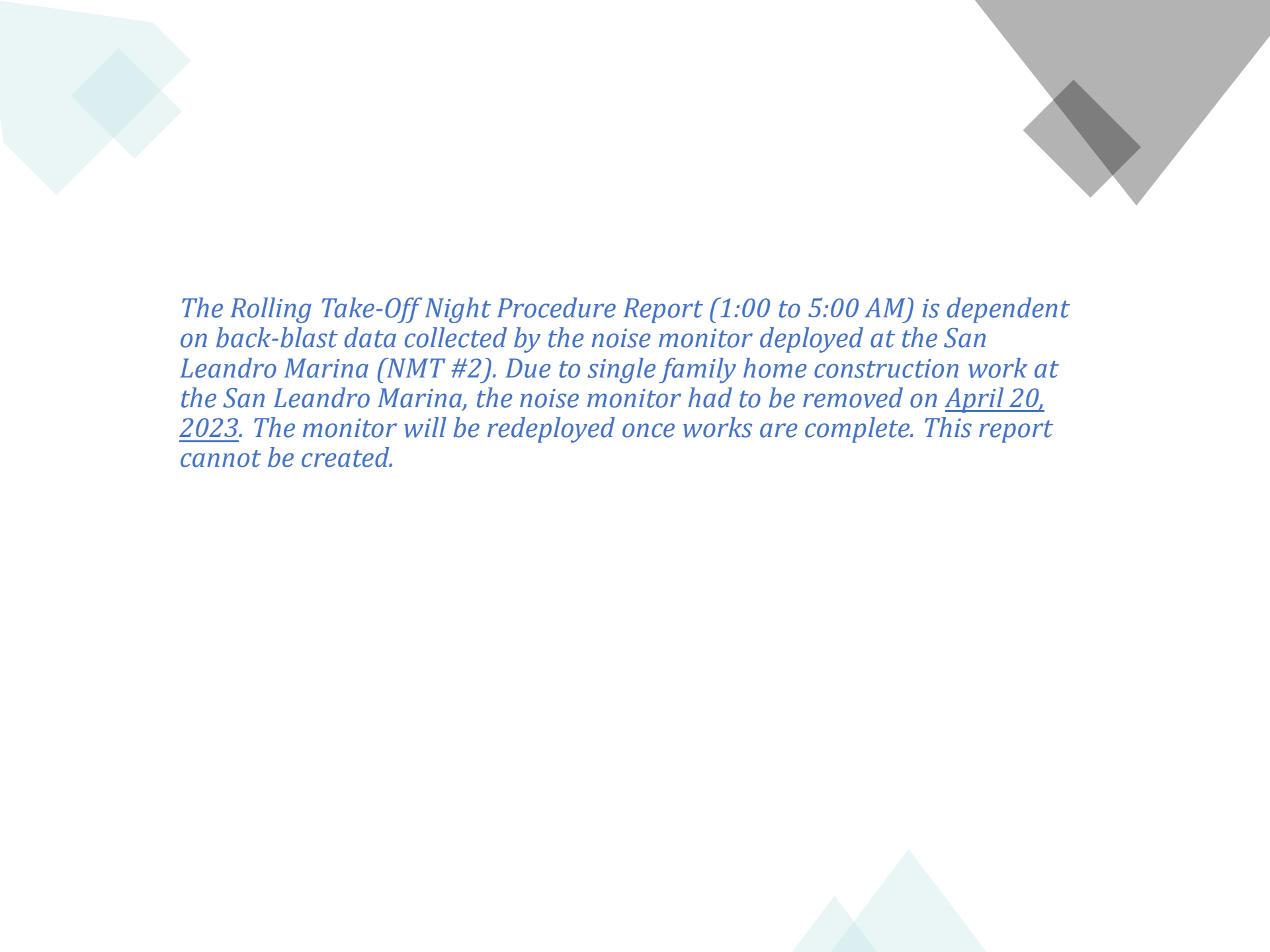
Second Quarter 2023 (10:00 p.m. to 7:00 a.m.)

NMT Number	Aircraft Noise Events Below SEL 80 dBA	Aircraft Noise Events SEL 80 - 84.9 dBA			Aircraft Noise Events SEL 85 - 89.9 dBA			Aircraft Noise Events SEL ≥ 90 dBA			Total Aircraft Noise Events
		Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	
3	37	2	0.0	0.8%	0	0.0	0.0%	0	0.0	0.0%	39
4	65	53	0.6	22.2%	28	0.3	11.7%	42	0.5	17.6%	188
5	69	15	0.2	6.3%	16	0.2	6.7%	47	0.5	19.7%	147
6	58	13	0.1	5.4%	23	0.3	9.6%	32	0.4	13.4%	126
7	19	17	0.2	7.1%	34	0.4	14.2%	11	0.1	4.6%	81
8	42	31	0.3	13.0%	3	0.0	1.3%	0	0.0	0.0%	76
Total	290	131	1.5		104	1.2		132	1.5		657

Table 3. Aircraft SEL Noise Measurements in San Leandro - Total Aircraft Departures = 11

Second Quarter 2023 (10:00 p.m. to 7:00 a.m.)

NMT Number	Aircraft Noise Events Below SEL 80 dBA	Aircraft Noise Events SEL 80 - 84.9 dBA			Aircraft Noise Events SEL 85 - 89.9 dBA			Aircraft Noise Events SEL ≥ 90 dBA			Total Aircraft Noise Events
		Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	Amount	Nightly Average	As Percentage of Departures	
2	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
9	9	5	0.1	1.5%	3	0.0	0.9%	0	0.0	0.0%	17
10	45	6	0.1	1.8%	3	0.0	0.9%	0	0.0	0.0%	54
11	4	2	0.0	0.6%	0	0.0	0.0%	0	0.0	0.0%	6
12	2	0	0.0	0.0%	1	0.0	0.3%	0	0.0	0.0%	3
13	2	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	2
14	28	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	28
Total	90	13	0.1		7	0.1		0	0.0		110



The Rolling Take-Off Night Procedure Report (1:00 to 5:00 AM) is dependent on back-blast data collected by the noise monitor deployed at the San Leandro Marina (NMT #2). Due to single family home construction work at the San Leandro Marina, the noise monitor had to be removed on April 20, 2023. The monitor will be redeployed once works are complete. This report cannot be created.

**Rolling Take-off Night Departure Procedure (1:00 to 5:00 AM)
Second Quarter 2022, NMT 2**

	Aircraft Departures	Recorded Noise Events (a)	Lmax Average	SEL Average	Avg. Duration (seconds)
Baseline (November 2002) [A]					
DC10/MD10	87	32	69	78	22
MD11	32	13	70	79	24
A 306	67	21	67	77	25
Second Quarter 2022 [B]					
	Total [X]	Est. Avg. Monthly [X/3]			
B763	283	94	54	64	73
DC10/MD10	16	5	7	66	75
MD11	201	67	83	66	74
A 306	16	5	1	62	69
B757	212	71	44	62	73
B77L	114	38	12	64	72
Difference [A-B]					
DC10/MD10		-82	-25	-3	-3
MD11		35	70	-4	-5
A 306		-62	-20	-5	-8

(a) For the current calendar quarter reported, ANOMS does not correlate all departures to their respective noise events; that is most, but not all, aircraft back-blast noise events are effectively correlated as the program software algorithms may misidentify an aircraft noise event.

Source: ANOMS (Airport Noise and Operations Monitoring System)

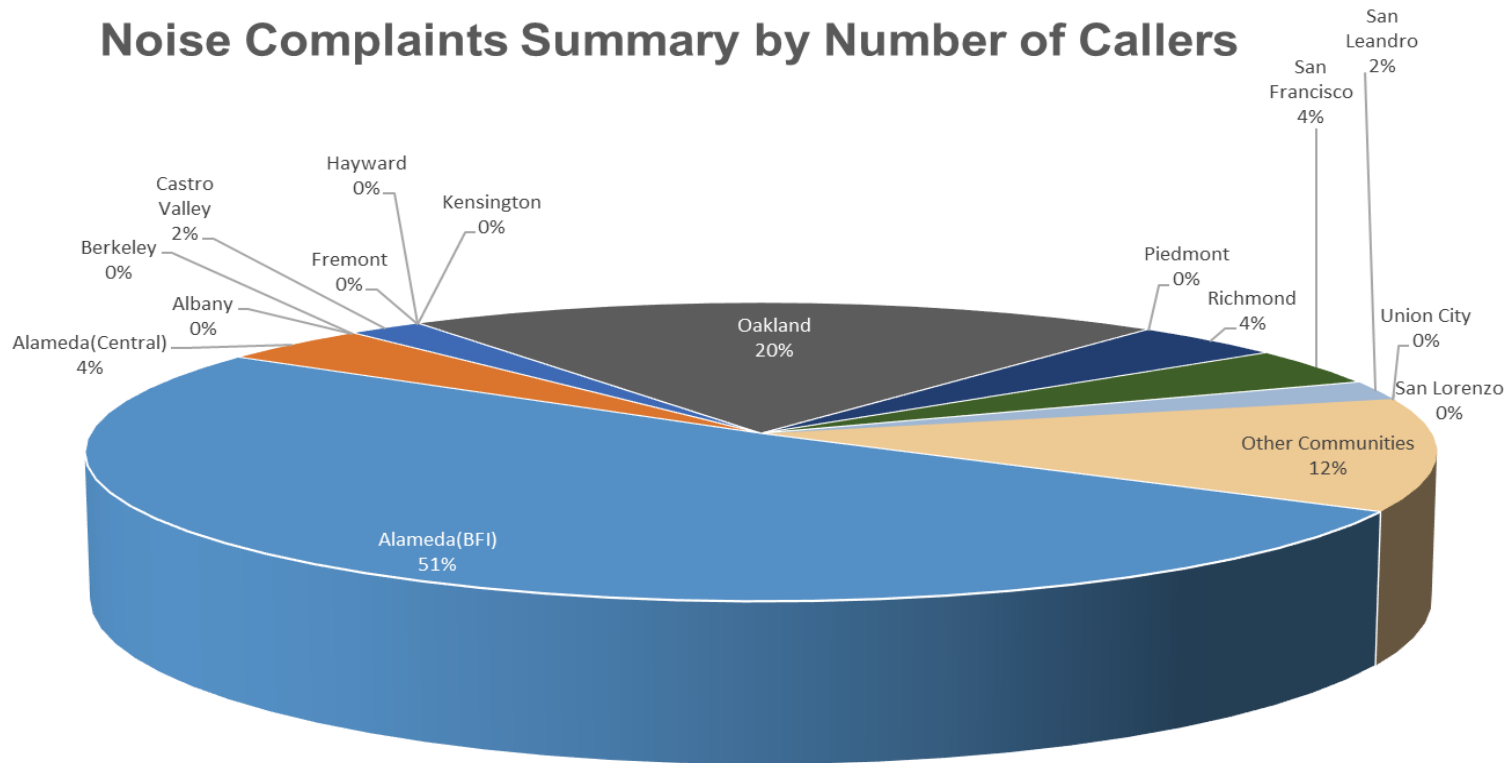
**Oakland International Airport
Noise Complaint Summary
April 2023**

Community	Callers	Complaints
Alameda(BFI)	25	1010
Alameda(Central)	2	4
Albany	0	0
Berkeley	0	0
Castro Valley	1	23
Fremont	0	0
Hayw ard	0	0
Kensington	0	0
Oakland	10	1808
Piedmont	0	0
Richmond	2	198
San Francisco	2	5
San Leandro	1	1
Union City	0	0
San Lorenzo	0	0
Other Communities	6	68
Total	49	3117
Complaints by Type		
E-mail	1777	
View point App	1340	
Complaints by Time of Day		
Day (0700 - 1900)	632	
Evening (1900 - 2200)	1110	
Night (2200 - 0700)	1375	
Complaints by Type of Operation		
Arrivals	1837	
Departures	1105	
Over-flights	125	
Touch & Go	50	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	156	
Helicopter	65	
Jet	2495	
Military	0	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	5	
Propeller	249	
Turbo-prop	147	

Number of Callers

April 2023

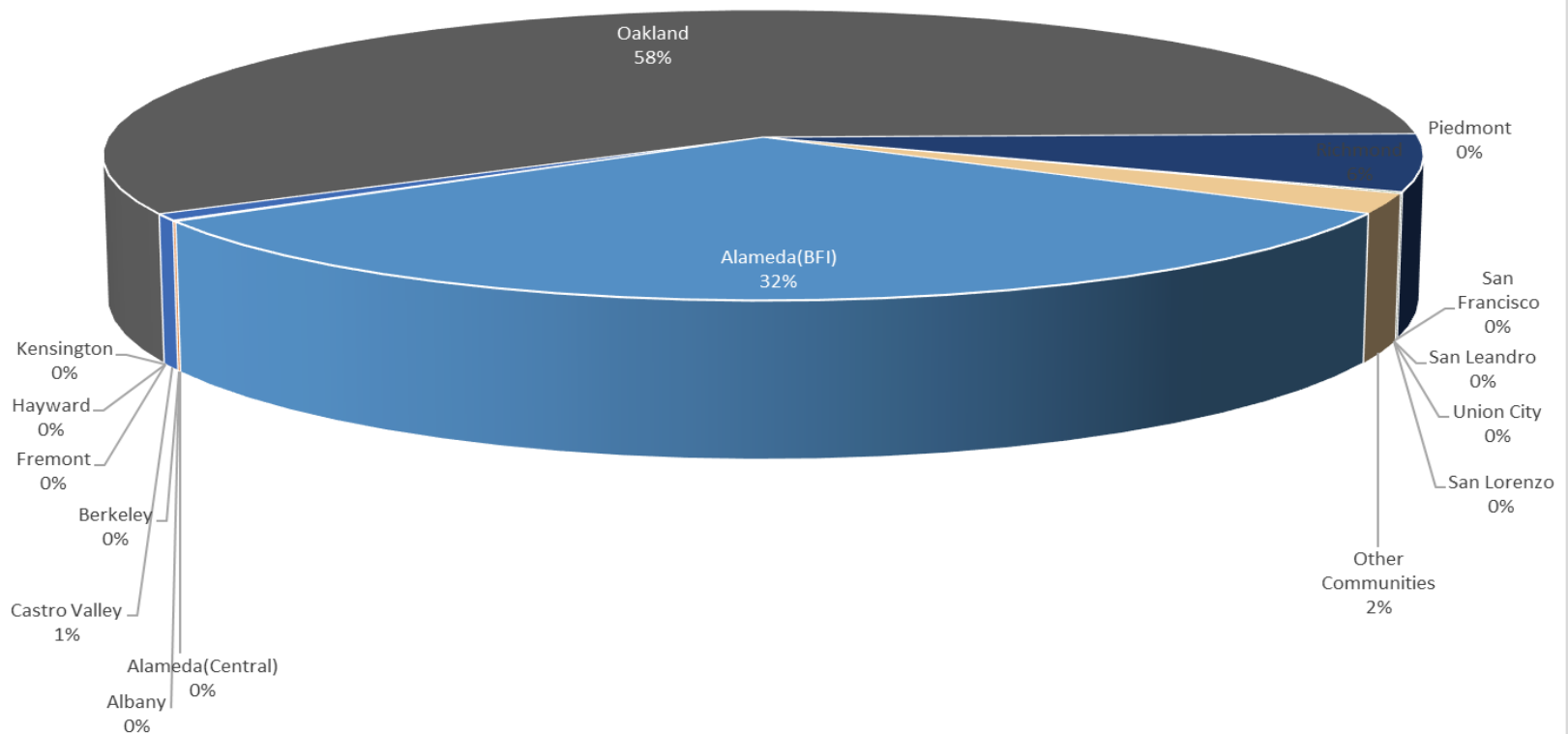
Noise Complaints Summary by Number of Callers



Number of Complaints

April 2023

Noise Complaints Summary by Number of Complaints



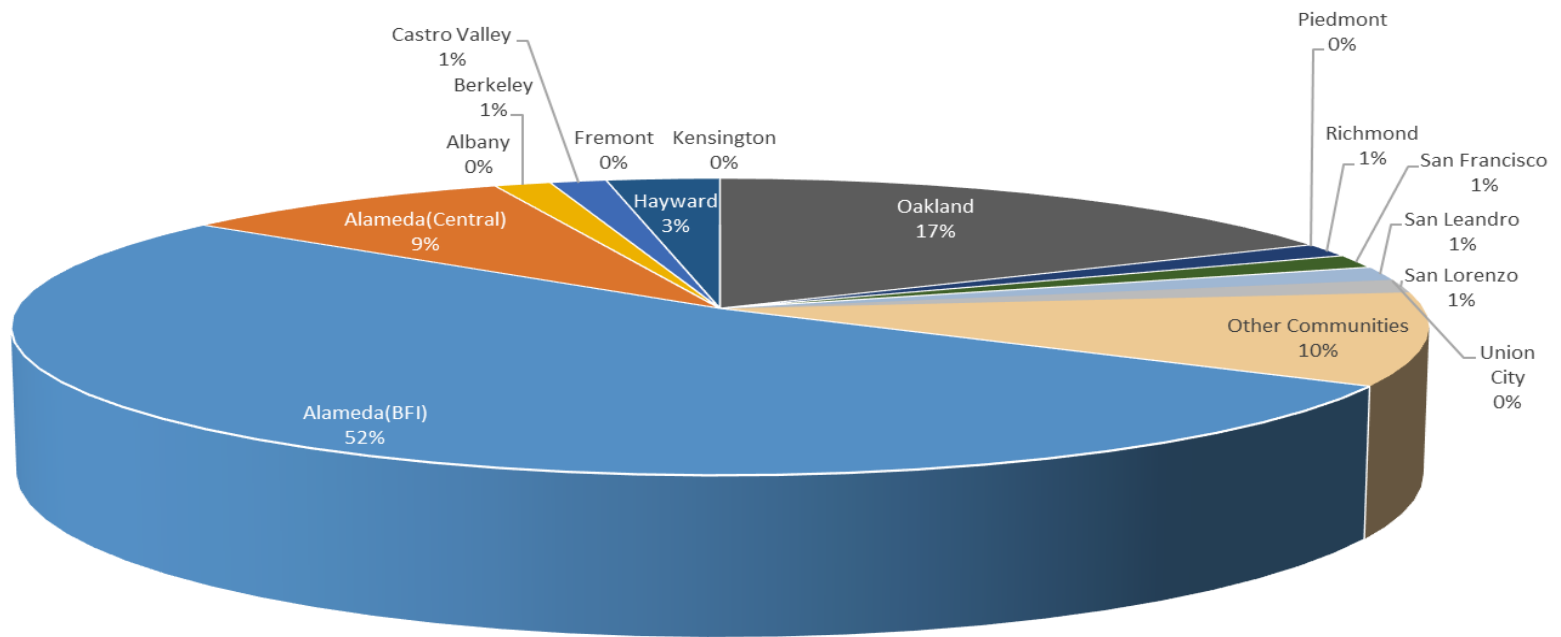
**Oakland International Airport
Noise Complaint Summary
May 2023**

Community	Callers	Complaints
Alameda(BFI)	36	1725
Alameda(Central)	6	23
Albany	0	0
Berkeley	1	10
Castro Valley	1	13
Fremont	0	0
Hayw ard	2	11
Kensington	0	0
Oakland	12	3052
Piedmont	0	0
Richmond	1	232
San Francisco	1	1
San Leandro	1	5
Union City	0	0
San Lorenzo	1	1
Other Communities	7	51
Total	69	5124
Complaints by Type		
E-mail	3029	
View point App	2095	
Complaints by Time of Day		
Day (0700 - 1900)	728	
Evening (1900 - 2200)	573	
Night (2200 - 0700)	3823	
Complaints by Type of Operation		
Arrivals	2578	
Departures	2208	
Over-flights	257	
Touch & Go	81	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	243	
Helicopter	82	
Jet	4176	
Military	0	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	11	
Propeller	466	
Turbo-prop	146	

Number of Callers

May 2023

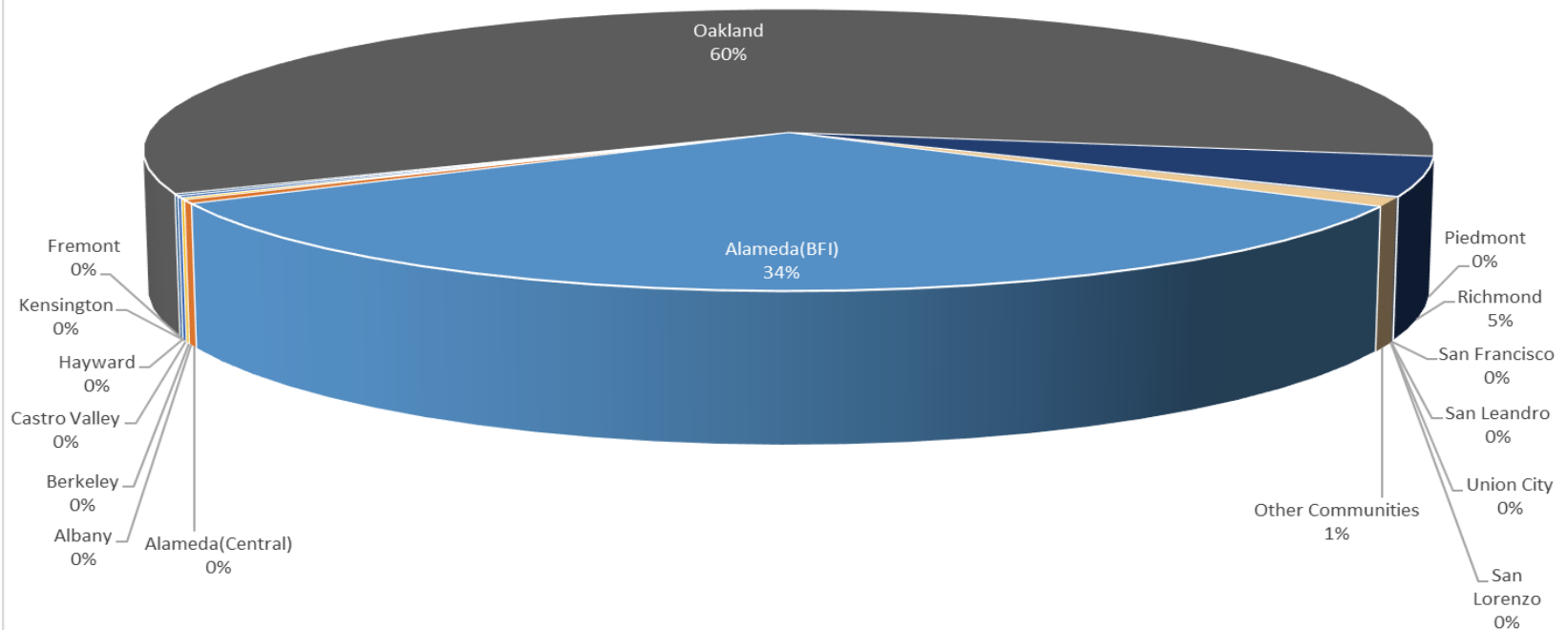
Noise Complaints Summary by Number of Callers



Number of Complaints

May 2023

Noise Complaints Summary by Number of Complaints



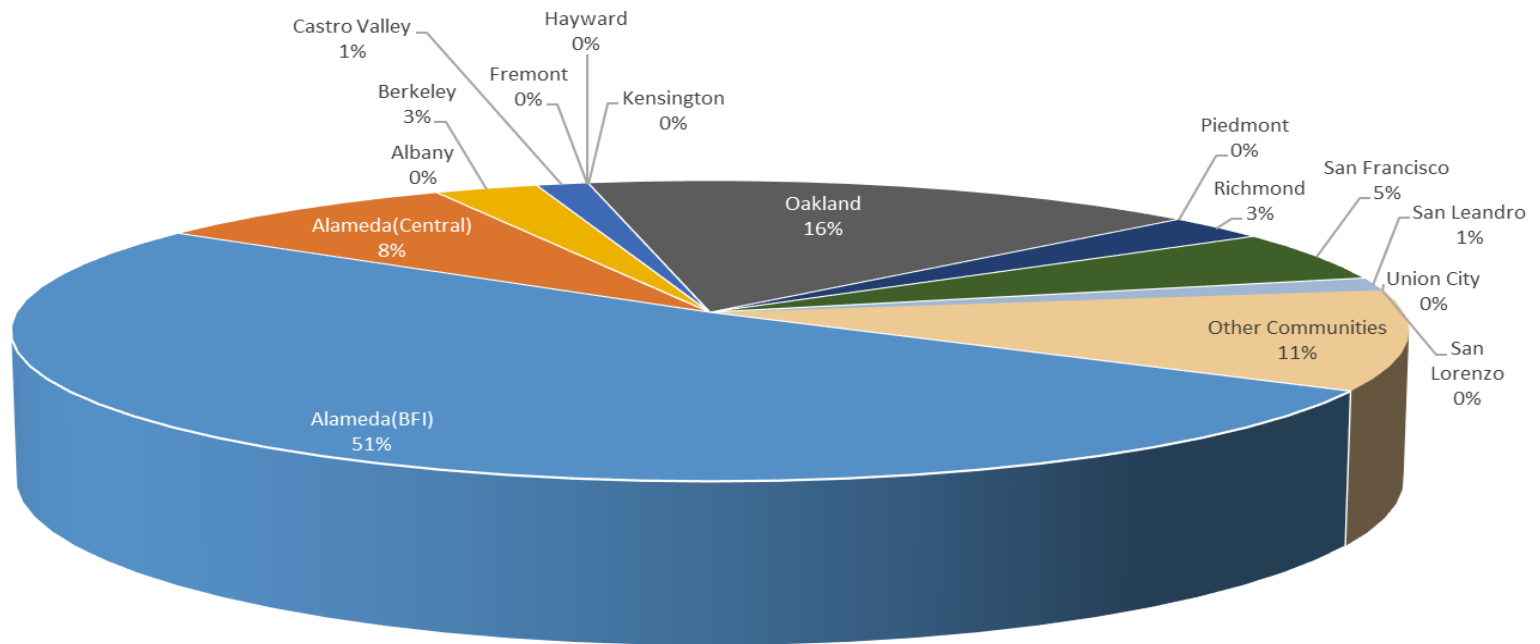
**Oakland International Airport
Noise Complaint Summary
June 2023**

Community	Callers	Complaints
Alameda(BFI)	38	1400
Alameda(Central)	6	24
Albany	0	0
Berkeley	2	104
Castro Valley	1	13
Fremont	0	0
Hayw ard	0	0
Kensington	0	0
Oakland	12	3495
Piedmont	0	0
Richmond	2	425
San Francisco	4	5
San Leandro	1	1
Union City	0	0
San Lorenzo	0	0
Other Communities	8	57
Total	74	5524
Complaints by Type		
E-mail	3756	
View point App	1768	
Complaints by Time of Day		
Day (0700 - 1900)	1370	
Evening (1900 - 2200)	523	
Night (2200 - 0700)	3631	
Complaints by Type of Operation		
Arrivals	2459	
Departures	2950	
Over-flights	17	
Touch & Go	98	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	166	
Helicopter	209	
Jet	4715	
Military	0	
Not Reported (not linked to an aircraft)	1	
Other (Type information not available)	3	
Propeller	351	
Turbo-prop	79	

Number of Callers

June 2023

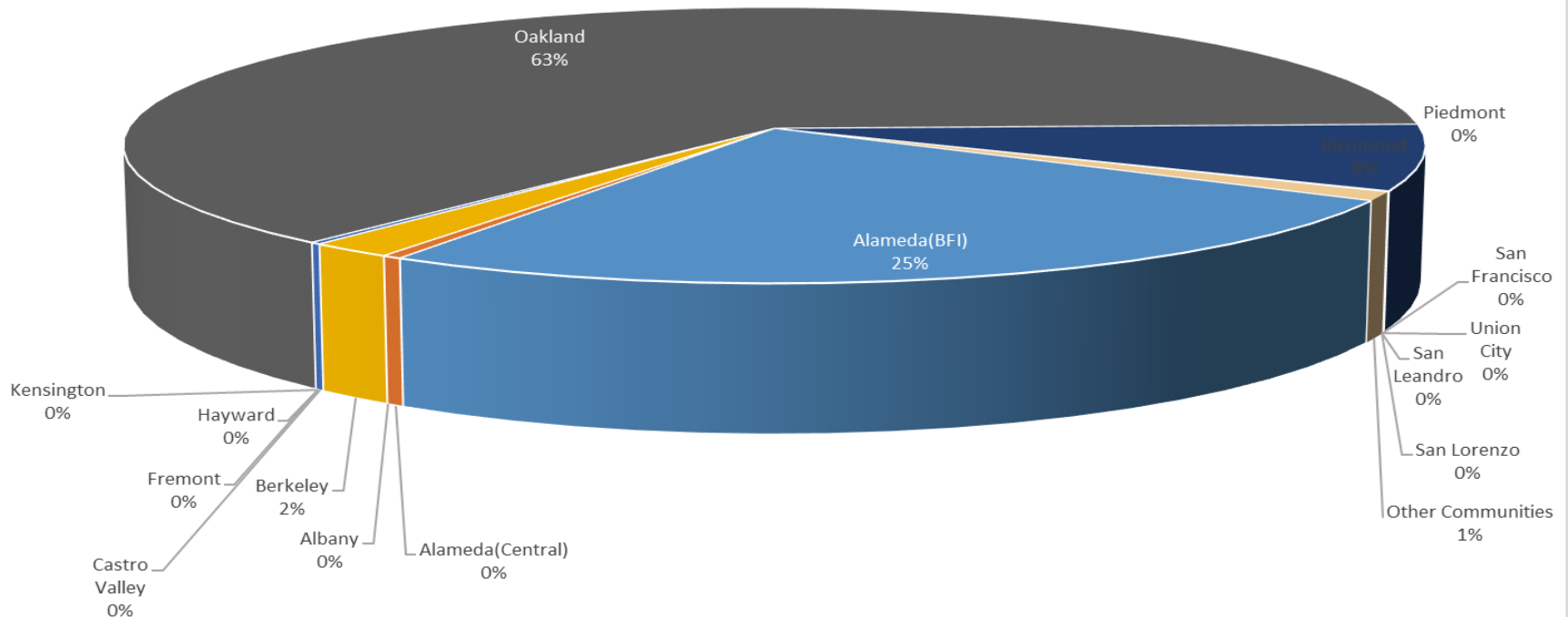
Noise Complaints Summary by Number of Callers

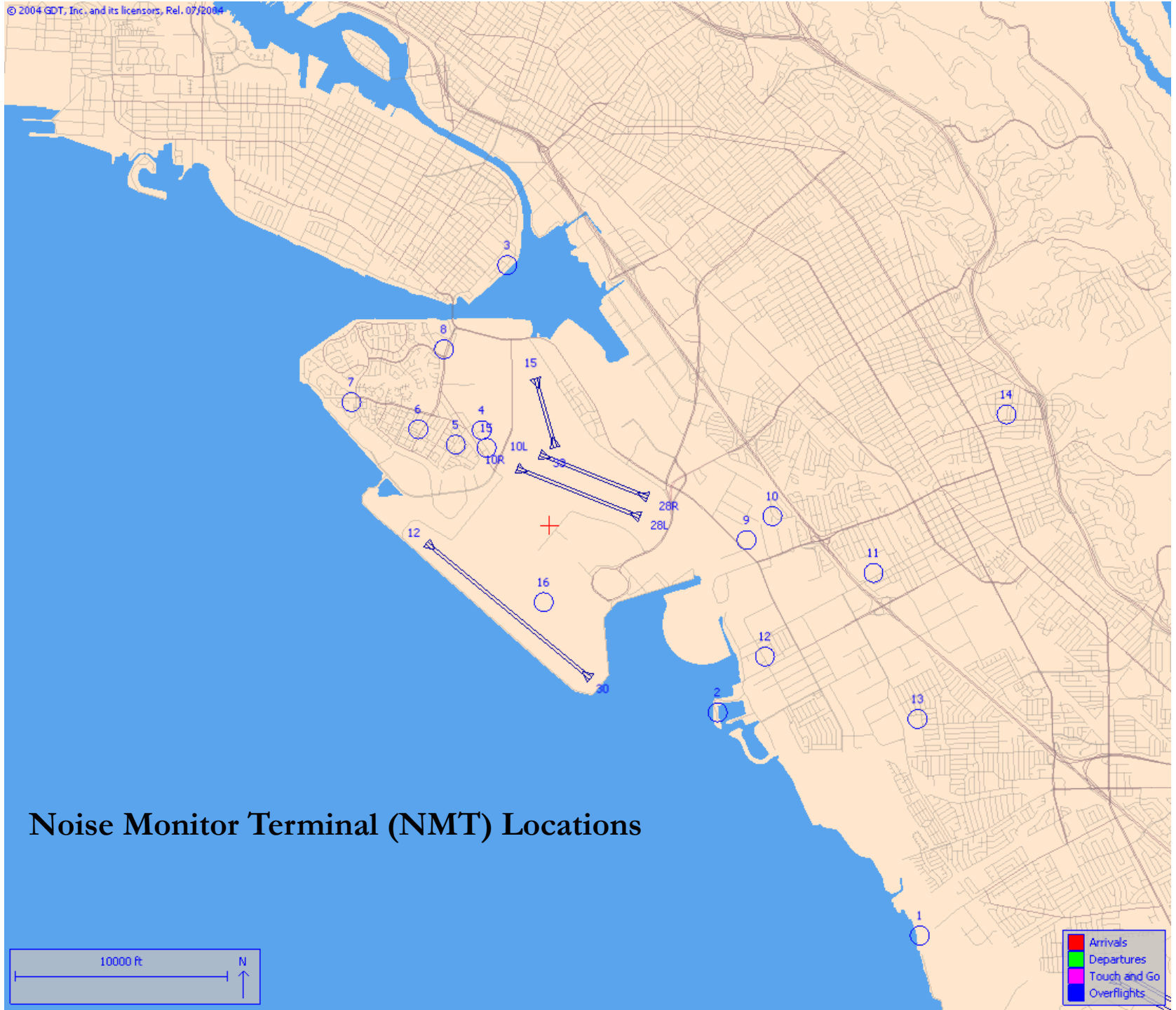


Number of Complaints

June 2023

Noise Complaints Summary by Number of Complaints





Noise Monitor Terminal (NMT) Locations