

NOISE FORUM SUMMARY

North/South Field Working Groups



NOISE ABATEMENT REPORT

FIRST QUARTER 2021

Compliance Monitoring Quarterly Summary Comparison First Quarter 2021				
	2020Q1		2021Q1	
	Compl.	N/C	Compl.	N/C
Runway 28R/L Jet Departure Compliance	96%	4%	95%	5%
Total Airport-wide Corporate Jet Departures	2,404	111	2,209	113
Runway 10R/L Jet Landing Compliance	73%	27%	78%	22%
Total Southeast Plan Corporate Jet Landings	44	16	147	42
North Field VFR Departure Compliance	93%	7%	93%	7%
Total Runways 28R/L & 33 Departures	211	15	265	21
North Field Quiet Hours Compliance	80%	20%	76%	24%
Total North Field Quiet Hours Departures	178	45	105	34
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	17,617	10	10,822	7
Night Time Departure Compliance	99%	1%	99%	1%
Total Runway 30 Night Turbojet Departures	3,246	36	2,024	19
Runway 12 Night Departure Compliance	100%	0%	100%	0%
Total Runway 12 Night Turbojet Departures	59	0	120	0
Runway 30 East Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 East Turn Departures	4,438	9	3,487	5
100 Degree Radial Turbojet Landing Compliance	99%	1%	98%	2%
Total 100 Degree Radial Turbojet Landings	1,108	8	640	14
Engine Runup Program Compliance	100%	0%	100%	0%
Total Evening and Nighttime Engine Runups	11	0	11	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

2021Q1
95% Compliance
(2,322 total departures)
(113 non-compliant)

2020Q1
96% Compliance
(2,515 total departures)
(111 non-compliant)

Heading: 325
Elevation: 15

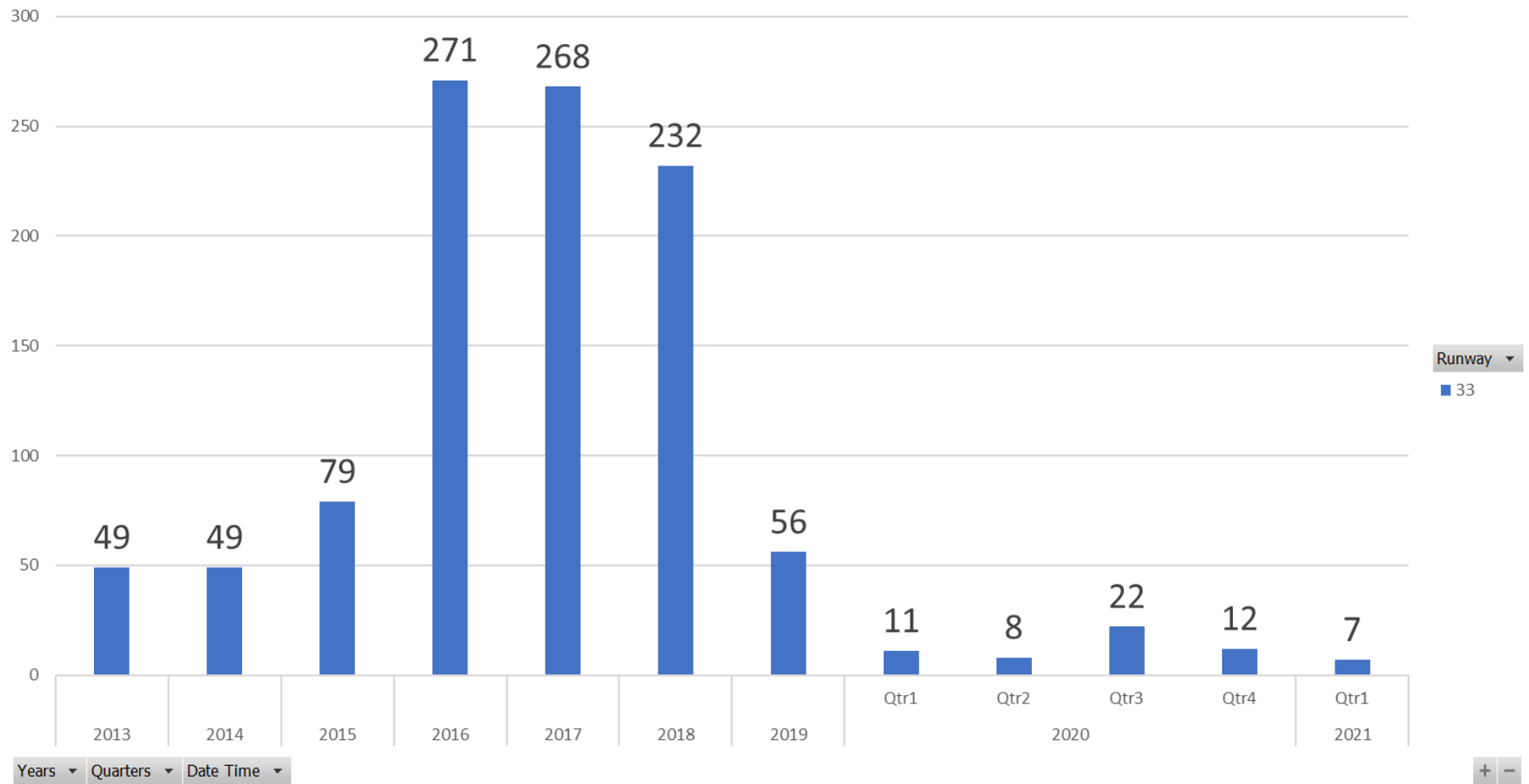
■ Arrivals
■ Departures
■ Touch and Go
■ Overflights

RUNWAY 33 JET DEPARTURES

First Quarter 2021

Count of Aircraft Type

Runway 33 Jet Departure Trend Analysis



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

2021Q1

93% Compliance
(189 total landings)
(42 non-compliant)

2020Q1

93% Compliance
(60 total landings)
(16 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



VFR Aircraft Departure NAP

2021Q1

93% Compliance
(286 total departures)
(21 non-compliant)

2020Q1

93% Compliance
(226 total departures)
(15 non-compliant)

Heading: 338
Elevation: 29

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

2021Q1

76% Compliance
(139 total departures)
(34 non-compliant)

2020Q1

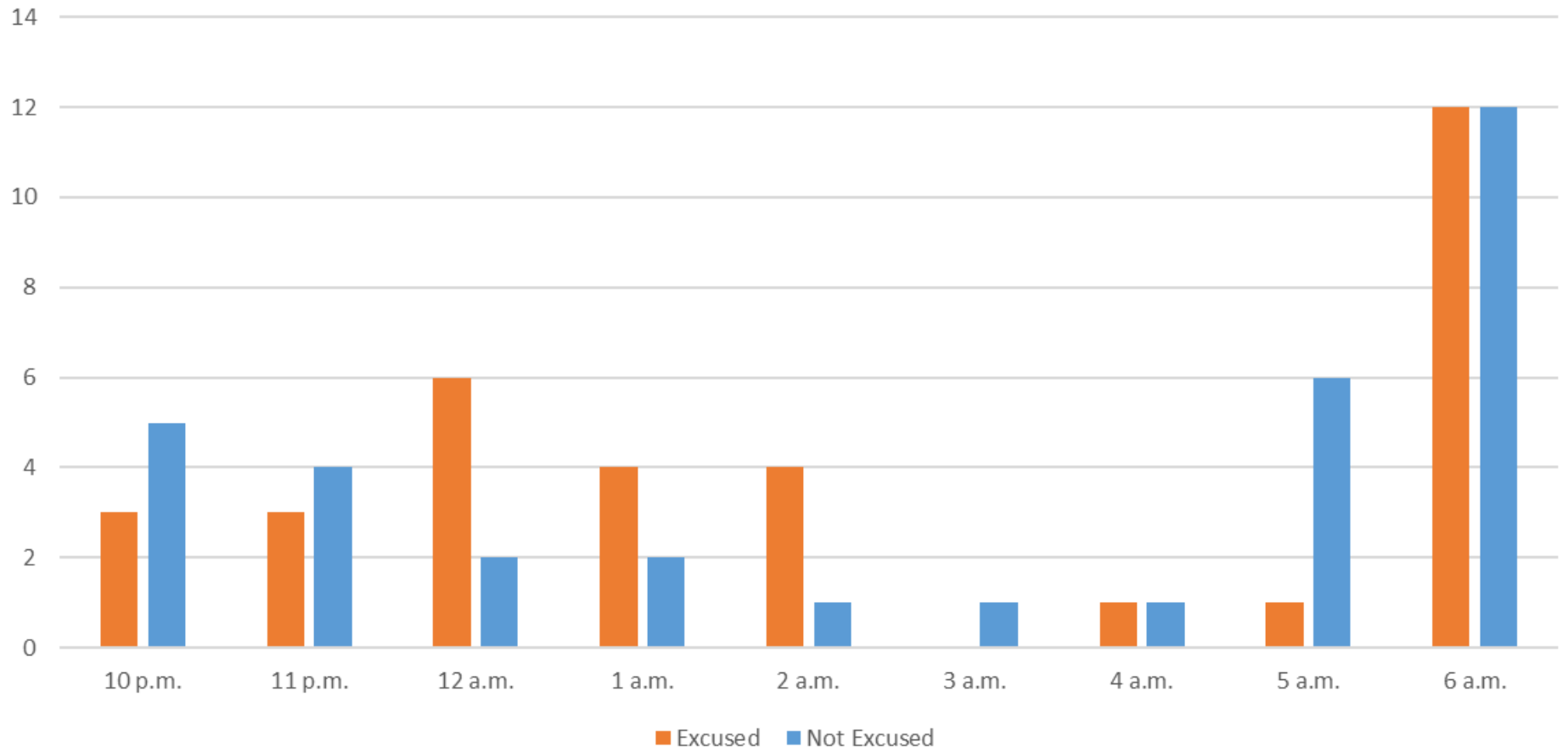
80% Compliance
(223 total departures)
(45 non-compliant)

Heading: 343
Elevation: 32

Arrivals
Departures
Touch and Go
Overflights

North Field Quiet Hours NAP Non-Compliant by Hour

Excused/Not Excused Violation Count by Hour



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



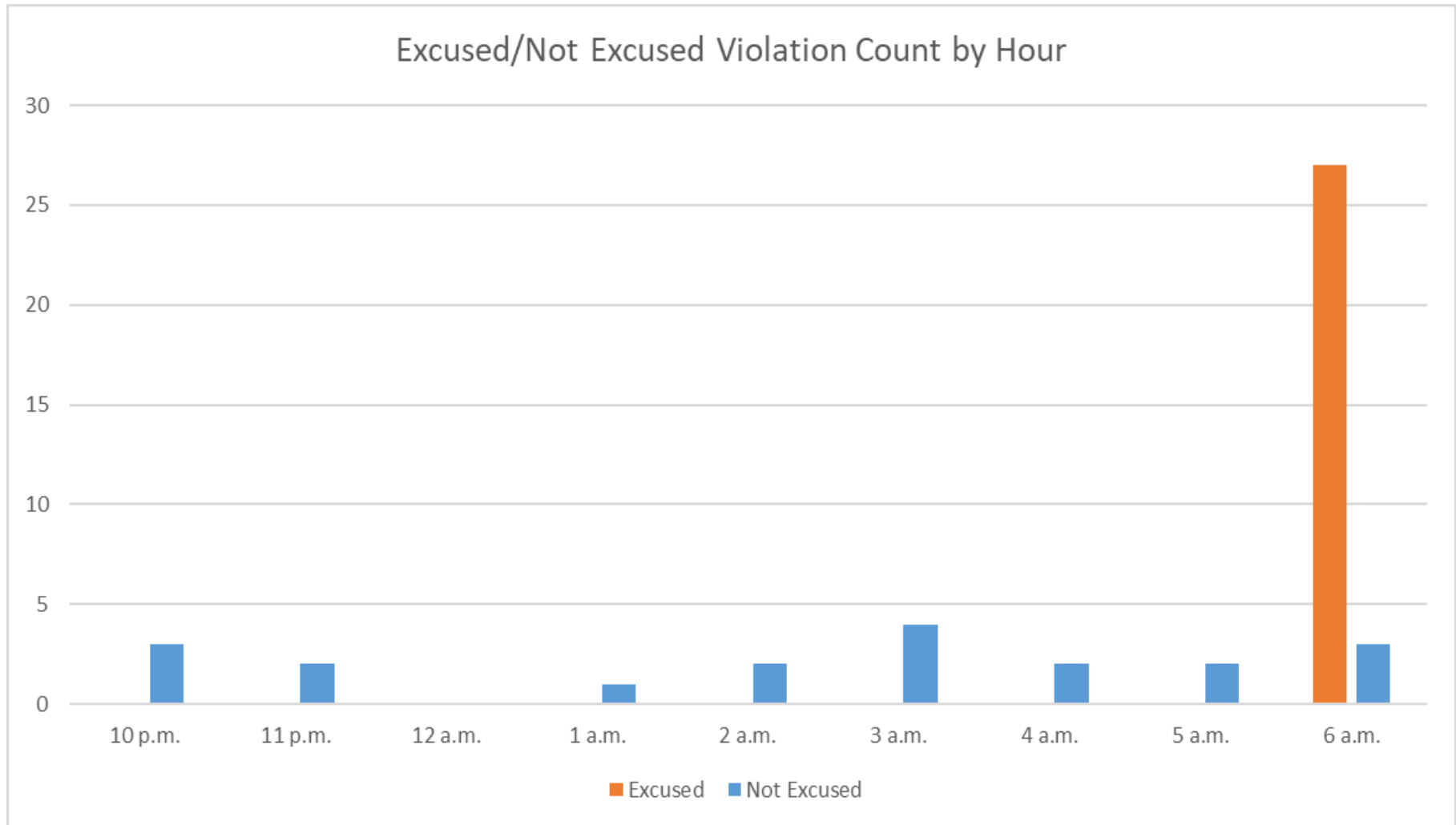
Night Time Departure NAP

2021Q1
99% Compliance
(2,043 total departures)
(19 non-compliant)

*REBAS Gate non-compliant = 18

2020Q1
99% Compliance
(3,282 total departures)
(36 non-compliant)

Night Time NAP Non-Compliant Count by Hour



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

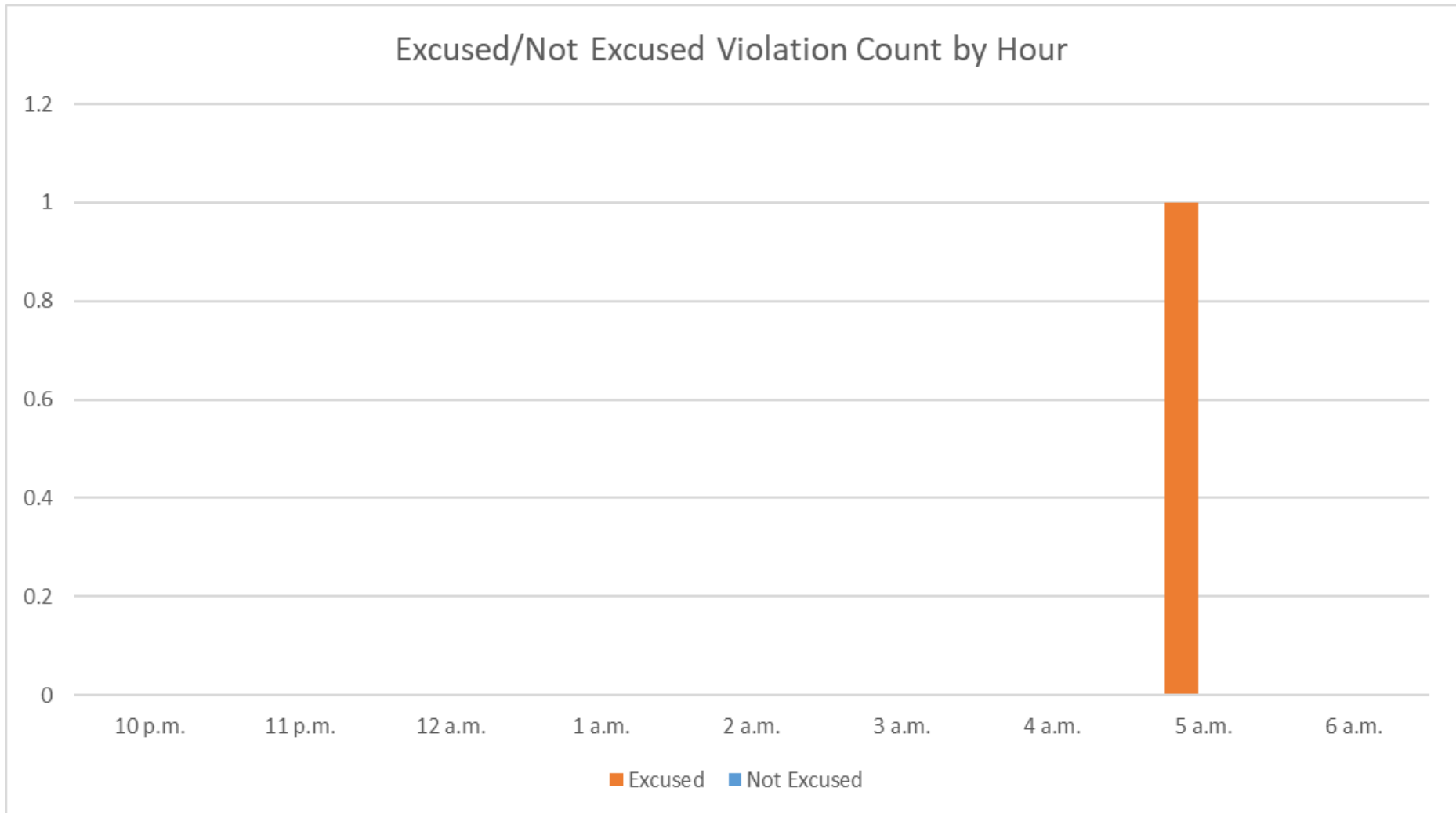


Runway 12 Night Departure NAP

2021Q1
100% Compliance
(120 total departures)
(0 non-compliant)

2020Q1
100% Compliance
(59 total departures)
(0 non-compliant)

Runway 12 Night Departure Non-Compliant Count by Hour



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

2021Q1
100% Compliance
(10,829 total departures)
(7 non-compliant)

2020Q1
100% Compliance
(17,627 total departures)
(10 non-compliant)

Heading: 299
Elevation: 36



Arrivals
Departures
Touch and Go
Overflights

Runway 30 East Turn NAP

2021Q1
100% Compliance
(3,492 total departures)
(5 non-compliant)

*Excused Departures = 10

2020Q1
100% Compliance
(4,447 total departures)
(9 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



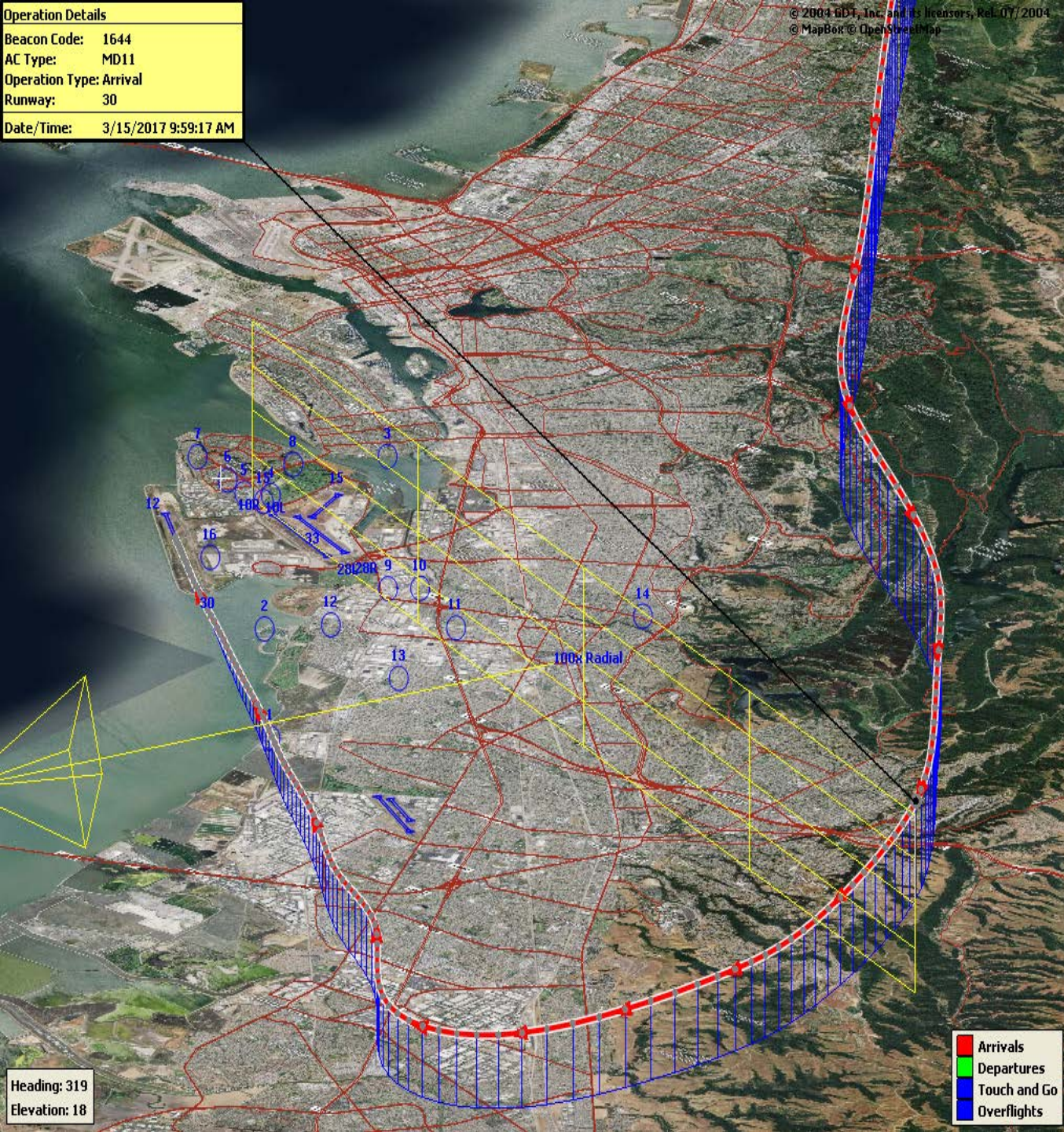
Operation Details
Beacon Code: 1644
AC Type: MD11
Operation Type: Arrival
Runway: 30
Date/Time: 3/15/2017 9:59:17 AM

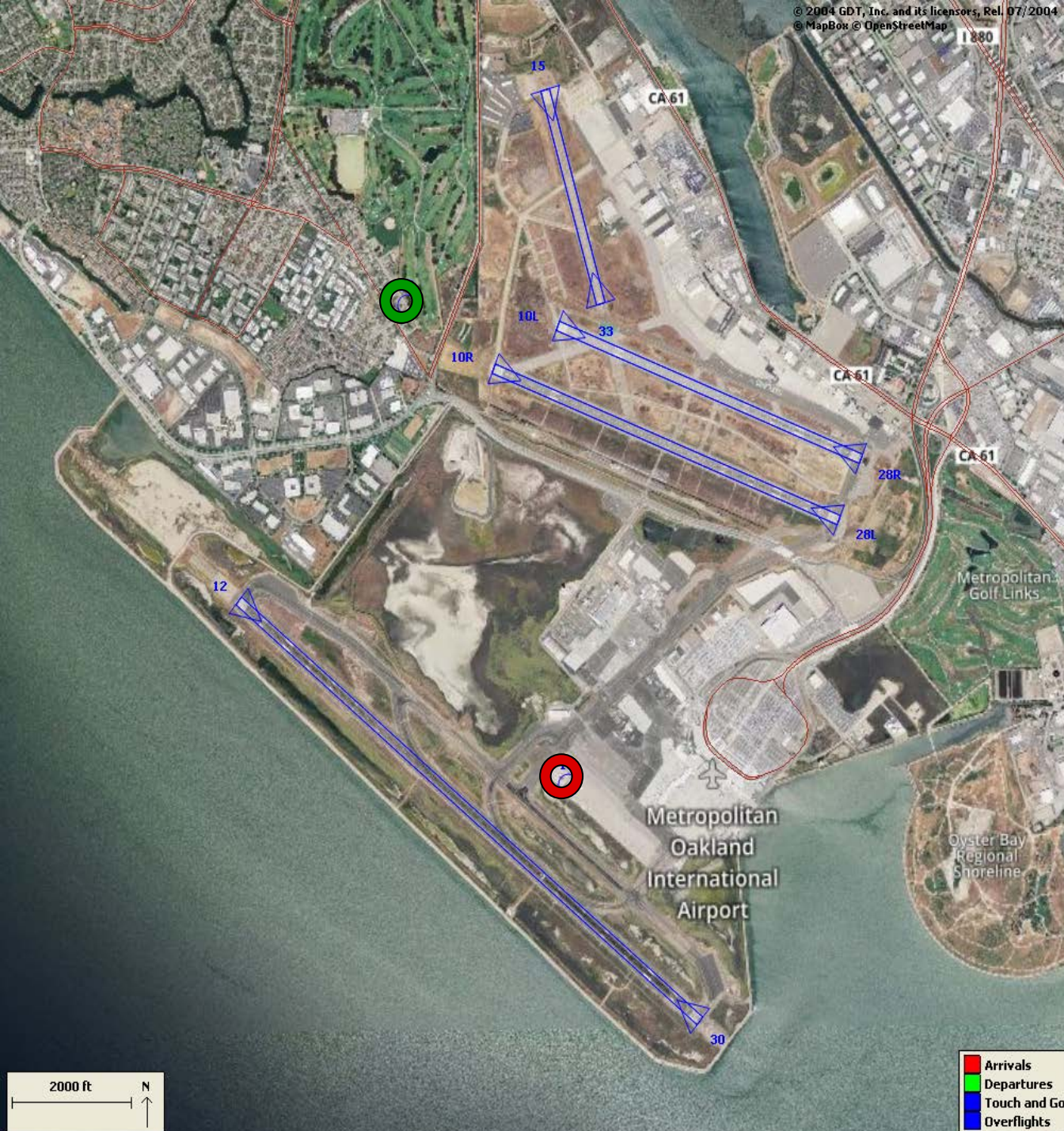
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100 Degree Radial At 3,000 ft. NAP

2021Q1
98% Compliance
(654 total landings)
(14 non-compliant)

2020Q1
99% Compliance
(1,116 total landings)
(8 non-compliant)





Engine Run-up NAP

2021Q1
100% Compliance
(11 engine run-ups)*
(0 non-compliant)

2020Q1
100% Compliance
(11 engine run-ups)
(0 non-compliant)

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

Compliance Monitoring Quarterly Summary Comparison First Quarter 2021 - Quarter-to-Quarter				
	2020Q4		2021Q1	
	Compl.	N/C	Compl.	N/C
Runway 28R/L Jet Departure Compliance	94%	6%	95%	5%
Total Airport-wide Corporate Jet Departures	2,083	132	2,209	113
Runway 10R/L Jet Landing Compliance	84%	16%	78%	22%
Total Southeast Plan Corporate Jet Landings	46	9	147	42
North Field VFR Departure Compliance	92%	8%	93%	7%
Total Runways 28R/L & 33 Departures	278	24	265	21
North Field Quiet Hours Compliance	76%	24%	76%	24%
Total North Field Quiet Hours Departures	102	32	105	34
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	11,926	1	10,822	7
Night Time Departure Compliance	99%	1%	99%	1%
Total Runway 30 Night Turbojet Departures	2,154	17	2,024	19
Runway 12 Night Departure Compliance	98%	2%	100%	0%
Total Runway 12 Night Turbojet Departures	55	1	120	0
Runway 30 East Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 East Turn Departures	4,009	4	3,487	5
100 Degree Radial Turbojet Landing Compliance	99%	1%	98%	2%
Total 100 Degree Radial Turbojet Landings	805	10	640	14
Engine Runup Program Compliance	100%	0%	100%	0%
Total Evening and Nighttime Engine Runups	6	0	11	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 = 139

First Quarter 2021 (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	1	0.0	0.2%	0	0.0	0.0%	0	0.0	0.0%	1
2	9	2	0.0	0.4%	0	0.0	0.0%	2	0.0	0.4%	13
3	27	6	0.1	1.1%	1	0.0	0.2%	0	0.0	0.0%	34
4	51	43	0.5	7.6%	18	0.2	3.2%	6	0.1	1.1%	118
5	60	13	0.1	2.3%	10	0.1	1.8%	10	0.1	1.8%	93
6	12	12	0.1	2.1%	4	0.0	0.7%	7	0.1	1.2%	35
7	16	9	0.1	1.6%	4	0.0	0.7%	2	0.0	0.4%	31
8	22	10	0.1	1.8%	1	0.0	0.2%	0	0.0	0.0%	33
9	8	19	0.2	3.4%	4	0.0	0.7%	2	0.0	0.4%	33
10	49	11	0.1	1.9%	0	0.0	0.0%	0	0.0	0.0%	60
11	5	3	0.0	0.5%	1	0.0	0.2%	0	0.0	0.0%	9
12	8	2	0.0	0.4%	3	0.0	0.5%	0	0.0	0.0%	13
13	3	1	0.0	0.2%	0	0.0	0.0%	0	0.0	0.0%	4
14	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
All NMTs	270	132	1	0	46	1	0	29	0	0	477

Table 2. Aircraft SEL Noise Measurements in Alameda - Total Aircraft Departures = 112

First Quarter 2021 (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	27	6	0.1	2.5%	1	0.0	0.4%	0	0.0	0.0%	34
4	51	43	0.5	18.0%	18	0.2	7.5%	6	0.1	2.5%	118
5	60	13	0.1	5.4%	10	0.1	4.2%	10	0.1	4.2%	93
6	12	12	0.1	5.0%	4	0.0	1.7%	7	0.1	2.9%	35
7	16	9	0.1	3.8%	4	0.0	1.7%	2	0.0	0.8%	31
8	22	10	0.1	4.2%	1	0.0	0.4%	0	0.0	0.0%	33
Total	188	93	1.0		38	0.4		25	0.3		344

Table 3. Aircraft SEL Noise Measurements in San Leandro - Total Aircraft Departures = 27

First Quarter 2021 (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	9	2	0.0	0.6%	0	0.0	0.0%	2	0.0	0.6%	13
9	8	19	0.2	5.8%	4	0.0	1.2%	2	0.0	0.6%	33
10	49	11	0.1	3.4%	0	0.0	0.0%	0	0.0	0.0%	60
11	5	3	0.0	0.9%	1	0.0	0.3%	0	0.0	0.0%	9
12	8	2	0.0	0.6%	3	0.0	0.9%	0	0.0	0.0%	13
13	3	1	0.0	0.3%	0	0.0	0.0%	0	0.0	0.0%	4
14	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
Total	82	38	0.4		8	0.1		4	0.0		132

Rolling Take-off Night Departure Procedure (1:00 to 5:00 AM)
First Quarter 2021, 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
A306	67	21	67	77	25
First Quarter 2021 [B]					
	Total [X]	Est. Avg. Monthly [X/3]			
B763	163	54	64	66	75
DC10/MD10	44	15	35	66	75
MD11	163	54	110	68	77
A306	109	36	45	65	75
B757	159	53	60	65	75
B77L	115	38	28	65	74
Difference [A-B]					
DC10/MD10		-72	3	-3	-3
MD11		22	97	-2	-2
A306		-31	24	-2	-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)

Rolling Take-off Night Departure Procedure (1:00 to 5:00 AM)
First Quarter 2020, 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
A306	67	21	67	77	25
First Quarter 2020 [B]					
	Total [X]	Est. Avg. Monthly [X/3]			
B763	144	48	40	65	74
DC10/MD10	47	16	22	65	75
MD11	227	76	127	67	76
A306	93	31	39	66	75
B757	172	57	55	66	76
B77L	113	38	25	65	73
Difference [A-B]					
DC10/MD10		-71	-10	-4	-3
MD11		44	114	-3	-3
A306		-36	18	-1	-2

(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.

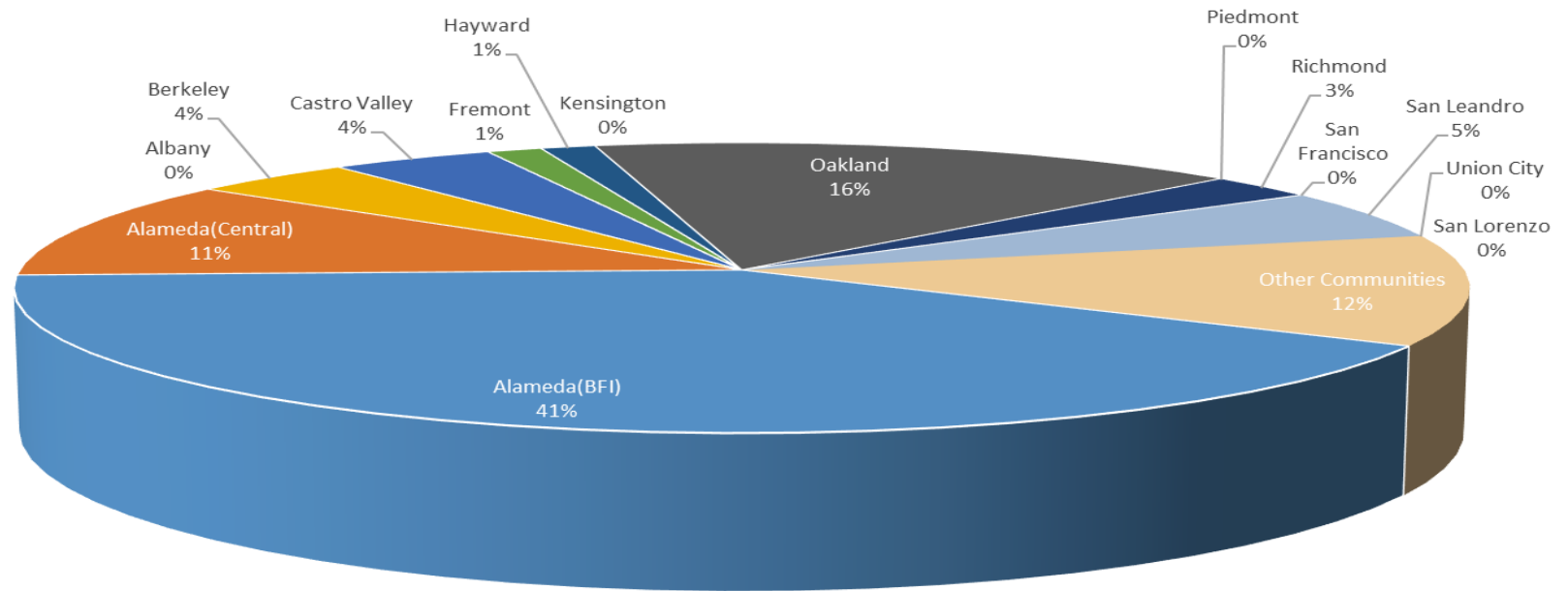
Source: ANOMS (Airport Noise and Operations Monitoring System)

Oakland International Airport Noise Complaint Summary January 2021		
Community	Callers	Complaints
Alameda(BFI)	30	1416
Alameda(Central)	8	64
Albany	0	0
Berkeley	3	3
Castro Valley	3	115
Fremont	1	3
Hayw ard	1	1
Kensington	0	0
Oakland	12	3553
Piedmont	0	0
Richmond	2	479
San Francisco	0	0
San Leandro	4	43
Union City	0	0
San Lorenzo	0	0
Other Communities	9	133
Total	73	5810
Complaints by Type		
Website	0	
E-mail	3516	
Phone	0	
View point App	2294	
Complaints by Time of Day		
Day (0700 - 1900)	2143	
Evening (1900 - 2200)	2110	
Night (2200 - 0700)	1557	
Complaints by Type of Operation		
Arrivals	3191	
Departures	2414	
Over-flights	127	
Touch & Go	78	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	249	
Helicopter	35	
Jet	5081	
Military	2	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	5	
Propeller	334	
Turbo-prop	104	

Number of Callers

January 2021

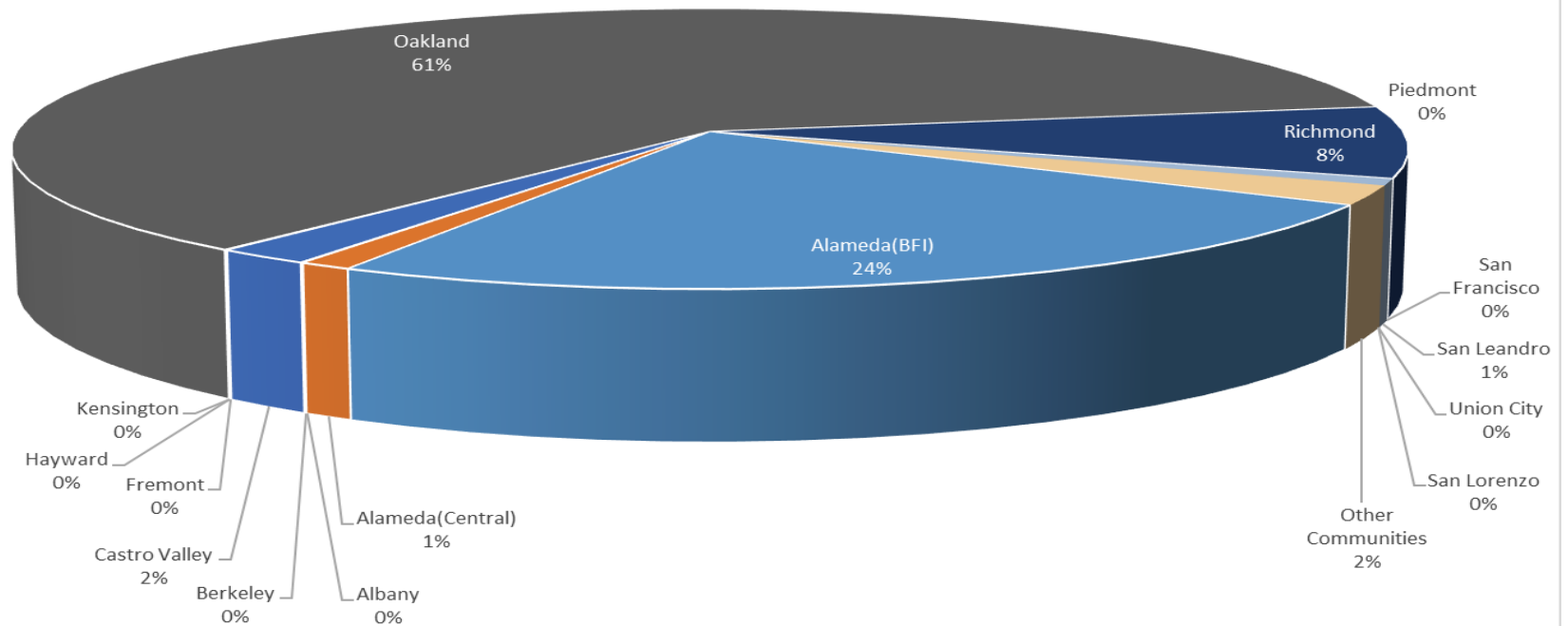
Noise Complaints Summary by Number of Callers



Number of Complaints

January 2021

Noise Complaints Summary by Number of Complaints

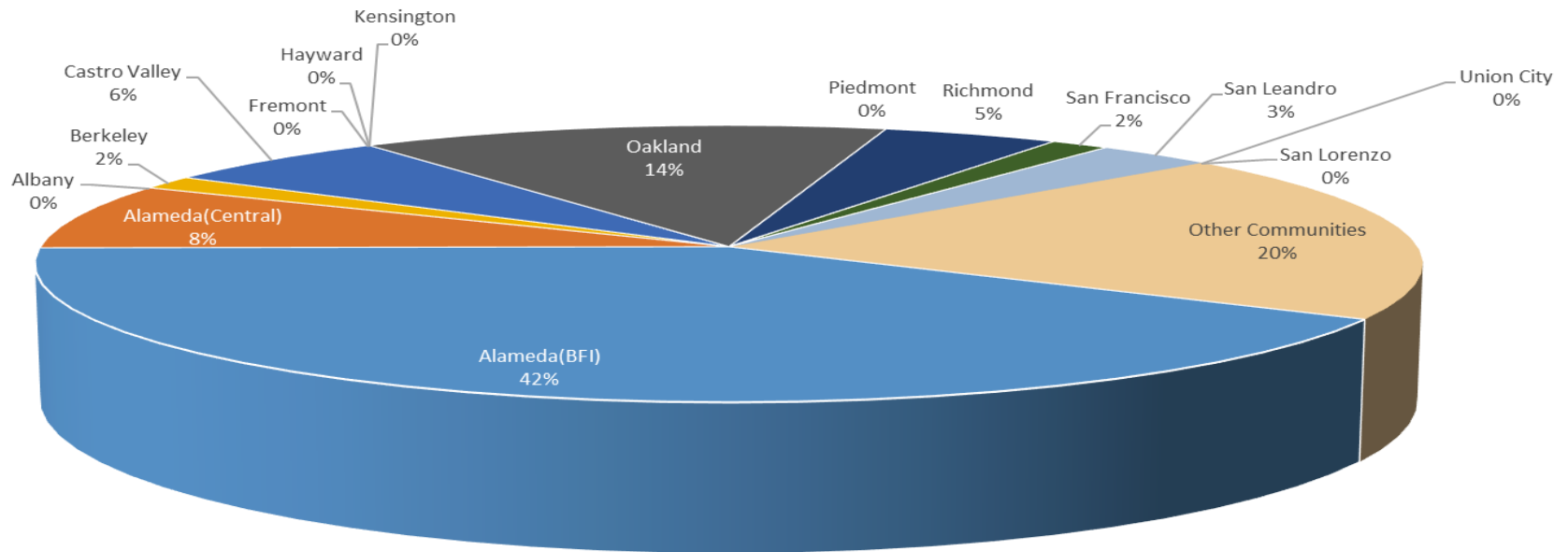


Oakland International Airport Noise Complaint Summary February 2021		
Community	Callers	Complaints
Alameda(BFI)	27	323
Alameda(Central)	5	37
Albany	0	0
Berkeley	1	1
Castro Valley	4	111
Fremont	0	0
Hayw ard	0	0
Kensington	0	0
Oakland	9	2707
Piedmont	0	0
Richmond	3	364
San Francisco	1	1
San Leandro	2	5
Union City	0	0
San Lorenzo	0	0
Other Communities	13	97
Total	65	3646
Complaints by Type		
Website	0	
E-mail	2690	
Phone	0	
View point App	956	
Complaints by Time of Day		
Day (0700 - 1900)	1150	
Evening (1900 - 2200)	685	
Night (2200 - 0700)	1811	
Complaints by Type of Operation		
Arrivals	2373	
Departures	1134	
Over-flights	108	
Touch & Go	31	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	191	
Helicopter	35	
Jet	3019	
Military	0	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	16	
Propeller	227	
Turbo-prop	158	

Number of Callers

February 2021

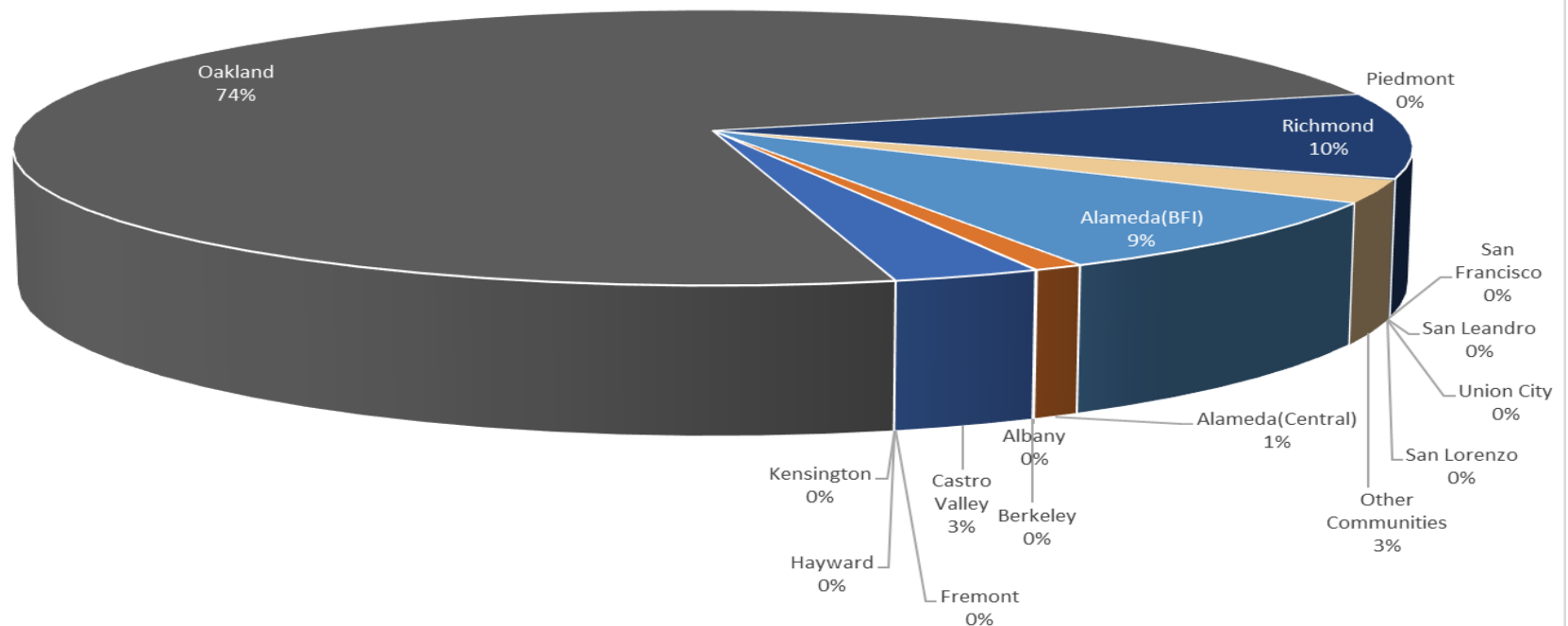
Noise Complaints Summary by Number of Callers



Number of Complaints

February 2021

Noise Complaints Summary by Number of Complaints

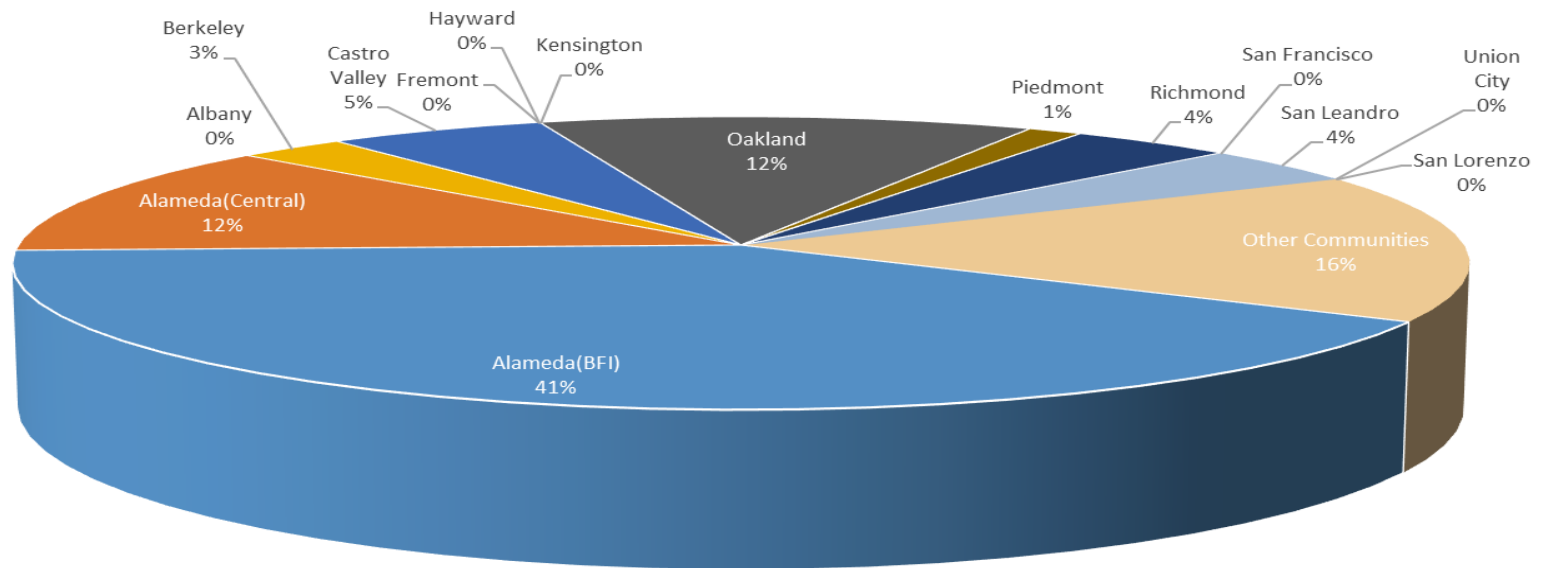


Oakland International Airport Noise Complaint Summary March 2021		
Community	Callers	Complaints
Alameda(BFI)	30	1070
Alameda(Central)	9	61
Albany	0	0
Berkeley	2	3
Castro Valley	4	117
Fremont	0	0
Hayw ard	0	0
Kensington	0	0
Oakland	9	3330
Piedmont	1	1
Richmond	3	427
San Francisco	0	0
San Leandro	3	27
Union City	0	0
San Lorenzo	0	0
Other Communities	12	215
Total	73	5251
Complaints by Type		
Website	0	
E-mail	3343	
Phone	0	
View point App	1908	
Complaints by Time of Day		
Day (0700 - 1900)	1449	
Evening (1900 - 2200)	1283	
Night (2200 - 0700)	2519	
Complaints by Type of Operation		
Arrivals	3362	
Departures	1519	
Over-flights	295	
Touch & Go	75	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	256	
Helicopter	51	
Jet	3757	
Military	0	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	24	
Propeller	1040	
Turbo-prop	123	

Number of Callers

March 2021

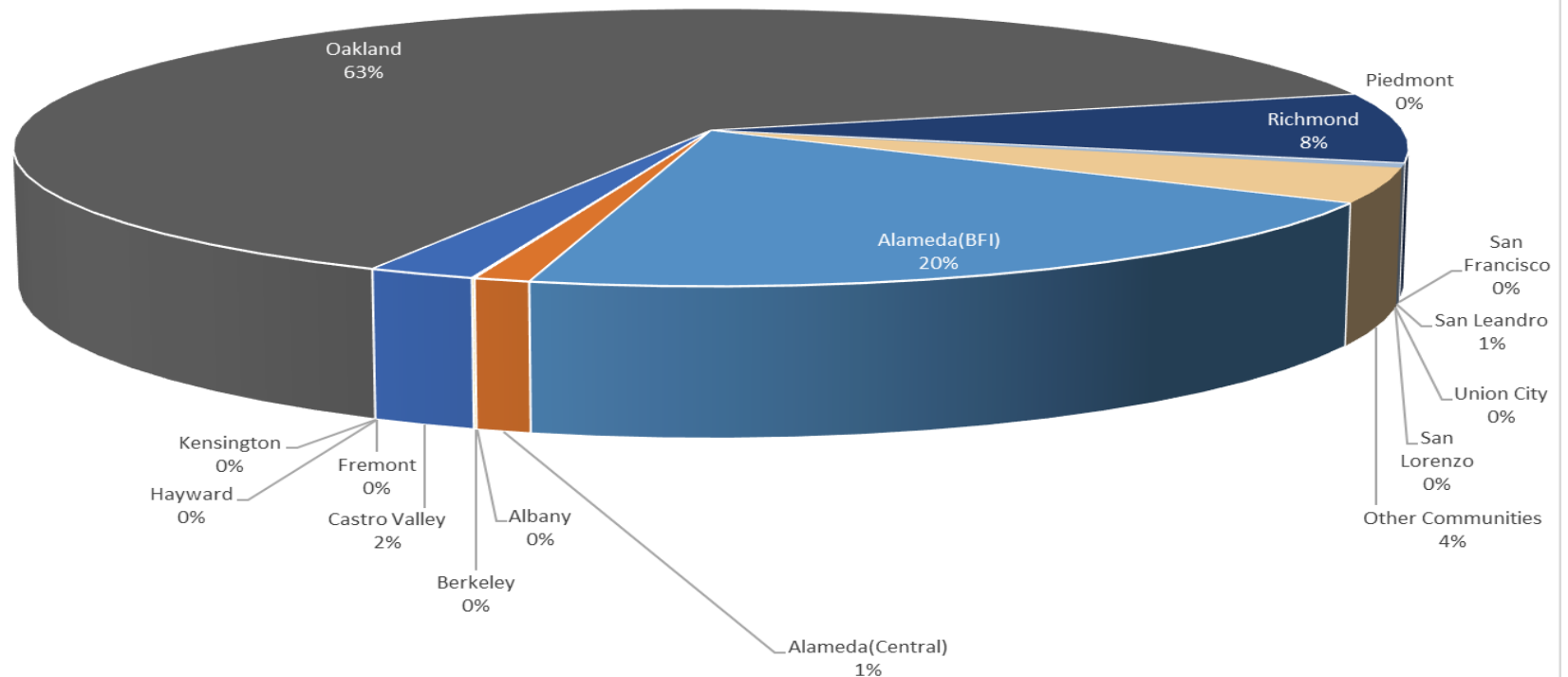
Noise Complaints Summary by Number of Callers

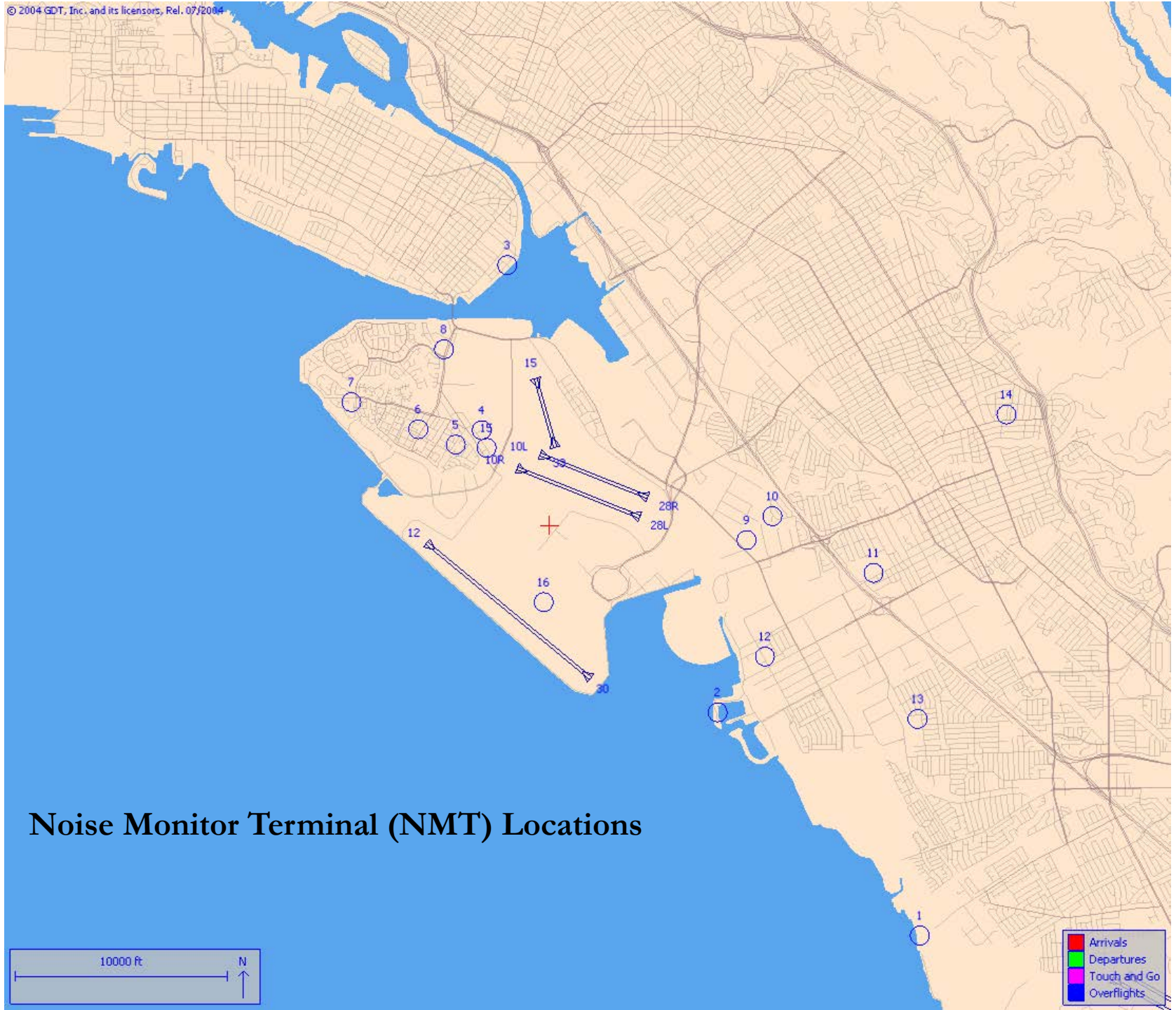


Number of Complaints

March 2021

Noise Complaints Summary by Number of Complaints





Noise Monitor Terminal (NMT) Locations