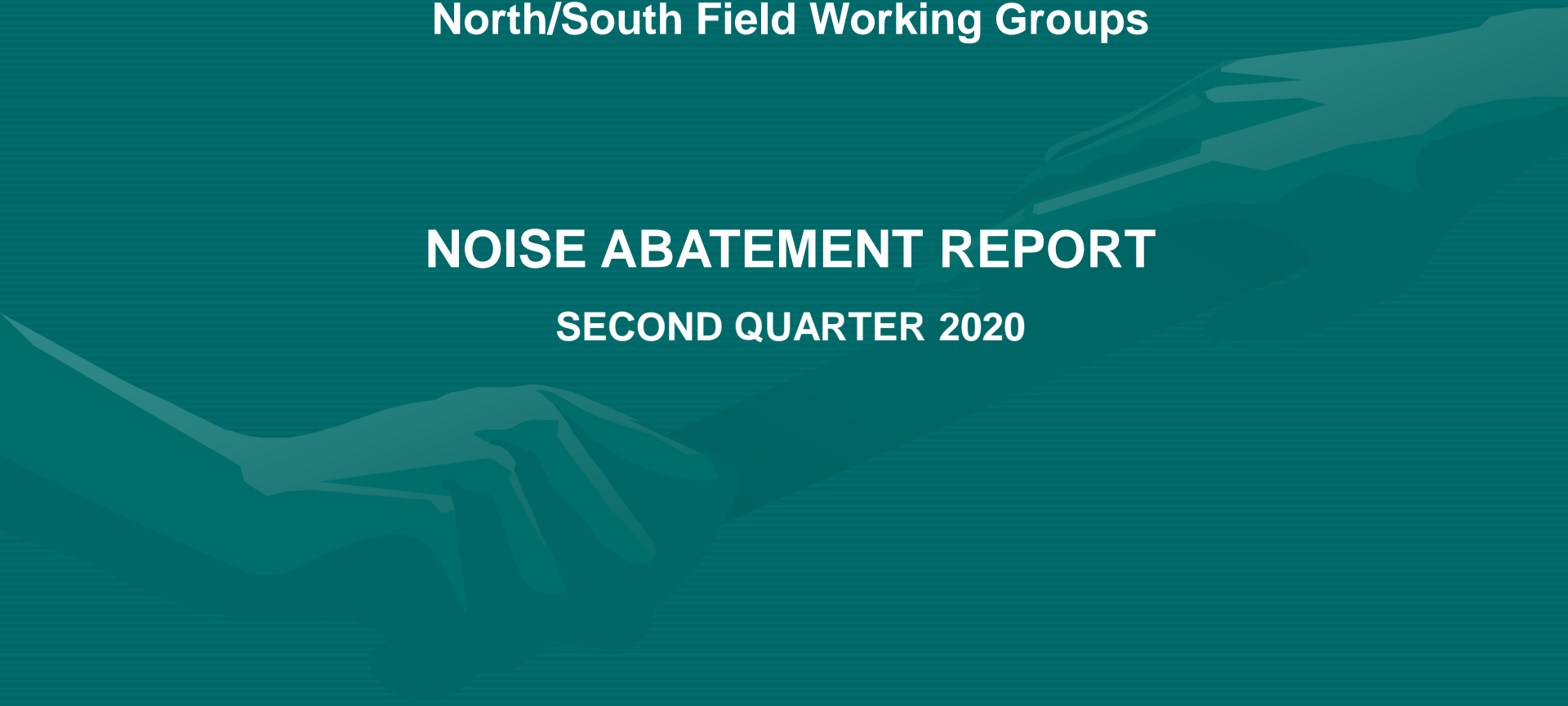


NOISE FORUM SUMMARY

North/South Field Working Groups

NOISE ABATEMENT REPORT

SECOND QUARTER 2020



Compliance Monitoring Quarterly Summary Comparison Second Quarter 2020				
	2019Q2		2020Q2	
	Compl.	N/C	Compl.	N/C
Runway 28R/L Jet Departure Compliance	96%	4%	96%	4%
Total Airport-wide Corporate Jet Departures	3,162	126	1,106	49
Runway 10R/L Jet Landing Compliance	83%	17%	85%	15%
Total Southeast Plan Corporate Jet Landings	84	14	11	2
North Field VFR Departure Compliance	94%	6%	87%	13%
Total Runways 28R/L & 33 Departures	294	19	124	18
North Field Quiet Hours Compliance	82%	18%	78%	22%
Total North Field Quiet Hours Departures	283	52	162	47
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	20,139	9	7,676	3
Night Time Departure Compliance	99%	1%	99%	1%
Total Runway 30 Night Turbojet Departures	4,190	43	1,825	26
Runway 12 Night Departure Compliance	100%	0%	92%	8%
Total Runway 12 Night Turbojet Departures	49	0	48	4
Runway 30 East Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 East Turn Departures	5,546	9	2,712	3
100 Degree Radial Turbojet Landing Compliance	99%	1%	99%	1%
Total 100 Degree Radial Turbojet Landings	1,329	9	540	6
Engine Runup Program Compliance	100%	0%	100%	0%
Total Evening and Nighttime Engine Runups	9	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

© 2004 GDT, Inc. and its licensors, Rel. 07/2004
© MapBox © OpenStreetMap

Runway 28R/L Jet Departure NAP

2020Q2
96% Compliance
(1,155 total departures)
(49 non-compliant)

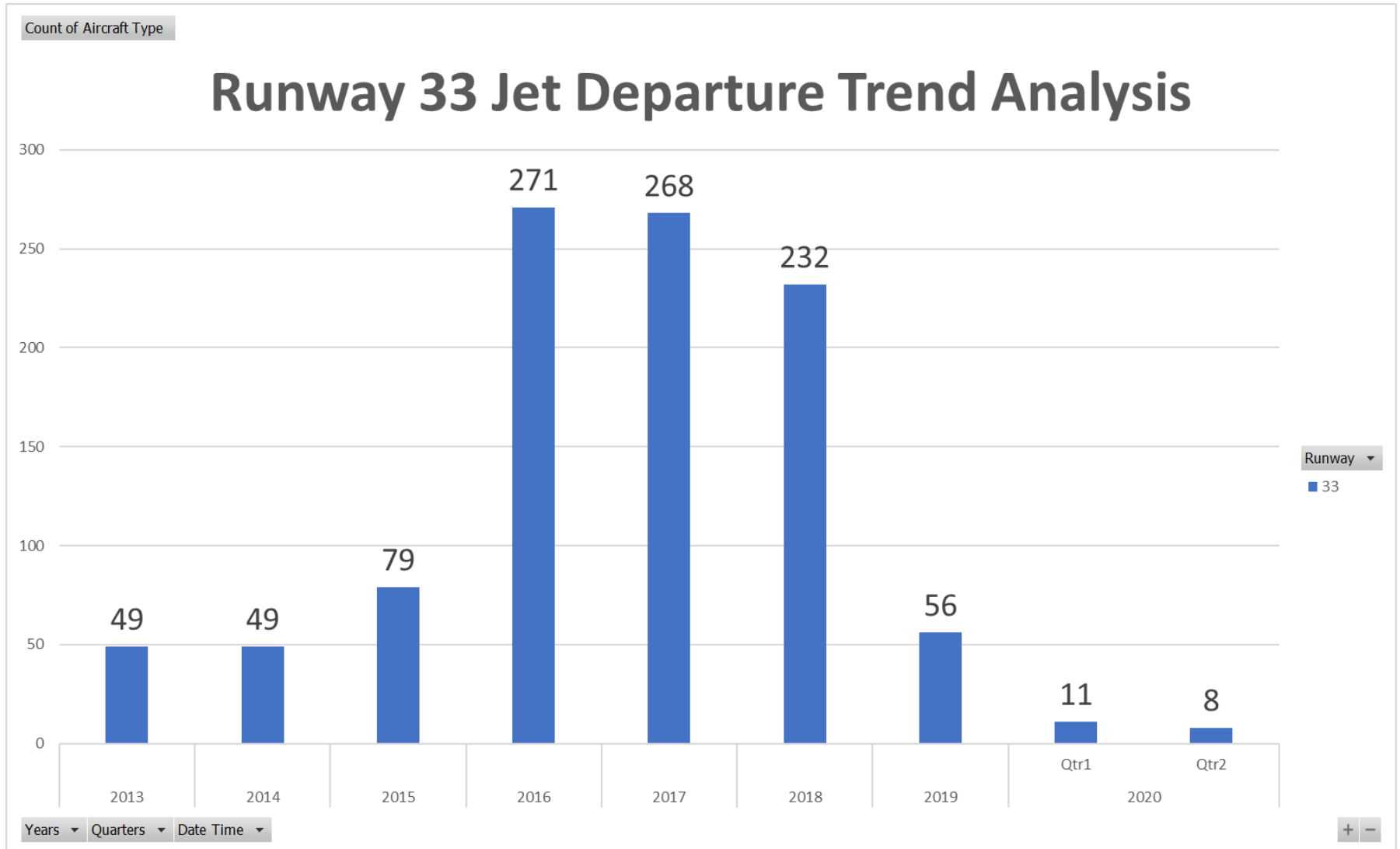
2019Q2
96% Compliance
(3,288 total departures)
(126 non-compliant)

Heading: 325
Elevation: 15

■ Arrivals
■ Departures
■ Touch and Go
■ Overflights

RUNWAY 33 JET DEPARTURES

Second Quarter 2020



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

© 2004 GDI, Inc. and its licensors. Rel. 07/2004
© MapBox © OpenStreetMap

Runway 10R/L Jet Landing NAP

2020Q2

85% Compliance
(13 total landings)
(2 non-compliant)

2019Q2

83% Compliance
(98 total landings)
(14 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

2020Q2

87% Compliance
(142 total departures)
(18 non-compliant)

2019Q2

94% Compliance
(313 total departures)
(19 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

© 2004 GDT, Inc. and its licensors, Rel. 07/2004
© MapBox © OpenStreetMap

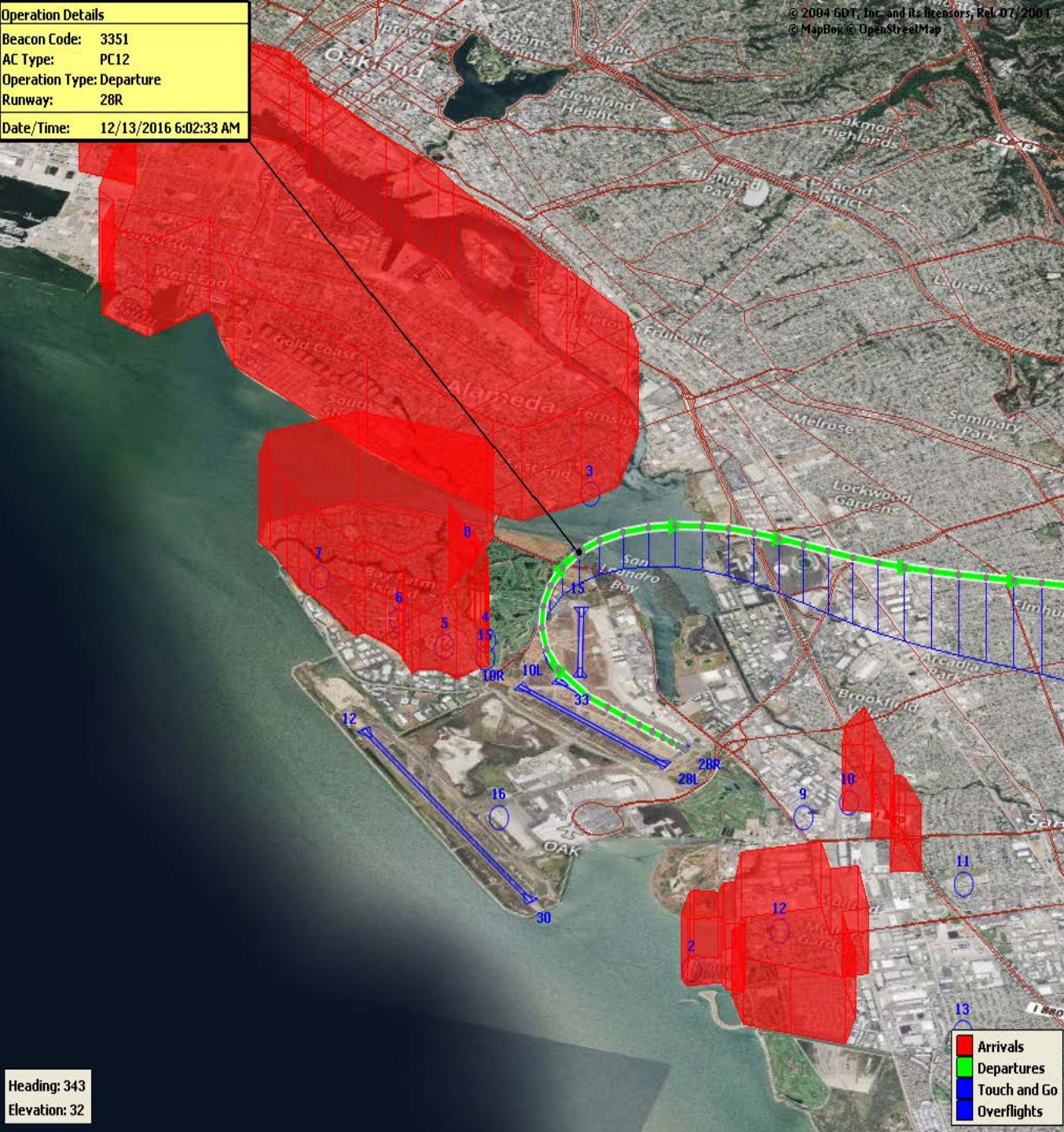
North Field Quiet Hours NAP

2020Q2
78% Compliance
(209 total departures)
(47 non-compliant)

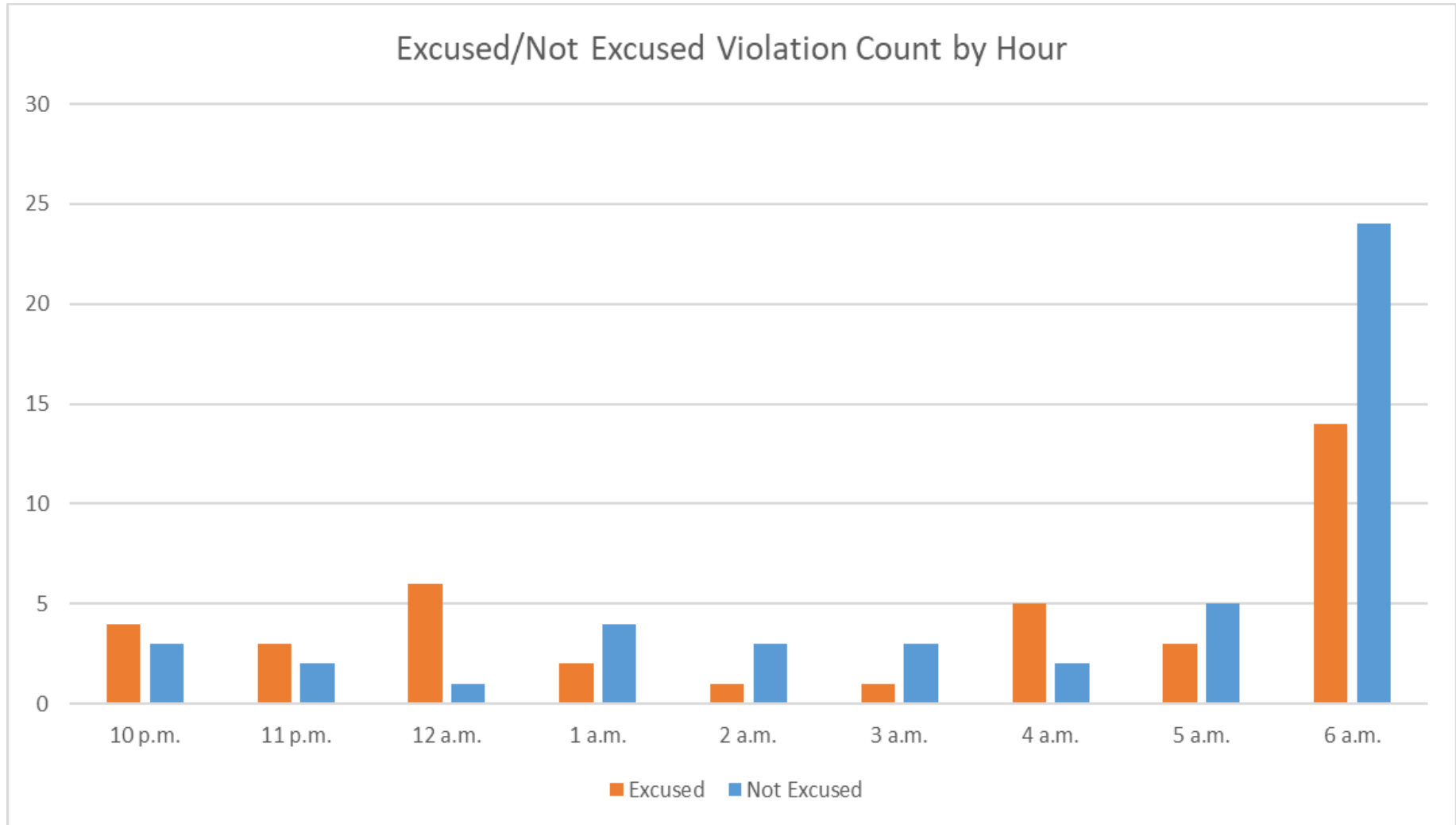
2019Q2
82% Compliance
(335 total departures)
(52 non-compliant)

Heading: 343
Elevation: 32

Arrivals
Departures
Touch and Go
Overflights



North Field Quiet Hours NAP Non-Compliant 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

2020Q2

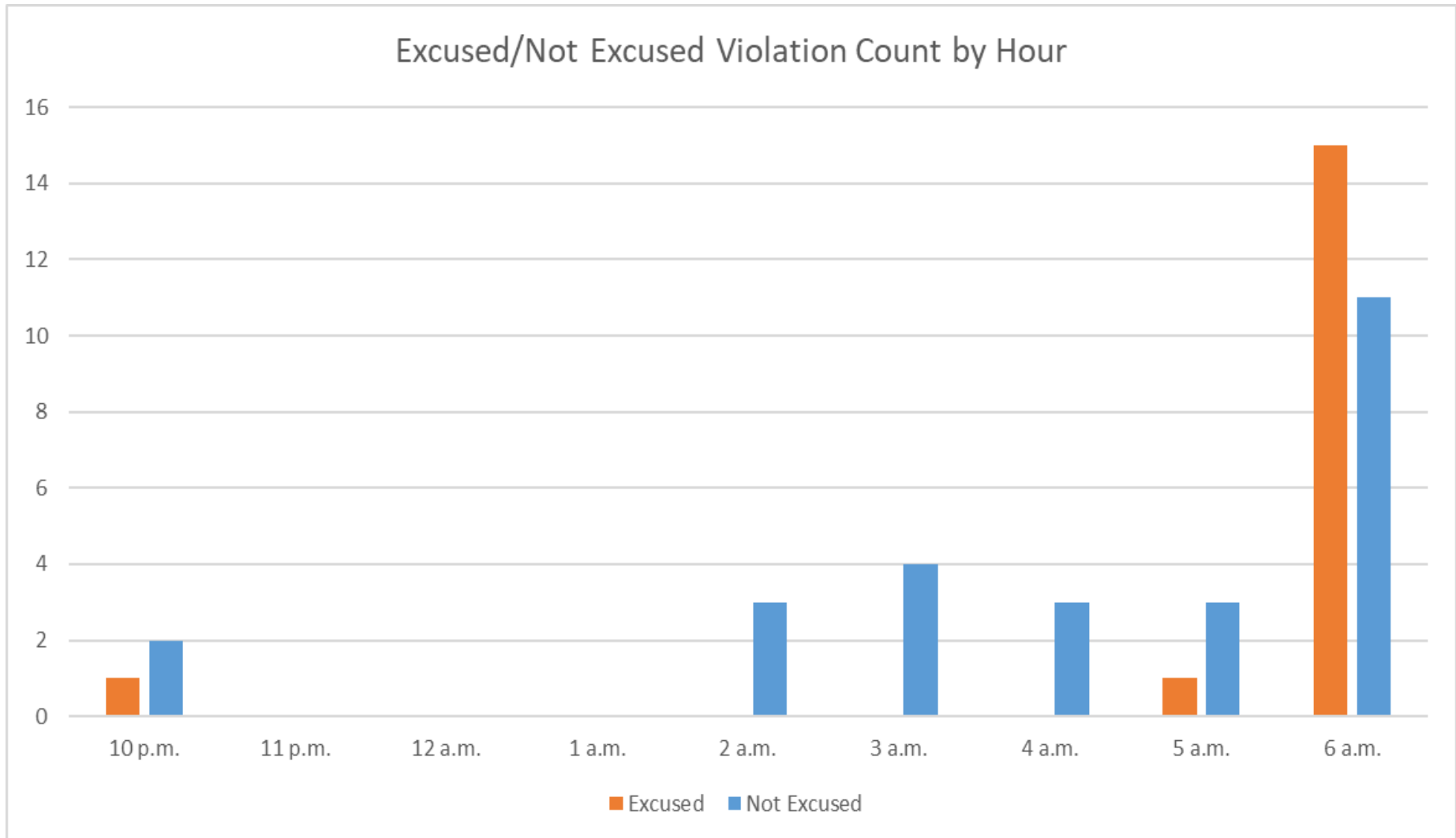
99% Compliance
(1,851 total departures)
(26 non-compliant)

*REBAS Gate non-compliant = 22

2019Q2

99% Compliance
(4,233 total departures)
(43 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

2020Q2

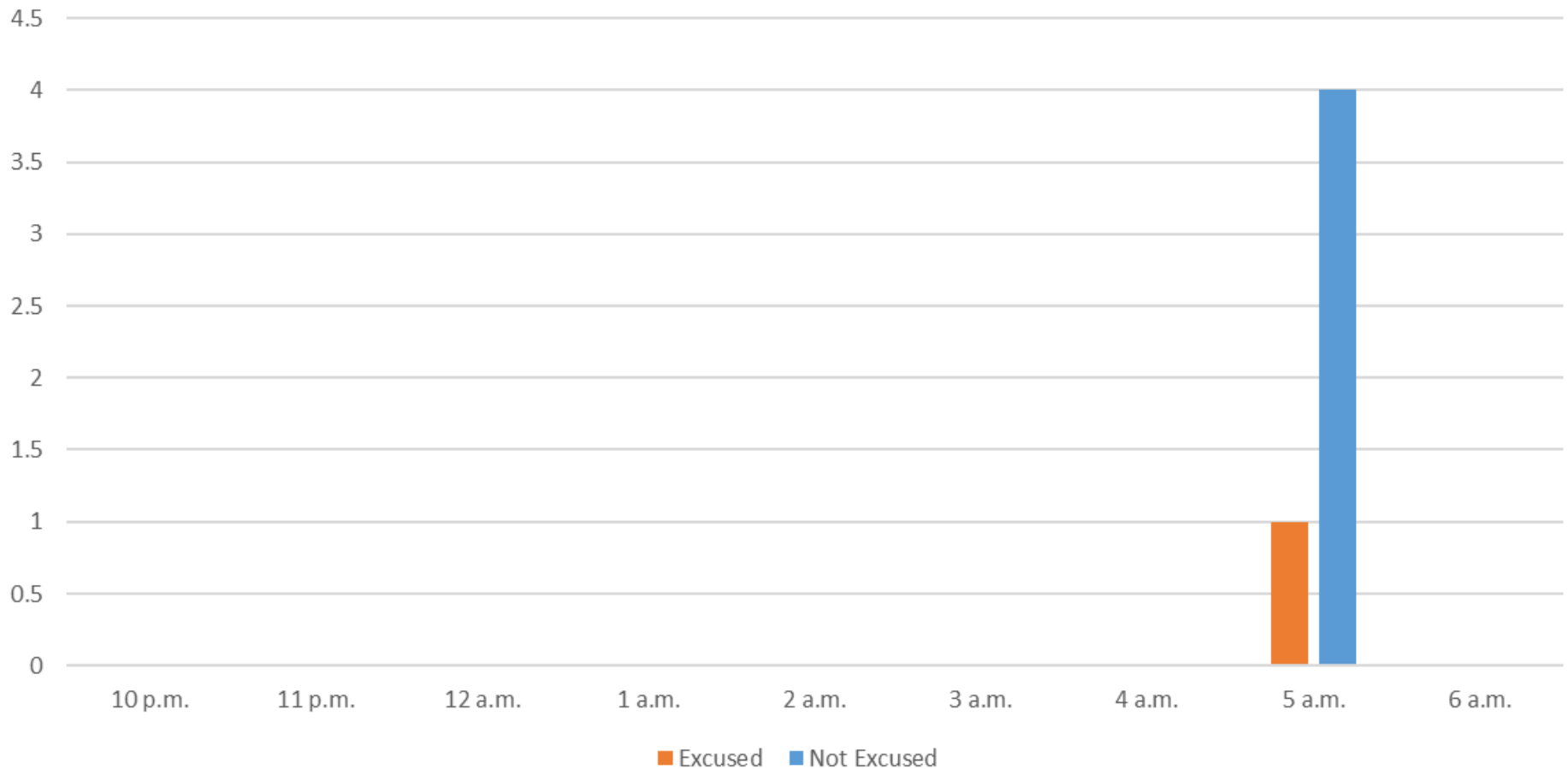
92% Compliance
(52 total departures)
(4 non-compliant)

2019Q2

100% Compliance
(49 total departures)
(0 non-compliant)

Runway 12 Night Departure Non-Compliant Count by Hour

Excused/Not Excused Violation 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

© 2004 GDT, Inc. and its licensors, Rel. 07/2004
© MapBox © OpenStreetMap

Runway 30 Bay Farm Right Turn NAP

2020Q2
100% Compliance
(7,679 total departures)
(3 non-compliant)

2019Q2
100% Compliance
(20,148 total departures)
(9 non-compliant)

Heading: 299
Elevation: 36



Arrivals
Departures
Touch and Go
Overflights

Runway 30 East Turn NAP

2020Q2
100% Compliance
(2,715 total departures)
(3 non-compliant)

*2020Q1 Excused Departures = 6

2019Q2
100% Compliance
(5,555 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



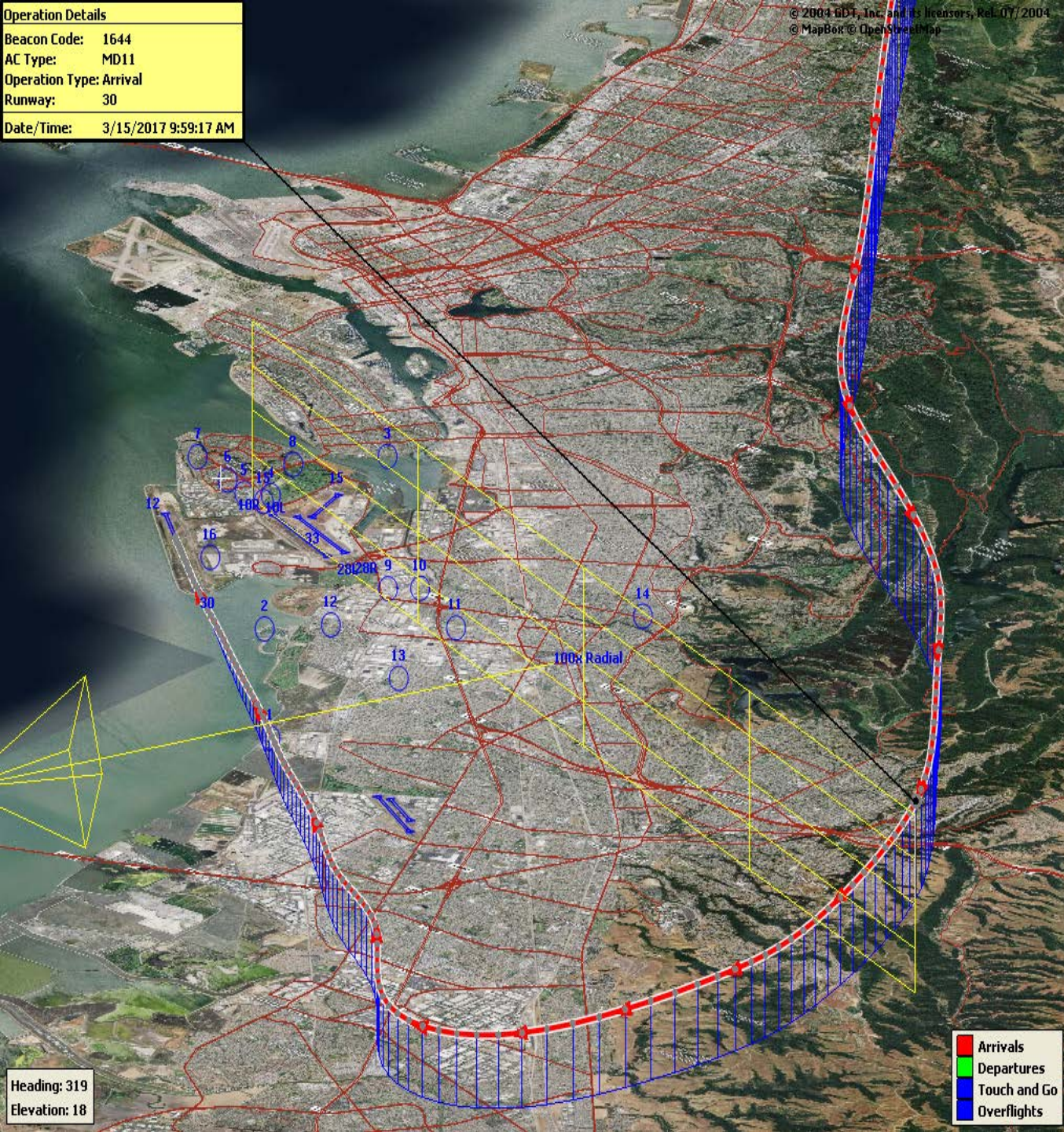
Operation Details
Beacon Code: 1644
AC Type: MD11
Operation Type: Arrival
Runway: 30
Date/Time: 3/15/2017 9:59:17 AM

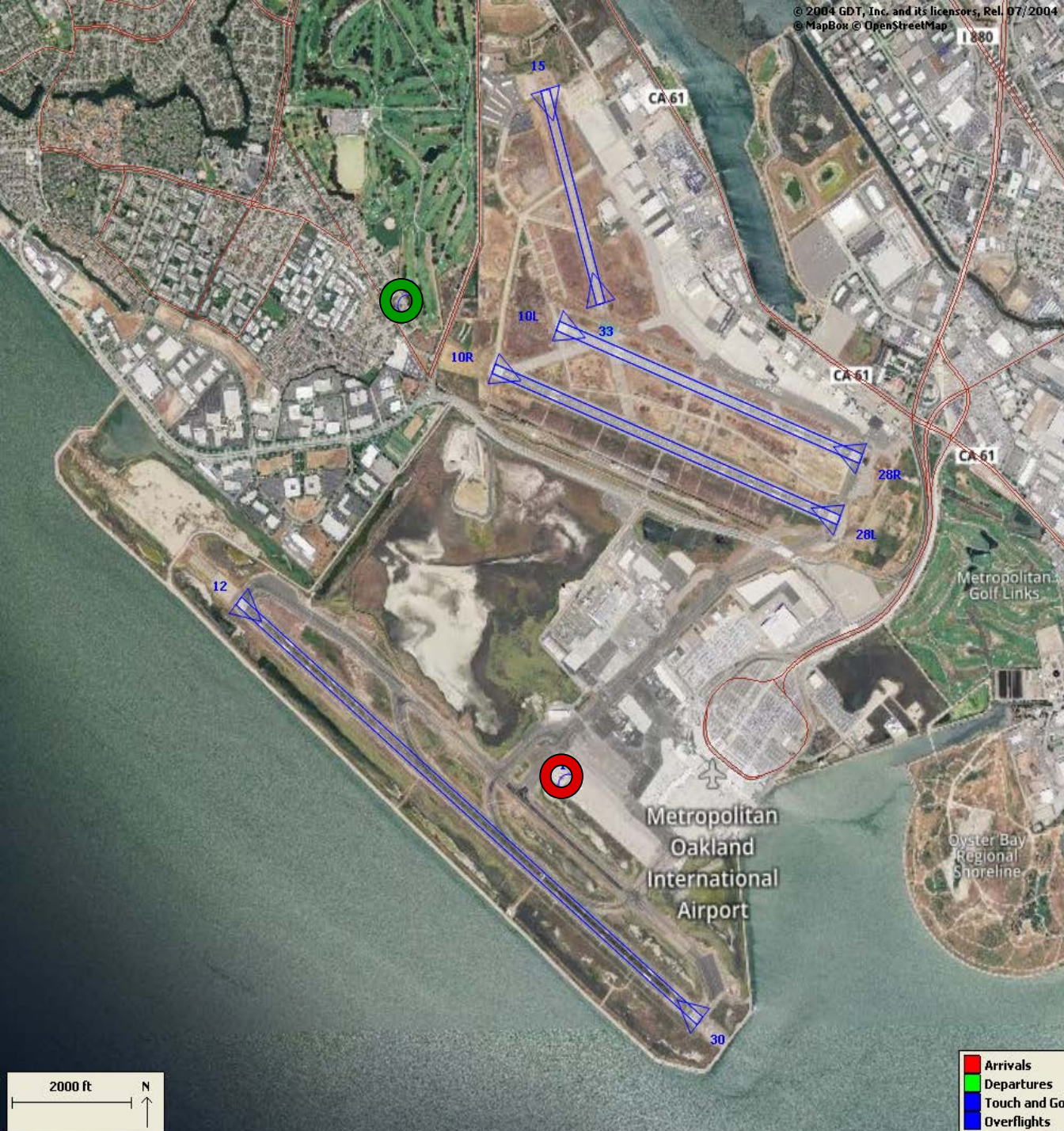
© 2004 GDI, Inc. and its licensors. Rel. 07/2004
© MapBox © OpenStreetMap

100 Degree Radial At 3,000 ft. NAP

2020Q2
99% Compliance
(546 total landings)
(6 non-compliant)

2019Q2
99% Compliance
(1,338 total landings)
(9 non-compliant)





Engine Run-up NAP

2020Q2

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

2019Q2

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

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

**Compliance Monitoring Quarterly Summary Comparison
Second Quarter 2020 - Quarter-to-Quarter**

	2020Q1		2020Q2	
	Compl.	N/C	Compl.	N/C
Runway 28R/L Jet Departure Compliance	96%	4%	96%	4%
Total Airport-wide Corporate Jet Departures	2,404	111	1,106	49
Runway 10R/L Jet Landing Compliance	73%	27%	85%	15%
Total Southeast Plan Corporate Jet Landings	44	16	11	2
North Field VFR Departure Compliance	93%	7%	87%	13%
Total Runways 28R/L & 33 Departures	211	15	124	18
North Field Quiet Hours Compliance	80%	20%	78%	22%
Total North Field Quiet Hours Departures	178	45	162	47
Runway 30 BFI Right Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 Turbojet Departures	17,617	10	7,676	3
Night Time Departure Compliance	99%	1%	99%	1%
Total Runway 30 Night Turbojet Departures	3,246	36	1,825	26
Runway 12 Night Departure Compliance	100%	0%	92%	8%
Total Runway 12 Night Turbojet Departures	59	0	48	4
Runway 30 East Turn Departure Compliance	100%	0%	100%	0%
Total Runway 30 East Turn Departures	4,438	9	2,712	3
100 Degree Radial Turbojet Landing Compliance	99%	1%	99%	1%
Total 100 Degree Radial Turbojet Landings	1,108	8	540	6
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.				

Table 1. North Field Night Aircraft Departure SEL Noise Measurements
Total Aircraft Departures = 60

Second Quarter 2020 (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	2	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	2
3	19	1	0.0	0.2%	0	0.0	0.0%	0	0.0	0.0%	20
4	16	25	0.3	4.4%	5	0.1	0.9%	4	0.0	0.7%	50
5	18	14	0.2	2.5%	5	0.1	0.9%	7	0.1	1.2%	44
6	13	4	0.0	0.7%	9	0.1	1.6%	3	0.0	0.5%	29
7	9	5	0.1	0.9%	6	0.1	1.1%	1	0.0	0.2%	21
8	10	6	0.1	1.1%	1	0.0	0.2%	0	0.0	0.0%	17
9	3	2	0.0	0.4%	0	0.0	0.0%	0	0.0	0.0%	5
10	5	3	0.0	0.5%	0	0.0	0.0%	0	0.0	0.0%	8
11	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
12	1	1	0.0	0.2%	0	0.0	0.0%	0	0.0	0.0%	2
13	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
14	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
All NMTs	96	61	1	0	26	0	0	15	0	0	198

Table 2. Aircraft SEL Noise Measurements in Alameda - Total Aircraft Departures = 55

Second Quarter 2020 (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	19	1	0.0	0.4%	0	0.0	0.0%	0	0.0	0.0%	20
4	16	25	0.3	10.5%	5	0.1	2.1%	4	0.0	1.7%	50
5	18	14	0.2	5.9%	5	0.1	2.1%	7	0.1	2.9%	44
6	13	4	0.0	1.7%	9	0.1	3.8%	3	0.0	1.3%	29
7	9	5	0.1	2.1%	6	0.1	2.5%	1	0.0	0.4%	21
8	10	6	0.1	2.5%	1	0.0	0.4%	0	0.0	0.0%	17
Total	85	55	0.6		26	0.3		15	0.2		181

Table 3. Aircraft SEL Noise Measurements in San Leandro - Total Aircraft Departures = 5

Second Quarter 2020 (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	2	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	2
9	3	2	0.0	0.6%	0	0.0	0.0%	0	0.0	0.0%	5
10	5	3	0.0	0.9%	0	0.0	0.0%	0	0.0	0.0%	8
11	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
12	1	1	0.0	0.3%	0	0.0	0.0%	0	0.0	0.0%	2
13	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
14	0	0	0.0	0.0%	0	0.0	0.0%	0	0.0	0.0%	0
Total	11	6	0.1		0	0.0		0	0.0		17

Rolling Take-off Night Departure Procedure (1:00 to 5:00 AM)
Second 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
Second Quarter 2020 [B]					
	Total [X]	Est. Avg. Monthly [X/3]			
B763	198	66	18	66	75
DC10/MD10	63	21	9	65	73
MD11	183	61	57	66	75
A306	96	32	11	66	74
B757	157	52	16	66	74
B77L	120	40	4	65	73
Difference [A-B]					
DC10/MD10		-66	-23	-4	-5
MD11		29	44	-4	-4
A306		-35	-10	-1	-3

(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)
Second Quarter 2019, 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
Second Quarter 2019 [B]					
	Total [X]	Est. Avg. Monthly [X/3]			
B763	129	43	5	64	73
DC10/MD10	54	18	6	66	75
MD11	254	85	62	65	74
A306	113	38	12	65	73
B757	178	59	16	65	72
B77L	85	28	2	63	70
Difference [A-B]					
DC10/MD10		-69	-26	-3	-8
MD11		53	49	-5	-10
A306		-29	-9	-2	-12

(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)

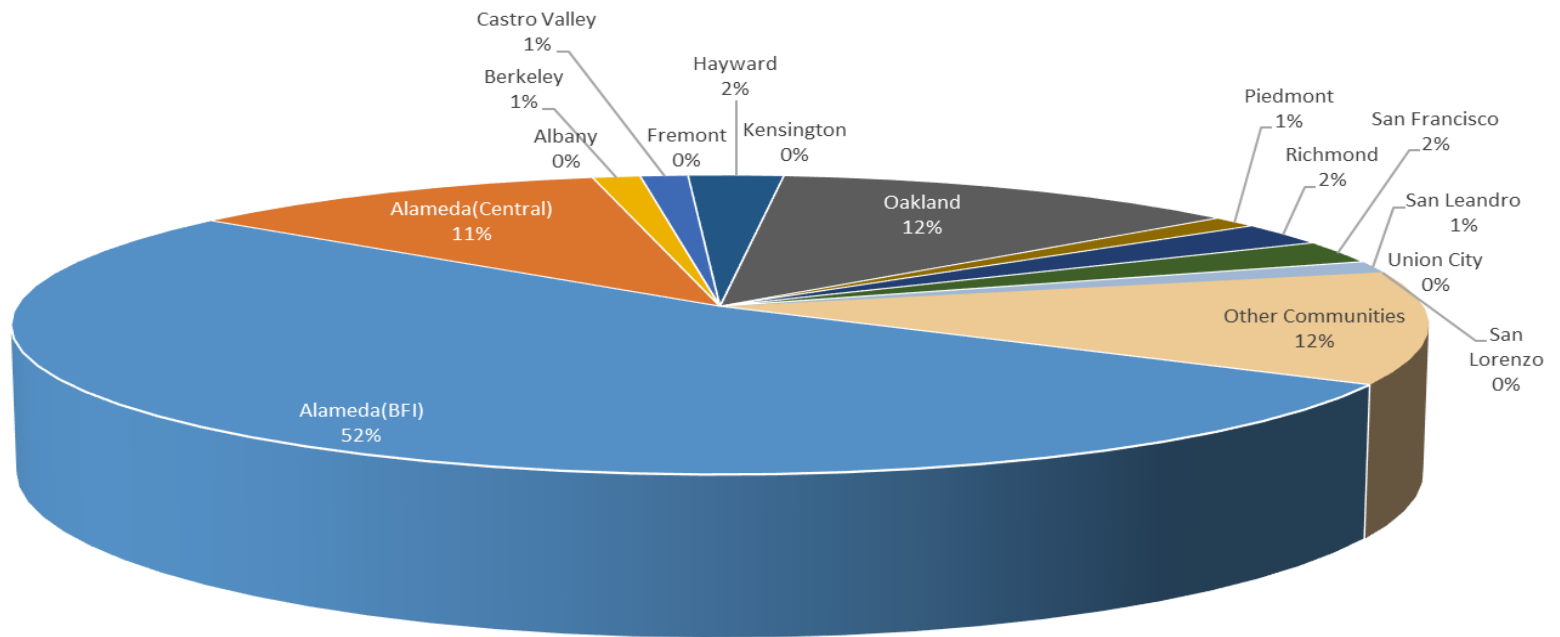
**Oakland International Airport
Noise Complaint Summary
April 2020**

Community	Callers	Complaints
Alameda(BFI)	43	2304
Alameda(Central)	9	43
Albany	0	0
Berkeley	1	1
Castro Valley	1	71
Fremont	0	0
Hayw ard	2	7
Kensington	0	0
Oakland	10	1582
Piedmont	1	1
Richmond	2	749
San Francisco	2	3
San Leandro	1	1
Union City	0	0
San Lorenzo	0	0
Other Communities	10	506
Total	82	5268
Complaints by Type		
Website	0	
E-mail	1969	
Phone	0	
View point App	3299	
Complaints by Time of Day		
Day (0700 - 1900)	2835	
Evening (1900 - 2200)	740	
Night (2200 - 0700)	1693	
Complaints by Type of Operation		
Arrivals	1798	
Departures	3037	
Over-flights	292	
Touch & Go	141	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	261	
Helicopter	73	
Jet	4040	
Military	0	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	213	
Propeller	456	
Turbo-prop	225	

Number of Callers

April 2020

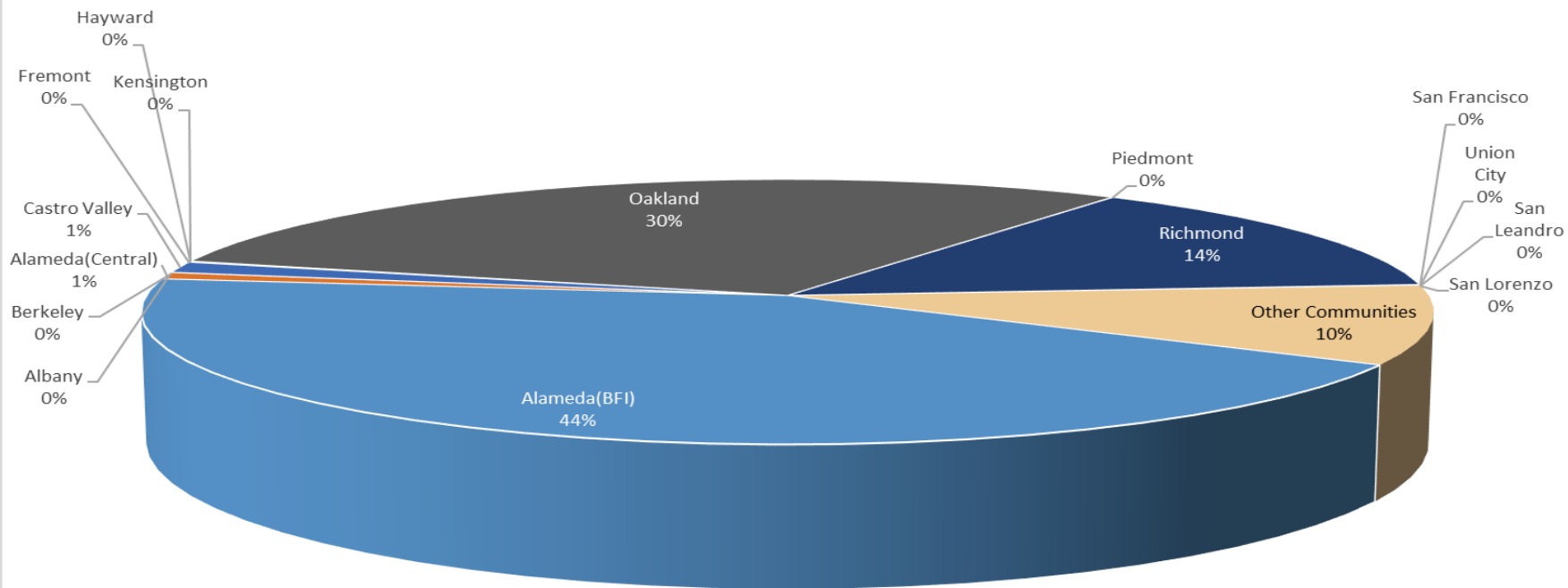
Noise Complaints Summary by Number of Callers



Number of Complaints

April 2020

Noise Complaints Summary by Number of Complaints



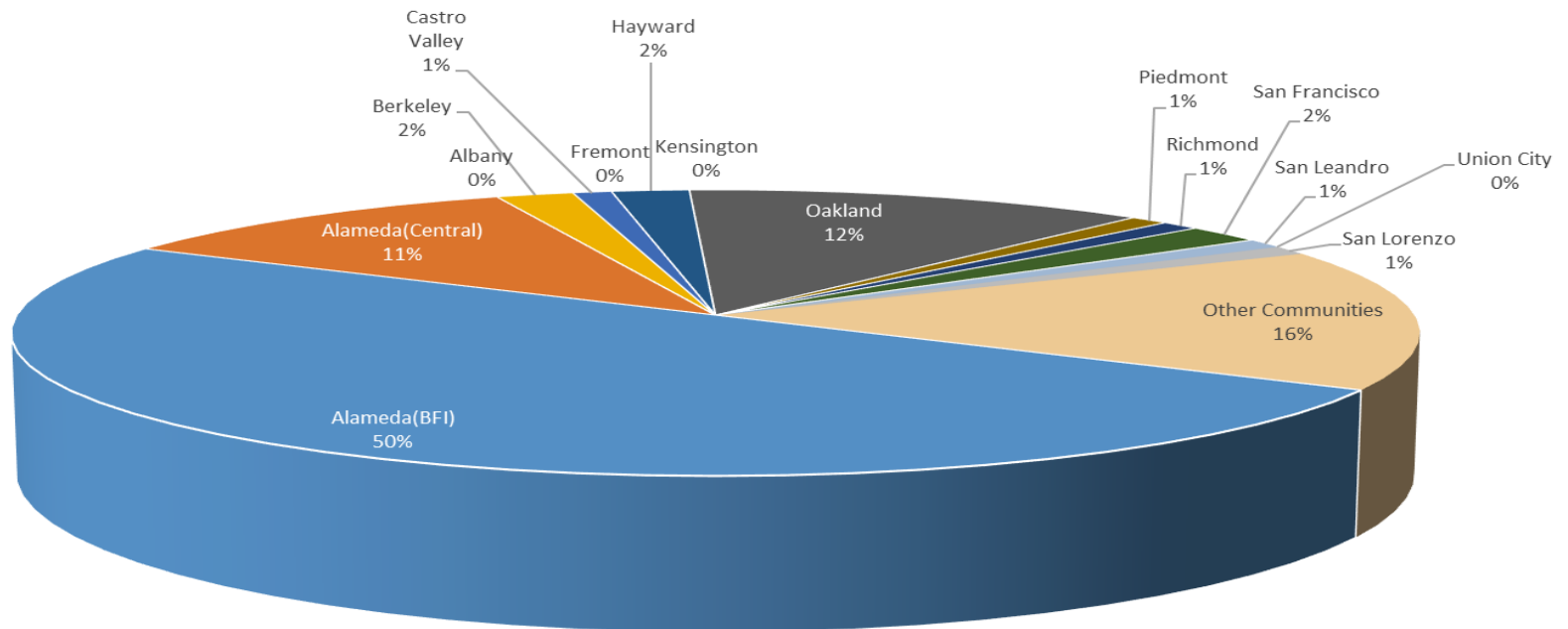
**Oakland International Airport
Noise Complaint Summary
May 2020**

Community	Callers	Complaints
Alameda(BFI)	50	3679
Alameda(Central)	11	38
Albany	0	0
Berkeley	2	3
Castro Valley	1	32
Fremont	0	0
Hayw ard	2	12
Kensington	0	0
Oakland	12	1527
Piedmont	1	84
Richmond	1	545
San Francisco	2	5
San Leandro	1	2
Union City	0	0
San Lorenzo	1	14
Other Communities	16	523
Total	100	6464
Complaints by Type		
Website	0	
E-mail	1654	
Phone	0	
View point App	4810	
Complaints by Time of Day		
Day (0700 - 1900)	4124	
Evening (1900 - 2200)	1246	
Night (2200 - 0700)	1094	
Complaints by Type of Operation		
Arrivals	1919	
Departures	3932	
Over-flights	326	
Touch & Go	287	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	666	
Helicopter	119	
Jet	4497	
Military	0	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	194	
Propeller	779	
Turbo-prop	209	

Number of Callers

May 2020

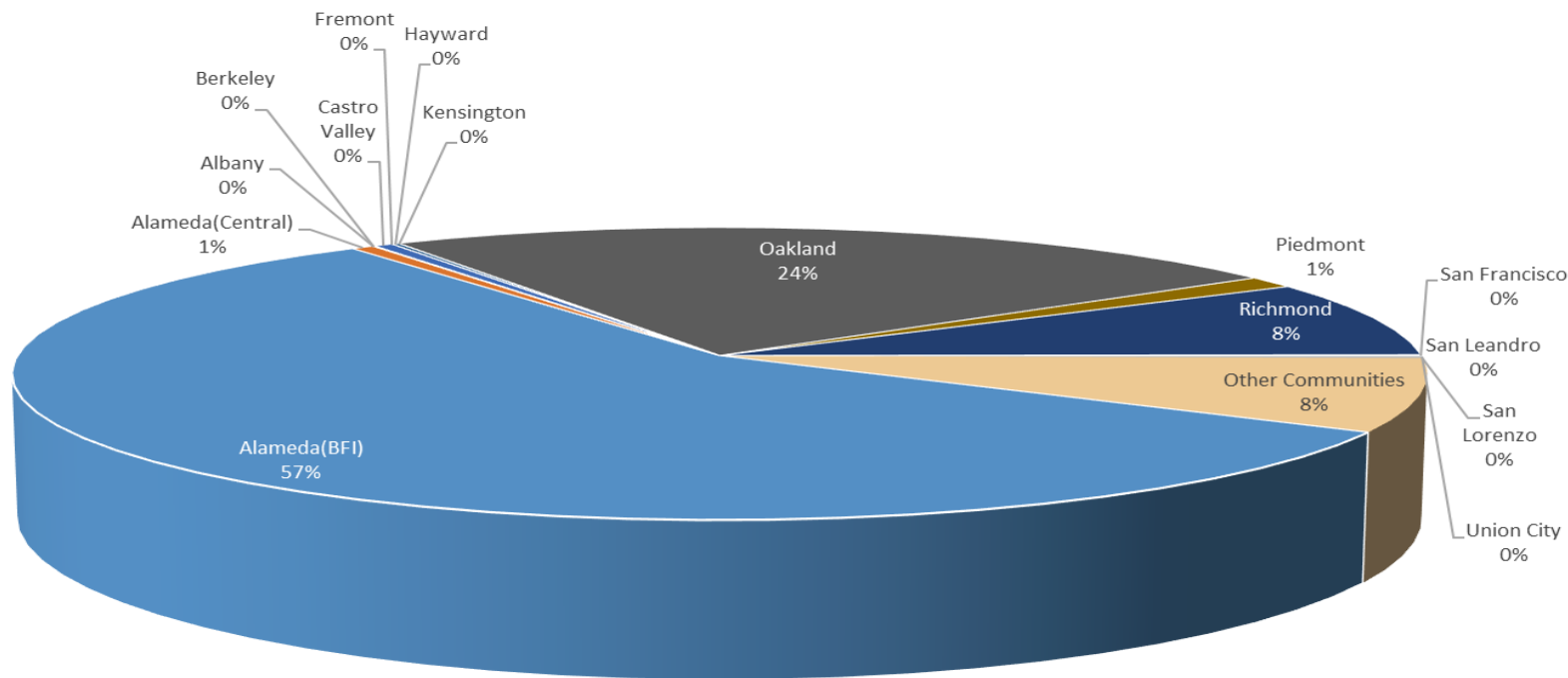
Noise Complaints Summary by Number of Callers



Number of Complaints

May 2020

Noise Complaints Summary by Number of Complaints



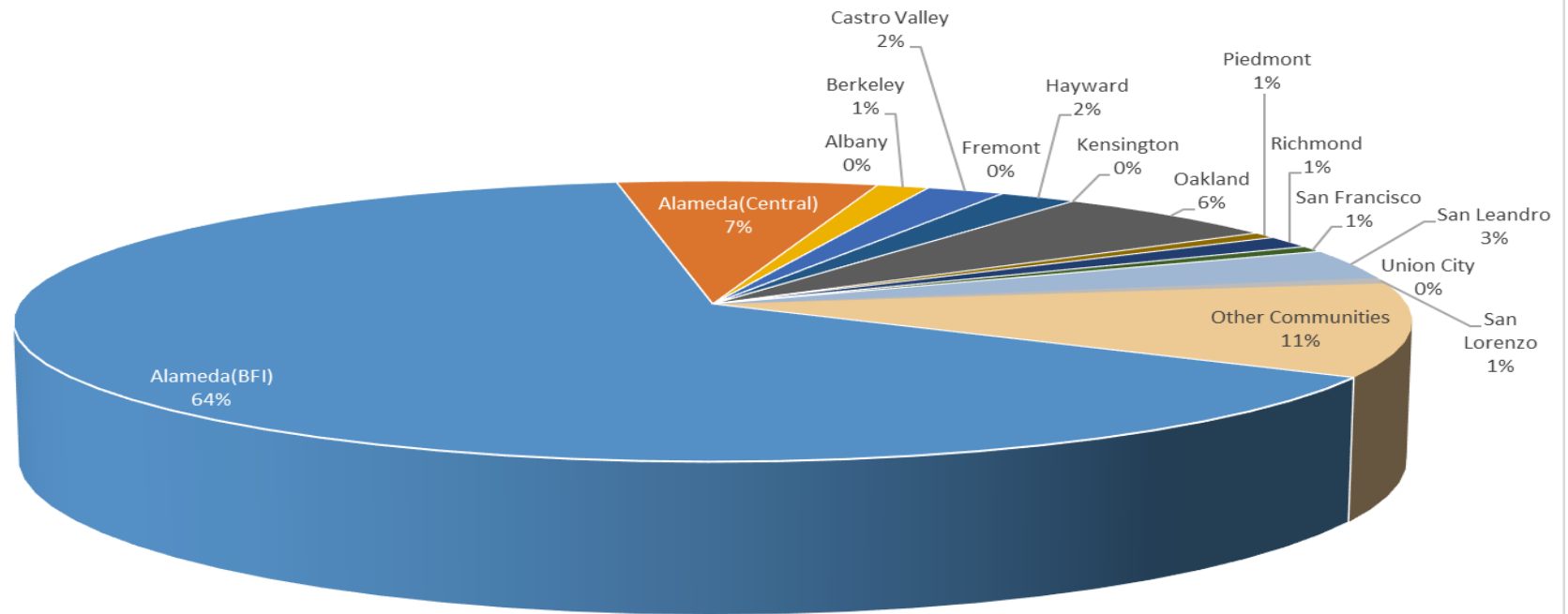
**Oakland International Airport
Noise Complaint Summary
June 2020**

Community	Callers	Complaints
Alameda(BFI)	95	2868
Alameda(Central)	10	68
Albany	0	0
Berkeley	2	2
Castro Valley	3	29
Fremont	0	0
Hayw ard	3	17
Kensington	0	0
Oakland	9	2145
Piedmont	1	14
Richmond	2	829
San Francisco	1	3
San Leandro	5	15
Union City	0	0
San Lorenzo	1	32
Other Communities	16	958
Total	148	6980
Complaints by Type		
Website	0	
E-mail	2920	
Phone	0	
View point App	4060	
Complaints by Time of Day		
Day (0700 - 1900)	3744	
Evening (1900 - 2200)	1622	
Night (2200 - 0700)	1614	
Complaints by Type of Operation		
Arrivals	2710	
Departures	3522	
Over-flights	414	
Touch & Go	334	
Not Linked to an Operation	0	
Complaints by Type of Aircraft		
Business Jet	425	
Helicopter	46	
Jet	5263	
Military	1	
Not Reported (not linked to an aircraft)	0	
Other (Type information not available)	205	
Propeller	864	
Turbo-prop	176	

Number of Callers

June 2020

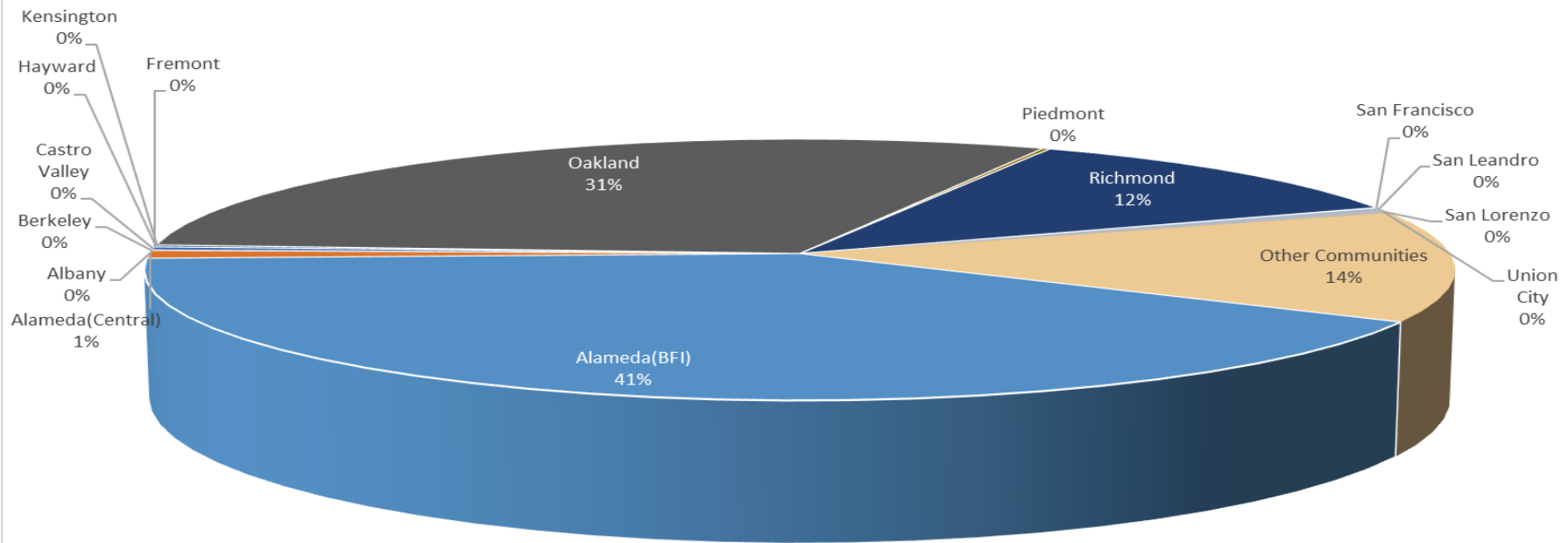
Noise Complaints Summary by Number of Callers

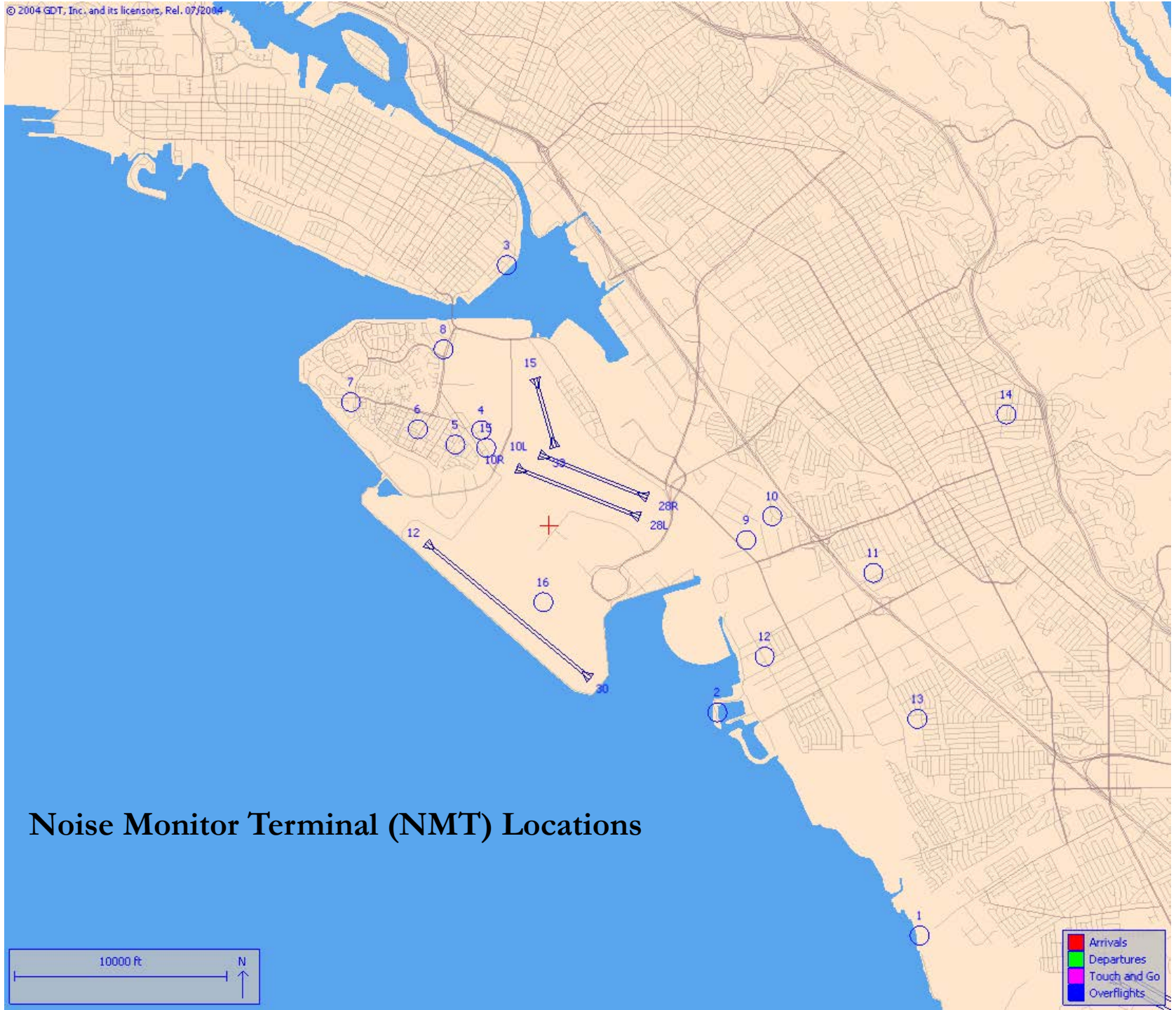


Number of Complaints

June 2020

Noise Complaints Summary by Number of Complaints





Noise Monitor Terminal (NMT) Locations