QUARTERLY NOISE REPORT

For:
California Department of Transportation

4th Quarter 2015

October 1 – December 31, 2015

SAN DIEGO
INTERNATIONAL AIRPORT
LET'S GO.

Airport Noise Mitigation

July 20, 2016

SAN DIEGO INTERNATIONAL AIRPORT
LET'S GO.

QUARTERLY NOISE REPORT
For the Period
October 1 through December 31, 2015

The California Department of Transportation, Division of Aeronautics, granted a Variance from the requirements of Section 5012, Chapter 2.5, Subchapter 6, Title 21, of the California Administrative Code to the San Diego County Regional Airport Authority for the operation of San Diego International Airport on May 8th, 2012.

This Quarterly Report for the 4th Quarter of 2015 was prepared by Airport Noise Mitigation at San Diego International Airport, in accordance with the Airport Noise Standards, State of California.

Keith Wilschetz
Director, Airport Planning & Noise Mitigation

Thella F. Bowens
President / CEO

TABLE OF CONTENTS

Summary of Statistical Information for the California Department of Transportation

1. Size of Noise Impact Area as defined in the Noise Standards (California Code of Regulations, Title 21, Chapter 2.5, Subchapter 6):
Noise Impact Area = 0.628 sq. miles; Military Noise Impact Area = 0.113 sq. miles

2. Estimated number of dwelling units included in the Noise Impact Area as defined in the Noise Standards:
8,550* (QHP Insulated = 3,360)

3. Estimated number of people residing within the Noise Impact Area as defined in the Noise Standards:
16,519* (QHP Insulated = 8,400)

4. Identification of the aircraft type having the highest takeoff noise level operating at SDIA, together with the estimated number of operations by this aircraft type during the calendar quarter reporting period:
McDonnell-Douglas MD-80 Series (Stage 3): 50

5. Total number of aircraft operations during the calendar quarter:
47,492

6. Number of Air Carrier operations by aircraft certified under Federal Aviation Regulations (FAR) Part 36:
41,657

7. Percentage of Air Carrier operations by aircraft certificated under FAR Part 36, Stage III:
100%

8. Estimated number of operations by Commuter aircraft during the calendar quarter:
3,341

9. Estimated number of operations by General Aviation aircraft during the calendar quarter:
2,287

10. Estimated number of operations by Military aircraft during the calendar quarter:
207

Form DOA 617, 10/89

* Population and dwelling unit calculations are based upon 2010 Census Block Boundary Data, which is an update to the calculations done since the publication of the 4th Quarter 2014 Report that are based upon 2000 Census Tract Data.

Aircraft Noise Measurements

Using data generated from the Airport Noise and Operations Monitoring System (ANOMS) and Geographic Information System (GIS), Airport Noise Mitigation determined that the Noise Impact Area (N.I.A.) and the Federal Military Impact Area (M.I.A.) within the 65 dB Community Noise Equivalent Level (CNEL) contour for the period between January 1, 2015 to December 31, 2015, to be 0.628 square miles (401.9 acres) and 0.113 square miles (72.3 acres), respectively. As compared to the period between January 1, 2014 to December 31, 2014, the Noise Impact Area increased by 0.142 square miles and the Federal Military Noise Impact Area decreased by 0.083 square miles.

Table 1

Change in N.I.A. and M.I.A.

January 1, 2015 to December 31, 2015	January 1, 2014 to December 31, 2014	Change
0.628	0.486	0.142
0.113	0.196	-0.083

A summary of the quarterly and annual CNEL data is shown on the following page within Table 2. Appendix A: Aircraft Noise Monitoring System contains Remote Monitoring Terminals (RMTs) thresholds and Daily/Monthly CNEL Logs.

The contours were prepared using Harris Miller Miller & Hanson Inc.'s (HMMH) RealContours software. The N.I.A. & M.I.A. were determined using GIS analysis. Use of GIS technology allowed direct counting of individual parcels within the N.I.A. The modeling methodology fulfills the requirements of the State of California, Title 21, California Noise Standards. A review of measured and modeled noise levels indicate good agreement between several key measurement locations.

Additionally, the 65 dB Community Noise Equivalent Level (CNEL) contours for the period between January 1, 2015 to December 31, 2015 compared to the period between January 1, 2014 to December 31, 2015 accompanies this report as an attachment.

Table 2

Quarterly and Annual CNEL Data

RMT #	Annual CNEL (dB)[1]	Quarter CNEL (dB)[2]
1	70.7	71.1
2	66.2	66.5
3	62.2	*
4	63.5	*
6	67.1	68.0
7	75.1	74.8
9	67.5	67.9
10	63.0	63.6
11	71.4	71.2
12	61.6	61.9
13	63.9	63.4
14	65.2	65.3
16	64.4	65.1
17	64.8	65.2
18	60.3	61.7
19	61.6	62.7
20	61.5	61.5
21	58.2	58.3
22	64.3	64.3
23	63.1	63.6
24	64.0	64.3
25	61.5	62.5
26	63.2	63.8

[1] = For the period January 1, 2015 through December 31, 2015

[2] = For the period October 1, 2015 through December 31, 2015

Note 1: RMTs #5, #8 and #15 are no longer operational since the noise impact boundary has decreased in size.

Note 2: RMTs #3 and 4 were offline during this time period due to mechanical, electrical and/or communication issues.

Aircraft Operations

The following table contains statistics of aircraft operations based upon the Federal Aviation Administration (FAA) Air Traffic Control Tower (ATCT) counts at San Diego International Airport (SAN).

Table 3

SAN ATCT Counts

Operations	4th Quarter 2015	4th Quarter 2014	Increase / Decrease	Percent Change
Air Carrier	41,657	39,446	2,211	5.61%
Air Taxi	3,341	6,452	-3,111	-48.22%
General Aviation	2,287	2,270	17	0.75%
Military	207	185	22	11.89%
Total	**47,492**	**48,353**	**-861**	**-1.78%**

For questions on how the FAA ATCT conducts their air traffic counts, please visit the following website: http://www.faa.gov/documentLibrary/media/Order/FAC.pdf and see "Chapter 9".

.

Quarterly Operations Survey Report

The Quarterly Operations Survey Report for San Diego International Airport (SDIA) encompasses the 4th Quarter of 2015. The data used to compile this report was gathered during 24-hour periods on November 10-12, 2015.

Table 5, Quarterly Operations Survey - Arrivals, identifies the loudest 25% of the aircraft arriving at SDIA, as measured at Remote Monitoring Terminal (RMT) #1, which is located approximately one (1.0) mile from the arrival end of Runway 27. During the 4th Quarter 2015 Operations Survey, an average of 233 daily air carrier arrival operations was conducted. Therefore, the loudest 25% of these arrivals totaled approximately 58. These commercial service jet aircraft are listed by Aircraft Type, Single Event Noise Exposure Level (SENEL), Airport Origin, Flight Number and Date/Time.

Table 6, Quarterly Operations Survey - Departures, identifies the loudest 25% of the aircraft departing from SDIA, as measured at Remote Monitoring Terminal (RMT) #7, which is located approximately one-half (0.5) mile from the departure end of Runway 27. During the 4th Quarter 2015 Operations Survey, an average of 233 daily air carrier departure operations was conducted. Therefore, the loudest 25% of these departures totaled approximately 58. These commercial service jet aircraft are listed by Aircraft Type, Single Event Noise Exposure Level (SENEL), Airport Destination, Flight Number and Date/Time.

The average Single Event Noise Exposure Level (SENEL) of the loudest 25% of the 4th Quarter 2015 Operations Survey is as follows:

Table 4

Single Event Noise Exposure Level (SENEL) Comparison

	November 10-12, 2015	November 11-13, 2014	Change (dB)
Departures	99.0	98.7	0.3
Arrivals	95.1	93.5	1.6

Note: The calculation methodology has changed since the publication of the 4th Quarter 2014 Report. The new calculation methodology identifies the loudest 25% of aircraft without averaging the noise levels from the same flight numbers within that time period.

Table 7, Air Carrier Operations Mix by Time of Day and Runway Use, represents the 467 daily operations, which is greater than the 456 daily operations recorded during the 4th Quarter of 2014.

Table 5

Quarterly Operations Survey – Arrivals (RMT #1 from November 10-12, 2015)

* = Missed Approach

Aircraft Type	SENEL (dB)	Arriving From	Flight Number	Date and Time
MD10	101.6	MEM	FDX1422	11/10/2015 5:48 AM
MD10	97.7	MEM	FDX1422	11/12/2015 5:40 AM
B772	97.4	EGLL	BAW44N	11/10/2015 4:42 PM
B752	97.1	DFW	AAL2472	11/10/2015 11:46 AM
B763	96.8	IND	FDX3713	11/10/2015 5:32 PM
B763	96.7	SDF	UPS922	11/10/2015 5:17 AM
A306	96.5	MEM	FDX906	11/10/2015 5:39 PM
B772	96.5	EGLL	BAW44N	11/11/2015 4:44 PM
B763	96.4	IND	FDX3713	11/11/2015 5:22 PM
B763	96.2	SDF	UPS2922	11/10/2015 5:46 PM
B752	96.1	DFW	AAL1159	11/11/2015 4:12 PM
B753	96.0	ATL	DAL2367	11/10/2015 10:56 PM
B752	95.9	DFW	AAL1159	11/10/2015 2:57 PM
B763	95.9	SDF	UPS922	11/12/2015 5:46 AM
B772	95.9	EGLL	BAW44N	11/12/2015 4:56 PM
B763	95.6	IND	FDX1754	11/10/2015 5:42 AM
B734	95.5	PDX	ASA582	11/10/2015 8:53 AM
B752	95.5	DFW	AAL277	11/10/2015 9:54 AM
B734	95.5	SEA	ASA494	11/12/2015 11:21 AM
A306	95.4	OAK	FDX1167	11/10/2015 8:06 AM
B752	95.2	DFW	AAL1194	11/11/2015 5:27 PM
B763	95.1	IND	FDX1754	11/11/2015 6:09 AM
B739	95.1	MMSD	ASA233	11/11/2015 3:56 PM
B752	95.0	DFW	AAL1194	11/10/2015 4:45 PM
B753	95.0	ATL	DAL2267	11/12/2015 12:48 PM
B733	94.9	SFO	SWA1281	11/10/2015 10:29 AM
B738	94.9	BWI	SWA2888	11/10/2015 1:49 PM
B733	94.9	LAS	SWA1866	11/10/2015 4:10 PM
B763	94.9	SDF	UPS922	11/11/2015 5:01 AM
B738	94.8	ORD	AAL2184	11/11/2015 4:26 PM
A306	94.8	MEM	FDX906	11/11/2015 5:43 PM
B738*	94.7	MCI	SWA996	11/10/2015 12:28 PM
B734*	94.7	SEA	ASA486	11/12/2015 6:28 PM
B733	94.6	SJC	SWA1194	11/10/2015 10:42 AM
B753	94.6	ATL	DAL2267	11/11/2015 12:56 PM
B738	94.6	BWI	SWA2045	11/11/2015 5:15 PM
B763	94.6	SDF	UPS2922	11/12/2015 5:52 PM
B762	94.5	PHX	GTI505	11/10/2015 8:34 AM
B752	94.5	MEM	FDX370	11/10/2015 6:04 PM

Table 5 Continued

Quarterly Operations Survey – Arrivals (RMT #1 from November 10-12, 2015)

Aircraft Type	SENEL (dB)	Arriving From	Flight Number	Date and Time
B733	94.5	OAK	SWA1459	11/11/2015 4:46 PM
B739	94.4	DTW	DAL833	11/10/2015 10:16 AM
B733	94.4	SJC	SWA2034	11/10/2015 6:01 PM
B733	94.4	SFO	SWA2259	11/11/2015 6:46 PM
B753	94.4	ATL	DAL2367	11/11/2015 11:02 PM
B752	94.4	DFW	AAL2283	11/12/2015 7:39 PM
B738	94.3	ORD	AAL1296	11/10/2015 2:24 PM
B763	94.3	IND	FDX1754	11/12/2015 5:43 AM
B752	94.3	JFK	DAL421	11/12/2015 8:24 PM
B733	94.0	OAK	SWA3071	11/10/2015 7:40 AM
B752	94.0	OAK	FDX1889	11/11/2015 4:05 AM
B737	93.9	LAS	SWA2421	11/10/2015 10:32 AM
B733	93.9	SEA	SWA1904	11/10/2015 2:16 PM
B738	93.9	ORD	AAL1151	11/11/2015 8:04 PM
B752	93.9	DFW	AAL1194	11/12/2015 4:58 PM
B738	93.9	PHOG	ASA806	11/12/2015 7:46 PM
B733	93.8	TUS	SWA2697	11/10/2015 6:34 AM
E175	93.8	LAX	CPZ5708	11/10/2015 1:20 PM
B738	93.8	MDW	SWA2056	11/10/2015 2:35 PM
B738	93.8	MDW	SWA2056	11/10/2015 2:35 PM

Table 6

Quarterly Operations Survey – Departures (RMT #7 from November 10-12, 2015)

Aircraft Type	SENEL (dB)	Departing To	Flight Number	Date and Time
T39	103.3	TUS	SBR39	11/10/2015 12:59 PM
MD10	101.4	MEM	FDX821	11/11/2015 7:57 AM
B772	101.4	EGLL	BAW72A	11/11/2015 7:41 PM
B772	101.4	EGLL	BAW72A	11/12/2015 7:52 PM
B772	101.1	EGLL	BAW72A	11/10/2015 7:48 PM
B739	101.1	ATL	DAL1792	11/10/2015 10:37 PM
A332	101.1	PHNL	HAL15	11/11/2015 10:47 AM
A321	100.7	DFW	AAL2205	11/11/2015 6:42 AM
B739	100.7	ORD	UAL307	11/11/2015 6:54 AM
B739	100.7	ATL	DAL1792	11/11/2015 10:44 PM
A321	100.4	CLT	AAL579	11/11/2015 10:46 PM
A321	100.2	CLT	AAL579	11/12/2015 10:57 PM
B738	99.9	JFK	DAL2404	11/11/2015 6:34 AM
B739	99.8	IAD	UAL546	11/11/2015 8:14 AM
A321	99.8	CLT	AAL487	11/11/2015 11:46 AM
B738	99.7	PHLI	ASA857	11/10/2015 10:19 AM
FA50	99.7	TEB	-	11/10/2015 11:28 AM
B738	99.6	PHOG	ASA829	11/11/2015 7:55 AM
A321	99.6	PHL	AAL458	11/11/2015 8:47 AM
B739	99.6	ATL	DAL1792	11/12/2015 10:43 PM
A321	99.5	CLT	AAL487	11/10/2015 11:41 AM
A332	99.4	PHNL	HAL15	11/10/2015 10:49 AM
B739	99.4	EWR	UAL1610	11/10/2015 10:04 PM
B739	99.1	DTW	DAL833	11/11/2015 11:43 AM
B739	99.1	EWR	UAL1610	11/12/2015 10:05 PM
B739	99.0	ATL	DAL1692	11/10/2015 11:20 AM
B739	99.0	ORD	UAL240	11/10/2015 10:41 PM
MD10	98.9	MEM	FDX821	11/10/2015 7:40 AM
A321	98.8	CLT	AAL579	11/10/2015 11:16 PM
B738	98.8	DTW	DAL2071	11/11/2015 7:13 AM
A321	98.7	DFW	AAL2491	11/11/2015 9:32 AM
B739	98.7	EWR	UAL1610	11/11/2015 10:02 PM
B738	98.6	JFK	AAL94	11/11/2015 7:51 AM
B739	98.6	ATL	DAL1692	11/11/2015 11:17 AM
A332	98.6	PHNL	HAL15	11/12/2015 10:46 AM
A321	98.6	CLT	AAL487	11/12/2015 11:27 AM
B738	98.5	PHNL	ASA895	11/11/2015 11:26 AM
B738	98.3	JFK	DAL2404	11/12/2015 6:32 AM
B738	98.2	PHOG	ASA829	11/10/2015 7:35 AM

Table 6 Continued

Quarterly Operations Survey – Departures (RMT #7 from November 10-12, 2015)

Aircraft Type	SENEL (dB)	Departing To	Flight Number	Date and Time
B734	98.2	SEA	ASA485	11/12/2015 8:12 PM
B738	98.1	EWR	UAL1964	11/11/2015 6:32 AM
B739	98.0	ORD	UAL240	11/11/2015 10:41 PM
A306	97.9	MEM	FDX1222	11/10/2015 7:31 PM
B738	97.9	MIA	AAL1042	11/10/2015 10:24 PM
B739	97.9	IAD	UAL546	11/12/2015 8:11 AM
B739	97.8	ORD	UAL307	11/10/2015 7:06 AM
B739	97.8	IAD	UAL238	11/10/2015 10:35 PM
B739	97.8	IAH	UAL1621	11/11/2015 7:15 AM
B739	97.8	ATL	DAL1692	11/12/2015 11:25 AM
B739	97.7	IAH	UAL1621	11/12/2015 7:12 AM
B738	97.6	BOS	ASA798	11/11/2015 8:58 AM
B738	97.5	AUS	SWA2918	11/11/2015 6:51 AM
B738	97.5	MIA	AAL1042	11/11/2015 10:17 PM
B738	97.5	MIA	AAL1042	11/12/2015 10:24 PM
B738	97.4	MDW	SWA2855	11/11/2015 6:49 AM
B753	97.4	ATL	DAL347	11/11/2015 7:46 AM
B739	97.4	SEA	ASA493	11/11/2015 8:12 AM
B738	97.4	ORD	AAL2184	11/11/2015 6:11 PM
B738	97.4	ORD	AAL2184	11/11/2015 6:11 PM

Table 7

Air Carrier Operations Mix by Time of Day and Runway Use

These numbers are the averages for operations for November 10-12, 2015

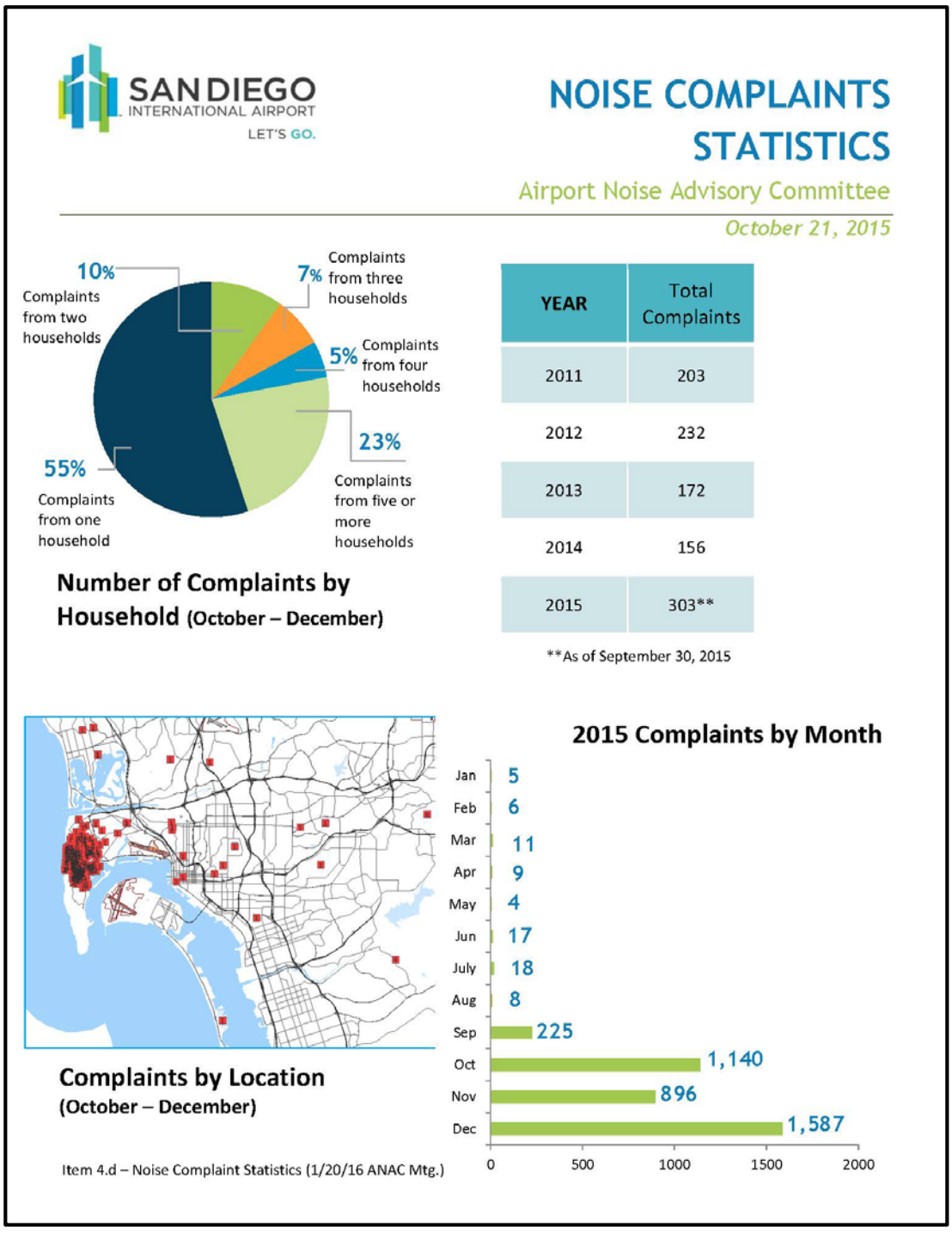
Aircraft Type	Runway 27						Runway 09						Total
	Arrivals			Departures			Arrivals			Departures			
	700 -- 1859	1900 -- 2159	2200 -- 659	700 -- 1859	1900 -- 2159	2200 -- 659	700 -- 1859	1900 -- 2159	2200 -- 659	700 -- 1859	1900 -- 2159	2200 -- 659	
A306	1				1								**3**
A319	7	1	1	8	1								**18**
A320+	26	7	3	27	5	4							**73**
A330+			1	1									**2**
B737+	96	24	17	105	16	16							**274**
B757+	5	3	2	7	1	1							**19**
B767+	3		2	2	2	1							**10**
B777+	1				1								**2**
B787+	1			1									**2**
DH8D	2			2									**4**
E170/175/190	14	3	2	15	2	2							**39**
MD10			1	1									**2**
MD90	1	1		2		1							**5**
RJ+	6	1		5	2	1							**15**
Total	**164**	**40**	**29**	**175**	**33**	**26**	**0**	**0**	**0**	**0**	**0**	**0**	**467**

Note 1: The use of a "+" sign after an aircraft model designation means "and all succeeding series aircraft." The designation of "Q" signifies a hush kitted aircraft. RJ+ = All forms/types of Regional Jets operated as "commercial service" flights; Includes CRJ2/7/9, E120/35/40/45

Aircraft Noise Complaints

During the 4th Quarter of 2015, Airport Noise Mitigation received a total of 3,623 complaints. Where possible, each complaint is correlated with a specific flight and examined for its validity. Those flights that indicate a possible violation of the Airport Use Regulations, Time of Day Restrictions, are investigated and appropriate enforcement action is taken.

The following figure depicts the residential vicinity in relation to the airport and the number of complaints received during the 4th Quarter of 2015. The 3,623 complaints recorded during the 4th Quarter of 2015 reflects an increase of 3,592 from the 31 recorded during the 4th Quarter of 2014.



Enforcement Actions

The Airport Use Regulations at San Diego International Airport establish Time of Day Restrictions for all operators. Airport Noise Mitigation monitors operator compliance with these Airport Use Regulations. Any infraction is reported to the Curfew Violation Review Panel (Panel), which is a separate body. The Panel examines data and documentation collected regarding alleged violations of the Time of Day (Noise Curfew) Restrictions, and makes recommendations to the Director, Airport Noise Mitigation, for the disposition of incidents.

The following figure is a summary of 4th Quarter of 2015 Final Enforcement Actions. The 19 curfew violations recorded during the 4th Quarter of 2015 reflects an increase of 9 from the 10 curfew violations recorded during the 4th Quarter of 2014.

SAN DIEGO INTERNATIONAL AIRPORT
LET'S GO.

CURFEW VIOLATION REVIEW PANEL
Airport Noise Advisory Committee

January 20, 2016

Curfew Violations for 4th Quarter 2016 (October 1 - December 30)

Date	Time	RWY	Operator / Flight ID	Aircraft	Amount Fined
11/18/2015	2335	27	Surf Airlines 849	Pilatus PC-12/47E (PC12)	Pot. $2,000 (CVRP 2/3/16)
11/23/2015	2358	27	United Airlines 240	Boeing 737-824 (B738)	Pot. $2,000 (CVRP 2/3/16)
11/25/2015	2344	27	SkyWest Airlines 3472	Bombardier CL-600-2C10 (CRJ7)	Pot. $6,000 (CVRP 2/3/16)
11/29/2015	0109	27	Sun Country Airlines 8662	Boeing 737-8BK (B738)	Pot. $2,000 (CVRP 2/3/16)
12/12/2015	0253	27	Sunset Aviation 22	Bombardier Global Express (GLEX)	Pot. $2,000 (CVRP 2/3/16)
12/21/2015	2330	27	American Airlines 579	Airbus A321-231 (A321)	Pot. $4,000 (CVRP 2/3/16)
12/23/2015	0037	27	Delta Air Lines 2331	Boeing 767-332 (B763)	Pot. $10,000 (CVRP 2/3/16)
12/24/2015	0117	27	Delta Air Lines 1635	Airbus A320-212 (A320)	Pot. $10,000 (CVRP 2/3/16)
12/26/2015	2332	27	American Airlines 579	Airbus A321-211 (A321)	Pot. $12,000 (CVRP 2/3/16)
12/26/2015	2354	27	American Airlines 1042	Airbus A321-231 (A321)	Pot. $20,000 (CVRP 2/3/16)
12/26/2015	2358	09	Delta Air Lines 2331	Boeing 767-332 (B763)	Pot. $10,000 (CVRP 2/3/16)
12/27/2015	0019	27	Delta Air Lines 1635	Airbus A320-211 (A320)	Pot. $10,000 (CVRP 2/3/16)
12/28/2015	2330	27	United Airlines 238	Boeing 737-924ER (B739)	Pot. $6,000 (CVRP 2/3/16)
12/29/2015	2330	27	jetBlue Airways 20	Airbus A320-232 (A320)	Pot. $6,000 (CVRP 2/3/16)

Item 4.d – Curfew Violation Review Panel Update (1/20/16 ANAC Mtg.)

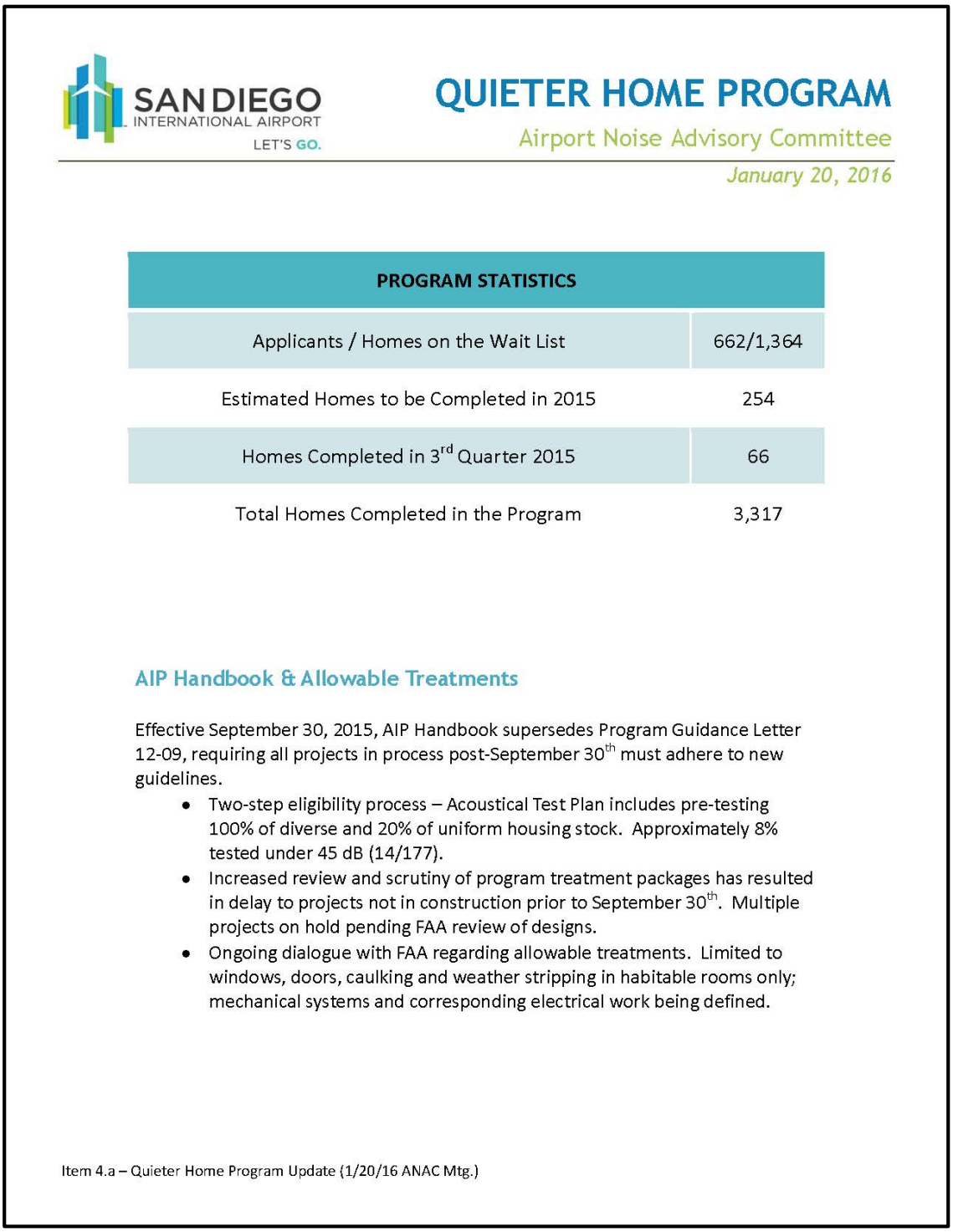
12/29/2015	2334	27	United Airlines 238	Boeing 737-924ER (B739)	Pot. $10,000 (CVRP 2/3/16)
12/29/2015	2344	27	NetJets 682	Cessna 560XL Citation XLS (C56X)	Pot. $2,000 (CVRP 2/3/16)
12/31/2015	2332	27	Global Jet Corp (N111GJ)	Cessna Citation 550 (C550)	Pot. $2,000 (CVRP 2/3/16)
1/2/16	2331	27	jetBlue Airways 20	Airbus A320-232 (A320)	Pot. $6,000 (CVRP 2/3/16)
1/3/16	2342	27	American Airlines 579	Airbus A321-211 (A321)	Pot. $4,000 (CVRP 2/3/16)

Year	Total Curfew Violations
2011	25
2012	36
2013	60
2014	47
2015	55
2016*	2

*Through 1/3/16

Residential Sound Insulation Program

Per the requirements of San Diego International Airport's Variance agreement, the following figure is provided to serve as an update on the Residential Sound Insulation Program (RSIP), also known as the Quieter Home Program (QHP), the Airport sponsored sound insulation program. To date, the Quieter Home Program has established eight eligibility boundaries. The eight boundaries are the Pilot/Phase 1A Boundary, the Phase 1B Boundary, the Phase 1C Boundary, the Supplemental Expansion Boundaries 1, 2, & 3, the 2014 NEM 68 dB CNEL boundary, and the 2014 NEM 67 dB CNEL boundary. Within each boundary there have been subsets, called phases and groups.



Airport Noise Advisory Committee (ANAC)

The following six pages contain a copy of the October 15, 2015 meeting minutes and roster of current members.

The information regarding the Airport Noise Advisory Committee (ANAC) can also be found on the Airport Authority's website: http://www.san.org/Airport-Projects/Airport-Noise-Mitigation#333293-airport-noise-advisory-committee.

SAN DIEGO INTERNATIONAL AIRPORT
LET'S GO.

DRAFT MINUTES

Airport Noise Advisory Committee

Date | time 10/21/2015 4:00 PM

Meeting called to order by: Jennifer Lilley

In Attendance

Name	Affiliation	In Attendance?
John Bennett	County of San Diego	No
Captain (Ret.) Jack Bewley	Airline Pilot (Retired)	Yes
Rob Cook	FAA Representative	Yes
Carl "Rick" Huenefeld	MCRD	Yes
Conrad Wear	San Diego City Council, District 2	Yes
Vacant	Downtown Community Planning Council	No
Vacant	Midway/Pacific Highway Community Planning Board	No
David Swarens	Greater Golden Hill Community Planning Committee	Yes
Deborah Watkins	Mission Beach Precise Planning Board	Yes
Paul Webb	Peninsula Community Planning Board	Yes
Tom Gawaronski	Ocean Beach Planning Board	Yes
Victoria White	City of San Diego	No*
Daniel Hazard	Congresswoman Susan Davis	Yes
Greg Murphy	County Supervisor Greg Cox	No*
Kirk Hanson	Community at Large	Yes
Chris Cole	Uptown Planners	Yes
Justin Cook	Acoustician	Yes
Grady Boyce	Airline Representative	Yes*
Authority Staff	Keith Wilschetz, Sjohnna Knack, Garret Hollarn, Craig Mayer	
Jennifer Lilley	Facilitator/Lilley Planning Group	

*Members contacted staff ahead of the meeting and are considered "excused"

1. Welcome and Introductions

Jennifer Lilley, Facilitator, began the meeting and asked that ANAC members introduce themselves. She stated that this is the quarterly Airport Noise Advisory Committee (ANAC) and that the FAA Metroplex is not in the Agenda since comment time has ended.

2. Approval of Minutes

A quorum was established, Ms. Lilley called to motion approval of July 15, 2015, Mr. Huenefeld approved the motion which was seconded by Mr. Cole. The Minutes were unanimously approved with no discussion.

3. Information Items

Airport Authority Update – Keith Wilschetz, Director of Airport Planning and Noise Mitigation, gave an airport update. He reported that operations in the airport are doing quite well and up 4.2 percent. Passenger enplanements are up 6.5 percent which is higher from last year.

The Rental Car Center (RCC) project at the north side of the airport is going well and is scheduled to open in January of 2016.

4. Presentation items

Note: A copy of the presentations can be found via our website using the following link:

http://www.san.org/Airport-Projects/Airport-Noise-Mitigation?EntryId=8293&Command=Core_Download

Quieter Home Program (Program) Update – Craig Mayer, Deputy Program Manager, provided the committee an update on the Program status. Mr. Mayer stated that currently there are 755 applicants which equates to 1,299 on the waiting list. He stated that 315 homes will be completed by the end of the year, December 31, 2015, which is lower than previous years due to majority of the homes being single-family homes. The total completed homes to date are 3,251 homes.

Mr. Mayer explained that since September 30, 2015, the Program has transitioned into the new Airport Improvement Program (AIP) Guidance that governs how we run the Program. The differences include a two-step process to determine the home's eligibility and other treatments that are no considered non allowable. Since the Program initiated the new two-step process, 177 homes have been acoustically tested and 14 homes have tested below the 45 decibel (dB) threshold.

Question from ANAC: Mr. Swarens had asked about treatments of the homes tested below 45 dB and the ramifications of the delays.

Mr. Mayer explained that a home that tests below 45 dB is compatible according to FAA. The Program has asked the FAA if the home can be treated with an ventilation system and is still waiting for a response. With regards to the second question, the Program is uncertain about the impacts of the delays but hoping that a resolution will be soon.

Question from ANAC: Mr. Hanson wanted to know what the Airport Authority is going to do to sound attenuate new homes since the proposed flight changes path will have a larger noise footprint, especially around the Point Loma area. He asked if the funding would change if the noise footprint expanded and will the Authority submit comments regarding this to the FAA.

Mr. Wilschetz replied that they are not able to talk about impacts to draft procedures as it would only be speculation. However, if noise impacts increase the contours for the Program, boundaries will be reviewed. The Airport Authority did provide comments on the draft SoCal Metroplex Environmental Assessment and they can be found on our website.

Curfew Violation Review Panel (CVRP) Statistics – Ms. Sjohnna Knack, Program Manager, Airport Planning & Noise Mitigation, gave a review of the total violations from July 1 to September 30, 2015. The total violations through September 30, 2015 are 30, which is down by nine violations from this time last year. From the past quarter, there were seven violations, and four are scheduled for the December meeting.

Flight Operation Statistics – Ms. Knack presented updated flight operation statistics. The total missed approaches through September 30, 2015 were 540 as compared to last year at this time when it was 482. In September alone there were 63 missed approaches which has increased from last year's 38 in September. One reason for the increase is due to the FAA testing new instrument landing system equipment. This equipment allows aircraft to operate in inclement weather. 21 of these missed approaches were related to the flight testing back in September.

She went on to explain early turns can go two different directions, either to the right, over Mission Beach, or the left over the Pt. Loma Peninsula. The early turn corridor is based on the headings of 295 to the right and 265 to the left, which is based on the Red Dot Agreement.

In July through September of 2015 there were 27 early turns to the left over Pt. Loma and 30 to the right over Mission Beach. When looking at the types of aircraft making the early turns, there was a large amount of general aviation aircraft, which is something Staff will be looking into.

She reiterated that early turns do not include propeller aircraft. Staff will be coordinating with ANAC FAA Member, Rob Cook, to review operators that frequently turn early to see if there ways to decrease MAs in the future.

Complaint Statistics - Ms. Knack presented an update on noise complaints. Through September 30, 2015, 303 noise complaints have been received. In September alone, 225 complaints were received with 90 percent of the complaint locations coming from the Point Loma area near Point Loma Nazarene University. The complaints are primarily on flight path changes, low altitude flights, and negative impacts of health. Ms. Knack explained that she conducted analysis on flights crossing over the Peninsula from April through September of this year. Based on that analysis, there were no significant increases in flights. The Airport has an average total of 520 operations (arrivals and departures) a day. The analysis showed on average, 35 flights a day cross over the Peninsula. Finally, when reviewing average altitudes, when looking at those Peninsula overflights, most flights are at 8,000 feet or higher.

Question from ANAC: Mr. Cole questioned why the bulk of the complaints are in the Point Loma area and not Mission Beach for Early Turns. He also asked why the complaints have increased when according to the FAA the Metroplex has not been implemented.

Ms. Knack responded that every complaint is considered valid. She stated that the Airport conducts continuous noise measurements which are used to create quarterly noise contours for the state of California quarterly noise repot. These contours will identify if there are any significant changes in the noise levels.

Question from ANAC: Ms. Watkins had asked about the increase of flights at Mission Beach, Ms. Knack responded that there is an increase on business jets, Mr. Cook had also stated that the FAA will look in to it.

Question from ANAC: Mr. Swarens asked if there is any progress with air carriers being a better citizen, and not violating the curfew.

Ms. Knack, responded that Staff works with all operators to see if they can either move their departure times earlier or work with their team to see if there are alternatives, such as switching aircraft, to reduce the number of curfew violations.

Question from ANAC: Mr. Huenefeld asked about the noise monitors recording noise level data and if a group of concerned citizens outside the high impact area will qualify to get a noise monitor installed?

Ms. Knack described how the noise monitor works and that the furthest western monitor was located at Talbot Street (Note: This location was later corrected to be at the intersection of Froude and Del Mar). She stated there is not in the wooded area.

Request from ANAC: Mr. Hugo Carmon requested for the flight analysis data for the Peninsula for the past ten years. Mr. Swarens also asked to include noise monitor levels.

5. Public Comment

Ms. Lilley opened the floor at 4:48 P.M. for public comment and reiterated that ANAC is not part of the FAA and will not be responding to any FAA Metroplex related questions since the comment period is now closed. She asked that the questions be clear and that three minutes is allowed for any comment or questions.

Lynn Borkenhagen stated the early morning noise must be from the buildings along the runway that were demolished.

Staff indicated an analysis will be conducted to determine if there were any impacts due to the removal of those buildings.

Joe Watkins, Executive Vice President of Pt. Loma Nazarene University and resident, he willingly purchased a home in Pt. Loma, he appreciates what the committee is doing. He asked about the increased Missed Approaches, with expansion of arrivals at the airport, do we anticipate an increase of missed approaches? What the protocols are for turns and what altitudes should reached.

Ms. Knack stated we can't speculate on future missed approaches, however, we will continue to collect statistical information. As it relates to protocols of missed approaches, ANAC FAA Member Rob Cook stated that missed approaches are required by either ATC or the pilot when there are separation or weather issues.

Julie Connolly asked why missed approaches are not routed over commercial areas. She said shifting the procedure towards the San Diego River would impact less people and be safer. She also asked if there was a plan to measure sound on the southern end of the point and how can impacts in that area be measured without a baseline. Ms. Connolly was interested in DNL vs. CNEL.

Mr. Cook stated that missed approaches are safe procedures. Ms. Knack said that that the noise monitors are placed in the most noise impacted areas to support the modeled noise contours.

Casey Schnoor said he looks forward to seeing the Peninsula data request and wants to make sure we look at the Peninsula as a whole, not just the wooded area. He asked about the history on the red dot agreement and who has the authority on allowing early turns.

Ms. Knack commented that aircraft are not the control of the Airport Authority and asked ANAC member Rob Cook to explain the red dot agreement.

Jill Monroe asked about the impact of maximizing Lindbergh Field compared to ten years ago.

Ms. Knack responded that impacts are reported on a quarterly basis and that data is collected and analyzed with stakeholders.

Jeffrey Ramos asked if webtrak be added to the noise monitor on Talbot St. he said that data cannot be correlated between noise complaints and measurements if there is no monitoring site. He was concerned that our system could not distinguish between a dog barking and an aircraft flying over.

Ms. Knack clarified that the monitor is not on Talbot St but on Froude and Del Mar. ANAC member, Mr. Justin Cook, Acoustician explained that noise can be distinguished by setting different thresholds to detect an aircraft.

Bruce Balley walks around PLNU daily. He thanked ANAC for their efforts and asked who makes the decision on the NextGen? Will the FAA follows recommendations by the Airport Authority? Where is the final stop? He also mentioned that the 65 dB is an old standard and the 55 DB as the modern standard, why not modernize it to give better information for all San Diego.

Staff was unable to answer his questions regarding the Metroplex. Ms. Knack replied that the noise level data has been audited by the State of California and is accurate, and the 65 CNEL average levels are set by the FAA.

Ms. Lilley advised the audience that it is now 5:20 P.M.

John Bauer stated that he had noticed an increase of flight take offs constantly and significantly to the southerly routes and thanked Mr. Cook's explanation but feels that the current modeling does not model the current reality, he also mentioned that he is partially deaf and the noise does not annoy him as much as it does the neighbors and invited Ms. Knack for a 6:30 AM coffee.

Neil Esterly asked about take offs, according to Next Door and Facebook is advocating for flights to be low and low and slow, he asked if this is accurate and correct.

ANAC FAA Member, Mr. Cook responded that this is not correct.

Cynthia Conger stated that the number of calls is not accurate that there should be more in Point Loma and an increase in head-to-head flights in the past eight to nine years, which increases the risks since there are two fail

safe system in place, both human, pilots and the tower. For ALUCP, where are the safety issues accounted for? Lindbergh is a dangerous airfield, with the NextGen many things will happen in the peninsula and that this is such a small runway.

Ms. Knack responded that information is provided quarterly and safety on ground and in aircraft is accounted for. Mr. Wilschetz added that ALUCP is to protect people on ground and in aircraft and had asked to talk off line.

Terri Johnson, comment about the impact study on the peninsula, comparing October 2012 with no noise to October 2015 with a lot of noise, what did the authority do cause the noise? The wooded area experiences continuous noise. Where is the environmental study for 40 dB where are the majority complaints are?

Mr. Wilschetz responded that according to the 2008 Master Plan a full environment report outlined these concerns and there are no answers as of yet.

Dan Frankel requested the committee should measure the duration and amount of contaminants. Collect and analyze data, something has changed and the data should be audited one has to question the data method. Map the early turns and noisy airplanes, and he volunteered his time and acoustic devices to monitor noise level.

Ms. Lilley advised the audience that it is now 5:47 and will take one more speaker.

Russ Valone asked to see the altitudes graphic and questioned how it is possible those altitudes are correct when he can see the windows of planes climbing low and slow. He would like to see departures categorized by altitude.

At this time Ms. Lilley asked the committee for any comments:

Mr. Cole commented to the public that the committee will work on the data breakdown for the past 10-years on number of flights, altitude, and type of planes.

Mr. Hanson noticed that every public comment is referring to airplanes that are louder and frequent and that not everyone can be wrong.

Ms. Lilley informed the audience that Mr. Wilschetz and Ms. Knack are totally engaged and committed to the community and also advised new members to review the policies and procedures about advisory roles and is looking forward to the ANAC meeting in January.

Mr. Wilschetz thanked the audience and mentioned that Peggy Cooper is the liaison and is always available to them.

6. New Business

None

7. Next Meeting/Adjourn

The next meeting is scheduled for Wednesday, January 20, 2016 at 4:00 p.m. at the Airport Noise Mitigation offices located at 2722 Truxtun St.

Ms. Lilley called to adjourn the meeting; Mr. Gawronski motioned to adjourn which was seconded by Mr. Swarens, the meeting adjourned at 6:02 p.m.

Sjohnna Knack
2016.07.07 11:23:15
-07'00'

Sjohnna Knack

Program Manager, Airport Noise Mitigation

Appendix A

Airport Noise Monitoring System

Appendix A1

Remote Noise Monitoring Terminal (RMTs) Thresholds

RMT #	SENEL Day Threshold (dB)	Duration (sec)	SENEL Evening Threshold (dB)	Duration (sec)	SENEL Night Threshold (dB)	Duration (sec)
1	73*	9	73	9	72*	10
2	63	10	60	12	58	14
3	74*	9	73	10	72*	10
4	64*	10	63	12	60*	12
6	68*	8	67	9	65*	10
7	65	12	63	12	62	15
9	68*	8	67	9	65*	10
10	65*	8	62	12	60*	13
11	65*	12	63	13	60*	15
12	64*	10	62	12	60*	14
13	65*	8	62	12	60*	13
14	65*	10	62	12	60*	13
16	67*	8	66	9	65*	10
17	64	9	62	12	58	15
18	65	8	65	8	62	12
19	64*	8	64	8	63*	8
20	62	11	62	11	60	13
21	60	10	58	12	55	18
22	65	8	63	10	60	12
23	65*	8	63	10	60*	12
24	65*	8	65	8	63*	10
25	65*	10	62	10	60*	12
26	65*	10	64	12	62*	14

KEY:

Day = **From 7:00 a.m. to 6:59 p.m.** (* = change occurs at 0500L)
Evening = **From 7:00 p.m. to 9:59 p.m.**
Night = **From 10:00 p.m. to 6:59 a.m.** (* = change occurs at 0500L)

Note 1: RMTs #1 and #3 high threshold levels are due to high freeway and/or construction noise.

Note 2: Noise monitors comply with all applicable settings as specified in the California Noise Standards (Title 21). Noise events must meet both threshold criteria to be considered for further review.

Appendix A2

Daily/Monthly CNEL Levels – October 2015

* Not in Service

Day	RMT 1	RMT 2	RMT 3	RMT 4	RMT 6	RMT 7	RMT 9	RMT 10	RMT 11	RMT 12	RMT 13
1	70.7	66.4	*	*	0.0	74.8	69.5	*	71.2	60.3	61.4
2	71.7	66.9	*	*	60.3	74.7	69.8	*	70.8	60.3	62.7
3	68.6	64.4	*	*	63.2	73.9	67.0	*	70.6	59.5	62.0
4	69.7	65.7	*	*	64.2	75.2	67.1	*	71.4	61.0	63.6
5	70.7	66.2	*	*	64.3	75.7	65.9	*	72.4	61.7	64.1
6	71.0	66.6	*	*	63.0	73.8	63.0	*	70.6	61.1	62.6
7	71.0	66.4	*	*	63.4	74.3	68.0	*	70.7	61.2	62.7
8	71.0	66.7	*	*	63.7	75.2	68.8	*	71.7	59.8	63.3
9	69.0	64.8	*	*	63.6	74.8	67.6	*	71.9	59.7	61.5
10	67.8	63.4	*	*	62.0	74.5	63.6	*	71.3	59.5	61.1
11	68.3	64.6	*	*	63.8	75.1	67.1	*	72.0	59.5	63.4
12	68.8	64.7	*	*	63.4	74.8	72.0	*	71.5	60.3	64.8
13	69.9	65.4	*	*	63.8	74.3	73.0	*	70.8	60.8	63.5
14	71.0	66.5	*	*	63.4	74.5	68.0	*	71.2	60.3	63.6
15	70.9	66.8	*	*	63.2	74.7	69.1	*	71.4	61.6	63.8
16	72.0	67.1	*	*	64.7	74.2	69.0	*	70.4	61.6	63.4
17	70.0	65.6	*	*	63.1	73.1	70.7	*	69.5	61.2	61.6
18	70.8	66.4	*	*	62.5	74.4	66.4	*	71.0	61.1	64.0
19	70.6	66.0	*	*	65.0	74.4	67.6	*	71.1	60.8	64.0
20	70.6	66.1	*	*	63.8	74.2	68.3	*	70.6	60.8	63.5
21	71.5	66.3	*	*	63.0	75.0	65.9	*	71.9	60.7	64.1
22	71.6	67.1	*	*	66.5	75.7	69.2	*	72.6	61.3	65.0
23	71.4	66.7	*	*	67.6	74.8	64.5	*	71.4	61.0	63.8
24	68.5	63.8	*	*	66.3	73.3	66.7	*	69.9	59.2	61.5
25	69.6	65.2	*	*	67.6	75.3	68.0	*	71.9	59.7	63.1
26	70.3	65.4	*	*	67.5	74.5	67.8	*	71.1	61.4	62.9
27	69.7	65.2	*	*	67.3	74.0	65.6	*	70.6	59.8	61.7
28	70.6	65.9	*	*	67.8	73.7	67.5	*	70.1	61.0	62.4
29	71.8	67.3	*	*	68.2	73.7	67.0	*	70.1	60.6	62.7
30	70.3	65.5	*	*	67.4	74.6	68.2	*	71.0	60.5	62.4
31	66.5	61.7	*	*	66.1	72.6	64.6	*	68.6	58.3	60.9
Month	**70.9**	**66.4**	*	*	**65.6**	**75.0**	**68.7**	*	**71.6**	**61.1**	**63.6**

Appendix A2 Continued

Daily/Monthly CNEL Levels – October 2015

* Not in Service

Day	RMT 14	RMT 16	RMT 17	RMT 18	RMT 19	RMT 20	RMT 21	RMT 22	RMT 23	RMT 24	RMT 25	RMT 26
1	65.0	64.3	64.9	57.6	61.0	60.3	58.5	63.5	61.7	63.3	62.4	63.7
2	65.3	65.0	65.3	58.0	65.1	60.9	57.5	64.2	62.6	63.7	62.6	63.9
3	64.8	63.0	62.7	56.3	63.7	59.4	60.4	62.8	61.5	62.7	61.7	61.5
4	65.9	63.8	64.5	59.6	62.0	60.8	57.6	64.6	63.7	64.6	62.5	63.1
5	66.0	64.9	65.1	55.5	61.3	61.4	58.3	65.0	63.1	64.7	63.0	63.7
6	65.2	64.2	65.1	56.0	56.1	60.8	57.4	64.0	62.8	63.9	62.2	64.1
7	65.1	64.3	65.1	57.7	57.6	60.4	57.2	63.8	61.9	63.6	63.0	63.3
8	65.6	64.6	65.2	59.8	58.6	60.7	57.6	63.7	61.7	63.2	62.6	63.7
9	64.5	63.7	63.7	63.4	62.6	59.8	55.0	62.6	62.2	62.4	60.7	62.5
10	64.1	61.5	62.5	55.8	57.4	58.5	54.1	62.0	62.0	61.3	59.7	56.3
11	64.6	62.8	63.9	62.4	62.6	59.5	54.9	63.2	63.0	63.0	60.4	61.9
12	64.6	62.8	64.1	62.3	62.8	59.6	56.5	63.2	63.1	63.3	61.2	62.7
13	64.8	63.2	64.1	55.7	62.3	59.6	56.4	63.6	62.6	63.7	61.5	63.3
14	65.2	64.0	64.9	58.4	58.0	60.4	56.7	63.9	63.7	63.5	62.4	63.5
15	65.5	64.3	65.4	60.1	59.3	61.0	57.7	64.2	62.8	64.2	62.7	63.7
16	64.6	64.6	65.7	61.3	59.6	60.1	56.5	63.5	62.5	63.9	61.6	63.6
17	64.3	62.8	64.0	59.8	57.6	59.2	55.7	62.4	61.7	62.7	60.8	63.0
18	65.4	64.3	64.9	60.8	60.8	60.6	57.0	64.1	63.0	64.2	62.1	61.3
19	65.3	65.0	64.6	57.2	62.7	60.5	58.0	64.2	63.3	64.3	62.3	64.7
20	65.4	64.1	64.6	56.3	63.1	60.3	57.8	63.9	63.2	63.8	62.8	63.5
21	65.4	64.6	66.6	60.3	62.4	60.5	57.3	64.2	62.6	63.8	62.4	64.2
22	66.4	64.9	66.3	58.7	63.5	62.1	59.7	64.9	63.5	64.5	65.0	65.2
23	65.6	64.5	64.9	57.3	54.0	61.5	58.0	64.4	62.6	64.0	62.8	63.9
24	64.1	62.1	62.2	62.6	62.0	58.9	55.3	62.1	61.2	61.6	60.3	60.7
25	64.8	63.3	64.2	56.6	62.8	59.9	55.9	63.9	64.6	63.7	61.0	59.5
26	65.0	64.0	64.7	61.2	61.5	60.7	57.6	64.4	62.9	63.4	61.9	63.9
27	64.0	63.8	63.9	58.5	58.9	59.3	56.2	62.6	60.5	62.1	60.8	61.5
28	64.0	64.5	64.5	61.8	62.9	60.0	56.5	63.3	61.7	62.9	61.3	62.7
29	64.4	65.6	65.6	63.9	61.7	60.3	57.5	65.2	63.6	63.5	61.8	64.0
30	64.9	64.6	63.8	64.3	63.6	60.6	56.9	64.2	62.0	62.9	62.2	62.0
31	63.2	60.6	60.5	59.4	59.0	57.5	54.7	61.4	59.9	60.5	59.7	59.4
Month	**65.5**	**64.5**	**65.1**	**60.6**	**62.0**	**60.8**	**57.7**	**64.2**	**63.1**	**63.9**	**62.5**	**63.5**

Appendix A3

Daily/Monthly CNEL Levels – November 2015

* Not in Service

Day	RMT 1	RMT 2	RMT 3	RMT 4	RMT 6	RMT 7	RMT 9	RMT 10	RMT 11	RMT 12	RMT 13
1	69.2	65.2	*	*	67.4	74.1	67.4	*	70.5	59.2	61.8
2	71.7	67.0	*	*	68.1	73.9	65.8	*	70.5	61.5	63.5
3	72.0	68.0	*	*	69.3	73.4	67.5	*	69.9	62.3	63.3
4	71.6	67.1	*	*	69.3	74.0	69.2	*	70.2	62.2	63.9
5	71.1	66.7	*	*	69.0	74.2	65.5	*	71.0	61.6	63.6
6	71.0	65.9	*	*	68.5	74.3	67.4	*	70.6	61.6	62.8
7	68.2	63.9	*	*	67.0	73.2	67.7	*	69.3	61.1	61.0
8	70.1	65.5	*	*	68.4	75.1	68.9	*	71.6	61.0	62.1
9	71.2	66.4	*	*	69.0	74.7	67.6	*	71.3	62.1	64.8
10	71.2	66.6	*	*	68.7	73.3	66.7	*	70.0	61.8	62.0
11	70.2	65.7	*	*	68.4	74.2	69.1	*	70.6	61.3	61.9
12	70.5	65.0	*	*	68.4	73.2	67.9	*	69.0	61.1	60.1
13	69.7	64.1	*	*	67.8	72.4	67.4	*	68.2	61.0	59.7
14	67.5	63.0	*	*	65.9	72.8	61.4	*	69.1	59.4	59.7
15	71.8	67.7	*	*	69.4	74.7	67.3	*	71.3	62.2	63.8
16	70.6	66.3	*	*	69.8	73.3	65.5	*	70.1	62.6	63.6
17	69.5	64.5	*	*	67.8	74.2	64.9	*	70.3	61.5	61.7
18	70.4	65.7	*	*	68.6	74.0	68.8	*	70.4	61.7	60.5
19	69.8	65.0	*	*	69.5	73.9	65.8	*	70.0	61.2	60.4
20	71.2	65.8	*	*	68.6	74.8	68.8	*	71.2	62.0	61.0
21	67.4	63.3	*	*	67.4	72.8	65.1	*	69.2	59.2	60.5
22	67.3	63.3	*	*	67.3	73.8	66.3	*	70.3	58.9	60.9
23	65.9	61.1	*	*	66.6	73.8	64.4	*	70.1	59.6	62.9
24	*	*	*	*	*	*	*	*	*	*	*
25	72.7	68.1	*	*	70.3	72.7	67.7	*	69.4	63.0	63.5
26	66.6	62.6	*	*	66.8	72.8	69.7	*	69.0	60.0	61.3
27	70.4	65.9	*	*	67.9	74.3	68.8	*	70.4	61.1	62.7
28	70.8	65.9	*	*	68.3	74.3	66.8	*	71.0	64.5	63.9
29	70.9	66.7	*	*	69.0	75.3	64.0	*	72.1	62.5	65.2
30	71.2	66.9	*	*	69.2	74.2	65.0	*	70.6	63.0	63.3
Month	**70.9**	**66.1**	*****	*****	**68.9**	**74.3**	**67.5**	*****	**70.7**	**61.9**	**63.0**

Appendix A3 Continued

Daily/Monthly CNEL Log – November 2015

* Not in Service

Day	RMT 14	RMT 16	RMT 17	RMT 18	RMT 19	RMT 20	RMT 21	RMT 22	RMT 23	RMT 24	RMT 25	RMT 26
1	64.2	63.3	63.9	61.6	63.1	59.6	55.8	62.9	61.2	62.5	61.0	63.4
2	64.7	64.9	65.6	59.9	62.7	60.9	58.0	63.9	63.4	64.3	61.9	64.1
3	64.6	65.8	66.2	63.2	63.1	61.6	58.4	64.1	63.5	64.6	62.9	65.5
4	64.5	65.7	65.8	66.9	64.4	61.5	58.5	64.3	63.6	64.5	62.4	64.2
5	65.4	65.4	65.3	58.7	58.5	62.4	58.2	64.1	62.3	63.7	62.7	66.3
6	65.1	65.5	64.7	63.4	61.9	60.5	57.5	63.7	62.2	63.8	62.5	62.8
7	63.8	63.1	62.5	59.5	63.0	58.5	55.0	62.0	60.5	61.8	59.9	60.7
8	65.4	64.1	64.3	63.7	65.2	61.0	57.5	64.3	62.7	64.0	62.4	63.4
9	65.5	64.9	65.4	62.0	62.7	61.4	58.6	65.1	64.0	65.0	62.7	64.2
10	64.7	65.6	65.4	64.1	60.3	62.2	59.0	64.1	63.0	64.2	62.8	63.9
11	64.8	64.7	64.8	58.2	62.5	60.9	57.2	63.8	61.9	63.0	61.8	63.0
12	63.3	64.5	63.7	63.1	63.9	59.0	63.7	62.2	60.6	62.8	59.8	61.5
13	62.3	64.0	63.1	64.8	62.6	57.9	54.0	61.1	60.0	61.7	59.8	61.0
14	63.5	62.7	61.8	56.3	56.4	57.9	54.6	61.2	68.8	60.8	59.6	60.9
15	66.1	65.9	66.2	62.7	63.8	64.3	59.0	64.9	62.5	64.7	63.5	65.5
16	65.0	64.9	65.3	63.9	58.8	67.7	63.9	65.1	62.6	65.1	63.5	*
17	64.3	63.4	63.6	56.4	59.7	59.9	56.9	63.4	62.5	63.3	61.1	*
18	64.2	64.8	64.5	60.7	64.4	60.1	56.6	63.5	61.3	63.3	61.5	*
19	64.2	64.4	63.9	64.1	61.2	59.9	56.2	63.2	61.7	63.5	61.1	*
20	64.4	65.9	64.5	65.6	64.2	60.2	55.9	63.4	62.3	63.9	60.8	*
21	64.0	62.5	62.0	62.1	59.9	58.1	55.0	61.9	60.6	61.7	59.9	*
22	63.9	62.5	62.3	60.4	61.4	58.6	54.9	62.7	61.0	62.6	61.0	*
23	63.5	60.1	59.8	57.9	59.6	59.0	55.7	63.0	60.8	62.5	60.7	*
24	*	*	*	*	*	*	*	*	*	*	*	*
25	64.5	66.3	66.7	65.8	62.8	63.8	59.5	64.4	64.4	65.0	62.5	*
26	63.4	61.0	61.4	54.6	66.2	60.2	56.9	62.4	61.9	62.3	61.0	*
27	64.5	64.5	64.3	57.9	63.9	60.4	57.7	63.8	63.2	63.9	61.4	*
28	65.6	65.0	64.7	57.7	62.2	60.8	57.9	64.5	63.4	64.7	62.5	*
29	66.3	65.3	65.6	56.6	58.3	61.9	58.8	65.6	64.0	65.5	63.2	*
30	64.9	65.5	65.8	58.3	57.9	61.0	58.4	64.4	63.0	64.5	62.1	*
Month	**64.9**	**65.1**	**65.0**	**62.7**	**63.0**	**61.7**	**58.6**	**64.2**	**63.4**	**64.2**	**62.2**	**64.2**

Appendix A4

Daily/Monthly CNEL Levels – December 2015

* Not in Service

Day	RMT 1	RMT 2	RMT 3	RMT 4	RMT 6	RMT 7	RMT 9	RMT 10	RMT 11	RMT 12	RMT 13
1	70.8	66.2	*	*	69.4	74.3	67.0	62.8	70.5	61.8	62.5
2	69.9	64.5	*	*	68.1	73.2	66.9	62.5	69.1	61.0	61.7
3	70.8	67.3	*	*	67.5	73.5	65.0	61.1	69.7	60.8	61.6
4	71.3	66.4	*	*	68.4	74.2	68.3	63.1	70.6	62.6	63.7
5	69.1	64.8	*	*	66.9	72.5	64.4	61.8	68.7	61.7	62.0
6	69.3	64.6	*	*	67.3	73.5	65.7	60.7	69.4	59.9	61.5
7	69.3	63.4	*	*	67.9	73.7	65.5	61.8	69.8	60.6	61.2
8	69.7	64.6	*	*	67.6	72.9	68.2	61.3	69.1	60.9	60.8
9	70.4	65.0	*	*	68.8	75.0	66.9	62.1	71.9	61.4	61.9
10	70.1	62.6	*	*	68.0	75.6	68.7	62.4	72.7	60.9	62.9
11	72.6	69.0	*	*	69.9	73.4	67.0	64.3	69.9	63.1	63.3
12	69.5	65.4	*	*	66.8	73.0	62.2	61.4	69.3	63.7	61.8
13	72.6	67.7	*	*	69.0	73.7	66.1	63.7	70.2	62.0	63.5
14	70.5	65.8	*	*	69.0	72.5	66.5	63.3	69.1	61.6	62.7
15	70.6	66.0	*	*	68.2	74.3	60.8	63.2	71.0	62.2	62.2
16	70.6	65.9	*	*	68.5	73.8	63.7	62.6	70.1	61.9	61.3
17	72.2	66.5	*	*	69.7	75.1	66.3	63.9	71.3	64.0	63.6
18	72.3	67.0	*	*	70.1	75.3	67.1	63.9	71.7	62.8	64.1
19	71.7	67.3	*	*	69.5	74.8	67.6	63.6	71.0	62.9	64.4
20	70.9	66.6	*	*	69.5	74.7	66.1	64.1	71.2	62.1	64.5
21	71.8	67.0	*	*	69.7	78.1	68.3	64.2	72.4	63.0	64.7
22	73.8	69.4	*	*	70.9	75.1	68.2	64.2	70.7	63.8	63.4
23	72.1	67.8	*	*	70.0	76.4	69.1	65.4	72.1	62.5	64.7
24	71.8	67.4	*	*	69.4	75.4	68.7	63.3	70.8	62.7	64.0
25	69.4	65.0	*	*	68.6	73.2	64.3	61.2	69.1	60.7	62.6
26	63.6	62.1	*	*	66.2	74.2	58.9	59.4	69.9	60.0	60.2
27	68.9	65.8	*	*	68.7	75.7	67.2	62.6	71.3	61.9	63.6
28	71.4	67.3	*	*	69.4	76.2	67.2	64.4	71.8	62.9	64.7
29	72.3	67.2	*	*	70.0	76.4	69.3	63.7	71.9	63.6	64.5
30	72.3	67.1	*	*	69.9	76.2	65.0	64.4	71.7	63.6	64.8
31	70.9	66.8	*	*	68.4	74.6	69.7	62.7	70.1	61.6	63.3
Month	**71.5**	**66.9**	*****	*****	**69.4**	**75.2**	**67.4**	**63.6**	**71.2**	**62.7**	**63.6**

Appendix A4 Continued

Daily/Monthly CNEL Log – December 2015

* Not in Service

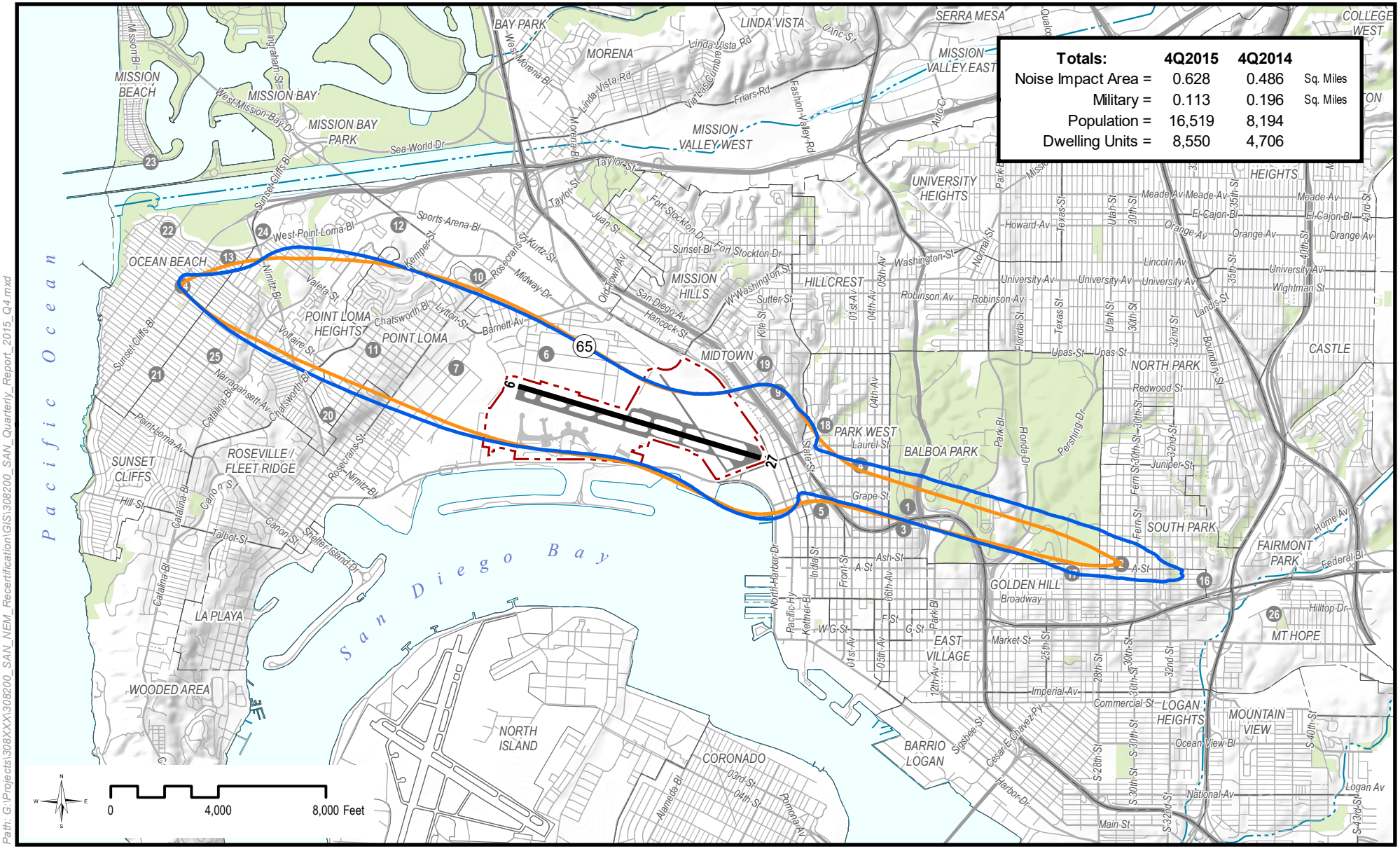
Day	RMT 14	RMT 16	RMT 17	RMT 18	RMT 19	RMT 20	RMT 21	RMT 22	RMT 23	RMT 24	RMT 25	RMT 26
1	64.3	64.6	64.8	60.8	61.9	60.7	57.2	63.7	62.5	63.7	62.1	*
2	63.6	63.5	63.0	64.5	63.7	58.9	55.8	62.0	60.6	62.2	60.5	*
3	62.5	64.6	64.7	62.4	61.6	58.7	55.2	62.1	61.3	62.6	59.5	*
4	65.4	65.6	65.2	63.3	64.2	60.8	58.1	64.2	63.7	64.1	62.6	*
5	64.0	63.6	63.4	61.8	60.3	59.1	56.3	62.4	63.1	62.4	60.7	*
6	63.0	62.9	64.0	58.7	60.8	58.4	53.9	61.9	61.5	62.0	59.1	*
7	63.5	62.9	62.6	60.3	60.2	59.5	56.3	62.5	62.7	62.1	60.3	*
8	63.5	64.1	63.6	65.0	63.8	59.2	55.8	62.2	63.3	62.4	60.8	*
9	66.3	63.3	63.1	63.1	63.1	60.2	56.8	63.9	63.9	63.8	62.1	*
10	66.2	64.3	64.2	57.1	63.6	60.5	57.3	64.4	63.6	64.2	61.3	*
11	65.4	67.1	66.7	64.8	61.7	63.7	59.9	64.4	64.9	64.8	63.5	*
12	64.3	64.1	63.6	55.2	58.3	60.1	57.5	62.9	64.4	62.3	61.8	*
13	65.6	66.2	66.2	63.0	61.3	65.4	60.1	64.5	64.9	64.5	62.7	*
14	64.8	64.9	65.0	64.0	60.5	63.3	60.6	64.2	63.8	63.9	63.5	*
15	65.3	64.7	64.4	55.7	53.5	60.9	58.0	64.4	62.8	64.1	62.7	*
16	64.7	64.7	64.6	57.4	56.6	60.3	57.2	63.7	61.6	63.4	62.1	*
17	65.5	66.0	65.5	61.6	61.0	62.1	58.0	64.7	63.3	65.1	63.3	*
18	65.4	66.4	65.8	62.5	61.0	61.4	57.5	64.4	63.5	65.0	62.1	*
19	66.0	65.6	65.9	63.1	65.9	62.0	58.5	65.0	63.7	64.9	63.1	*
20	65.6	65.4	65.4	63.0	62.1	61.7	58.8	65.3	64.4	65.6	63.0	*
21	66.5	65.3	65.4	60.5	62.4	62.7	59.0	65.6	64.6	67.4	63.4	*
22	65.7	67.8	67.4	65.6	64.3	63.7	61.4	64.5	66.2	65.2	62.7	*
23	66.2	66.9	66.1	82.3	66.1	62.4	59.2	65.8	66.2	66.0	63.6	*
24	63.0	65.7	65.9	61.8	65.9	61.5	58.6	64.5	64.6	64.4	62.8	64.8
25	61.8	63.4	63.9	61.6	58.5	61.8	58.7	63.6	63.2	62.9	62.2	62.5
26	64.2	59.3	60.6	56.7	52.0	59.4	56.0	61.5	59.9	60.6	60.4	58.1
27	64.4	64.3	64.6	60.1	63.5	60.9	56.0	64.1	62.9	64.5	61.1	63.3
28	67.1	65.8	66.0	61.2	61.5	62.4	59.5	65.6	64.1	65.2	63.3	64.9
29	66.2	66.4	65.9	61.2	66.2	62.2	58.5	65.2	64.7	65.3	62.8	65.5
30	66.2	66.3	65.8	60.6	58.2	62.0	58.5	65.6	64.3	65.4	63.2	65.5
31	62.2	64.8	65.8	61.9	67.3	60.6	57.3	63.9	62.4	63.2	62.2	63.8
Month	**65.5**	**65.6**	**65.5**	**62.0**	**63.3**	**62.0**	**58.6**	**64.6**	**64.2**	**64.7**	**62.7**	**63.6**

Appendix B

ANOMS Commercial Flight Operations Mix – 4th Quarter 2015

Aircraft Type	Air Canada	Alaska	Allegiant	American	British Airways	Delta Air Lines	Frontier	Hawaiian	Japan	jetBlue	Seaport	SkyWest	Southwest	Spirit	Sun Country	United	Virgin America	Volaris	WestJet	Airborne/Atlas	FedEx	UPS	Total Arrivals	Total Operations
A306																					33		33	66
A319	90		16	3		69	196							298		204	4	2					882	1764
A320			1	50		247	16			342				294		627	499	34					2110	4220
A321				1073																			1073	2146
A330+								91															91	182
B712						18																	18	36
B733													1804										1804	3608
B734		191																					191	382
B736																			8				8	16
B737		74											5039		59	26			11				5209	10418
B738		921		634		315							1146		27	526			46				3615	7230
B739		354				278										765							1397	2794
B744																				2			2	4
B752			2	360		203															53	10	628	1256
B753						134										1							135	270
B762																				63			63	126
B763				4		62		2												2	113	106	289	578
B764																3							3	6
B777+					89																		89	178
B787+									88														88	176
CRJ2												227											227	454
CRJ7												499											499	998
CRJ9												35											35	70
DC10																					6		6	12
E175						1203						381											1584	3168
MD10																					93		93	186
MD11																					40		40	80
MD80+				25																			25	50
MD90						219																	219	438
Total	**90**	**1540**	**19**	**2149**	**89**	**2748**	**212**	**93**	**88**	**342**	**0**	**1142**	**7989**	**592**	**86**	**2152**	**503**	**36**	**65**	**67**	**338**	**116**	**20456**	**40912**
BE35											1												1	2
BE99																				71			71	142
C208											336										215		551	1102
DH8D		188																					188	376
SW3/4																						58	58	116
Total	**90**	**1728**	**19**	**2149**	**89**	**2748**	**212**	**93**	**88**	**342**	**337**	**1142**	**7989**	**592**	**86**	**2152**	**503**	**36**	**65**	**138**	**553**	**174**	**869**	**1738**

Data Sources: San Diego International Airport; San Diego Association of Governments (SANDAG); City of San Diego and County of San Diego (SanGIS); Environmental Systems Research Institute, Inc. (ESRI); U.S. Census Blocks 2010



Path: G:\Projects\308XXX\308200_SAN_NEM_Recertification\GIS\308200_SAN_Quarterly_Report_2015_Q4.mxd

SAN DIEGO INTERNATIONAL AIRPORT
LET'S GO.

2015 4th Quarter 65 dB CNEL Contour
2014 4th Quarter 65 dB CNEL Contour
Airport Property
Runway
RMT Site Location
Roads
River / Stream

Comparison of the 2014 and 2015 Fourth Quarter 65 dB Community Noise Equivalent Level (CNEL) Contours