

LONG BEACH AIRPORT

Final Air Carrier Noise Budget Analysis Report & Charts

October 12, 2004

Air Carrier (Airline) Flight Limits

- Minimum of 41 flights for airlines
- Minimum of 25 flights for commuters
- At end of budget year more flights may be allocated if airlines/commuters are operating below budget limits
 - and newly allocated cannot result in budget exceedance
- Noise Budget Year (NY) October - September

How Does the Budget Work?

■ Calculated flight by flight

- number of operations
- loudness of the operation
 - » loudness at nearest homes to main runway
 - » 3dB louder counts as 2 flights
 - » 10dB louder counts as 10 flights
- time of day of operation
 - » evening (7pm - 10pm) flight counts as 3 flights
 - » night (10pm - 7 am) flight counts as 10 flights
 - » no late night waivers or exceptions for the noise budget
 - » time determined by time of flight over noise monitors, not takeoff time

Noise Budget Foundation

■ Initial concept:

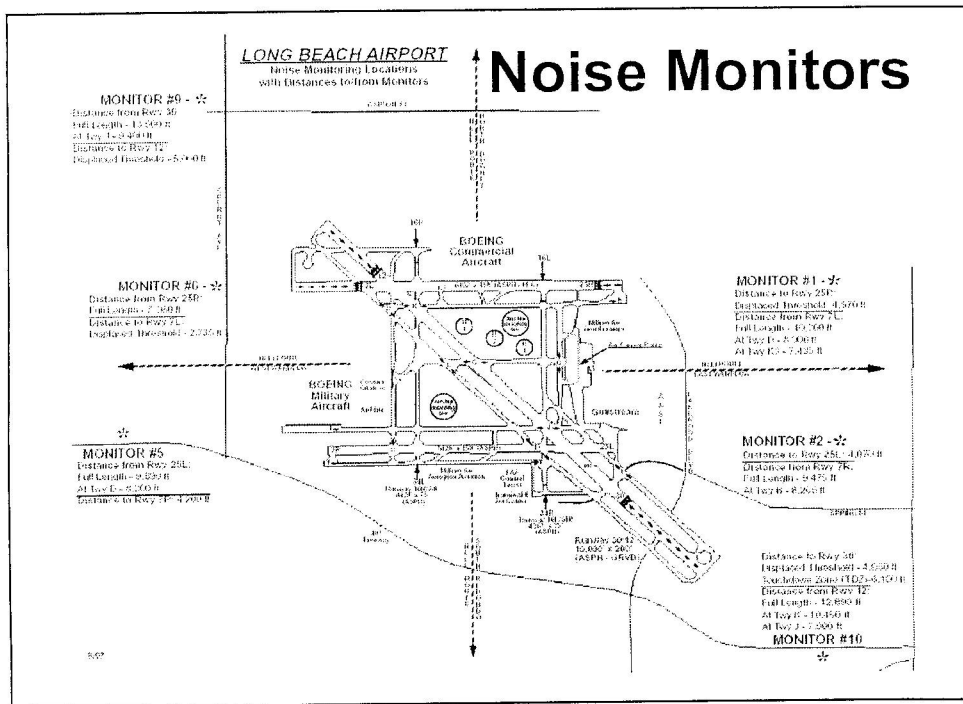
- 100 budget units that produce 65 CNEL at the nearest residence
 - » Goal to not exceed 65 CNEL at nearest residence

■ Base Year 1989/1990

- noise at nearest residence exceeded 65 CNEL
- Industrial noise budget increased to accommodate future growth

■ Noise Budget Allows Noise To Exceed 65 CNEL

- 65.1 north of airport
- 65.8 south of airport



Example of Budget Operations Calculations

Max. Date Time	1 Eq. Op. = 94,400 SEL						Adj. To Nearest Residence	Adj. SEL	D/E/N	Time Based Theoretical Equivalent # of Ops.			Actual Equiv Ops.
	A/C	AIR	A/D	RUNWAY	RMT	SEL				Day	Evs.	Night	
10/2/02 7:06	MD80	AAL	D	30	9	99.7	1.1	100.8	DAY	4.4	13.1	43.7	4.4
10/1/02 7:09	A320	JBU	D	30	9	89.8	1.1	90.9	DAY	0.4	1.3	4.5	0.4
10/1/02 7:11	A320	AWE	D	30	9	88.2	1.1	89.3	DAY	0.3	0.9	3.1	0.3
10/1/02 7:17	A320	JBU	D	30	9	94.7	1.1	95.8	DAY	1.4	4.1	13.8	1.4
10/1/02 8:02	A320	JBU	D	30	9	90.0	1.1	91.1	DAY	0.5	1.4	4.7	0.5
10/1/02 8:40	MD80	AAL	D	30	9	98.8	1.1	99.9	DAY	3.5	10.6	35.5	3.5
10/1/02 8:42	MD80	AAL	D	30	9	98.9	1.1	100	DAY	3.6	10.9	36.3	3.6
10/1/02 9:43	A320	AWE	D	30	9	89.8	1.1	90.9	DAY	0.4	1.3	4.5	0.4
10/1/02 10:20	A320	JBU	D	30	9	94.1	1.1	95.2	DAY	1.2	3.6	12.0	1.2
10/1/02 22:07	A320	JBU	D	30	9	94.2	1.1	95.3	NIT	1.2	3.7	12.3	12.3
10/2/02	MD80	AAL	D	30	9	100.9	1.1	102	DAY	5.8	17.3	57.5	5.8

Budget Results Noise Year '03 -04

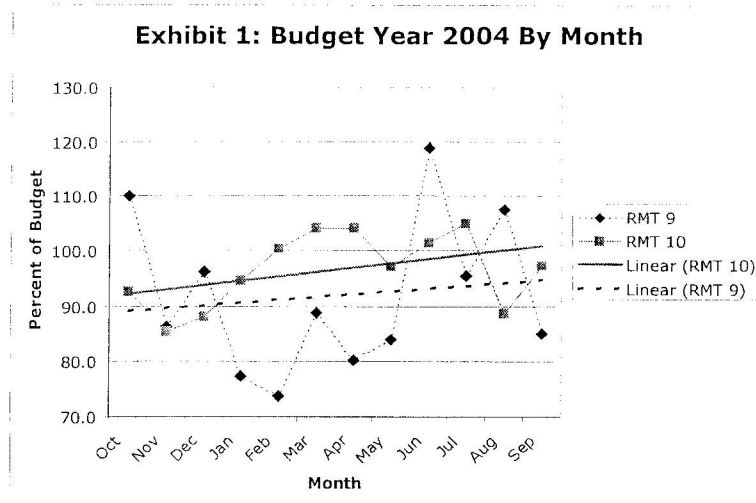
Location	Allowed Budget	Actual Budget Used
RMT 9	70.7	65.1
RMT 10	84.6	81.7

Monthly Budget Status

Table 1 Summary of Monthly and Cumulative Budget Status

Month	UNADJUSTED		RWY 25 ADJUSTED		ADJUSTED		Monthly Budget Status		Year To Date Cumulative Budget Status		Cumulative Budget Status	
	RMT 9 Eq Ops	RMT 10 Eq Ops	RMT 9 Eq Ops	RMT 10 Eq Ops	RMT 9 Eq Ops	RMT 10 Eq Ops	RMT 9	RMT 10	RMT 9	RMT 10	RMT 9	RMT 10
October	77.8	78.3	0.0	0.0	77.8	78.3	Over	ok	77.8	78.3	Over	ok
November	61.1	72.3	0.0	0.0	61.1	72.3	ok	ok	69.6	75.4	ok	ok
December	68.1	74.5	0.0	0.0	68.1	74.5	ok	ok	69.0	75.1	ok	ok
January	54.7	80.1	0.0	0.0	54.7	80.1	ok	ok	65.4	76.3	ok	ok
February	52.2	84.9	0.0	0.0	52.2	84.9	ok	Over	63.3	78.5	ok	ok
March	62.8	88.0	0.0	0.0	62.8	88.0	ok	Over	63.0	79.6	ok	ok
April	56.8	88.1	0.0	0.0	56.8	88.1	ok	Over	62.1	80.8	ok	ok
May	59.3	82.2	0.0	0.0	59.3	82.2	ok	ok	61.7	81.0	ok	ok
June	84.0	85.8	0.0	0.0	84.0	85.8	Over	Over	64.2	81.5	ok	ok
July	62.1	78.7	5.5	10.1	67.6	88.8	ok	Over	64.5	82.3	ok	ok
August	73.6	71.0	2.5	4.0	76.1	75.0	Over	ok	65.6	81.6	ok	ok
September	58.0	78.6	2.1	3.7	60.1	82.3	ok	ok	65.1	81.7	ok	ok
Budget:									70.7	84.6		
Below Budget:									5.6	2.9		

Plot of Monthly Budget Status



Effect of Fleet Changes

- Had the MD80's been utilized the entire year the noise budget would have been exceeded at RMT 9.
- Had the B757 been utilized the entire year the budget would have been exceeded at RMT 10.
- The net effect of the changes in aircraft type was the air carrier budget averaged to a value below the allocated budget.

Conclusion

- The Long Beach Ordinance provides for allocating additional flights for the next budget year if it is clear that such additional flights will not cause the air carrier budget to be exceeded.
- Based upon our findings, additional flights cannot be allocated with the assurance that NY '04-05 budget will not be exceeded.

45

FILED
WITH CITY COUNCIL

OCT 12 2004

CITY CLERK