CITY OF LONGBEACH

Date: March 15, 2024

To: Thomas B. Modica, City Manager

From: Cynthia Guidry, Director, Long Beach Airport

For: Mayor and Members of the City Council

Subject: Update to General Aviation Operations at Long Beach Airport

On September 12, 2023, the City Council requested a comprehensive report on general aviation operations (GA Report) at Long Beach Airport (Airport or LGB) in response to community concerns over increased general aviation (GA) activity. The GA Report was released on October 31, 2023, and included seven specific recommendations within the authority of the Airport to improve the quality of life in nearby communities. On December 12, 2023, the GA Report was presented to the City Council to provide an opportunity for questions, discussion, and public comment on the matter. City Council also referred the item to the Housing and Public Health Committee and the Mobility, Ports, and Infrastructure Committee.

This update addresses the status of the seven recommendations identified in the GA Report and provides updated data on GA operations and runway usage for Runways 26L and 26R. Additional questions received from the community are also answered and included as an attachment. The Airport remains committed to and engaged in finding meaningful opportunities to improve quality of life within our authority to address community concerns.

Recommendation 1: Pursue Voluntary Agreements with LGB Flight Schools

As voluntary agreements are typically the best and fastest remedy to noise mitigation, LGB continues to meet with its GA tenants to discuss community concerns regarding GA operations. Most recently, on January 25, 2024, Airport leadership, noise abatement staff, and the Airport's consultant attended a meeting of the Long Beach Airport Association (LBAA), which included flight schools based in Long Beach and Torrance, members of the Federal Aviation Administration (FAA) Flight Standards District Office, and the Fifth District Councilwoman and her staff.

Airport staff shared current information during the meeting regarding traffic patterns, violations, frequency of operations, and community concerns based on data from its Airport Noise and Operations Monitoring Systems (ANOMS). This included a review of flight training activity, nighttime operations, and volume of operations. The majority of LGB flight schools were in attendance and actively engaged in discussion to better understand and support the voluntary measures. Outside of the LBAA meeting, LGB is engaged in additional smaller question-and-answer sessions with other flight schools regarding voluntary measures.

LGB staff provided updates and fielded questions on the Supplemental Type Certificate (STC) Reimbursement and the Unleaded Fuel Subsidy programs and encouraged all eligible flight schools and pilots to take advantage of these programs. Flight schools interested in understanding more about their past operations are also encouraged to contact the LGB Noise staff. As shared in the October comprehensive report, while the majority of flight school

operations are legal and in compliance with federal regulations, the flight schools continue their efforts to identify methods to "fly friendly" without compromising safety. The LBAA continues to develop additional voluntary operations for Airport and FAA consideration.

LGB will also be meeting with the General Aviation Noise Abatement Committee (GANAC) during its regularly scheduled quarterly meetings to discuss noise data, operational best practices, and community concerns.

Recommendation 2: Review Increasing the Noise Ordinance Violation Fee Structure

Regulatory fines were established in 1995 with the enactment of Long Beach Municipal Code Chapter 16.43. The fines were set at an amount that serves to deter behavior or actions. Over time, fines can appear negligible if they are not adjusted to account for increases in the cost of living and changes in economic conditions.

The City Attorney and the Airport have had a preliminary conversation with the FAA. The Airport, in conjunction with the City Attorney, is working with its industry partners to identify any legal precedence in aviation for modification of an ordinance, or similar law or regulation, that allows for revisions of fines or fees within the context of the original agreement.

Future meetings will be coordinated as an appropriate approach to increasing the Noise Ordinance Violation Fee Structure is further identified.

Recommendation 3: Increase Community Outreach and GA Educational Materials

The Airport is in discussions with the FAA for a jointly hosted GA educational webinar to provide the local community with an opportunity to hear directly from the FAA, business stakeholders, and the Airport. Several topics will be covered, including air space allocation, management of flight operations, and roles and responsibilities. The webinar will also include answers to questions regarding current issues and concerns with GA operations. The webinar is planned for June 2024; specific details for virtual attendance will be provided when available. FAA has conducted similar webinars at other airports, and we are pleased to have FAA's participation for this upcoming GA-focused educational webinar.

We continue progress on developing a formal Fly Friendly program to reduce noise levels on a voluntary basis. We also continue to develop a recognition program to encourage best practices and acknowledge flight school and pilot participation. The Airport has researched fly friendly programs at other airports, reviewed lessons learned, and is developing relevant parameters and data needs specific to LGB. Staff are in ongoing discussions with LBAA on proposed program criteria and anticipate a launch date in the second quarter of 2024.

The Airport is also augmenting its staff and consultant services for the LGB Noise Office to address community calls and requests for assistance. Two additional full-time noise staff members have been requested for approval to assist in technical reviews, analysis, community response, and reports. The LGB Noise Office reviews written correspondence, and/or listens to complaints, investigates concerns, and issues violations when applicable.

Staff are also responsible for preparing the Airport's Monthly Noise Report and have taken note of community requests to add more information regarding GA operations on Runway 26L and

26R. Additional operational information will be included beginning with the January 2024 Airport Noise Report.

Members of the community are encouraged to attend the monthly meetings of the Airport Advisory Commission held at the Long Beach Airport Marriott Hotel on the third Thursday of the month at 4:00 p.m., except for the months of April, August, and December. Monthly updates and reports presented at the Commission meetings are also available on the Airport's website at <u>www.lgb.org</u>.

Recommendation 4: Support Strong Federal Advocacy for Lead-Free Skies

On December 7, 2023, the Mayor and the Fifth District Councilwoman, along with other City officials, met with the leadership of the FAA and the Environmental Protection Agency to discuss concerns regarding increased GA operations and a desire to accelerate federal efforts to eliminate the use of leaded aviation fuel. These meetings included agency staff from Washington, D.C., regional, and local offices. Long Beach elected officials established the need to be partners and the aim to enlist the support of both agencies in addressing the concerns of the local community.

On February 6, 2024, the City Council approved the 2024 Legislative Agenda (Agenda), as recommended by the Intergovernmental Affairs Committee, containing City Council-adopted objectives and directives regarding a wide array of issue areas impacting the City. The Agenda includes seven objectives for the Airport, four of which address current environmental concerns of both LGB and the surrounding community. The four environmental objectives are:

- Support of policies, legislation, and funding that incentivize the use of sustainable aviation fuel but does not impose mandates.
- Support of policies, legislation, and funding to provide additional resources for the development and transition to unleaded aviation fuel (Unleaded Avgas).
- Support of policies and legislation that would allow for certified flight simulation training to apply towards flight hours in order to receive a pilot license.
- Support of legislation that includes a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) liability exemption for airports for the costs of responding to, or damages resulting from, a release of PFAS due to the use of FAAmandated Aqueous Film Forming Foam (AFFF) and the lack of approved alternatives.

Airport staff meets monthly with the City's Government Affairs team to discuss the Agenda, provide updates on current aviation issues, and discuss potential new funding opportunities for both the Agenda and new initiatives.

Recommendation 5: Confer with FAA on Feasible Operational Solutions

To ensure that the Air Traffic Control Tower (ATCT) maintains its primary focus on the safety of aircraft operations at LGB, the FAA has requested that LGB submit questions on behalf of the flight community regarding feasible operational solutions to lessen aircraft noise in the

surrounding community. LGB will submit questions and seek answers from the FAA's Regional Administrator who in turn coordinates through FAA's various lines of business for answers. At this time, LBAA has requested the review of several new proposed fly friendly procedures for consideration.

Recommendation 6: Explore Additional Incentives for Unleaded Fuel and Fly Friendly Program

At the request of the Mayor and City Council in October 2022, LGB began identifying and formalizing incentives to facilitate and expedite the transition to Unleaded Avgas. Below is a brief timeline and update on significant milestones:

- In December 2022, the City Council authorized the waiving of fuel flowage fees for Unleaded Avgas for the three-year period of 2023 to 2025. Fuel flowage fees are the revenues received by LGB for each gallon of fuel delivered for sale at the Airport. This action serves as an incentive to encourage fuel providers to add Unleaded Avgas to their fuel supplies.
- In August 2023, Swift UL94 became available for sale at LGB. It is estimated that Swift UL94 is usable in 60 to 70 percent of the piston-powered aircraft based at LGB.
- In November 2023, following the release of the GA Report, the City Council authorized the Supplemental Type Certificate (STC) Fee Reimbursement Program. An STC is a certification required for the use of Unleaded Avgas to confirm that an aircraft and engine qualify for the specific Unleaded Avgas available for sale. An STC is required for the use of Swift UL94. The STC Fee Reimbursement Program provides compensation of STC fees up to a maximum of \$300 per aircraft. The reimbursement amount is expected to fully cover the STC fees for use of Swift UL94. This action serves as a further incentive for the transition to unleaded fuel by minimizing additional costs. The STC Fee Reimbursement Program is only available to LGB-based aircraft. Requests for STC reimbursement have been minimal as the pilot community is still learning about the program, benefits of the new fuel, and affordability.
- In January 2024, the City Council authorized an unleaded aviation fuel subsidy program to minimize the cost differential between Leaded and Unleaded Avgas. It is estimated that the cost of Unleaded Avgas may fluctuate as much as \$2 to \$4 more per gallon than Leaded Avgas. The program, Subsidized Aviation Fuel for the Environment (SAFE), works directly with the fuel provider to subsidize the market differential rate for the sale of Leaded and Unleaded Avgas. The goal is to maintain a nearly equal sales price point between Leaded and Unleaded Avgas to further facilitate, encourage, and expedite the transition to Unleaded Avgas. The SAFE program is available to all aircraft, both LGBbased and transient, to encourage the use of Unleaded Avgas and minimize lead emissions at LGB.

The Airport will continue to work with aviation industry organizations and federal partners to support the local and national efforts to eliminate lead emissions from general aviation aircraft operations.

Recommendation 7: Explore with FAA Temporary Moratorium on New Flight Schools Business Licenses

In recent months, the City of Torrance has implemented actions to direct flight operations, ban certain flight procedures or training maneuvers, and limit the number of flight school business licenses. Sling Pilot Academy was granted a preliminary injunction by the Los Angeles County Superior Court to prevent the City of Torrance from taking any action regarding the 2024 business license renewal for Sling Pilot Academy.

As this matter mirrors the objective of Recommendation 7 to place a temporary moratorium on new flight school business licenses at LGB, the Airport and the City Attorney are monitoring the situation at Torrance Airport. As mentioned in the presentation on December 12, 2023, a ban of new flight schools at LGB could place the City at risk for violating FAA grant assurances, and a temporary moratorium is also of similar concern. The outcome of the City of Torrance actions will inform how best to proceed on discussions with the FAA to explore a similar moratorium at LGB.

Updated GA Information on Runways 26R and 26L Operations

The following three charts provide year-end data for Runways 26L and 26R. The first chart, a five-year annual comparison chart, highlights daily departures on Runway 26R from January 2020 to the present. The second chart provides a four-year comparison of total monthly departure operations for Runways 26L and 26R. The last chart provides a four-year comparison of the percentage of total operations for Runways 26L and 26R. All three charts are also available in a larger format and are included at the end of this report marked as Attachment A.



Monthly Runway 26R vs. Runway 26L Total Departing Operations

Jan 2020 – Jan 2024



Monthly Runway 26R vs. Runway 26L Percentage of Total Operations Jan 2020 – Jan 2024



On December 5, 2023, the community group, Long Beach Small Aircraft NoisE Reduction (SANeR), delivered a document to the Airport, City Council, City Manager, and City Attorney containing ten follow-up questions to the GA Report. The responses are included at the end of this report marked as Attachment B.

The Airport will continue to remain engaged on these recommendations and recognizes that although there is progress, there are efforts that will take additional time. As this update also provides answers to additional questions on GA operations after the October report, we look forward to a more in-depth discussion as part of the joint FAA and LGB informational webinar.

Staff will continue to provide pertinent updates as they may become available. Should you have any questions, please contact me at (562) 570-2605.

ATTACHMENTS

CC: DAWN MCINTOSH, CITY ATTORNEY DOUGLAS P. HAUBERT, CITY PROSECUTOR LAURA L. DOUD, CITY AUDITOR APRIL WALKER, ASSISTANT CITY MANAGER TERESA CHANDLER, DEPUTY CITY MANAGER MEREDITH REYNOLDS, DEPUTY CITY MANAGER GRACE YOON, DEPUTY CITY MANAGER TYLER BONANNO-CURLEY, DEPUTY CITY MANAGER KEVIN LEE, CHIEF PUBLIC AFFAIRS OFFICER MONIQUE DE LA GARZA, CITY CLERK DEPARTMENT HEADS

Attachment A



General Aviation Operations on Runway 26R – Jan '20-Feb '24



Jan 2020 – Jan 2024

Monthly Runway 26R vs. Runway 26L, Total Departing Operations

Monthly Runway 26R vs. Runway 26L, Percentage of Total Operations Jan 2020 – Jan 2024

Attachment B

On September 12, 2023, the City Council requested a comprehensive report, in response to community concerns over increased General Aviation (GA) activity, detailing the GA operations at Long Beach Airport (Airport), including its ties to the City of Long Beach (City), the Federal Aviation Administration (FAA), and privately owned flight schools. The report was delivered to the Mayor and City Council members on October 31, 2023. Airport staff presented a summary of the report at the December 12, 2023, City Council meeting. Additional questions and requests for clarification regarding the report have been presented. The purpose of this document is to provide responses to these additional questions and informational requests.

Question 1: Flight Schools as % of GA Activity

What percentage of total GA Activity is each of the following:

- 1. Touch and Go
- 2. Stop and Go

Please provide additional context as available:

- 1. Baseline 1989-90 levels
- 2. Comparing last 5 Calendar Years

Question 1 Response

The Airport maintains a state-of-the-art Aircraft Noise and Operations Monitoring System (ANOMS). Historical ANOMS data extends to 1998. The system records noise level data at eighteen microphones located in the vicinity of the airport and incorporates aircraft identification and spatial data from the Federal Aviation Administration's System Wide Information Management (SWIM) system. ANOMS operates 24/7 and correlates noise and aircraft identification data to ensure positive identification of all noise events.

Aircraft on the ground are very difficult to track accurately. As a result, the ANOMS does not currently have the capability to automatically differentiate between stop and go and touch and go operations. Staff identifies these operations through a detailed and laborious analysis process, which includes a review of time between operations, audio of Air Traffic Control recordings, and noise level data. Exhibit 1, Runway 26R Daily Departures Annual Comparison, depicts daily departures on Runway 26R for the period January 1, 2020 through February 11, 2024. This exhibit is an update of similar data presented in the comprehensive report. Exhibit 2, Runway 26R Daily Departures Operations, depicts these operations as a linear graph. The operational totals represented in these exhibits are aircraft that are operating in a westerly flow and exiting the

runway environment to the west. The data only consists of turboprop and propeller aircraft and includes straight out departures, touch and go procedures, and single circuit procedures. Each time an aircraft exits the runway environment to the west it is counted as one (1) operation.

Exhibit 1 - Runway 26R - Daily Departures Annual Comparison

Exhibit 2 – Runway 26R – Daily Departures Operations

Question 2: GA Operations by Runway

We would like to better understand how shifts in GA operation volumes have occurred at a runway level over time. The intention is to gain further insight to the changes in noise levels/increases experienced by the communities west of 26 L/R.

It can also help us understand how under the current order, shifting activity between runways (ie the partial or full closure of 26L) can result in a concentration of operations in one area that go well beyond levels compatible with residential land.

Please provide % of Total GA Operations per Runway:

- 1. Baseline 1989-90 levels
- 2. Compare last 5 Calendar Years

Question 2 Response:

Exhibit 3 depicts Monthly 26R vs. Runway 26L Total Departing Operations. Exhibit 4 depicts Monthly Runway 26R vs. Runway 26L Percentage of Total Operations. The operational totals represented in these exhibits are aircraft that are operating in a westerly flow and exiting the runway environment to the west. The data consists exclusively of turboprop and propeller aircraft and includes straight out departures, touch and go procedures, and single circuit procedures. Each time an aircraft exits the runway environment to the west it is counted as one (1) operation. Should and aircraft perform six (6) training circuits in a touch and go operation it is counted a total of six (6) times. As shown in these exhibits, approximately sixty percent of these operations utilize Runway 26L and forty percent of these operations utilize Runway 26R.

Exhibit 3 - Monthly Runway 26R vs. Runway 26L Total Departing Operations

Exhibit 4 - Monthly Runway 26R vs. Runway 26L Percentage of Total Operations

Question 3: GA Noise Capacity

Please provide your best estimate of how many total operations per day (annual average), would need to occur on Runway 26R to exceed:

GA's Noise Bucket allocation 65db CNEL 60db CNEL

Use recent runway distribution of GA operations for estimates.

Context

There are no monitors deep into the residential area subject to a significant increase in Flight School training patterns flown overhead. These high frequency, low altitude patterns are a significant increase in Time Above and Number Above functions of the resulting noise levels.

Often by aircraft flying much lower than altitudes assumed for "flying friendly" patterns, or FAA guidelines for flying over densely populated residential areas, schools, churches, etc., and are generating higher levels of sound at ground level than they would from higher altitudes.

Question 3 Response:

In Calendar Year 2023 the Airport averaged approximately 118 daily departures on Runway 26R. The noise level at Remote Monitoring Terminal (RMT) 6 for Calendar Year 2023 was 58.7 CNEL. The ratios of noise to operational levels required to reach 60 CNEL and 65 CNEL respectively at RMT 6, assuming the same types of aircraft and time of operations, are given by the following equations:

Equation 3-1. 60 CNEL Calculation

 $\frac{10^{(60.0/10)}}{10^{(58.7/10)}}$ x 118 = 1.3489 * 118 = 159 daily departure operations

Equation 3-2. 65 CNEL Calculation

 $\frac{10^{(65.0/10)}}{10^{(58.7/10)}}$ x 118 = 4.2658 * 118 = 503 daily departure operations

Table 1 depicts the Top 40 Hourly Departure periods for Runway 26R and Runway 26L for the calendar year of 2023. Based on this data, a service level of operations for Runway 26R would be approximately 31 departures per hour; and a service level of operations for Runway 26L would be approximately 45 departures per hour. It should be noted that the service level of a runway has several factors including but not limited to: aircraft fleet mix within the runway environment, meteorological conditions, time of day, air traffic control staffing, and pilot experience. Runway assignments and utilization is at the direction of the FAA Airport Traffic Control Tower (ATCT) in coordination with the pilot-in-command.

26R Departing Hourly Operations	Hour	Date	26L Departing Hourly Operations	Hour	Date
39	11	12/16/2023	74	11	9/4/2023
37	13	10/1/2023	68	11	9/6/2023
37	17	8/24/2023	68	11	9/14/2023
37	11	9/14/2023	56	8	2/8/2023
36	12	5/11/2023	54	10	9/20/2023
36	11	9/20/2023	52	12	9/6/2023
34	11	6/21/2023	51	17	6/9/2023
34	11	9/4/2023	51	10	6/10/2023
34	12	9/14/2023	49	13	2/6/2023
33	13	6/4/2023	49	11	6/26/2023
33	12	5/13/2023	48	11	6/9/2023
33	13	6/9/2023	47	14	4/13/2023
33	14	1/8/2023	47	15	8/24/2023
32	15	8/3/2023	47	10	9/13/2023
32	11	3/4/2023	46	11	1/23/2023
32	17	5/15/2023	46	10	4/13/2023
32	16	11/30/2023	46	11	4/28/2023
32	18	4/10/2023	45	14	5/29/2023
32	14	7/3/2023	45	11	8/4/2023
31	17	7/21/2023	45	13	7/3/2023
31	14	9/8/2023	45	17	8/24/2023
31	11	9/19/2023	45	14	10/2/2023
31	10	3/25/2023	45	10	10/10/2023
31	15	7/8/2023	45	16	9/19/2023
31	15	6/6/2023	44	11	2/16/2023
31	11	10/10/2023	44	13	2/10/2023
31	11	3/2/2023	44	8	1/19/2023
31	13	5/29/2023	44	16	8/24/2023
30	16	2/6/2023	44	11	10/27/2023
30	14	5/25/2023	43	13	5/6/2023
30	11	6/10/2023	43	11	5/13/2023
30	13	2/17/2023	43	12	5/5/2023
30	16	8/24/2023	43	8	7/13/2023
30	11	12/15/2023	43	14	8/19/2023

Table 1 – Top 40 Hourly Departures for Runway 26R and Runway 26L

30	10	9/12/2023		43	11	9/19/2023
30	15	8/24/2023		43	12	10/17/2023
29	17	4/12/2023		43	18	9/20/2023
29	12	9/15/2023		43	11	12/15/2023
29	12	5/20/2023		43	16	11/29/2023
29	15	1/12/2023		42	12	5/31/2023
32.1		Mean		47.7		Mean
31.0		Median		45.0		Median
31.0		Mode		43.0		Mode

If the maximum observed volume of 39 hourly operations occurred continuously on Runway 26R for each hour training operations are permitted by the Noise Ordinance (Long Beach Municipal Code 16.43.030) the Airport could approximately triple operations on Runway 26R. In other words, it is very unlikely 65 CNEL will be reached at RMT 6 given typical operations. However, the loudest and most intrusive noise events are monitored via SENEL and the Airport works continuously with the operators to reduce these occurrences. In addition, SENEL exceedances of the Noise Ordinance are given violations in accordance with the established process.

Question 3 continued: 66 CNEL at RMT 6

The most recent noise related analysis provided by airport staff, the 2005 Airport Terminal Improvement study, showed a total CNEL of 66.0 at the monitor nearest the land west of Runway 26R, number 6.

	YEAR 2004 Measured CNEL							
SITE	COMMUNITY	AIRCRAFT	TOTAL					
1	57.7	52.4	58.8					
2	57.9	51.5	58.8					
3	64.6	58.8	65.7					
4	61.9	61.6	64.8					
5	71.5	53.4	71.6					
6	64.1	61.3	66.0					
7	62.0	58.4	63.5					
8	59.7	61.9	64.0					
9	60.8	63.8	65.5					
10	68.6	64.8	70.1					
11	63.1	56.5	64.0					
12	67.3	54.9	67.5					
13	61.0	64.4	66.0					
14	60.5	60.4	63.5					
15	67.1	60.6	68.0					
16	86.9	66.5	86.9					
17	70.5	66.1	71.8					
18	63.6	69.0	70.0					

Table 3	-2
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See notes from FAA Airport Desk Reference - Chapter 17 - Noise re: GA Volume for 65db noise contour:

(a) 90,000 annual (247 average daily operations) piston-powered aircraft operations in Approach Categories A through D (i.e., landing speed < 166 knots); or

(b) 700 annual jet-powered aircraft operations (about 2 average daily operations) during the period the environmental document covers.

Note: These levels of piston-powered or jet-powered general aviation operations have been shown to produce a DNL 60 dB contour less than 1.1 square miles in area and extending no more than 12,500 feet from the start of takeoff roll. The resulting maximum DNL 65 dB contour would be 0.5 square mile and would not extend more than 10,000 feet from the start of takeoff roll. The Cessna Citation 500 and other jet aircraft producing noise levels less than or equal to the Beech Baron 58P may be counted as propeller aircraft, not iets.

Question 3 Response (Continued):

The data depicted above in Table 4A contains a column of data labeled 'TOTAL'. The CNEL value of 66.0 at Site 6 is from that column. However, the value that should be referenced is 61.3, which is taken from the 'AIRCRAFT' column for Site 6. This value is the average measured noise level, in terms of the CNEL metric, for calendar year 2004 for Site 6 from aircraft events. The 'COMMUNITY' column contains all other noise not associated with aircraft events. Together, 'COMMUNITY' and 'AIRCRAFT' are logarithmically summed to determine the 'TOTAL' column.

Exhibit 5 depicts the RMT 6 Daily Aircraft CNEL values in terms of dBA for the last five (5) years utilizing a 31-day rolling average. RMT 6 is the closest to the California Heights neighborhood of Long Beach. The 31-day rolling average depicted on this exhibit indicates changes in the runway utilization and operational levels. For example, in April and May 2020 the 31-day rolling average shows a significant decrease in CNEL due to the COVID-19 Pandemic and shutdown. Additionally, in May, June and July of 2023 the 31-day rolling average shows an increase in the CNEL due to Runway 12/30 being closed for the Runway Lighting Project which forced additional traffic to Runways 26L and 26R.

Exhibit 5 - RMT 6 - Daily Aircraft CNEL

Question 4: Local vs. Transient Aircraft

Of total GA operations, what percentages are:

LGB Based GA Operations Transient GA Operations

Please provide:

Baseline 1989-90 levels Compare last 5 Calendar Years

Question 4 Response:

The based aircraft fleet at the Airport changes frequently. Flight schools and other tenants rotate their based aircraft for maintenance, fleet management and other reasons. Additional data is needed to get a full data set of what aircraft are Airport based and which aircraft are not Airport based.

Exhibit 6 depicts the monthly General Aviation and Air Taxi Operations for the Airport from the FAA's Air Traffic Activity System (ATADS).

Exhibit 6 - General Aviation and Air Taxi Operations for the Airport

Question 5: Traffic Pattern and Altitude Monitoring

Long Beach's GA community has a pilot education/Fly Friendly program that it administers to itself and voluntarily adheres to. Our community regularly observes and documents operations that bare little semblance to the guidelines listed below, even when taking into consideration that many of the training operations are in a perpetual state of either taking off or landing.

Please provide insight as to how we currently measure and monitor the effectiveness of these programs - include insight as to how the airport observes training patterns, altitudes, and whether or not GA is actually flying friendly.

Question 5 Response:

This is a voluntary program administered by the GA community. Historically, the Airport's role has been enforcement of the Noise Ordinance (LBMC 16.43), the Airport does support and communicates the voluntary measures but has an ancillary role in the program. The Airport does not have a role in regulating the program. Airport staff are working with flight schools, GA operators, tenants, and operators from other airports in the region to incorporate a system that monitors the effectiveness of the Fly Friendly program and its associated voluntary measures. The Airport is supportive of developing a recognition program to acknowledge and provide encouragement as voluntary measures are typically the quickest and method of achieving the desired outcome.

Question 6: Total GA Operation Numbers

Please clarify / confirm which numbers are accurate and what is represented.

There are some inconsistencies and items that need clarification with regard to GA Operation Totals presented in various documents, and within the Report.

Example 1

Document: LGB GA Report

The title of this suggests it represents Total Operations info for 26R, which represents 25.3% of GA total, on average, per Calendar Year 2022 figures as baseline.

The Y axis is labeled "Daily Penetrations" as opposed to Daily Operations, as suggested by the Title.

Penetrations are generally understood to be "Landing" operations

It is not clear whether the graphed figures represent only "penetrations" or "landings", or if these totals represent total operations. 150 total operations including landings and training ops seems low.

If total operations is correct suggested by the title, please confirm that the depicted totals include:

- 1. 1 count for a departure
- 2. 1 count for a landing
- 3. 2 counts for a touch and go

4. 2 counts for a stop and go

Per operations count guidelines, FAA.gov website:

The second s	
7210.3 by Topic BASIC	Eacility Statistical Data. Reports. and Forms / Local Operations
 AIR ROUTE TRAFFIC CONTROL CENTERS 	Section 3. Local Operations
 TERMINAL AIR TRAFFIC CONTROL FACILITIES 	13-3-1. TABULATION
FLIGHT SERVICE STATIONS	count local operations as follows:
TRAFFIC MANAGEMENT SYSTEM	a. One count for an aircraft departing the airport area for a designated practice area and one count for the aircraft returning
REGULATORY AND PROCEDURAL	from the designated practice area.
INFORMATION SYSTEM OPERATIONS SECURITY	b. Two counts for each low approach below traffic pattern altitude that is a stop and go or touch-and-go operation.
APPENDIX	

Question 6 Response:

The operations totals represented in the exhibits cited are aircraft that are operating in a westerly flow and exiting the runway environment to the west. In other words, these should represent all operations over the community of California Heights from departure operations from Runway 26R. The data consists of turboprop and propeller aircraft and includes straight out departures, touch and go procedures, and single circuit procedures. Each time an aircraft exits the runway environment to the west it is counted as one (1) operation. For example, if an aircraft performs six (6) training circuits (touch and go operation) each circuit is counted as an operation for a total of six (6) operations.

Example 2

FAA ATADS Reported Totals for Aug 2023:

Air Taxi: 1,212

General Aviation: 10,996

Total Air Tax and General Aviation: 12,208

Long Beach Current Month & Calendar Year-to-Date Statistics for Aug 2023:

Total Air Taxi and General Aviation: 34,137

Difference Between Totals: 21,929

LGB Current	AIRP(t Month	ORT OP & Calend	ERATIONS lar Year-To- 2023	Date Statis	tics	
		August		Caler	ndar Year-	To-Date
Airport Operations (FAA)	2023	2022	Change	2023	2022	Change
Air Carrier + Commuter Carriers	2,949	2,659	10.9%	22,026	21,212	3.8%
Air Taxi + General Aviation	34,137	29,367	16.2%	219,694	203,408	8.0%
Military Operations	94	92	2.2%	667	753	-11.4%
Total Aircraft Operations	37,180	32,118	15.8%	242,387	225,373	7.5%

ATADS - FAA												
ATADS : Airport Operations : Standard Report	Date	Month	Year	Air Carrier	Air Taxi	GA	Military - Itinerant	Total Itinerant	Civil	Military - Local	Total Local	Total Operations
Towers with Radar	08/01/2023	8	2023	98	56	380	1	535	489	0	489	1024
Towers with Radar	08/02/2023	8	2023	101	40	424	0	565	594	0	594	1159
Towers with Radar	08/03/2023	8	2023	100	53	356	1	510	705	0	705	1215
Towers with Radar	08/04/2023	8	2023	101	61	330	3	495	852	0	852	1347
Towers with Radar	08/05/2023	8	2023	80	28	272	7	387	534	0	534	921
Towers with Radar	08/06/2023	8	2023	90	34	234	2	360	472	0	472	832
Towers with Radar	08/07/2023	8	2023	98	35	343	0	476	526	0	526	1002
Towers with Radar	08/08/2023	8	2023	100	48	403	1	552	919	0	919	1471
Towers with Radar	08/09/2023	8	2023	99	69	412	2	582	794	0	794	1376
Towers with Radar	08/10/2023	8	2023	100	41	348	6	495	928	0	928	1423
Towers with Radar	08/11/2023	8	2023	102	68	332	2	504	790	0	790	1294
Towers with Radar	08/12/2023	8	2023	81	33	340	0	454	448	0	448	902
Towers with Radar	08/13/2023	8	2023	89	35	308	4	436	340	0	340	776
Towers with Radar	08/14/2023	8	2023	100	24	393	3	520	206	0	206	726
Towers with Radar	08/15/2023	8	2023	102	43	414	0	559	671	0	671	1230
Towers with Radar	08/16/2023	8	2023	105	48	523	4	680	912	0	912	1592
Towers with Radar	08/17/2023	8	2023	101	46	546	0	693	985	0	985	1678
Towers with Radar	08/18/2023	8	2023	99	56	441	2	598	654	0	654	1252
Towers with Radar	08/19/2023	8	2023	79	14	299	4	396	590	0	590	986
Towers with Radar	08/20/2023	8	2023	51	5	12	0	68	0	0	0	68
Towers with Radar	08/21/2023	8	2023	82	13	284	2	381	580	0	580	961
Towers with Radar	08/22/2023	8	2023	100	31	394	0	525	911	0	911	1436
Towers with Radar	08/23/2023	8	2023	100	31	419	2	552	822	0	822	1374
Towers with Radar	08/24/2023	8	2023	99	31	360	0	490	876	0	876	1366
Towers with Radar	08/25/2023	8	2023	100	58	386	3	547	575	0	575	1122
Towers with Radar	08/26/2023	8	2023	81	19	296	0	396	642	0	642	1038
Towers with Radar	08/27/2023	8	2023	98	26	256	0	380	373	0	373	753
Towers with Radar	08/28/2023	8	2023	100	51	372	6	529	688	0	688	1217
Towers with Radar	08/29/2023	8	2023	103	46	389	0	538	980	0	980	1518
Towers with Radar	08/30/2023	8	2023	101	38	426	0	565	1,108	0	1,108	1673
Towers with Radar	08/31/2023	8	2023	103	31	304	0	438	736	0	736	1174
				2943	1212	10996	55	15206	2070	0	20700	35906

Question 6 Response (Continued):

The Air Traffic Activity System (ATADS) data contains several datasets including IFR and VFR Itinerant aircraft, Overflight aircraft and Local aircraft. It appears the summation provided only references Itinerant aircraft. Local aircraft operations, an additional 20,700 operations, should also be included. In addition, the FAA is missing data on August 20. If these data are included along with the additional 20,700 local operations, the values from the LGB August Report and the FAA data would be in close agreement.

Question 7: Periodic Updates

Please provide a comprehensive list of all Airport Master Plans, Noise Compatibility Plans, Noise Studies, or related/similar studies that contain an airport noise component since the original baseline years of 1989-90, along with the documents. We currently have an outstanding PRR for this info.

The baseline data for the Noise Budget/Noise Ordinance is from 1989-90.

FAA Advises that plans should be reviewed at intervals of 3-5 years or when Noise Exposure Maps or Airport Master Plans have been updated.

What we are looking for is something along the way that addresses, forecasts, or acknowledges that the residences west of 26R are subject to significant increases in noise with no monitor or visibility to the actual CNEL in that area.

Context

After submitting a Public Records Request for any Part 150/Noise Compatibility documents on record, our group was told by Airport staff that a Part 150 had never been done.

The FAA website currently has a document presented as active/most recent, a response to a Part 150 Noise Compatibility plan submitted by Long Beach in 1987. Realizing this predates the Noise Ordinance and the baseline years of 1989-1990, we went head with our request for a copy of the document from the FAA for our review. At that point it seemed to be the most relevant, as well as the only thing of this nature available via Long Beach Airport or the FAA.

Once we shared the document with airport staff, another document was shared with us - the noise component of the Environmental Impact Review done in 2005, related to the Terminal Area Improvement project. We were informed that this would be the most relevant to our inquiry.

In the FAA's posted information re: Grants to Long Beach Airport, there are references to Grants for Airport Master Plans - in 2006, 2011, and 2015.

LGB FAA Grant History									
Fiscal Year	Loc ID	Site Name	City Name	State Abbrv	Project Description	AIP Entitlement	AIP Discretionary	Grand Total	
FY 2006	LGB	Long Beach (Daugherty Field)	Long Beach	CA	Conduct Airport Master Plan Study	\$491,464.00		\$491,464.00	
FY 2011	LGB	Long Beach (Daugherty Field)	Long Beach	CA	Conduct Airport Master Plan Study		\$1,102,028.00	\$1,102,028.00	
FY 2015	LGB	Long Beach (Daugherty Field)	Long Beach	CA	Conduct Airport Master Plan Study		\$822,378.00	\$822,378.00	

There was also a motion put forward by a Council member to request an Airport Master Plan in December 2016. This motion was amended to request an assessment of the pros and cons of doing an Airport Master Plan, as well as a recommendation as to whether or not one should be undertaken. Then Airport Director Jess Romo delivered a recommendation against doing an Airport Master Plan 45 days following.

U.S. Department of Transportation

Federal Aviation Administration

Advisory Circular

Subject:

Date: 8/5/83 Initiated by: AC No: 150/5020-1 Change:

NOISE CONTROL AND COMPATIBILITY PLANNING FOR AIRPORTS

b. Periodic or formal reviews, at intervals of three to five years or when the noise exposure map or airport master plan is updated, should be scheduled and budgeted by the airport operator as an integral part of the program. Included within the formalized review should be consideration of those problems or deficiencies identified during the monitoring process and most notably those pertaining to the performance of the plan. The review will normally not be as extensive as the original effort but should establish whether the plan remains viable or what actions are necessary to correct existing or forecast deficiencies. The types of activities included in the review should be:

(1) A comparison of the current compatibility of the airport and its environs to that outlined in the program's goals and objectives.

(2) Appraisal of the rate of growth of both the community and airport to determine the current and future adequacy of the compatibility plan.

(3) Review of the airport noise exposure map in light of both current and forecast operations and the noise performance levels of aircraft.

(4) Review of the adequacy of current operational controls in maintaining aircraft noise within the designated noise impact areas.

(5) Review of the adequacy of the adopted development controls in protecting the designated noise impact areas from encroachment by noise sensitive uses.

(6) Review of the effectiveness of the corrective actions employed in resolving existing unprotected noise sensitive uses within the noise impact areas.

c. Although all land uses may be considered as normally compatible with noise levels less than 65 L_{dn}, local needs and values may dictate further delineation based on specific local requirements or determinations as well as low ambient levels.

ASSURANCES

AIRPORT SPONSORS

7. Consideration of Local Interest.

It has given fair consideration to the interest of communities in or near where the project may be located.

34. Policies, Standards, and Specifications.

It will carry out any project funded under an Airport Improvement Program Grant in accordance with policies, standards, and specifications approved by the Secretary including, but not limited to, current FAA Advisory Circulars (<u>https://www.faa.gov/airports/aip/media/aip-pfc-checklist.pdf</u>) for AIP projects as of [Selection Criteria: Project Application Date].

Question 7 Response:

Airport studies are broadly categorized by the FAA as "Master Plans". The 2006 document was an Airport Layout Plan Update. The 2011 and 2015 documents were Airfield Geometry Studies. These studies identified safety enhancements to the airfield and resulted in the closure of Runway 16L-34R and Runway 16R-34L.

It is the understanding of Airport staff that a Part 150 Airport Noise Compatibility Study was initiated in 1985 and Noise Exposure Maps were submitted and found to be in compliance in early 1987; however, the associated Noise Compatibility Program was never approved and thus, the Airport does not have a FAA approved Part 150 Study. The Noise Compatibility Ordinance is more restrictive than measures that would be approved by the FAA as part of an approved Part 150 Noise Compatibility Plan.

Exhibit 6 is an extract from the FAA's web site indicating the status of airport noise compatibility programs. As indicted, the LGB Noise Exposure Map (NEM) was determined to be in compliance 1-16-1987 and the Noise Compatibility Program is listed as a finding; however, it was never approved. The exhibit also indicates the status of John Wayne Airport, which is another airport with a noise compatibility program grand-fathered under the Airport Noise and Capacity Act of 1990. Interestingly, John Wayne Airport has never attempted a Part 150 Noise Compatibility Study.

Exhibit 7. Status of Part 150 Study

John Wayne Airport (SNA), Orange County		
Lake Tahoe Airport (TVL), South Lake Tahoe	NEM in compliance 5-18- 1994	NCP approved 11-14-1994
Long Beach Dougherty Field Airport (LGB), Long Beach	NEM in compliance 1-16- 1987	NCP finding 3-27-1987

Source: <u>Planning Data and Noise Compatibility Program Status - California | Federal Aviation</u> <u>Administration (faa.gov)</u>

The applicable noise planning document for LGB is the Long Beach Airport Terminal Area Improvement Project Environmental Impact Report No. 37-03 (State Clearing House No. 200309112), November, 2005.

Question 8: Noise Monitoring / Noise Budget

Question 8 Responses Incorporated

Monitoring for Noise Budget vs Monitoring for Noise Violation

Noise Budget was set based on activity on Runway 30.

Noise Budget is managed by measurements taken from monitors placed at Runway 30

Please confirm that we are correct in our understanding of the following hypothetical scenario:

1. GA Activity measured on Runway 26R is captured by monitor 6, but that is used to measure for SENEL violations, not the Noise Budget

RMT 6 is used to monitor SENEL violations and aircraft CNEL.

2. If a GA departure registers at 90db on 26R during daytime hours, it will not trigger a violation

Correct.

3. If a GA departure registers at 90db on 26R during daytime hours, it will not count toward the noise budget, as that's measured by monitors 9/10.

Correct the departure will not count toward the budget; however, CNEL is monitored at all RMT locations.

- 4. If that same 90db plane does not climb / stays close to the same altitude throughout its pattern over the neighborhood, it will not be counted against any noise budget
- 5. Correct the departure will not count toward the budget; however, CNEL is monitored at all RMT locations.
- 6. If the same 90db plane does not climb / stays close to the same altitude throughout its pattern over the neighborhood, there is no corresponding CNEL calculation, as there aren't any monitors deeper into the neighborhood / under the training pattern

Correct. It is important to note that a CNEL Contour is generated using FAA's approved noise model, Aviation Environmental Design Tool (AEDT)1. For purposes of our monthly

¹ FAA: AEDT Support Website

and annual noise reports, the CNEL contour is then calibrated to measured noise levels within ANOMS.

16.43.040 Maximum SENEL limits.

A. Subject to the authority of the Airport Manager to adjust permissible single event noise limits for categories of Airport users in order to reduce such group's cumulative noise levels, all non-governmental Operations at the Airport shall meet the following SENEL limits:

Runway	7 a.m. to 10 p.m.	10 p.m. to 11 p.m. & 6 a.m. to 7 a.m.	11 p.m. to 6 a.m.	Noise Monitors		
	Departure/Arrival	Departure/Arrival	Departure/Arrival	Departure/Arrival		
30	102.5/101.5	90/90	79/79	9/10		
12	102.5/101.5	90/90	79/79	10/9		
25R	92/88	*/	*/	6/1		
25L	95/93	*/	*/	5/2		
7R	95/92	*/	*/	2/5		
7L	88/92	*/	*/	1/6		

Question 9: Safety – Student Pilots, Volume of Traffic

Please provide insight to the city's risk assessment process, adverse event statistics, any available documentation of discussions on the topic to date, and any thresholds identified by the city as a "yellow" or "red" zone - how much activity is too much risk for the city and for the airport?

Context

As stated in the report, Long Beach is a complex airspace by several measures. We are increasing the number of Flight School students in our airspace - these are the least experienced of the entire pilot population.

"If you can make it here, you can make it anywhere" does not sound like a prudent basis for risk management when the potential for serious injury or death, and property damage is at stake.

- 1. Flight School operations are driving an increase in total GA operations
- 2. Flight School operations are increasing as % of total GA operations
- 3. Risk of adverse event increases along as degree of complexity and volume of operations increase
- 4. Some peak times are at full capacity

5. Recent reports indicate FAA is short on ATC's, existing staff stretched thin

Question 9 Response:

Long Beach Airport recognizes the increases in Flight School Operations at the Airport. Safe and efficient movement of air traffic and specifically pilot certification is a federal responsibility. Any safety of flight concerns should be communicated to the FAA Flight Standards District Office (FSDO). FSDO has a local branch in Long Beach where residents can submit their safety concerns².

² Flight Standards District Offices (FSDO) | Federal Aviation Administration (faa.gov)

Question 10: Communication re: Operations and Runway Changes

What is the airports plan to keep the communities updated on any changes for all runways?

The airport had an incident happen recently on runway 26L in or around 10/26/23 that the NTSB, FAA/ ATCT was made aware of and is still ongoing, a significant number of operations were shifted over to runway 26R which has impacted noise exposure / quality of life for the residents.

Question 10 Response:

The Airport currently monitors and disseminates press releases notifying the public of any upcoming runway closures or shifts of operations and posts messages on the Airport's flight tracking website, WebTrak3 as depicted in Exhibit 8. The Airport also notifies residents through LinkLB. Residents who have signed into LinkLB, and requested notifications by the Airport. City Council Members of Districts 4, 5, 7 and 8, and their staff are alerted of upcoming runway closures and special military operations so that they can disseminate the information to their mailing lists.

The Airport also includes information on the lgb.org noise advisory webpages regarding upcoming airfield changes and/or updates to changes in operations. Additionally, the Airport provides updates at City Airport Advisory Commissions (AAC) meetings that are held on the third Thursday of each month (except during the months of April, August and December).

The Airport welcomes any other ideas that the public would have regarding additional channels that they would like the Airport to utilize for construction updates, runway closures or irregular operations.

³ WebTrak (emsbk.com)

Exhibit 8 – Airport Messaging Capabilities within WebTrac

