LAX Fly Quieter Program (FQP)
Frequently Asked Questions

What aircraft types are included in the FQP? (e.g., passenger jets, cargo jets, turboprops, other)

The LAX FQP includes jet aircraft used by air carriers (passenger and cargo operations). Under the current program, regional airlines operating smaller, regional jets are recognized separately in the FQP and are not grouped in the award categories (please see the FQP Methodology for more information).

Which aircraft type scores best on the Quietest Fleet element?

The quietest fleet score evaluates the noise contribution of each operator's fleet as it actually operates at LAX. Operators generally own a variety of aircraft types and schedule them according to both operational and marketing considerations. The FQP assigns a higher rating or grade to operators operating quieter, new generation aircraft, while operators operating older, louder technology aircraft would rate lower.

An operator's score is based on a certified noise level rating that uses three noise measurement points (approach, departure, and sideline) for each aircraft type according to the Code of Federal Regulation, Title 14, Part 36 (14 CFR Part 36). The allowable noise limits within 14 CFR Part 36 increase with weight, so that larger aircraft, serving more passengers, are not penalized as compared to smaller aircraft types.

The quietest fleet element considers the certified noise level ratings of all three noise measurement points and averages them between the variety of possible aircraft configurations for a particular aircraft type. There are a wide variety of aircraft that operate out of LAX. In the narrow-body category, the Airbus A320-Neo family is among the highest scoring. In the wide-body category, the Airbus A380-800 and the Boeing 787-10 Dreamliner are among the highest scoring.

For example, in the narrow-body category, the Airbus A320-Neo family of aircraft has an average rating of 28.8 whereas the Boeing 737 family of aircraft has an average rating of 14.3. In the wide-body category the Boeing 787-10 Dreamliner has an average rating of 28.6 whereas the Boeing 777-300ER has an average rating of 17.2. The highest score for an aircraft operating at LAX is the Airbus 380-800, which has a rating of 32.5.

For more information on FAA certified noise level ratings, please see:

https://www.faa.gov/noise/levels

Aren't newer aircraft supposed to be quieter? If so, how can an operator's scores for the Quietest Fleet and Quietest Arrivals elements be so different?

The Quietest Fleet element considers three noise measurement points (approach, departure, and sideline) based on FAA aircraft certification criteria. While newer generation aircraft are often quieter overall, the Quietest Arrivals element is based on noise measurement data from aircraft on approach only. It is not uncommon for some newer, quieter-rated aircraft to have much higher noise ratings on arrival than on departure or sideline. Other variables such as wind, flaps, throttle settings, etc. may also contribute to noise measurements at the NMTs. As such, differences in scores between Element 1 and Element 2 in the FQP annual report are to be expected.

Which aircraft type scores best on the Quietest Arrivals element?

Scoring for the Quietest Arrivals element is based on actual noise monitoring data measured from two permanent Noise Monitoring Terminals (NMTs) located under the LAX final approach paths (one under the north runway complex arrivals and the other under the south runway complex arrivals). Points in this element are awarded to operators that have the lowest noise readings for a given quarter. Actual scores on the Quietest Arrivals element will change on a quarter-by-quarter basis dependent on the number of overall arrivals for that given quarter.

In general, aircraft scoring higher on the Quietest Arrivals element consist of the Boeing 737 family, Airbus A320 family, and Embraer E-Jet family of aircraft. Scores for Quietest Arrivals may differ from Quietest Fleet as the Quietest Fleet scores takes into account not only approach noise levels but also departure and sideline noise.

How do noise monitors differentiate aircraft noise from community noise (vehicular traffic, lawn care equipment, etc.)?

LAX's permanent Noise Monitoring Terminals (NMTs) identify noise events as potential aircraft noise utilizing thresholds and duration limits. These noise events are then correlated with an aircraft operation if its radar flight track is within close proximity to the NMT and occurs within that time interval.

For example: If there is an ambulance that passes by an NMT and the noise level exceeds the threshold for a certain amount of time, but there is no radar track associated at that specific time and location, the LAX Noise and Operations Management System (NOMS) will label it as community noise.

How far from the end of the Runway are the Noise Monitoring Terminals (NMTs) that are used as part of the Quietest Arrivals Element of the FQP? How were they selected?

Two permanent NMTs were selected for the Quietest Arrivals Element, one for north runway complex arrivals and one for south runway complex arrivals. They were selected specifically because of their distance away from the LAX runways and where aircraft should be on final approach in full landing configuration. The following distances are for the outer runway thresholds on each complex:

North Complex Runway 24R: ~4.35 Nautical Miles to the east
South Complex Runway 25L: ~4.40 Nautical Miles to the east

These specific NMTs were selected from among the array of noise monitors near LAX because they capture arrivals to LAX during West Flow at a very similar distance from the runways, whether they land on the north or south complex, making it easier to compare "apples to apples" among operators.

What are the scoring categories for the FQP and can they change?

Currently, the FQP distinguishes three (3) categories of operators for awards. The categories listed below are based on the number of average daily operations by calendar year. One operation is defined as one arrival or one departure.

Category 1: 100+ operations per day
Category 2: 5 – 99 operations per day
Category 3: 1 – 4 operations per day

Due to a significant reduction in operations in 2020, Category 1 was adjusted from 100+ operations per day down to 50+ operations per day, and Category 2 was adjusted to 5-49 operations per day. Category 3 was not adjusted. LAX may periodically adjust the number of operations for each category to account for any notable change in the number of operations at LAX in the future.

Each category will consist of three (3) winners at the end of each year (see FQP Methodology for more information).

What if an operator does not have the minimum number of average daily operations in one or more quarters during the year to quality for the FQP?

For an operator to qualify and be scored for the FQP, they must have an annual average of at least one operation per day at LAX. An operation is defined as one arrival or one departure. Some airlines may not operate during certain quarters, but they may operate enough during the quarters they do fly into LAX that they average at least one operation per day over the entire year.

If an operator qualified the previous year, they would continue to receive quarterly scoring updates the following year. However, if they drop under the threshold of one operation per day, they will not receive a final annual score.

How are bonus points determined?

Operators have the opportunity to perform additional efforts to engage with stakeholders or reduce noise impacts throughout the year. As additional efforts are made, operators can notify LAX staff of these noise reduction efforts for consideration of bonus points. LAX noise management staff will determine how many bonus points are awarded for additional efforts to mitigate noise impacts and increase stakeholder awareness. The number of bonus points awarded will be based upon level of effort and impact of changes by the operators. Current bonus points include, but are not limited to:

- Roundtable attendance/participation (Max of 4 points/year)
  - Attending a meeting (1 point)
  - Providing a presentation (2-3 points)
  - Actively participating in Roundtable Ad Hoc Committees (4 points)
- A320 vortex generators retrofits (2-5 points)