

Noise Impact Summary: January 2026

--- Acacia Park

Official report for community transparency and policy review.

Key Monthly Metrics

Metric Category	Recorded Observation
Monthly Event Count	10,080 airplane noise events detected (day + night).
Day Event Count	8,585 day events detected.
Night Event Count	1,495 night-window events detected (11:00 PM–7:00 AM).
Missing dB Values	3,548 events in this export have no dB value reported.
Night Observation	11:00 PM to 7:00 AM analysis window.
Day Limit Violations	5,430 day events above the 55 dB threshold (where dB reported).
Night Limit Violations	1,102 night-window events above the 45 dB threshold (where dB reported).
Frequency of Impact	Exceedances occurred on 31 of 31 nights (where dB reported).
Nighttime Median Gap	2.2 minutes (median gap between night-window events).
Daytime Median Gap	1.9 minutes (median gap between daytime events).
Night Intensity	Median: 71.0 dB Max: 86.7 dB (where dB reported).

Sustained Noise Sequences (Event Trains)

Max Gap Allowed	Full Day Max Duration	Night Hours Only
Events ≤ 5 min apart	7h 2m 12s (231 events)	2h 4m 33s (57 events)
Events ≤ 10 min apart	15h 27m 32s (412 events)	2h 39m 58s (61 events)
Events ≤ 15 min apart	19h 12m 55s (476 events)	2h 48m 50s (48 events)

Scientific Impact Transparency

Loudness Perception	A 75 dB event is perceived as 300% LOUDER than daytime limits (55dB) and 700% LOUDER than nighttime limits (45dB).
Physical Sound Energy	Each 75 dB event contains 1,000 TIMES more physical sound energy than the nighttime safety limit.
Sleep Protection	The consistency of nightly exceedances indicates that there is currently no protected sleep window for residents.

