

# Noise Impact Summary: April 2026

--- Acacia Park

*Official report for community transparency and policy review.*

## Key Monthly Metrics

Metric Category	Recorded Observation
<b>Monthly Event Count</b>	7,647 airplane noise events detected (day + night).
<b>Day Event Count</b>	6,762 day events detected.
<b>Night Event Count</b>	885 night-window events detected (11:00 PM–7:00 AM).
<b>Missing dB Values</b>	554 events in this export have no dB value reported.
<b>Night Observation</b>	11:00 PM to 7:00 AM analysis window.
<b>Day Limit Violations</b>	6,235 day events above the 55 dB threshold (where dB reported).
<b>Night Limit Violations</b>	858 night-window events above the 45 dB threshold (where dB reported).
<b>Frequency of Impact</b>	Exceedances occurred on 27 of 30 nights (where dB reported).
<b>Nighttime Median Gap</b>	1.9 minutes (median gap between night-window events).
<b>Daytime Median Gap</b>	2.1 minutes (median gap between daytime events).
<b>Night Intensity</b>	Median: 73.4 dB   Max: 86.2 dB (where dB reported).

## Sustained Noise Sequences (Event Trains)

Max Gap Allowed	Full Day Max Duration	Night Hours Only
Events ≤ 5 min apart	4h 21m 49s (143 events)	1h 6m 37s (30 events)
Events ≤ 10 min apart	12h 7m 44s (337 events)	1h 28m 38s (31 events)
Events ≤ 15 min apart	15h 25m 39s (408 events)	2h 1m 32s (34 events)

## Scientific Impact Transparency

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