

# Noise Impact Summary: February 2026

Acacia Park

Official report for community transparency and policy review.

## Key Monthly Metrics

Metric Category	Recorded Observation
Monthly Event Count	7,939 airplane noise events detected (day + night).
Day Event Count	7,073 day events detected.
Night Event Count	866 night-window events detected (11:00 PM–7:00 AM).
Missing dB Values	3,370 events in this export have no dB value reported.
Night Observation	11:00 PM to 7:00 AM analysis window.
Day Limit Violations	3,951 day events above the 55 dB threshold (where dB reported).
Night Limit Violations	618 night-window events above the 45 dB threshold (where dB reported).
Frequency of Impact	Exceedances occurred on 26 of 28 nights (where dB reported).
Nighttime Median Gap	2.0 minutes (median gap between night-window events).
Daytime Median Gap	1.9 minutes (median gap between daytime events).
Night Intensity	Median: 69.1 dB   Max: 80.5 dB (where dB reported).

## Sustained Noise Sequences (Event Trains)

Max Gap Allowed	Full Day Max Duration	Night Hours Only
Events ≤ 5 min apart	6h 17m 50s (183 events)	0h 55m 21s (26 events)
Events ≤ 10 min apart	12h 2m 12s (332 events)	1h 54m 44s (33 events)
Events ≤ 15 min apart	17h 55m 33s (430 events)	1h 54m 44s (33 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.