

<h1>Noise Impact Summary: April 2025</h1>
<i>Official report for community transparency and policy review.</i>

Key Monthly Metrics	
Metric Category	Recorded Observation
Monthly Event Count	8,949 airplane noise events detected.
Night Observation	11:00 PM to 7:00 AM analysis window.
Night Limit Violations	1,139 events above the 45 dB threshold.
Frequency of Impact	Exceedances occurred on 29 of 30 nights.
Density of Noise	Median gap between events is 1.9 minutes.
Night Intensity	Median: 70.9 dB Max: 93.2 dB.

Sustained Noise Sequences (Event Trains)		
Max Gap Allowed	Full Day Max Duration	Night Hours Only
Events ≤ 5 min apart	5h 21m 00s (180 events)	0h 48m 41s (28 events)
Events ≤ 10 min apart	13h 51m 42s (402 events)	1h 54m 20s (41 events)
Events ≤ 15 min apart	17h 22m 31s (473 events)	2h 29m 41s (45 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.