

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

Key Monthly Metrics	
Metric Category	Recorded Observation
Monthly Event Count	11,276 airplane noise events detected.
Night Observation	11:00 PM to 7:00 AM analysis window.
Night Limit Violations	1,160 events above the 45 dB threshold.
Frequency of Impact	Exceedances occurred on 30 of 31 nights.
Density of Noise	Median gap between events is 1.9 minutes.
Night Intensity	Median: 70.6 dB Max: 89.7 dB.

Sustained Noise Sequences (Event Trains)		
Max Gap Allowed	Full Day Max Duration	Night Hours Only
Events ≤ 5 min apart	3h 42m 55s (122 events)	1h 22m 04s (36 events)
Events ≤ 10 min apart	13h 26m 35s (355 events)	1h 23m 50s (37 events)
Events ≤ 15 min apart	18h 28m 07s (439 events)	3h 10m 17s (46 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.