

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

Key Monthly Metrics	
Metric Category	Recorded Observation
Monthly Event Count	8,317 airplane noise events detected.
Night Observation	11:00 PM to 7:00 AM analysis window.
Night Limit Violations	876 events above the 45 dB threshold.
Frequency of Impact	Exceedances occurred on 24 of 28 nights.
Density of Noise	Median gap between events is 2.0 minutes.
Night Intensity	Median: 70.0 dB Max: 95.2 dB.

Sustained Noise Sequences (Event Trains)		
Max Gap Allowed	Full Day Max Duration	Night Hours Only
Events ≤ 5 min apart	4h 18m 21s (138 events)	1h 39m 32s (45 events)
Events ≤ 10 min apart	14h 10m 54s (366 events)	3h 20m 38s (63 events)
Events ≤ 15 min apart	19h 32m 25s (432 events)	3h 20m 38s (63 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.