

Alongside the [draft NPS for airports and airspace change consultation](#), the government last week released the [CAA's Survey of noise attitudes \(SoNA\)](#).

Noise from aircraft, affecting those living in the vicinity of airports and under flight paths, represents a serious and developing problem. Though modern aircraft are individually quieter than in the past, a growing body of evidence suggests that **people are affected less by the noise level of each aircraft than they are the number of noise incidents they may experience.**

Government policy currently refers to a measurement of 57 dB Leq as the threshold for the upturn in significant community annoyance, based on survey work undertaken in the 1980s. While numerous more recent studies have suggested that this approach underestimates the number of people affected, the Government has so far resisted any update to its policy.

CAA's most recent study was commissioned by the Government to consider a number of questions including whether the 57 dB Leq threshold remains valid. The research was conducted between October 2014 and February 2015, and took into account the impact of aviation-related noise on over 2000 people living in close proximity to nine of England's major airports. Its objective was to allow the DfT and other government departments to understand people's attitudes to noise from various sources, but specifically fixed-wing aircraft.

The most significant finding of the study was that the same percentage of respondents said to be highly annoyed at 57 dB Leq in the government's 1982 study were found to be affected at the lower level of 54 dB Leq in the CAA's 2014 study.

We welcome that the study acknowledged a lower threshold for significant noise annoyance, and we believe that this must now be fully reflected in Government policy.

It was also found that people's expectation about noise played a significant role in annoyance levels.

Those who had moved and reported that noise was greater than expected or had got worse were found to be significantly more annoyed than those who said the noise was roughly as expected when moving into their home. Expectation after moving was found to be the strongest non-acoustic factor affecting the likelihood of annoyance.

Whilst this finding is perhaps unsurprising, it suggests that better aircraft noise information for people prior to moving in could help to limit the impact of noise in terms of annoyance.

Whilst the study found a significant link between self-

reported poor health and noise annoyance, it did not find that noise level had a direct causal effect. In other words, **the individual was more likely to report poor health as a result of a higher level of annoyance rather than as a result of a higher noise level.**

An indirect [impact on health](#) is certainly noteworthy. It suggests that for daytime noise, interventions targeted at lowering the level of annoyance experienced by individuals may help to reduce consequential health impacts.

The study focused only on aircraft noise during the day. The health impacts that arise as a result of noise specifically at night are well-recognised, with disturbed sleep increasing the risk of a whole host of health problems. This remains a key area in the subject of noise effects, and government policy action is needed to tackle it.

Finally, the study set out to consider the metrics employed to measure aircraft noise annoyance and specifically whether Leq (the 'average continuous' noise level a person is exposed to) remains the most appropriate indicator. The study concluded that, compared with 'N' measures (the number of overflights at or above a given noise level), Leq has the best fit with reported annoyance. However, the 'N' measures may work more effectively for communicating noise to communities since it can be understood more intuitively.

We welcome the recommendation that noise impacts should be considered and communicated using a range of metrics. 'Number above' metrics may be particularly relevant for night noise, since the overall mean noise level at night may be less relevant than the number of one-off incidents that are noisy enough to cause awakening.

To conclude, we welcome this new evidence which reflects the findings of numerous other studies that people now have a lower tolerance of aircraft noise levels than in the past. We hope to see this fully reflected in Government policy. We are interested in the possibility that better communication with the public in relation to aircraft noise could help to limit the impacts of noise on overall annoyance and on health during the daytime. However, night noise, which poses a particular risk to health, remains a contentious issue which government must also take into consideration if it wishes to act in the public's best interest.

<http://www.aef.org.uk/2017/02/08/lower-threshold-for-noise-annoyance-caa-study-finds/>

8 Feb 2017