

FAA Neighbourhood Environmental Survey

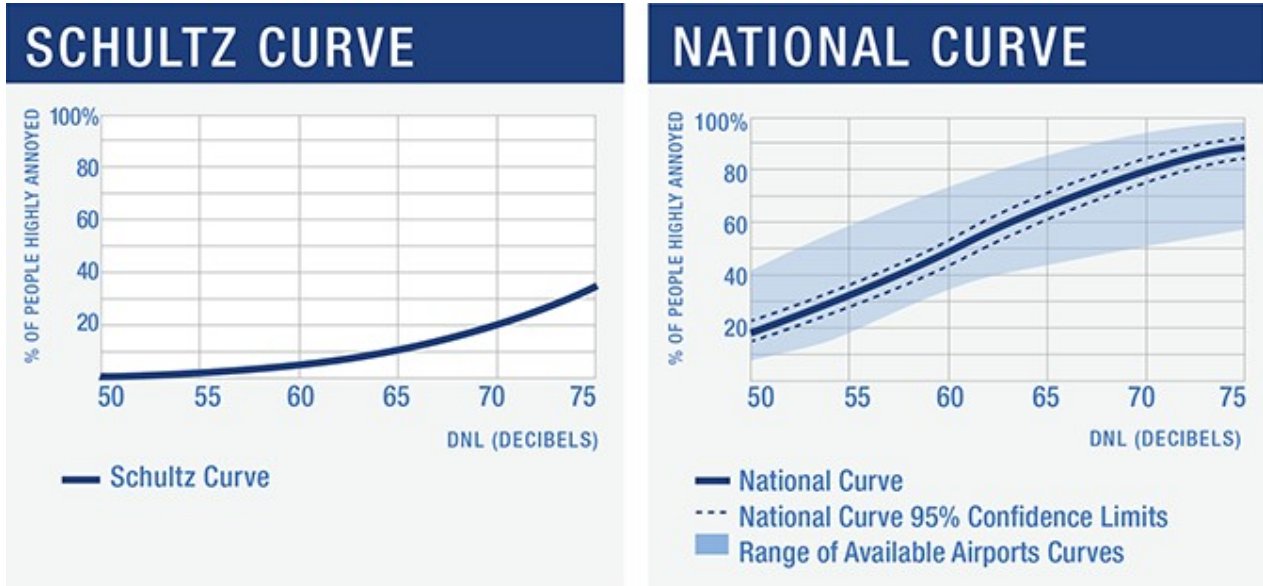
Response from UECNA

Thank you for the opportunity to comment.

UECNA is the only Europe-wide organisation which represents airport communities at the European Parliament, the European Commission and at the International Civil Aviation Organisation. It also supports organisations and citizens with expert advice and by exchanging information, experience and best practices.

Our website is: <https://www.uecna.eu/>

The FAA work has been rigorous and comprehensive, and we applaud the FAA for undertaking it.



Its findings are revealing in that significantly more people report high annoyance than would be expected from the current basis for the USA policy to mitigate health impacts from aircraft noise.

The findings are consistent with other recent studies. Most notably, the World Health Organisation (WHO) guidelines published in 2018 which found people are more highly annoyed by aircraft noise than 20 years ago. The FAA findings are also consistent with a major report from the UK Civil Aviation Authority - *2014 Survey of noise attitudes 2014: Aircraft* (SoNA). Like the FAA work, it found that people became annoyed at lower levels of noise than previously assumed. It has changed UK policy. Previously, the 'onset of community annoyance' was at Lden 57dbLAeq (i.e. the noise averaged out over a 16 hour day). As a result of the SoNA findings it is now 51dbLAeq. SoNA found 7% of the population became highly annoyed at 51LAeq and 9% and at 54 LAeq.

We urge the FAA to take action immediately and not wait on further research being completed. On the basis of the precautionary principle, measures should be implemented with urgency to reduce the annoyance and related health affects of aircraft noise. Although further research may be beneficial in increasing the understanding of the phenomena in play, it is obvious that this will not lead to major changes to the conclusion that the FAA reached. As the health of citizens is at stake, measures should be implemented as soon as possible to protect citizens living outside the DNL 65 contours.

We now turn to specific questions (repeated in *Italic*) you have asked.

(1) What, if any, additional investigation, analysis, or research should be undertaken in each of the following three categories as described in this notice:

- *Effects of Aircraft Noise on Individuals and Communities;*
- *Noise Modeling, Noise Metrics, and Environmental Data Visualization; and*
- *Reduction, Abatement, and Mitigation of Aviation Noise?*

One key piece of research is required. To investigate the link between rising flight numbers over communities and rising levels of annoyance. The period of increased annoyance covered in the studies carried out this far – the last 20 - 40 years – coincides with a growth in movement numbers at most airports. Anecdotal evidence points strongly to a link between aircraft numbers and annoyance. There seems to be trigger points (different for each individual) when people start to notice the aircraft overhead and start to get annoyed by them. There may also be a link between higher levels of annoyance sand the increased concentration of flight paths which has taken place at a number of airports in recent years.

We know enough from existing studies that:

- **New metrics should be used** which better reflect the experience of noise as experienced by communities. These should include an ‘N’ metric to better reflect the number of aircraft passing overhead; a ‘single-mode’ metric to capture the average noise levels only during the periods when the aircraft are flying over a community; a metric which reflects the clear findings that communities are annoyed at lower levels than previously acknowledged – for example, the UK has moved from recognising 57dbLAeq as ‘the onset of community annoyance’ to 51dbLAeq.
- **Mitigation and compensation measures should be extended** to cover a wider area. This comes out of the existing research and is not dependent of further research being done.
- **Respite trials should take place.** This can form part into the research on the link between the rising numbers of planes overhead and levels of annoyance.

(2). As outlined in this notice, the FAA recognizes that a range of factors may be driving the increase in annoyance shown in the Neighborhood Environmental Survey results compared to earlier transportation noise annoyance surveys—including survey methodology, changes in how commercial aircraft operate, population distribution, how people live and work, and societal response to noise. The FAA

requests input on the factors that may be contributing to the increase in annoyance shown in the survey results.

The missing factor is the link between aircraft numbers and annoyance. As we said in answer to the last question this should be the focus of urgent research.

There is clear evidence from the WHO work and other studies that when change takes place, noise annoyance increases.

There is a lack of evidence noise annoyance aircraft is linked to a rise in living standards. The UK The Civil Aviation Authority in its report *Managing Aviation Noise* (2014) pointed to this lack of evidence: “Historically, as GDP and living standards have increased, so has people’s desire for a quiet, relaxed home environment, and a tranquil setting out of doors. This may have contributed to changes in attitudes to aircraft noise in some countries, although there is no robust evidence for this in the UK.”.

<https://publicapps.caa.co.uk/docs/33/CAP%201165%20Managing%20Aviation%20Noise%202.pdf>

There is evidence that, during the years people have become more annoyed by aircraft noise, they have become more tolerant of noise per se. It is well summarized in *Why Noise Matters* (Stewart et al, published by Earthscan in 2011). It found that societies in the developed world have not only become more tolerant of noise, and of loud noise, than they were 40 years ago but that they have embraced it. People see some noise sources – loud music, iPods, gadgets in our homes – as adding to rather than detracting from their quality of our life. The book quotes Blesser and Blesser who argue that, if we embrace loud noise as something which brings us enjoyment, we become more tolerant of noise per se. The fact that aircraft noise is an exception to this suggests that the reason for it lies outside our modern lifestyles.

The FAA study talks about more homeworking and greater networking amongst noise groups as factors in increased noise annoyance. Commonsense suggests they may be factors but there is no empirical evidence to show they are key factors.

(3). What, if any, additional categories of investigation, analysis, or research should be undertaken to inform FAA noise policy?

As the Ldn at locations in the vicinity of airports is more and more the result of more flights with less noisy aircraft. As these low noise levels appear also at relatively large distances from airports, the area of investigation should be expanded. In some quarters it is suggested that these noise levels are too low to model accurately and thus should be ignored. It is our view that this is not a sound scientific approach. Data driven policy should be based on the best available data, even if that is of a lower than desired quality. We suggest that work is undertaken to improve the capabilities of AEDT to assess noise exposure at lower aircraft noise level locations.

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