THE BOTTOM RUNG

Noise: the challenges, trends, technologies, politics and opportunities

Looking forward; seeking solutions

Summer 2026

SOUNDS OF HOPE

There are real signs that the noise community in the UK, long-neglected, is fighting back. The Starmer Government downgraded noise. DEFRA, the Government department taking the lead on noise, employs just two permanent staff, both part-time. We wait to see if things improve under Burnham. But noise groups are mobilising like never before. The catalyst was probably the rejection by both the Sunak and Starmer governments of the ground-breaking report by the House of Lords Science and Technology Committee into noise pollution. In July to mark the third anniversary of the report, the Institution of Environmental Science, the Institute of Acoustics and the UK Noise Association hosted an online webinar attended by over 100 noise experts, lobbyists and campaigners: https://youtu.be/IsF7-Cla0YI?t=1009 Noise Action Week has returned. Noise Network Plus gave out its first tranche of grants. Two major reports have been published which show people get annoyed by aircraft noise at lower levels than previously acknowledge (see pages 2&3). Sownd Affects has been launched. And in the autumn a number of these organisations will come together to draw up a common list of key demands.

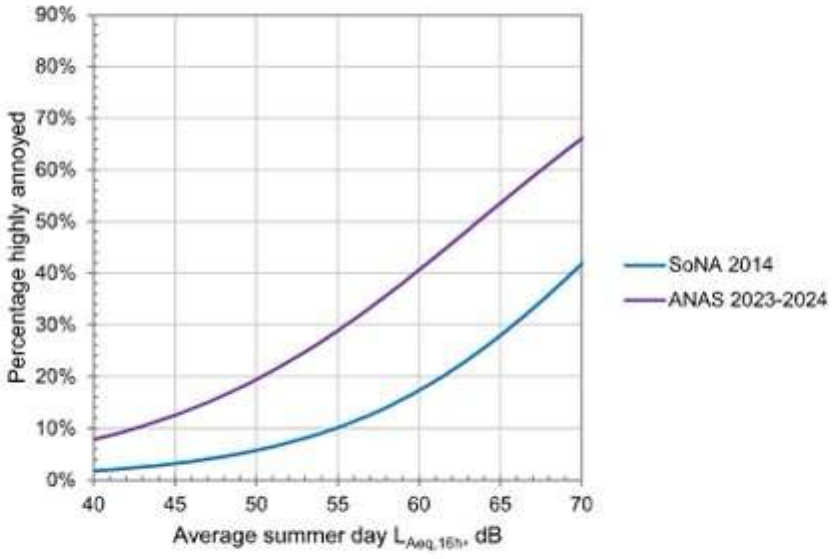
NEW REPORTS: PEOPLE BECOME ANNOYED AT LOWER LEVELS OF AIRCRAFT NOISE

A major new report from the CAA (Civil Aviation Authority), ANAS, published last month, has found that residents become annoyed at much lower levels of aircraft noise than previously acknowledged. It is much more in line with the WHO 2018 Noise Guidelines. The page below shows the comparison with previous study, SoNA 2014. Prior to SoNA the 'onset of community annoyance' in the UK was put 57 dB LAeq. The EU uses 55Lden. America is much higher and, in light of this new evidence, looks even more out of touch with reality. The study in full:
https://www.caa.co.uk/media/znmfqdoa/cap-3131-aviation-noise-attitudes-survey-2023-2024.pdf

How do the results compare with SoNA 2014 and WHO 2018?

S24 The exposure-response function for ANAS 2023-2024 (Wave 1) is found to differ markedly from SoNA 2014 (Figure S6). The average noise level corresponding to 10% of the population highly annoyed was found to occur at around 43 dB $L_{Aeq,16h}$, compared with 54 dB $L_{Aeq,16h}$ for SoNA 2014.

Figure S6 Comparison of the ANAS 2023-2024 exposure-response function to SoNA 2014 based on attitudes during the last three months, HA_N (Q8), Wave 1



S25 This change is not the result of surveying to lower noise levels. The percentage highly annoyed from ANAS 2023-2024 is found to be higher than SoNA 2014 at all noise exposures, including in the same geographical areas surveyed in SoNA.

S26 Comparing against the WHO 2018 the ANAS 2023-2024 function is similar (Figure S7), but the function is less linear and, whilst within a few percent of the WHO function at around 45-50 dB L_{den}, at 55 dB L_{den} it is 7% lower than the WHO 2018 function. At 65 dB L_{den} it is 4% lower than the WHO 2018 function.

AND AT NIGHT…….

A seminal new report on the impact of night noise for the Department for Transport by a team led by Professor Charlotte Clark was also published last month. It was not confined to aircraft noise. The study has two parts. Just the first part has been published. It was a large-scale survey carried out among residents living around eight UK airports to assess the impact of night flights on sleep disturbance and annoyance. The second part, to be published later, will look at sleep disturbance in more detail.

The eight airports studied were:
Bristol Airport (BRS)
East Midlands Airport (EMA)
Glasgow Airport (GLA)
London Gatwick Airport (LGW)
London Heathrow Airport (LHR)
London Stansted Airport (STN)
London Luton Airport (LTN)
Manchester Airport (MAN)

The findings
30% of people indicated that they were bothered, disturbed, or annoyed by **road traffic**;
24% by **aircraft/airports/airfield noise;**
22% by **neighbours outside their homes**;
14% by **neighbours inside their homes.**

Aviation Night Noise Effects (ANNE)
https://assets.publishing.service.gov.uk/media/6a2693b856960b0542c0b153/anne-subjective-study-report.pdf

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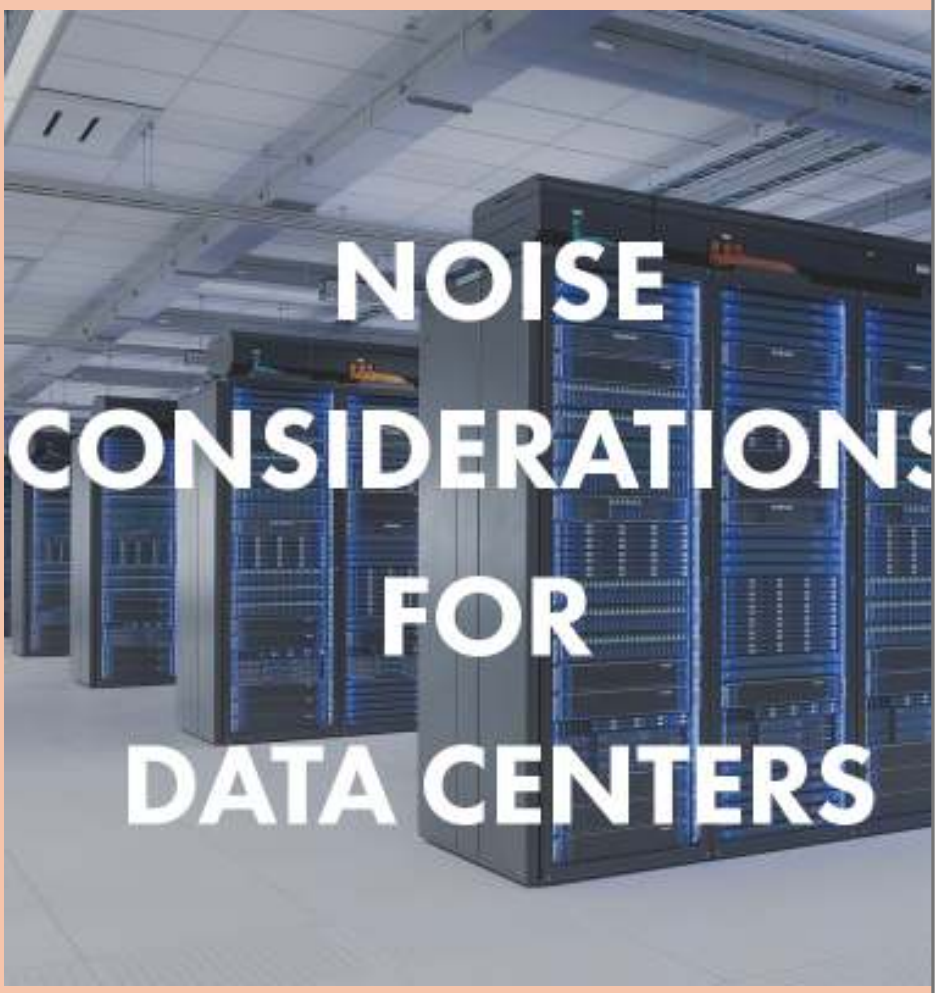
NOISIEST FIREWORKS COULD BE BANNED FROM PRIVATE DISPLAYS

Residents, campaigners and some politicians have welcomed news of a government-led public consultation into legislation around fireworks. The review will examine current rules around the sale, use and noise limits of fireworks. It proposes restricting the availability of noisier fireworks, banning some of the more dangerous items and reviewing regulations round those currently classed as lower risk. It comes after persistent pressure from campaigners and a handful of MPs. Many campaigners would like to see private displays banned altogether.

FEATURE ON DATA CENTRES

What It's Really Like to Live Next to a Data Centre



America is full of them. But they are in the UK as well. Data centres are being proposed from the Fife countryside in Scotland to Charlton in an urban corner of South East London. But is Slough, just west of London, that is the data centre capital of the UK. Globally, Slough is second only to "Data Centre Alley" in Virginia. And Slough's residents are revolting.

We are facing the classic dilemma. Data centres, AI, are here to stay. They will be a big part of the future. And they have real potential to make our lives better. But they are noisy. That noise problem will present decision-makers with a real challenge which they need to start preparing for now.

There are also concerns around the energy consumption of data centres but we only focus on their noise impact.

Slough……

It sounds like a faint rumble at first, but as you get closer, it turns into a roar. The cooling units on top of the Virtus London 10 data centre whir away day and night, delivering a persistent noise resembling a motorway in the near distance. After a while, your ears adjust, and the hum gives way to a different sound: a steady high-frequency buzz similar to a worn-out fridge. Across the road, another data centre delivers a whining noise equivalent to a dentist's drill. Turn the corner, and you are greeted with a baritone hum from another grey-clad building. The setting for this orchestra is the Slough Trading Estate, Britain's data centre capital and the densest cluster of sites in Europe.

In the last 20 years, more than 30 data centres have sprung up on the estate, less than a square mile in size, attracted by the loose planning requirements, direct electricity connections and high-speed internet links.

But never-ending construction and noise complaints are leading to a pushback against the unsightly facilities, at the same time as the AI boom makes them more sought-after than ever. "You're living with a constant buzz, that static noise, all night, it's not nice to be around," says Tanvi, a resident whose house borders the trading estate. "There's also a lot of lights around the data centre, it feels like it's never dark. In the summer they push out hot air."

AND IN AMERICA....

This is an abridged version of a much longer article by Alice Gibbs in Newsweek (13/6/26).

In Charcie Chavis' backyard in Conover, North Carolina, the view is no longer farmland. The land behind her home has been cleared for a Microsoft data center development that now wraps around her neighbourhood "like a U." Construction crews, she said, have begun work before dawn, poured concrete late into the night and filled the air with red dust. "You work all day, and you come home, and you can't even get three hours of peace and quiet," she told *Newsweek*. "At 2:30 in the morning, they're gonna be out here." Chavis' experience reflects a broader shift taking place across the United States as more people find out what it is like to live near a data center. Residents interviewed for this story described a range of concerns, including visual impact, noise, and uncertainty about how projects are approved and communicated to the public.

Massachusetts Data Centers: 'Like a Jet Engine Next to You'

But in the case of Jake Fortes in Lowell, Massachusetts, the noise didn't stop when construction ended. He said the facility built near his home over the past decade now stands just 84 feet from his property, bringing what he describes as constant mechanical noise and regular emissions from backup generators. The facility is operated by Boston-based Markley Group. Cooling systems and infrastructure run day and night, he said, producing a sound that rises and falls unpredictably. "It's like just putting a jet engine next to you in bed," describing how surges in noise can wake him during the night.

Data Centers: A Rapidly Expanding Industry

The global data center market is forecast to reach $573 billion in 2026, rising to more than $739 billion by the end of the decade, as demand surges for artificial intelligence, cloud computing and digital services. The U.S., already home to thousands of facilities, is expected to remain the world's largest market.

The scale of that growth is significant. A 2025 analysis by the Data Center Coalition (DCC), a trade association and lobbying group representing data center owners, found that the U.S. data center sector contributed nearly $727 billion to GDP in 2023, supporting millions of jobs across the economy when indirect effects are included. Employment directly tied to data centers has also grown rapidly, rising from around 306,000 workers in 2016 to more than 500,000 in 2023, according to U.S. Census data. However, the number of permanent jobs at individual sites is often relatively small. Once built, large data centers can operate with as few as several dozen on-site staff, with most employment concentrated in the construction phase. For example, a $10 billion facility may support thousands of construction roles but only hundreds—or fewer—long-term jobs once operational.

More Data Centers Are Coming—and Residents Are Bracing

For Padilla, the concerns are less about a single project than the cumulative effect. "It's just the idea of knowing that more of these are coming," she said. As data center construction continues across the U.S., nearby residents want people to understand the reality of having them on their doorstep. Fortes said he believes the reality of living near data centers will affect more communities. "This story will be repeated tons of times over," he said.

In the autumn the UK Noise Association will team up with the US-based Quiet Communities to host a major webinar on data centres.

OPINION

WHAT HAVE LOW TRAFFIC NEIGHBOURHOODS AND CONCENTRATED FLIGHT PATHS GOT IN COMMON?

At first sight there may seem to be little connection between Low Traffic Neighbourhoods and Concentrated Flight Paths but I feel they come from the same stable. They both provide relief for a majority of the population at the expense of a minority.

Low Traffic Neighbourhoods (LTNs) reduce traffic in a local area by relocating traffic onto adjacent roads, very often already busy 'main' roads. There is no convincing evidence that they reduce overall levels of traffic but they have cut traffic considerably for many people. Concentrated flight paths do the same. If all the flights go over a small number of communities, then the majority of people are flight free.

There are a number of problems with this approach.

It is not equitable. A smaller number of people are being sacrificed for the comfort of others. Particularly in the case of 'main' roads these people can be disproportionately poorer and in some parts of the country more likely to be from ethic minority communities than the general population.

It makes no sense health-wise. Authorities generally get the greatest return from their investment by tackling the noisiest and most polluted areas first.

It can lull people into a false sense that a problem has been dealt with simply because it is out of sight and mind. And therefore there is less pressure on the authorities to act.

It precludes more imaginative and fairer solutions. Flight paths can be alternated to give people a break from the noise. There are many ways to cut overall road traffic.

The choices we make will reflect the sort of society we are. One that is willing to discriminate against a minority of people or one which aims to be inclusive. ***John Stewart***

IMPACTED BY NOISE?

Become a Member

We have introduced a new membership scheme. Members will receive our briefings and reports as well as invites to our events. No fixed annual fee but we suggest £20.

Email johnstewart2@btconnect.com for details

Website Address

http://www.uknoiseassociation.com/

Reports, Briefings, Blogs, News

Check it out!

Help! I've got a noise problem!

You can contact:
The Noise Abatement Society
https://noiseabatementsociety.org/

Helpline on 01273 823 850;
email info@noise-abatement.org

Noise Nuisance provides information and help from experts.
https://noisenuisance.org/about-us/

ASB Help, a charity which aims to provide information and advice to victims of anti-social behaviour
https://asbhelp.co.uk/noisy-neighbours-noise/

Noisedirect
08453 31 32 30

Independent advice line from noise professionals

The Bottom Rung **is a quarterly journal, edited by John Stewart. We are always looking for contributions, be it articles or opinion pieces.**
Email johnstewart2@btconnect.com

Our blog site is at:
https://www.cutnoise2day.co.uk/
Twitter: @cutnoise

Listen and Watch!

A selection of watchable noise videos

https://youtu.be/QKrFXZ-0E7w
An outstanding video, shot in London, from our friends at SoundPrint. How noisy are London neighborhoods Covent Garden and Soho? Is it safe to have a conversation in a busy food hall? Is the public aware of safe noise levels?

https://youtu.be/kFh_OdMb5v8
How noise is all around us and silence is hard to find. Refreshing, fun, watchable

https://youtu.be/FDJY1EuhLwI
Leaf Blowers

https://youtu.be/f7DQ3SgSg0c
Living 1600ft from a wind turbine

https://youtu.be/qd-k0rHS-DM
Traffic: noise from M8 in Central Glasgow

https://youtu.be/NR1lLokkp28
'Boom' cars in Manchester

https://youtu.be/G2fDzqqg23Y
Loud music ruins Soho Square in London (listen first with the sound off)

Bradford noise-detecting camera to crack down on boy racers - BBC News
Widespread coverage in papers on the roll-out of noise cameras.

https://youtu.be/dBVCU8xuG9E
When will we start taking noise pollution seriously?

https://www.youtube.com/watch?v=OMGniph-uPo
A fascinating discussion by campaigners from 4 continents discussing aviation noise. Part of UECNA's recent conference: www.uecna.eu

You'll find more videos on our website.