

WOODBIDGE TOWN COUNCIL ('WTC)
WRITTEN REPRESENTATION
DEADLINE 8 – RAIL NOISE

Rail Noise

In our oral representation at ISH12 Councillor Sanders brought to the attention of the ExA a very recent paper on the link between dementia and the presence of road or rail noise. Details of how to access that paper are included in written copy of the oral presentation.

The Applicant at that hearing provided rebuttal to the representation via its medical adviser Dr Beroni. He stated that *“there was a wider risk of actually selective application of an evidence base is[sic] where you confuse association with causation. The BMJ study that Mr Sanders picked out, that is an observation study. It shows that, yes, they did see an increase in senile dementia Alzheimer’s type for road and rail but there is no causal mechanism behind it and further study is required. They also couldn’t figure out why there is no similar association with vascular dementia between road noise and rail noise there was for road but wasn’t for rail. All it does it adds to weight of evidence that already underpins the WHO’s guidance to which is[sic] both the EHO and Mr Brownstone have already alluded is the appropriate methodology to assess risk to public health.”*

Firstly, WTC does not seek to dispute the use of WHO guidance on the levels of acceptable rail noise but notes that WHO’s 2018 guidance recommends that rail noise levels should be limited to 44dB and not the higher levels that the Applicant is seeking to set defined as its EIA Acceptance Limits.

Secondly, WTC agree the BMJ paper adds to the weight of evidence already used to develop the WHO guidance and it is the reason WTC raised the issue.

Thirdly WTC accepts there is an indirectly determined causal link between sleep disturbance and road/rail noise as various health conditions are associated with sleep disturbance.

Fourthly, and importantly, WTC also agree with Dr Beroni that it is an observation study but this is no different from many other studies associating a medical condition with the impact of road/rail noise. What is different is the scale of the cohort and time period over which the study was undertaken. It represents a major input to what the WHO states was very limited scientific literature supporting its 2018 guidance and it would like to have had more substantive literature— as evidenced by the following abstract from the 2018 guidance:

“In these Guidelines for Community Noise only guideline values are presented. These are essentially values for the onset of health effects from noise exposure. It would have been preferred to establish guidelines for exposure-response relationships. Such relationships would indicate the effects to be expected if standards were set above the WHO guideline values and would facilitate the setting of standards for sound pressure levels (noise immission standards). However, exposure-response relationships could not be established as the scientific literature is very limited. The best-studied exposure-response relationship is that between Ldn and annoyance (WHO 1995a; Berglund & Lindvall 1995; Miedema & Vos 1998).”

What the BMJ paper does is set out an exposure-response relationship regarding increased incidence of dementia and demonstrates that the 44dB guidance level is appropriate and proportionate to an increase impact for a particular health condition.

Dr Beroni’s comment on vascular dementia is correct but is, in our view, a spurious comment as the lack of why rail noise does not impact on that particular condition is irrelevant to setting a limit on rail noise as impact is evident with other forms of dementia. It is a matter of academic interest not of practical application.