

CASE REF: APP/03100/V/23/3326625

**Corridor between the A34 Milton Interchange and the
B4015 north of Clifton Hampden**

PROOF OF EVIDENCE - HEALTH

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| Topic 1 | The need for and benefits of the scheme |
| Topic 2 | Whether the transport modelling is robust and takes into account significant traffic impacts in the wider area |
| Topic 3 | Whether the proposal would make acceptable provision for sustainable travel |
| Topic 4 | Consideration of alternatives |
| Topic 6 | Acceptability in terms of impacts on noise |
| Topic 7 | Acceptability in terms of air quality |
| Topic 14 | Other policy matters and overall planning balance |

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1. My name is Angela Jones. I have prepared this evidence from the point of view of a resident of Appleford since 1999. I am a retired general medical practitioner with an interest in health inequalities, a specialist adviser to the Department of Communities and Local Government from 2006-2008 and past Chair of the Health Inequalities Standing Group of the Royal College of GPs. I seek to present local knowledge of the impact of this application on the area and its residents, with the additional benefit of professional expertise in the area of health.
2. The proposal will have detrimental effects on the health of the local population, as pointed out to Oxfordshire County Council (OCC). from as early as 2018 (consultation phase). Despite these representations, the route running adjacent to the village of Appleford was selected by OCC.
3. These detrimental effects could have been reduced by adopting the alternative route suggested to the applicant by local community representatives, prior to the planning application. This alternative route took the road further away from the most sensitive receptors in Appleford into the industrial zone. (see Appendix 5). Unfortunately, the applicant declined to reroute the road as suggested.
4. The proposal puts the health of residents of Appleford and areas further afield at risk, risks which the applicant admits in its own planning proposal are not amenable to full mitigation.
5. The adverse health effects of roads come under two main headings: air pollution and noise. It is uncontested that there are adverse effects on health associated to proximity of roads. In Europe, the WHO estimates that 509 000 deaths per year could be attributed to air pollution to which traffic contributes very significantly. Furthermore, the European Environment Agency estimates that 55 000 deaths per annum are attributable to nitrogen dioxide alone (see Appendix 3)
6. **Air pollution** from roads is due to:
 - 6.1. Particulates (PM2.5 and ultrafine particles)
 - 6.2. Carbon monoxide
 - 6.3. Nitrogen dioxide (NO₂)
 - 6.4. Black carbon from diesel
 - 6.5. Polycyclic aromatic hydrocarbons
 - 6.6. Metals
7. The health effects known to be caused by such air pollution are:
 - 7.1. Cardiovascular mortality (death due to coronary heart disease)
 - 7.2. Respiratory mortality (death due to lung problems)
 - 7.3. Heart attacks and angina
 - 7.4. Raised blood pressure.
 - 7.5. Diabetes

- 7.6. Wheezing, asthma and hospital admissions due to heart disease
- 7.7. Reduced lung function
- 7.8. Lung cancer
- 7.9. Childhood cancer
- 7.10. Low birth weight
- 7.11. Reduced cognitive performance in children.

These adverse health effects have been demonstrated to exist after correction for socioeconomic status and noise and cannot simply be blamed on the fact that poorer and less advantaged people often live next to busy roads. (See Appendix 3)

- 8. The presence of pollutants in the air depends on distance from the road and varies depending on the type of pollutant and factors such as wind direction. Concentrations are found to be higher downwind of the road with the distance – decay gradient to baseline extending to up to 1500m downwind for some pollutants.
- 9. Prevailing winds are from the SW meaning Appleford is downwind of the proposed road with all of the residential properties falling well within the 1500m affected area. (see Appendix 1).
- 10. It is important to understand that as exhaust emissions decrease with improvements in vehicle propulsion technology eg increase in EVs, the importance of non-exhaust emissions from road wear, tyre wear and brake wear will become increasingly important, as toxicological research is able to attribute some of the adverse health effects of roads to these factors. Therefore, we cannot rely on electrification of vehicles to solve the health problems caused by the road.
- 11. **Noise from roads** is considered as a separate risk to health and wellbeing. (see Appendix 2) The WHO has identified traffic noise as second only to air pollution as a cause for ill health in Western Europe, causing 12 000 premature deaths and 48 000 new cases of ischaemic heart disease per year in Europe. (See Appendix 2). A 2018 report by the WHO noted that each year, western Europeans are collectively losing more than 1.6 million years of healthy life to traffic noise, including both premature death and noise-induced disability.
- 12. Traffic noise is considered as a physiological stressor, second only to air pollution and on a par with radon or secondary tobacco smoking (). The main resultant harms are seen in terms of cardiovascular and cerebrovascular disease increasing the risk of heart attacks and stroke and arise due to damage to the lining of the blood vessels due to stress related hormones released due to noise exposure.
- 13. Traffic noise is worse downwind and exacerbated by elevation of the road, with the attendant difficulties in mitigation, meaning that the positioning of current proposed road and flyover will impact unduly on residents of Appleford. Furthermore, it has been pointed out that the construction of the flyover risks exacerbating existing sources of noise pollution to which Appleford is already subjected, by reflecting and enhancing noise from the quarrying and stone-moving activities at Appleford Sidings.

14. Chris Hancock, fellow resident has provided a detailed critique of the applicant's assertions regarding air and noise pollution which I support.
15. The applicant did not provide a **Health Impact Assessment (HIA)**. This is very surprising, given the previously mentioned health impacts and given the proximity of the proposed road to sensitive populations, in particular Appleford, but also children from age 4-18 at the state-run European School in Culham. Furthermore, government and local recommendations suggest an HIA should be prepared in addition to the Environmental Impact Statement for major projects where the health impact could be significant. It was also assumed by the local UKHSA expert that a health impact statement would be provided that demonstrated that exposure to pollutants had been minimised. (see Appendix 6).
16. The fact that no HIA has been provided by the applicant is a significant omission. The applicant is asking the inspector to adjudicate on the harms versus benefits of the proposal without proper professional advice.
17. Even if an HIA had been carried out, it would probably have been inaccurate, given that the traffic predictions for the proposed road are flawed, in the opinion of residents who understand the traffic issues better than most.
 - 17.1. The proposal does not simply rearrange existing traffic, which would imply benefit to villages such as Appleford by diverting traffic off the A4016. It will instead bring significant HGV traffic into the parishes of Appleford and Sutton Courtenay, which have been previously protected from such flows by the weight limits on their roads, requiring HGVs to keep to A34 to the west and the roads around Wallingford to the east.
 - 17.2. The proposal fails to take any account of **induced traffic**. In our view, the creation of this route will immediately attract traffic from the A34 and M40, especially when there are severe delays on the A34 (an almost daily occurrence due to the severe effect of minor breakdowns, accidents or roadworks on this highly- saturated trunk road).
 - 17.3. The presence of the Science Bridge in Didcot indicates that north – south HGV traffic to and from the A34 and M40 is designed to be routed onto the HIF1 road.
 - 17.4. By creating a roundabout on the B4106 allowing access from the B4106 onto the HIF1 road, a 'rat run' will be created through Appleford from Didcot, Wallingford and surrounding villages to the south and east to access the new road, risking further noise and air pollution and road safety hazards on this residential B-road which caters for our school children, residents and dog walkers.

18. This proposal is not the answer to the transport needs of the area which are reduction of the congestion on the roads around Didcot which has been caused by huge amounts of residential and industrial development without significant improvements in the transport infrastructure.
 - 18.1. Residents see that peak congestion is caused by cars carrying single persons, attempting to travel to and from work, in and around Oxford, Didcot and Abingdon plus cars taking children to and from schools in the same areas.
 - 18.2. Mass transport for these areas are poor and does not provide the required routes or accommodate adequate numbers of individuals in the appropriate timeframes.
 - 18.3. Provision of a safe environment for active transport is inadequate in the area.
 - 18.4. Building a new road will provide an additional Thames crossing, but its benefits (if any) will be short lived due to the projected growth in residential and other development in the area and by the induced traffic described earlier.
 - 18.5. The inclusion of a cycle way is unlikely to significantly increase cycle use over private care use and will simply serve to expose the cyclists to air pollution due to their proximity to the increased number of vehicle users.
 - 18.6. The huge costs of this road would be better spent on a coordinated public transport and active transport plan for the area, with the attendant health benefits and reduction of health risks.

Word Count 1500 (plus title area)