A57 Link Roads TRO10034 - Deadline 2, 14th January 2022
Written representation from Anthony Rae - unique reference: 20029740

Summary: NPS 5.17 is out of date and its asserted proposition about assessing the climate impact of a single road scheme 'in isolation', which in 2014 was not supported by quantified verification, is undermined by two basic contradictions which the applicant has not resolved with evidence.

1. My name is Anthony Rae, and I am a transport & climate campaigner working at local to national levels. I've been a member of DfT project reference groups in the North of England for the last 2 decades and am the convener of a network of transport campaigners that over the last 4 years have engaged with Transport for the North urging them (successfully) to include a decarbonisation strategy at the core of their programme. I do not live in the scheme area (I'm based in West Yorkshire) but have a broad knowledge of the issues as a result of my membership of the DfT/TfN Trans-Pennine Tunnel reference group.

2. This submission is confined to climate change impacts and carbon emission issues and in preparing it I've reviewed the detailed submission on that topic made by fellow campaigner Anne Robinson for CPRE Peak District/South Yorkshire. Consequently I've confined my contribution to what I believe is the essence of the argument and analysis. Within this I'm only dealing with operational, and not embedded, carbon.

3. The argument in relation to climate change appears to rest on the quantitative evidence relating to the emissions tonnage impact of this scheme, and then the balance to be struck between statements in the National Networks NPS concerning the weight to be attached to that evidence and more recent developments in what is now the Net Zero (NZ) transport decarbonisation policy framework.

4. The single sentence reference in NPS 5.17 – 'It is very unlikely that the impact of a road project will, in isolation, affect the ability of Government to meet its carbon reduction plan targets' - then links back to essentially identical statements in 5.16 and 3.8. The latter reference in 2014's NPS then connects back to 2013's *Investing in Britain's future*, whilst 5.16 establishes quite clearly how out of date is its connection to the current climate policy framework ('The Government has a legally binding framework to cut GHG emissions by at least 80% by 2050'.) It surely can be reasonably argued that 2020's adoption by government of an NZ target and then 2021's *Transport Decarbonisation Plan* (TDP) requires that more limited weight in general should be applied to what is essentially an assertion by a dated NPS that is not in itself supported by quantified evidence. The TDP itself acknowledges that the NPS is out of date (page 103, 2nd column) pending review. On the other hand, its emissions projections for cars (TDP figure 9), vans (figure 10) and HGVs (figure 13) establish an approximate quantification (notwithstanding the spread of the trajectory and the absence of precise data) for the major emissions reduction - around 75% - required by the scheme's 2040 design year.

5. The emissions evidence for the A57 scheme is equally clear: '… in both the opening and design years the Scheme will lead to an increase in operational emissions …' *Environmental Statement (ES) 14.9.7* This increase is caused by the 'increased vehicle kilometres generated by the scheme' *bid.* However there are at least 2 issues associated with the precise quantification of that increase: i) what is the baseline against which that increase should be compared, and ii) that there are different versions of the 2025 and 2040 DM/DS tonnages. 14.6.4 in ES14 defines its baseline as emissions in the DM opening year i.e 2025 but it's not known whether factors inside the modelling might have increased that baseline number above that of the most recent (pre-Covid) historic level e.g 2019 - an actual measured baseline - which would have the effect of reducing the scale of the subsequent increase in the DM-DS comparison.

6. Secondly table 14-3 in the *Preliminary Environmental Information Report* (Nov 2020) had baseline 2025 DM tonnage for operational emissions as 761,085, increasing to 829,455 tonnes in DS 2040 - a rise of 9.0%; whereas *ES14* (Nov 2021) has the equivalent figures as 2025 DM baseline 737,485 *table 14.10* and DS 2040 as 792,072 - a rise of 7.4%. I cannot know the explanation for the discrepancy between the reports but the principal point to note is that carbon emissions associated with this individual scheme have increased rather than reduced, and are still higher in 2040 than in 2025 rather than lower. The traffic volume evidence from e.g. figures 4.1 and 7.1/2/5.6 from the Transport Assessment seem to indicate, but with imprecise quantification, that traffic levels as a result of the DS are higher in 2040 than in 2025.

7. It is therefore common ground that carbon emissions as a result of this scheme will increase, so the issue becomes: how should that be interpreted? - following on from NPS 5.17 etc as discussed above. We are being asked to focus on the proposition that the test to be applied is how the carbon impact of this one single road scheme compares to the quantity of the entire UK carbon budget (UKCB): hence the analysis submitted in ES 14.9.8-10. Instead I want to propose that the question of the scheme's increased carbon emissions should be examined in relation to two apparently contradictory analyses, which also bear on the ExA's identified questions at 8.3 a) and b), 8.5, and 8.14 'reducing traffic'. In each case I'm suggesting that the test should be: has the applicant provided sufficient evidence such that the apparent contradictions I'm identifying can be resolved in their favour? If not, then protecting the integrity of the UKCB pathway must prevail.

8. *Contradiction 1*: that the provision of new road infrastructure by particular individual schemes resulting in ***increased*** emissions can at the same time be combined with a major ***reduction*** in overall roads emissions that national transport policy is requiring and forecasting. If this were to be the case – with increased emissions occurring at the locations of those schemes or along their corridors - at which other locations or transport modes are emissions being reduced to an even greater extent than the aggregate emissions pathway in order to compensate for the impact of that new infrastructure, bearing in mind that road emissions are almost the entirety of surface transport carbon? So emissions in those other locations/modes would need not just to reduce to the aggregate level of the TDP pathway but fall still further to allow for the increased emissions from individual road schemes.

9. *Argument*: Whilst it is understood that vehicle electrification will make a substantial contribution to the aggregate transport reduction pathway, where is the evidence submitted by the applicant on both sides of the equation making up that aggregate pathway, such as: increased new road scheme emissions = X; further additional reduced emissions elsewhere = Y; therefore aggregate net emissions reductions = Z which is the emissions reduction pathway required by policy and law? If the applicant has not provided this evidence - I don't think they have - then it would be reasonable for ExA to conclude that this contradiction cannot be resolved except by refusing individual new road schemes, recognising that there is a very substantial cumulative pipeline of such schemes being developed in accordance with RIS2&3.

10. *Contradiction 2*: That additional road capacity which is required to be provided to cater for *increased* traffic volumes (which have been forecasted) can at the same time be combined with the *reduction* in traffic volumes which other analyses are suggesting so as to be compatible with the overall roads decarbonisation pathway, recognising that vehicle electrification on its own has been demonstrated to be insufficient to meet that pathway.

11. *Argument*: The academic and other analysis at the moment is indicating that vehicle electrification on its own cannot produce sufficient decarbonisation and that therefore reduction in vehicle trips/length will also be required: 'Judging by the analysis at a national level, reductions of at least 20% are appropriate for a pathway to net zero by 2050; larger reductions (perhaps 50-60%) are necessary for a pathway to net zero by 2030'. Transport for Quality of Life *The last chance saloon: we need to cut car mileage by at least 20%* December 2021 and citing analyses by CREDS, Green Alliance, and Welsh and Scottish governments. So if car/vehicle mileage has to be constrained in order to deliver the emissions reduction pathway, what is the justification for providing additional road capacity that is demonstrated will induce increased road travel? Neither the applicant or the DfT in its TDP have reflected on this contradiction and how it might be resolved - in a way which might be informative to the ExA - and therefore it should be appropriate for the ExA to at least address this issue (as per its Q 8.14 'Have appropriate carbon-reduction measures been secured for the operational phase, including but not limited to… reducing traffic?')

12. *Conclusion*: In both these cases the applicant is placing a bet on the future - that additional road capacity, induced extra traffic, and increased emissions even by 2040 can somehow be made compatible with radical carbon reductions - although there is no detailed quantification to substantiate that bet. This is also in the context, solely applicable to transport, where emissions in pre-Covid 2019 were still higher than the Climate Change Act's 1990 baseline. If the applicant's case relating to climate impacts, and the contradictions it creates, cannot be sustained by current analysis, now in a Net Zero context, then the 2022 decisionmaker should place greater weight on providing more certainty that the surface/road transport emissions pathway of the TDP and government NZ strategy will be protected.

Anthony Rae *14th January 2022*