

RAC Foundation Consultation Response on the revision of DfT's speed limit circular

About the RAC Foundation

The Royal Automobile Club Foundation for Motoring Ltd is a charity which explores the economic, mobility, safety and environmental issues relating to roads and responsible road users. Independent and authoritative research, carried out for the public benefit, is central to the Foundation's activities.

Q1. Do you agree that this advice about introducing 20mph zones and limits provides useful guidance to traffic authorities considering speed management in urban areas? If not, please explain your reasons.

Yes. With regard to 20mph limits and zones, it is right that the guidance stresses that 20mph speeds should generally be self-enforcing and the RAC Foundation is encouraged to see that the limited effectiveness of speed limit signing on its own are detailed using research evidence. The Foundation is slightly concerned that the new guidance suggests authorities can, overtime, introduce 20mph zones into 'major streets where business on foot is more important than slowing down road traffic' (Sec.72). Whilst the Foundation agrees that in certain circumstances it will be beneficial to reduce speeds on major routes, we believe this statement should also include reference to the importance of maintaining 'streets for movement' in urban areas and that the wider economic impacts of any speed reduction on major routes is fully considered.

Q2. Do you agree that traffic authorities should be able to consider the implementation of 20mph limits over a number of roads where mean speeds are at or below 24mph are already achieved? If not please explain your reasons.

Yes, providing the caveats already mentioned in response to Q1 are taken into account.

Q3. Do you agree that the recommendation to use the technical assessment tool should be withdrawn? If not, please explain your reasons.

Without seeing the detail of the new speed limit appraisal tool it is difficult to say whether the existing technical assessment tool should be withdrawn. The Foundation would encourage the Department to ensure that the new speed limit appraisal tool takes account of best practice throughout Europe and beyond, building upon the concept of the safe systems approach (See: Box and Bayliss, 2012)

Q4. Do you agree that compliance with air quality limits could be a factor in the choice of speed made by local traffic authorities? If not, please explain your reasons.

Yes. Air quality limits should feature in local authority decisions about appropriate speed choices,. However, as new technology enables motor vehicles to be less polluting it may be more important that the speed limits are plausible and considered appropriate by the driving public. Therefore this guidance needs to guard against artificially low speed limits being introduced at sites with air quality breach concerns. Air quality should be considered alongside other important considerations (e.g. safety, mobility, environmental concerns as well as the impact of the speed on the quality of life for people living alongside the road).

Q.5 Do you have other comments about the drafting of the revised circular?

Local authorities should be encouraged to bear in mind the 85th percentile travel speed of traffic in their local areas as well as the mean speed. For many years, the 85th percentile speed has been the touchstone for setting local speed limits, but this was changed in 2006 guidance revision – where it was recommended that some reference to the 85th percentile is made where it is abnormally higher than the mean. As the 85th percentile speed is based on the premise that drivers make rational choices and only those in the minority (in this case the fastest 15%) would be judged as speeding, the RAC Foundation believes that this method should be reinstated as an important consideration when setting speed limits in the UK.

In Europe, where the safe systems approach to speed management is the most common methodology in use, the 85th percentile is taken as the main indicator. The UK has not embraced the safe systems approach to speed management in the same way as our continental neighbours, and the Foundation believes that these principles should feature in the UK's speed management approach. Using the safe systems approach, the starting point for setting speed limits is the threshold of physical resistance of the human body to the changes in speed occurring during a crash. This input is then considered alongside the characteristics of the road, including its physical layout and the other users and activities it serves, as well as recognising the way drivers and their vehicles can be expected to behave under the prevailing conditions. Significant casualty reductions have been secured through the use of this methodology elsewhere, and we believe that the UK should now look to adopt this type of approach (See: Box and Bayliss, 2012).

In paragraph 16 of the Speed Limit Circular the bullet point starting 'we also want to encourage sustainable local travel and economic growth...' has the word 'cycling' underlined in the text. Unless there is some unstated preference for this mode, 'walking' and 'public transport' should also be underlined

In paragraph 26 we agree with the statement 'The aim of speed management policies should be to achieve a safe distribution of speeds consistent with the speed limit that reflects the function of the road and the road environment'. However, we do not believe that this should imply 'a mean speed appropriate to the prevailing conditions'. Instead we believe that, as is the case in other leading European countries that the 85th percentile should be the main parameter measured, with reference made to the mean speed.

In paragraph 29 we believe 'safe systems approach' should be encouraged when setting speed limits. A description of what constitutes a safe systems approach should be given and linkages should be provided to the available research evidence that supports this approach (e.g. ITF/OECD (2008) Towards Zero: Ambitious Road Safety Targets and the Safe System Approach)

In paragraph 33 the guidance states 'when traffic is travelling at constant speeds, even at a lower level, it may result in shorter and more reliable overall journey times'. This statement can be true for urban roads and motorways, but this will not be the case for rural roads. This spatial distinction needs to be made.

In paragraph 34 the guidance states 'Mean speed and 85th percentile speed are the most commonly used measures of actual traffic speed. Traffic authorities should continue routinely to collect and assess both, but mean speeds should be used as the basis for determining local speed limits'. As has already been stated we believe this is incorrect and the 85th percentile should be the main parameter used, with reference to the mean.

In the section about speed limit signing there is no reference made to the use and application of variable speed limits (apart from a small section in paragraph 90 on variable 20mph limits, which we believe would benefit from some national trials). The guidance also seems to provide little room for innovation in speed limit setting and signing. Although a complicated area we do feel some reference should be made to these issues, which will become increasingly important in the future particularly as in-car technology reduces the need to rely on physical signs.

In paragraph 72 the second bullet point should read ‘...is more important than slowing down road traffic’. ‘Traffic’ is currently missing from this sentence.

In paragraph 102 the RAC Foundation is pleased to note that the guidance acknowledges that speed limit reductions in rural areas on their own are unlikely to reduce casualty rates and that local authorities should look at a range of solutions for improving safety. We are also encouraged to see that reference is made to the Road Safety Foundation’s risk rating for A roads in Britain (Paragraph 104). Being able to predict where collisions may occur rather than relying solely on existing collision data is vital for ensuring continued road safety improvements. The RAC Foundation would like to draw the Department’s attention to another recent report by the Road Safety Foundation commissioned by the RAC Foundation which sought to prioritise improvements based on the star rating awarded to A roads, which could also be usefully referenced within the guidance document in paragraph 105 (See: Road Safety Foundation / RAC Foundation 2011).

References:

Box and Bayliss (2012) Speed Limits – A review of evidence

<http://www.racfoundation.org/research/safety/speed-limits-review-of-evidence>

ITF/OECD (2008) Towards Zero: Ambitious Road Safety Targets and the Safe System Approach

<http://www.internationaltransportforum.org/jtrc/safety/targets/targets.html>

Road Safety Foundation (2011) Saving Lives – Saving Money

<http://www.racfoundation.org/research/safety/saving-lives-saving-money>

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