

Call for comments on revision of DfT's speed limit circular

December 2009

Dear colleagues,

As you may be aware, DfT Ministers recently announced an independent expert review on the issues of drink and drug driving to inform the new Road Safety Strategy. The review, chaired by Sir Peter North, is already underway and will report to the Department by 31st March 2010.

As this work takes place, we would like to seek your views on a proposed revision to the Department's advice on setting local speed limits, Circular 01/06.¹

This year's consultation on the new Road Safety Strategy set out the overarching objective of reducing casualties among all road users. This objective should inform decisions on reviewing and setting speed limits and therefore provides context for the speed limit advice. In our consultation we committed to updating the speed limit circular and asked for views on specific policy proposals about speed limits. Comments in response to these proposals have informed the proposed amendments to the Circular summarised below.

The Consultation set out the aims of tackling pedestrian casualties and reducing the risks for road users on rural single carriageway roads. In line with this emphasis, we will focus our revision of the Circular on the advice on 20 mph zones and limits; and on rural A and B single carriageway roads.

We carried out a comprehensive review and full consultation exercise to produce the current circular, issued in 2006. Informal feedback from users has generally been positive, confirming that the advice remains largely fit for purpose, so we are not proposing substantial changes. We are also keen to give you certainty on the new advice as soon as possible to allow progress with introducing more 20 mph schemes and with carrying out rural speed limit reviews. We aim to issue a revised Speed Limit Circular in early 2010.

We are therefore asking for your comments on areas of change through this letter, before finalising the new advice. We will be making additional changes aimed at clarifying or rationalising the advice, or where changes to other sections are required as a result of the changes proposed here.

¹ Circular 01/06, www.dft.gov.uk/pgr/roadsafety/speedmanagement/dftcircular106/dftcircular106.pdf

We would ask you to use the advice contained in his letter to continue with your speed management activity until the final new guidance is in place.

If you would like to comment please respond **by 5th February 2010**, either in writing, to:

Speed Management Branch
Road User Safety Division, Zone 2/13
Department for Transport
Great Minster House
76 Marsham Street
London SW1P 4DR

or by e-mail to the following address:
speedlimitcircular@dft.gsi.gov.uk

In summary, we propose the following changes:

On 20 mph zones and limits:

- Draft revised text is at Appendix A to this letter.
- We want to encourage highway authorities to introduce, over time, 20 mph zones or limits into streets which are primarily residential in nature and into town or city streets where pedestrian and cyclist movements are high, such as around schools, shops, markets, playgrounds and other areas, where these are not part of any major through route.
- We want to make it clearer that highway authorities have flexibility in the use of 20 mph zones and limits, and should apply the option best suited to the local circumstances and that brings most benefits in terms of casualty reductions and wider community benefits.
- We want to draw attention to the initial evidence from the trial of wide area signed-only 20mph limits in Portsmouth, and want to make clear that 20 mph limits over a number of roads may be appropriate elsewhere.
- We are setting out that we will consider the requirements for calming measures in 20 mph zones as part of the DfT's Traffic Signs Policy Review, which was announced in September 2008. In exceptional cases, the Department could also look at giving special authorisation for the use of 20 mph repeater signs, including with accompanying painted roundels, instead of calming measures, on individual streets with low average speeds within a 20 mph zone. Decisions will, however, be made on a case by case basis.
- In addition to better road safety outcomes, we will also look to contribute to the DfT's other goals, including for the economy, emissions, equality of opportunity and quality of life.

Please let us know whether you agree that this is the right approach, or have any comments.

On rural speed limits:

- We propose to restructure, remove repetition and rationalise the advice contained in chapter 6 on rural speed management and Annexes D and E of the Circular.
- We will reiterate our call for speed limit reviews by 2011, making it clearer that the emphasis for highway authorities should be on carrying out speed limit reviews on 'A' and 'B' class national speed limit single carriageways and adapting lower limits where the risks are relatively high and there is evidence that a lower limit would reduce casualties, by the end of 2011. Instead of focusing on A and B roads, authorities may choose to use the Institute of Highways and Transportation (IHT) definition of 'upper tier' roads and focus on these.
- Recognising pressures on resources, we are not asking for a comprehensive speed limit review of minor rural roads, but only of those C and unclassified roads (or those that fit the IHT definition of 'lower tier' roads) that have the highest risk of collisions or where there is particular local concern about the speed limit.
- We also propose to withdraw the technical assessment tool for rural speed limit reviews, contained in Traffic Advisory Leaflet 2/06² and referred to in the current Circular. This approach is based on the informal feedback we have received from users of the tool. We propose to leave in place the principles underlying the tool, and set them out more clearly in the Circular.
- We will also include reference to new Road Safety Foundation EURORAP risk mapping of A roads, charting the relative accident risk, which should assist highways authorities with speed limit reviews on those roads. Maps can be found on the Road Safety Foundations' website.³
- Evidence from the use of average speed cameras shows that they are effective in reducing speeds over longer stretches of road. A number of highway authorities have submitted before and after evaluation data to the Department and this suggests reductions in the rate of KSI and reductions in the percentage of vehicles exceeding the speed limit have taken place at each of the sites. It should however be noted that the data have not been independently validated or adjusted for national KSI trends or regression to mean effect. We will include this in our revised circular.

Please let us know whether you agree that this is the right approach, or have any comments.

If you have any wider comments about the Circular, beyond the issues raised above, please feel free to also share them with us.

Road User Safety Division
DfT

² <http://www.dft.gov.uk/pgr/roads/tpm/tal/trafficmanagement/ficadvisoryleaflet206spe1767.pdf>

³ EuroRAP, Risk Rating of Britain's Motorways and A Roads, www.eurorap.org/library/pdfs/20090620_RSFRiskMap.pdf

Appendix A – Proposed draft new section on 20 mph limits and zones

20 MPH SPEED LIMITS AND ZONES

20 mph zones and limits are now relatively wide-spread, with an estimated over 2,000 schemes in operation in England, the majority of which are 20 mph zones.

There is clear evidence of the impact of reducing traffic speeds on reducing collisions and casualties, as accident frequency is lower at lower speeds, and where collisions do occur, there is a lower risk of fatal injury at lower speeds. Research shows that on urban roads with low average traffic speeds any 1 mph reduction in average speed can reduce the accident frequency by around 6 % (Taylor, Lynam and Baruya, 2000). There is also clear evidence confirming the greater chance of survival of pedestrians in collisions at lower speeds.

Further benefits of 20 mph schemes include quality of life and community benefits, encouragement of healthier and more sustainable transport modes such as walking and cycling. There may also be environmental benefits, as generally, driving more slowly at a steady pace will save fuel and carbon dioxide emissions, unless an unnecessarily low gear is used.

Based on this positive effect on road safety, and a generally favourable reception from local residents, we want to encourage highway authorities, over time, to introduce 20 mph zones or limits into

- streets which are primarily residential in nature; and into
- town or city streets where pedestrian and cyclist movements are high, such as around schools, shops, markets, playgrounds and other areas; where these are not part of any major through route.

Successful 20 mph zones and 20 mph speed limits should be generally self-enforcing, i.e. the existing conditions of the road together with any measures such as traffic calming or signing as part of the scheme, should lead to average traffic speeds compliant with the speed limit. To achieve compliance there should be no expectation on the police to provide additional enforcement beyond their routine activity, unless this has been explicitly agreed.

Evidence from successful 20 mph schemes shows that the introduction of 20 mph zones generally reduces average traffic speeds by more than is the case when a signed-only 20 mph limit is introduced. Currently, zones make up about 90% of all 20 mph schemes in England.

Early evidence from the area-wide 20 mph limit scheme in Portsmouth confirms previous findings that the introduction of signed-only 20 mph limits reduced average traffic speeds by less than 20 mph zones (by around 1 mph). However, the Portsmouth scheme indicates that where average traffic speeds before the installation of 20 mph limits were above 24 mph, average speeds were significantly reduced, by around 7 mph. (Atkins, 2009). Early evidence also suggests that overall casualty benefits above the national trend are likely.

Circular Roads 05/99 (DETR, 1999) sets out the legislative regime for introducing 20 mph limits and zones and Traffic Advisory Leaflet 09/99 (20 mph Speed Limits and Zones) (DETR 1999a) gives additional advice on how and where to implement 20 mph speed limits and 20 mph zones. A comprehensive and early consultation of all those who may be affected by the introduction of a 20 mph scheme is an essential part of the implementation process. This needs to include local residents, all tiers of local government, the police and emergency services and any other relevant local groups.

It is important to consider the full range of options and their benefits, both road safety and wider community and environmental benefits, and costs before making a decision as to the most appropriate method of introducing a 20 mph scheme to meet the local objectives.

20 mph zones

20 mph zones are very effective at reducing collisions and injuries. Research has shown that overall average annual accident frequency may fall by around 60%, and the number of accidents involving injury to children may be reduced by up to two-thirds. Zones may also bring further benefits, such as an overall reduction in traffic flow, where research has shown a reduction by over a quarter (Webster and Mackie, 1996), as well as a shift towards more walking and cycling.

20 mph zones are predominantly used in urban areas, both town centres and residential areas, and in the vicinity of schools. They may also be used around shops, markets, playgrounds and other areas with high pedestrian or cyclist traffic, though they should not include any major through roads. It is generally recommended that they are imposed over an area consisting of several roads.

A 20 mph zone is indicated by specially designed 20 mph zone entry and exit signs (TSRGD, diagrams 674 and 675). The statutory provisions (Direction 16(1) TSRGD) require that no point within the zone must be further than 50 metres from a traffic calming feature (unless in a cul-de-sac, where it may be up to 80 metres).

No additional speed limit or traffic calming signs are required within a 20 mph zone, as these are implicit in the 20 mph zone signs.

There may be cases where a wider area is considered for a 20 mph zone, but contains small individual roads or stretches of road where average speeds are already so low that a signed-only limit would be appropriate to achieve compliance. However, the introduction of 20 mph zones and 20 mph limits bordering immediately on each other should be avoided where possible as this and the signing to indicate this may be confusing for road users. The Department would recommend including these roads as part of the zone and use the available lighter touch traffic calming measures, such as overrun areas rather than more substantive engineering measures.

Where this is not practical, in exceptional cases the Department could also look at giving special authorisation for the use of 20 mph repeater signs, including with accompanying painted roundels, instead of traffic calming measures, within a 20 mph zone. Decisions will, however, be made on a case by case basis.

20 mph speed limits

Research into signed-only 20 mph speed limits shows that they generally lead to only small reductions in traffic speeds. Signed-only 20 mph speed limits are therefore most appropriate for areas where vehicle speeds are already low. This may for example be on roads that are very narrow, through engineering or on-road car parking. If average speeds are already around 24 mph on a road, introducing a 20 mph speed limit through signing alone, is likely to lead to general compliance with the new speed limit. Early research from the area-wide 20 mph limit in Portsmouth suggests that greater reductions can be achieved through signed only limits where previous average speeds were significantly above 20 mph.

The implementation of 20 mph limits over a larger number of roads, which we previously advised against, should be considered where the conditions are right. Highway authorities are already free to use additional measures in 20 mph limits to achieve compliance, such as some traffic calming measures and vehicle activated signs or speed cameras.

A 20 mph speed limit is indicated by terminal speed limit signs, and repeater signs are required at regular intervals along the roads covered by the limit (TSRGD, diagram 670 and Direction 11). Where traffic calming measures are placed they should be signed in line with regulations (TSRGD Diagram 557.1-4 and 883).

Variable 20 mph limits

Highway authorities have powers to introduce 20 mph speed limit that apply only at certain times of day. These variable limits may be particularly relevant where for example a school is located on a road that is not suitable for a regular 20 mph zone or limit, for example a major through road. To indicate these limits, variable message signs are available (TSRGD, Regulation 58).

The Department has occasionally granted special authorisation for the trialling of a more cost-effective sign indicating “20 mph when lights flash”. Pending evidence about the level of compliance that can be achieved through this sign, the DfT may consider this as part of the signs review.

Traffic Calming Measures

Traffic calming involves the installation of specific physical measures to encourage lower traffic speeds. There are many measures available to traffic authorities to help reduce vehicle speeds and ensure compliance with the speed limit in force. As set out above, these are required at regular intervals in 20 mph zones and may be used in 20 mph limits.

A recent review of 20 mph zone and limit implementation (DfT, 2009) shows that the vast majority of calming measures in use are speed humps, tables, cushions or rumble devices, so called vertical deflections, but highway authorities will want to consider the full set of available measures.

The Highways (Road Humps) Regulations 1999, The Highways (Traffic Calming) Regulations 1999 and Direction 16 of TSRGD give details of the traffic calming measures that meet the requirements for a 20 mph zone.

It is important to consider fully which measures might be appropriate for the specific local requirements. These calming measures range from more substantive engineering measures to lighter touch road surface treatments and include for example:

- road humps
- road narrowing measures, including e.g. chicanes, pinch-points or overrun areas,
- gateways
- road markings
- rumble devices.

The DfT's Traffic Signs Policy Review, announced in September 2008, will consider the requirements for traffic calming measures within 20 mph zones. Any changes to this would require regulatory change, and will be taken forward as part of the review.

The Department does not currently advise the use of average speed cameras to enforce 20 mph zones. Transport for London is working with some London boroughs piloting the implementation of some 20mph zones where average speed cameras will play a role in enforcing the speed limit. The evaluation of these pilots will show whether this approach has any benefits over existing measures and whether highway authorities may want to consider whether it is appropriate for their own areas.