

Speed Limit Briefing Note

Speed limits should be evidence-led, self-explaining and seek to reinforce a driver's assessment of what is a safe speed to travel. They should encourage self-compliance.

The underlying aim should be to achieve a 'safe' distribution of speeds. The key factors that should be taken into account in any decisions on local speed limits are:

- History of collisions;
- Existing traffic speeds;
- Road geometry and environment;
- Road function;
- Composition of road users.

A study of the types of crashes, their severity, causes and frequency, together with a survey of traffic speeds, should indicate whether an existing speed limit is appropriate for the type of road and mix of use by different groups of road users or whether it needs to be changed.

The principal aim in determining appropriate speed limits should, therefore, be to provide a consistent message between speed limit and what the road looks like, and for changes in speed limit to be reflective of changes in the road layout and characteristics.

(mph)	Where limit should apply
20 (including 20 mph zone)	In streets that are primarily residential and in other town or city streets where pedestrian and cyclist movements are high, such as around schools, shops, markets, playgrounds and other areas, where motor vehicle movement is not the primary function.
30	In other built-up areas with development on both sides of the road.
40	On higher quality suburban roads or those on the outskirts of urban areas where there is little development or properties set back from the road, with few cyclists, pedestrians or equestrians.
50	On rural roads, dual carriageways or bypasses that have limited frontage development or are only partially built up.

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. This should imply a mean speed appropriate to the prevailing road environment, and all vehicles moving at speeds below or at the posted speed limit, while having regard to the traffic conditions.

It may well be that a speed limit need not be changed if the collision rate can be improved or wider quality of life objectives can be achieved through other speed management measures, or other measures. These alternative measures should always be considered before proceeding with a new speed limit.

The estimated collision and injury savings should also be an important factor when considering changes to a local speed limit. Another key factor when setting a speed limit is what the road looks like to the road user. Drivers are likely to expect and respect lower limits, and be influenced when deciding on what is an appropriate speed, where they can see there are potential hazards, for example outside schools, in residential areas or villages and in shopping streets.

The vast majority of the rural road network is subject to the national speed limit. On many of these roads, the majority of drivers are travelling below – sometimes significantly below – the speed limit because of the characteristics of the road. This is especially evident on C and Unclassified roads where the geometric characteristics include many narrow roads, bends, junctions and accesses.

Speed limits are only one element of speed management. Local speed limits should not be set in isolation. They should be part of a package with other speed management measures including engineering and road geometry that respect the needs of all road users and raise the driver's awareness of their environment. These measures should enable traffic authorities to deliver speed limits and, as importantly, actual vehicle speeds that are safe and appropriate for the road and its surroundings. The measures should also help drivers to be more readily aware of the road environment and to drive at an appropriate speed at all times.

It is important that traffic authorities and police forces work closely together in determining, or considering, any changes to speed limits.

The full range of speed management measures should always be considered before a new speed limit is introduced.

Speed limits should not be used to attempt to solve the problem of isolated hazards, such as a single road junction or reduced forward visibility, e.g. at a bend.

Contrary to many people's expectations, reducing a speed limit does not lead to an equivalent drop in actual vehicle speeds. It is often assumed that a 10mph speed limit reduction will result in an average speed reduction of a similar amount. Subsequently journey time increases, casualty number reductions and other impacts are over estimated.

A considerable amount of research has been undertaken to assess the effect of changes in speed limits on actual speeds. Although reducing the speed limit can have a considerable safety benefit due to reductions in average speed, in places where speed limits have been changed and no other action taken, the change in average speed may be as little as about one quarter of the change in speed limit. Analysis shows that lowering the speed limit by 10 kph (6.2mph) achieves a decrease in average speed of 3–4 kph (approximately 2mph).

Where there is poor compliance with an existing speed limit on a road or stretch of road the reasons for the non-compliance should be examined before a solution is sought. If the speed limit is set too low for no clear reason and the risk of collisions is low, then it may be appropriate to increase the limit. If the existing limit is in place for a good reason, solutions may include engineering measures or changes to the road environment to ensure it better matches the speed limit. Enforcement may also be appropriate, but should be considered only after the other measures and jointly with the police force.

Other considerations:

- The cost ratio benefit of the proposed speed limit needs to be justified in terms of the budget commitment to progress the Traffic Regulation Order and the provision and maintenance of traffic signs and road markings against the potential casualty reduction.
- The proposed speed limit needs to be appropriate in terms of the road environment and the likelihood of it being respected by the majority of drivers.
- The impact of traffic signs and road markings needs to be taken into account especially within rural areas.
- There is no specific allocation of funds to progress new speed limits. The cost of implementation will therefore need to be prioritised within the available Road Safety Budget.

References:

- Department for Transport Circular 01/2013 – Setting Local Speed Limits
- A summary of the evidence on the costs and benefits of speed limit reduction (TRL Published Project PPR 632)
- East Sussex County Council - Local speed limits PS04/02