

Appendix 1 – Summary of DfT Circular 01/2013 Setting Local Speed Limits

1. Background

The overall speed limit framework, which includes the setting of national limits for different road types and when exceptions to these general limits can be applied, is the responsibility of the government. The three national speed limits are:

- 30mph on roads with street lighting
- 60mph national speed limit on single carriageway roads
- 70mph national speed limit on dual carriageways and motorways.

The national speed limits are not, however, appropriate for all roads. Where local conditions suggest the national speed limit is not appropriate the Highways Agency is responsible for determining speed limits on the trunk road network (motorways and selected A roads) and local highway authorities are responsible for determining speed limits on the local road network. In such cases the responsible highway authority must follow guidance issued by the Department for Transport (DfT).

DfT Circular 01/2013 Setting Local Speed Limits was issued in January 2013. The guidance contained within the circular sets out the framework that highway authorities should follow when reviewing and setting local speed limits. The circular also asks highway authorities to keep their speed limits under review with changing circumstances; and consider the introduction of more 20mph limits and zones in urban areas and built-up village streets that are primarily residential, to ensure greater safety for pedestrians and cyclists.

Highway authorities have the flexibility to set local speed limits that are appropriate for the individual road, reflecting local needs and taking account of all local concerns. Local speed limits should not, however, be set in isolation but as part of a package with other measures to manage vehicle speeds across the local road network and improve road safety.

The underlying aim is to provide a safe, efficient highway network with traffic travelling at appropriate speeds. This policy therefore aims to achieve a safe distribution of traffic at appropriate speeds which reflects the function of the road and the road's environment (i.e. vehicles travelling at or below the speed limit whilst having regard to the traffic conditions). It is hoped that this will be achieved by providing a consistent message between the speed limit and what the road looks like; and for changes in speed limits to reflect changes in the road layout and characteristics.

A speed limit should be set with support from the local community, the police and other local services. Close working is also needed with neighbouring highway authorities where a road crosses administrative boundaries. It should also be supported by education and engineering measures where necessary to reduce speeds.

As part of the process of making a speed limit order, public consultation of those affected is very important and, together with good information about planned changes, this will improve support for and compliance with new limits. Local residents may also express their concerns or desire for a lower speed limit and these comments should be considered. It is important that highway authorities and police forces work together from an early stage when considering or determining any changes to speed limits. It is also important that neighbouring traffic authorities work closely together, especially where roads cross boundaries, to ensure speed limits remain consistent.

If a speed limit is set unrealistically low for the particular road function and condition, it may be ineffective and drivers may not comply with the speed limit. Drivers are likely to expect

and respect lower limits where they can see there are potential hazards, for example outside schools, in residential areas or villages and in shopping streets.

Before introducing or changing a local speed limit, the highway authority will need to ensure that the expected benefits exceed the costs. Many of the costs and benefits, however, do not have monetary values associated with them but these will still need to be considered. The objective will be to seek an acceptable balance between costs and benefits taking into account economic, environmental and quality of life benefits as well as road safety improvements.

The factors that will therefore be used in the assessment of appropriate speed limits are:

- the function of the road – whether it is a strategic road, whether it carries through traffic or if it is mainly residential
- existing traffic speeds as well as its potential to reduce congestion and improve journey time reliability
- estimated collision and injury savings – whether there is a history of collisions, including frequency, severity, types and causes
- what the road looks like to the road users – considering the road geometry and engineering such as its width, sightlines, bends, junctions, accesses etc.
- the composition of the road users (including existing and potential levels of road users) and its ability to increase walking and cycling levels – whether it is outside a school, in a residential area or village, in a shopping area
- the environment of the road – considering the level of roadside development and possible impacts on residents' quality of life (e.g. visual impact, noise, vibration, severance and air quality)
- costs – including engineering and other physical measures including signing, as well as future maintenance liabilities and the cost of enforcement.

The speed limit appraisal tool provided by DfT enables highway authorities to wholly assess the full costs and benefits of proposed speed limit changes; and to help ensure a consistent approach to setting local speed limits.

To avoid too many speed limit changes along a route the minimum length of a speed limit should generally be not less than 600m, although this could be reduced to 400m for lower speed limits, or even 300m on roads with a purely local access function, or where a 20mph speed limit is introduced.

2. Urban road network

Lower speeds benefit all urban road users, and setting appropriate speed limits is therefore an important factor in improving urban safety. The standard speed limit in urban areas is 30mph, which represents a balance between mobility and safety factors.

Sometimes a decision about a road's primary or most important function needs to be taken and therefore there may be a need to consider alternative speed limits. For example, it may be appropriate to consider 20mph limits on roads with high pedestrian and cycling activity, such as residential streets, shopping areas, or outside schools and these are discussed further in section 5 below.

Similarly, on dual carriageways where the road environment and characteristics allow, it may be appropriate to implement 40mph and, in exceptional circumstances, 50mph limits.

Suitable routes for urban through-traffic will be promoted, and the speed of traffic using these routes to access residential streets will be managed through the use of appropriate traffic management techniques. 40mph speed limits (and 50mph speed limits in exceptional

circumstances) will be considered on dual carriageways where the road environment and characteristics allow.

Roads suitable for 40mph speed limits will generally be higher-quality suburban roads or those on the outskirts of urban areas where there is little development. Such roads will also have good width and layout, parking and waiting restrictions in operation, and buildings set back from the road. These roads should, wherever possible, cater for the needs of non-motorised road users through segregation of road space, and have adequate footways and crossing places.

In exceptional circumstances a 50mph speed limit may also be used on higher-quality roads where there is little or no roadside development and such speeds can be achieved safely. The roads most suited to these higher urban limits are special roads or those with segregated junctions and pedestrian facilities, such as primary distributors. These will include dual carriageway ring or radial routes or bypasses that have become partially built up. 50mph speed limits will only be considered where they will have little or no negative impact on the local community and non-motorised road users.

3. Rural road network

Reducing the numbers of road users killed and seriously injured on rural roads is one of the key road safety challenges. Research has assessed the risk of death in collisions at various impact speeds for typical collision types on rural roads. This research suggests that the risk of a driver dying in a head on collision involving two cars travelling at 60mph is around 90%, but that this drops rapidly with speed, so that it is around 50% at 48mph (Richards and Cuerden, 2009).

Given the percentages of travelling too fast for the conditions as a contributory factor to road traffic collisions, speed limit changes alone are unlikely to fully address all of the collisions occurring on the roads. Speed limits will therefore be considered as part of the wider rural safety management programme.

The majority of the rural road network is subject to the national speed limit of 60mph on single carriageway roads and 70mph on dual carriageways.

In most instances, consideration of collision history, road function, road users (including the presence of vulnerable road users), road geometry, engineering and environment, and actual traffic speed should enable the determination of the appropriate speed limit on single and dual carriageway rural roads.

The choice of speed limits should take account of whether there is substantial roadside development and whether the road forms part of a recognised route for vulnerable road users, including whether there is a footway.

Revised speed limits will consider the function and nature of the road as well as the likely benefits of any revision. The speed limit appraisal tool provided by DfT will be used to help inform such decisions to help ensure a consistent approach to setting local speed limits.

On A and B classified single carriageway rural roads the following speed limits are considered appropriate and will be used as guidance when reviewing the speed limits on such roads:

- 60mph is recommended for most high quality strategic A and B roads with few bends, junctions or accesses
- 50mph should be considered for lower quality A and B roads that may have a relatively high number of bends, junctions or accesses. It can also be considered

where mean speeds are below 50 mph, so the lower speed limit does not interfere with traffic flow

- 40mph should be considered where there are many bends, junctions or accesses, substantial development, a strong environmental or landscape reason, or where there are considerable numbers of vulnerable road users.

On C and unclassified single carriageway rural roads with important access and recreational function, the following speed limits are considered appropriate and will be used as guidance when reviewing the speed limits on such roads:

- 60 mph is only appropriate for the best quality C and unclassified roads with a mixed function (i.e. partial traffic flow) with few bends, junctions or accesses. In the longer term, these roads should be assessed against through-traffic criteria.
- 50 mph may be appropriate for lower quality C and unclassified roads with a mixed function and high numbers of bends, junctions or accesses.
- 40 mph may be considered for roads with a predominantly local, access or recreational function, for example in national parks or areas of outstanding natural beauty, or across, or adjacent to, unenclosed common land; or if they form part of a recommended route for vulnerable road users. It may also be appropriate if there is a particular collision problem.

Dual carriageway roads with segregated junctions and separate facilities for vulnerable road users are generally subject to and suitable for the 70mph national speed limit. A lower limit may, however, be appropriate if, for example, a history of collisions indicates that this speed cannot be achieved safely and this risk of collisions cannot be addressed through other engineering measures.

3.1 Villages

Fear of traffic can affect people's quality of life and therefore the built-up area of villages should have comparable speed limits to similar roads in urban areas. For the purposes of applying a village speed limit of 30mph the definition of what constitutes a village is that there are:

- 20 or more houses (on one or both sides of the road), and
- a minimum length of 600 metres.

If there are just less than 20 houses, extra allowance may be made for any other key buildings, such as a church, shop or school. The minimum length may also be lowered to 400 metres (and in exceptional circumstances 300 metres) when there are 20 or more houses located within this shorter length.

30mph speed limits should be the norm on roads in villages with sufficient housing and/or key buildings. At locations where the above criteria for a village are not met and there is less housing development (or where engineering measures are not practicable or cost-effective to achieve a 30mph limit) but a reduction from the national 60mph speed limit is considered appropriate, consideration will be given to alternative lower limits of 40mph or 50mph.

Revised speed limits should consider the function and nature of the road as well as the likely benefits of any revision.

4. **Buffer zones**

At some locations it may be appropriate to use a short length of 40mph or 50mph speed limit as a transition between a length of road with a national limit and another length on which a 30mph limit is in force (for example, where there are outlying houses beyond the village boundary or on roads with high approach speeds).

The use of such transitional limits should only be used on sections of road where immediate speed reduction would cause risks or is likely to be less effective. In such cases, consideration may be given to other speed management measures if necessary to help encourage compliance so that no enforcement difficulties are created for the police.

5. 20mph limits and zones

There is clear evidence of the effect of decreased traffic speeds on the reduction of collisions and casualties; collision frequency is lesser at lower speeds and where collisions do occur, there is a lesser risk of fatal injury at lower speeds. Research also shows that on urban roads with low average traffic speeds any 1mph reduction in average speed can reduce the collision 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.

Additional benefits of 20mph schemes include the encouragement of healthier and more sustainable transport modes such as walking and cycling, as well as quality of life and community benefits (Kirkby, 2002). Walking and cycling can make a very positive contribution to improving health and tackling obesity, improving accessibility, tackling congestion, reducing carbon emissions and improving the local environment. There may also be environmental benefits as, generally, driving more slowly at a steady pace will save fuel and reduce pollution, unless an unnecessarily low gear is used.

20mph schemes are usually introduced as either 20mph limits (using only appropriate signing) or 20mph zones (where signing is generally accompanied by other traffic calming features).

20mph zones and limits are now relatively wide-spread, with more than 2,000 schemes in operation in England. Traffic authorities are able to use their powers to introduce 20mph speed limits or zones on:

- Residential streets in cities, towns and villages, particularly where the streets are used by people on foot and on bicycles, there is community support and the characteristics of the street are suitable
- Major streets where there are (or could be) significant numbers of journeys on foot, and/or where pedal cycle movements are an important consideration, and this outweighs the disadvantage of longer journey times for motorised traffic.

5.1 20mph zones

Research has shown that 20mph zones are very effective at reducing collisions and injuries (research in 1996 showed that overall average annual collision frequency could reduce by around 60%; and the number of collisions involving injury to children could reduce by up to two-thirds). There is no evidence of migration of collisions to streets outside the zone.

20mph zones are predominantly used in urban areas (both town centres and residential areas). They can also be used around schools, shops, markets, playgrounds and other areas with high pedestrian or cyclist traffic, although they should not include roads where motor vehicle movement is the primary function. It is generally recommended that they are imposed over an area consisting of several roads.

20mph zones require terminal signs at all of the entrances/exits of the zone and require traffic calming measures (e.g. speed humps, chicanes) or repeater speed limit signing and/or roundel road markings at regular intervals, so that no point within a zone is more than 50m from such a feature.

5.2 20mph limits

Research has shown that signed-only 20mph speed limits generally lead to only small reductions (about 1mph on average) in traffic speeds and therefore such limits are most appropriate where vehicle speeds are already low. Where mean vehicle speeds are already at or below 24mph, introducing a signed-only 20mph speed limit is therefore likely to result in general compliance with the 20mph speed limit.

20mph limits can be introduced over larger numbers of roads where mean speeds at or below 24mph are already achieved over a number of roads.

In Portsmouth, where signed-only speed limits were introduced in most streets, greater than average reductions in average speeds were recorded where the average speed was 25mph or higher prior to the introduction of the scheme (although the speed reductions were insufficient to make the resulting speeds generally compliant with the new 20mph limits).

Such schemes should consist of entry/terminal signs and at least one repeater sign (additional repeater signs will be considered if necessary to inform road users of the speed limit in force).

5.3 Variable speed limits

Highway authorities are able to introduce 20mph speed limits that apply at certain times of day. Variable speed limits may be of particular value outside schools located on distributor roads (main through roads). DfT has produced guidance on the signs to be used for such speed limits (both advisory and mandatory) – mandatory limits must use variable message signs; and advisory limits must place an advisory part-time 20mph speed limit sign with flashing school warning lights.