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West Sussex Speed Limit Policy

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1 Introduction

1.1 A "Safe system" approach to road safety has been adopted by West Sussex County Council. This has a long-term goal for a road traffic system which is eventually free from death and serious injury. There are five key pillars to the Safe System approach:

- Safe Road Use
- Safe vehicles
- Safe speeds
- Safe roads and roadsides
- Post-crash response.

1.2 Research indicates that reducing traffic speeds reduces the likelihood of a road traffic collision occurring and reducing the speed difference between those involved will reduce the severity of any injuries sustained in a collision.

1.3 The 2022 changes to the Highway Code introduced a "hierarchy of road users" which places those road users most at risk in the event of a collision at the top of the hierarchy and placed greater responsibility on those who pose the greatest risk to others (generally motorised traffic) to use the highway safely. The most vulnerable road users (VRUs) are pedestrians, cyclists and equestrians and exist in both urban and rural settings.

1.4 Setting speed limits with the aim of achieving safe driving speeds therefore plays an important role in making the public highway safer and reducing the risk of harm for all road users. Lower traffic speeds may also encourage more walking and cycling in support of our Active Travel Strategy, helping to make communities safer and more pleasant places to live, and to support local schools, shops, and businesses.

1.5 Effective speed management involves many components designed to work together to require, encourage and help road users adopt appropriate safe speeds below the speed limit. Speed limits should be self-explaining, encourage self-compliance and be seen as the maximum rather than a target speed at which to drive regardless of conditions.

1.6 Nationally there are three speed limits applicable in England:

- The 30mph speed limit on roads with a system of street lighting (referred to as Restricted Roads)
- The national speed limit of 60mph on single carriageway roads
- The national speed limit of 70mph on dual carriageways and motorways.

1.7 These limits are not appropriate for all roads, so Department for Transport circular 1/2013 "*Setting Local Speed Limits*" provides advice and guidance

to Traffic Authorities for developing speed management strategies suitable for local needs. Authority to make changes to speed limits is granted through the Road Traffic Regulation Act 1984 (RTRA) and in accordance with the current Traffic Signs Regulations and General Directions (TSRGD).

1.8 Though experience shows that changing to a lower speed limit on its own is not always successful in reducing the speed of traffic to compliant levels if the prevailing mean speeds are much higher than the proposed lower limit, there is a high correlation between pre-existing mean speeds and the reduction in speeds. In general, higher existing speeds lead to greater speed reductions – as evidenced from recent 20mph schemes in the Scottish Borders, Oxfordshire, Wales, and Kent. Higher existing speeds should not, therefore, preclude the option to consider a lower speed limit.

1.9 However, it is advised that speed limits alone should not be used to attempt to protect VRUs or to solve the problem of isolated hazards (such as single road junctions or reduced forward visibility such as a bend or hidden dip). In these circumstances if speed limits are to be used, they should be considered as part of a package of supporting measures to manage vehicle speeds and improve road safety.

1.10 Changes to the highway, such as narrowings, vertical speed reducing measures, realigning the road or additional road signs and markings may be considered to encourage lower speeds where reducing the speed limit may not achieve the desired result on its own.

2 Speed Limit Assessments

2.1 Assessing a road for an appropriate speed limit in West Sussex includes taking the following into account.

- Functional hierarchy of the route
- The length of the route to be subject to the speed limit
- Road Traffic Collision history
- Traffic speeds (speed assessment)
- Other means of intervention to improve road safety.

2.2 The functional hierarchy / route assessment is undertaken to identify the typical speed limit appropriate for the route under consideration and in most cases will be the primary determinant in the speed limit assessment.

2.3 Although not essential to pursue a lower speed limit, a speed assessment of existing traffic flows should be undertaken, either through use of GPS / telematics software or through fixed Automatic Traffic Counters. Most motorists will travel at a speed they consider to be appropriate based upon their assessment of the road environment and the prevailing

conditions. Understanding how the existing road environment influences a driver's choice of speed on a particular section of road means that an assessment of vehicle speeds is highly recommended to help assess if supporting measures may need to be considered.

2.4 Where average speeds are higher than the criteria for each proposed speed limit indicated in section 2.11 or there is a high record of treatable road traffic collisions, supporting measures or other road safety interventions may be required to ensure that the new speed limit is self-explaining and well respected by most drivers. Proposals for supporting measures should be considered, and when deemed appropriate discussed and agreed with the Assistant Director for Highways Transport and Planning in consultation with the Cabinet Member for Highways and Transport.

Functional hierarchy / route assessment

2.5 Functional hierarchy relates to the way the road is being, or could potentially be, utilised by a mix of VRUs and motorised traffic. For example, roads in town centres will likely have a high number of pedestrians and cyclists mixing with a high volume of both local and through traffic, whereas a minor rural road may experience lower volumes of both VRUs and motorised traffic, but potentially at a higher speed and therefore pose a greater risk of more serious injury. A lower speed limit may encourage more VRU use.

2.6 The functional hierarchy / route assessment is therefore used to assess the functional use of the public highway, including potential future use by VRUs, and to determine where a particular speed limit is likely to be appropriate. The typical functional use is set out in Table 1.

Speed Limit	**Typical functional use**
20mph Speed Limit	Generally, where a high proportion of VRUs are, or could be, present or traffic flows are low: • Urban residential areas. • Shopping streets. • Industrial estates (where there is a mix of HGV traffic and pedestrian movements). • Roads adjacent to schools. • Locations / routes forming part of an Active Travel "corridor". • Rural villages. • Rural "Quiet Ways" where roads are very narrow with no footway or verge, have low traffic volume and low speeds and support a combination of VRUs.

30mph speed limit	Generally, where a high proportion of VRUs are, or could be, present and 20mph is deemed not appropriate: • Built up / partially built-up urban areas with a high proportion of property (e.g houses, shops, church) frontage. • Rural Villages. • Rural "Quiet Ways" where roads are narrow, have no footways and only a narrow verge, have low traffic volume and low speeds and support a combination of VRUs.
40 mph speed limit	• Through traffic routes (single or dual carriageway) in partially built-up areas with segregated VRU facilities and limited frontage accesses or junctions. • Lengths of A and B class rural roads identified as high risk (see para 2.8). • Rural C class and unclassified roads not within a village.
50mph	Generally, few VRUs present or segregated facilities provided: • Rural A and B class single carriageways (not within a village). • Rural all-purpose dual carriageways with frequent junctions or development access or otherwise identified as high risk.
60mph	• Rural all-purpose dual carriageways with minimal junctions identified as high risk.

Table 1 - Functional hierarchy / route assessment to determine suitable speed limits

2.7 Further detail relating to specific road / speed limit types can be found under section 3 "Specific speed limit application".

2.8 As part of any speed limit assessment consideration will be given to the road traffic collision history of the road / route including frequency, severity, and causation factors. Those collisions that are evidenced to be treatable with appropriate engineering measures should be considered as part of the speed limit assessment. High risk sites identified through the road traffic collision data assessment will likely require supporting measures, and where appropriate to be discussed and agreed with the Assistant Director for Highways Transport and Planning in consultation with the Cabinet Member for Highways and Transport.

Route Length Assessment

2.9 The objective is to achieve a balance between providing reasonable consistency of speed limit along a route and the need to encourage awareness of lower speed limits appropriate for changes in character or

where risks are higher. Exceptionally lengthy sections of speed limit where the functional hierarchy does not support the lower limit or multiple changes of short sections of speed limit along a route should be avoided.

2.10 The recommended minimum route length for a speed limit is 600m - this provides reasonable opportunity for active enforcement to be undertaken. However, when considering a compact village location along a route or when provided as a buffer length to provide transition to a lower speed limit this may be reduced to 400m. In exceptional circumstances this may be reduced to 300m with the approval of the Assistant Director for Highways Transport and Planning in consultation with the Cabinet Member for Highways and Transport.

Average Speeds

2.11 The average (mean) speeds appropriate for each speed limit without the need to consider supporting measures are shown in table 2. Note that the measurement of the existing average speed is rounded to the nearest whole number.

Speed Limit	20	30	40	50
Average speed should be below	26	35	46	57

Table 2 - Average speeds relevant to each speed limit

2.12 To assess and consider if supporting measures may be required, average speed assessments for the route length under consideration should be reviewed. Data may be obtained by undertaking individual single site collection methods or through the use of GPS led traffic monitoring software.

2.13 Where data recorded exceeds the figures in table 2, potential supporting measures or other road safety interventions should be considered, and where appropriate discussed and agreed with the Assistant Director for Highways Transport and Planning in consultation with the Cabinet Member for Highways and Transport.

2.14 In the absence of a posted speed limit or system of street lighting (as defined by the Traffic Signs Regulations and General Directions) the national speed limit (NSL) of 60mph on single carriageway roads and 70mph on dual carriageways automatically applies. A 60mph speed limit will only be relevant for use on dual carriageways and as part of a road safety intervention. In such cases any scheme progressed will require approval of the Assistant Director for Highways Transport and Planning in consultation with the Cabinet Member for Highways and Transport.

2.15 In the design of new, or amendment to existing infrastructure average speeds may be supplemented using 85th percentile data (the speed at or below which 85 percent of drivers will operate with open roads and favourable conditions) to maintain safe highway design in accordance with current guidance, e.g Design Manual for Roads and Bridges and the Manual for Streets, rather than relying on the posted speed limit. It is advisable that the higher of the two (85th percentile or posted speed limit) is used to apply the correct design guidance or standard.

Speed Reduction / Behavioural Change Measures

2.16 Speed reduction or other road safety intervention measures may be required to support a lower speed limit where average speeds exceed the speeds indicated in table 2 or to address specific road safety concerns identified through analysis of road traffic collision data. There is no prescriptive guidance on which supporting measures to use, however, table 3 indicates a range of options that could be considered, in accordance with current national guidance, on a case by case basis. Proposals for specific sites, where deemed appropriate, will be discussed and agreed with the Assistant Director for Highways Transport and Planning in consultation with the Cabinet Member for Highways and Transport.

Type of Measure	**Application**
Traffic signs	May include: • hazard warning or advisory signs • gateways including village name signs with optional road safety messages • enhanced speed limit signs • vehicle activated (interactive) signs • School Safety Zones
Road markings	May include: • speed limit roundels • "slow" markings • hatching • rumble devices
Vertical deflections	Only for use on roads with a 30mph or lower speed limit. May include: • road humps • raised tables • speed cushions
Horizontal deflections	May include: • road narrowing such as kerb build outs, chicanes, or pinch points • traffic islands • pedestrian refuge islands

Table 3 - Typical speed reducing measures

2.17 In addition, communities may wish to pursue other behavioural change measures such as Community Speed Watch, use of portable Speed Indicator Devices (SIDs) or a local poster campaign. Where appropriate these will be supported and licensed in accordance with current processes.

Advisory limits

2.18 Advisory limits should be used sparingly and will therefore only be used as part of a road safety intervention where evidence indicates a lower speed is necessary, but a formal permanent speed limit is not appropriate. They must be associated with the placement of suitable hazard warning signs in accordance with national guidance.

2.19 Advisory limits will require approval of the Assistant Director for Highways Transport and Planning, and suitable evidence must be provided indicating the appropriate maximum speed to be advised.

3 Specific Speed Limit application

3.1 The following paragraphs provide specific guidance on when each speed limit is likely to be appropriate, subject to individual site circumstances and additional requirements that may be identified as part of the assessment process.

20mph speed limits and zones

3.2 20mph speed limits / zones may encourage modal shift towards more active travel forms such as walking and cycling and may result in reductions in traffic flow on the road, as well as reduced emissions. They are most appropriate in urban residential areas, shopping streets, village environments, industrial estates where large vehicles may be manoeuvring or in locations / on routes forming part of an Active Travel "corridor" and a lower speed limit is deemed necessary to support movement of VRUs.

3.3 Locations with very narrow roads, no footways or verges, low traffic volume, low speeds and support a combination of VRUs may be deemed as rural "Quiet Ways" and a 20mph speed limit may be considered. Any such request will require approval of the Assistant Director for Highways Transport and Planning in consultation with the Cabinet Member for Highways and Transport.

3.4 Research indicates that signed-only 20mph speed limits can lead to reductions in traffic speeds. Where average speeds are less than 26mph a signed-only 20mph speed limit is deemed suitable, but if average speeds are higher than 26mph supporting measures or other road safety interventions may need to be considered, and where applicable discussed and agreed with the Assistant Director for Highways Transport and

Planning in consultation with the Cabinet Member for Highways and Transport.

3.5 In some circumstances a 20mph zone may be the preferred option. These are generally very effective in reducing speeds and casualties, however, some supporting measures associated with zones can be expensive and are not always popular, with the potential to generate additional noise pollution and make journeys more uncomfortable for passengers of public service vehicles and those with certain medical conditions. Also, they may not be appropriate on major strategic routes, as these impact on response times for emergency services. Evidence that the local community supports the introduction of a 20mph zone, and its associated features, will be required to support a request.

3.6 Where a 20mph zone with supporting measures is implemented, any part of the road included within the zone must be within 50 metres of suitable supporting measure and to comply with TSRGD Schedule 10, General Direction 1. Supporting measures may include horizontal and vertical deflections, as well as some signs and road markings – see table 3 for examples.

20mph speed limits outside schools

3.7 West Sussex County Council recognises the area around school gates may pose a potentially high risk to VRUs. It is also acknowledged a variety of stakeholders have a critical role in maintaining safety in these environments, including the school, parents / guardians of children attending the school, residents and through traffic.

3.8 A 20mph speed limit may be provided adjacent to schools where there is a mixed use of vulnerable road users and motorised traffic. A typical layout that would meet approval would involve a minimum 150m length on each approach to the school and its associated school keep clear markings (where present) as shown at figure 1.

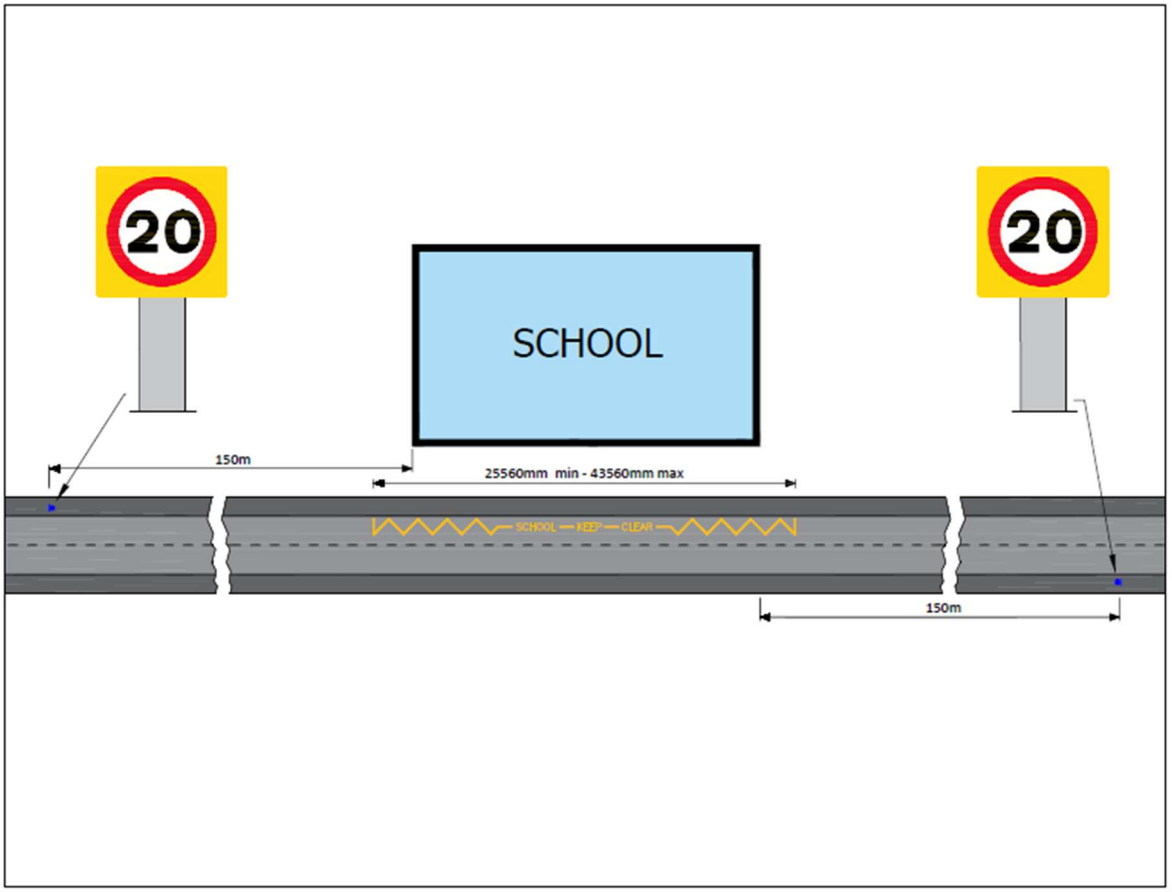

Figure 1 - typical 20mph zone at a school

3.9 Where appropriate, this layout may be adjusted to accommodate the local environment and adjoining roads adjacent or near to the school may also be considered if deemed to be a high risk.

3.10 It is recognised that not all school sites will be suitable for a 20mph speed limit so other measures that can be considered adjacent to schools to support a reduction in congestion and improve road safety include:

- School Safety Zones (signs, flashing lights and advisory 20mph)
- School Crossing Patrols
- Behavioural Change – education, training and publicity.

Towns and Villages

3.11 Within the formal defined boundaries of a town or village it is acceptable for the speed limit to be set at either 20mph or 30mph on all roads.

3.12 Exceptions may apply to urban distributor roads, either single or dual carriageways, that have high through traffic volume with segregated VRU facilities and limited frontage accesses or junctions - in such cases the speed limit could typically be 40mph.

3.13 In a village environment the expectation is for a lower speed limit to begin at the village boundary as defined by the first property or community meeting space within that settlement. The typical requirement to be considered a village will be "*A group of houses and associated buildings with at least one community facility or meeting place focal point such as a church, public house, shop, community hall or green*", though exceptions where there is ribbon development with no focal point, but a presence of vulnerable road users, may be considered through discussion with and agreement of the Assistant Director for Highways Transport and Planning in consultation with the Cabinet Member for Highways and Transport. However, any speed limit will comply with the minimum length distances in para 2.10.

Single Carriageway Rural Roads

3.14 Rural roads play an important role in the road hierarchy across West Sussex, supporting a mix of leisure and business functions as well as being home to many thriving communities. Access to sustainable travel in rural areas is of high importance to these communities, and it is critical to ensure rural bus stops and the public rights of way network can be accessed safely. However, many rural roads are narrow and not suited to high volumes of faster moving traffic, creating conflict with VRUs.

3.15 Some rural roads may be deemed to be "Quiet ways" and are typically narrow unclassified rural lanes with the following characteristics:

- No footway
- Narrow or no verges
- No carriageway centre line
- Low traffic volume
- Low average speeds
- Evidence of a mix of VRUs present, or the potential to encourage more VRU use.

3.16 Requests for speed reductions on single carriageway rural roads should be assessed against the functional hierarchy / route assessment at 2.5 to determine an appropriate speed limit. Potentially that speed limit could be:

- 50mph on "A" and "B" class roads
- 40mph on "C" class and "Unclassified" roads and
- 20 / 30mph on a road deemed to be a "Quiet Way".

However, speed and collision history assessments may also be required to ascertain if any supporting measures may also be required.

Dual carriageways

3.17 Dual carriageways are generally provided as a strategic route between major destinations. Speed limit requests on dual carriageways, regardless of location, shall be assessed against the functional hierarchy of that route

whilst also considering any road safety concerns, and reduced only with supporting evidence that a lower speed limit is appropriate.

4 Signing Speed Limits

4.1 Speed limits should be signed in accordance with current advice contained in the Traffic Signs Manual, Chapter 3. This will generally be through the use of standard speed limit terminal signs with road marking roundels and / or upright signs as repeater signing on an as needs basis. Each site will be assessed and considered for its own requirements.

4.2 Where a speed limit is reduced consideration should be given to any changes in existing signs or road markings to ensure these comply with the guidance contained within the Traffic Signs Manual. Where feasible, any appropriate works to amend the infrastructure should be incorporated with the speed limit reduction.

4.3 Village "gateways" on entry to a village that incorporate speed limit signing and a road safety message can reinforce the identity of the village environment and assist with self-compliance of a lower speed limit. Where appropriate, applications for community funded village gateways will be supported and licensed in accordance with current processes.

4.4 Where applicable, and such installation meets relevant criteria, vehicle activated signs may be considered to support a reduced speed limit. There is a separate application process for a VAS. In addition, West Sussex County Council will be generally supportive of local communities utilising mobile Speed Indicator Devices to support a speed limit, where such use is in accordance with current guidance, and will be licensed in accordance with current processes.

4.5 When providing speed limit signs and other infrastructure a balance needs to be found between providing sufficient road user information to effect behaviour, and not creating an unnecessary visual intrusion to the environment.

End