# PAPER C

# The Isle of Wight Council

# "Setting Local Speed Limits 2014"

Policy draft for decision

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# 1.INTRODUCTION

This new (2014) Isle of Wight Council speed limit policy is based upon the guidance received from the Department for Transport of the same name.

The policy needs to be set in the context of the new Highways PFI contract that commenced in April 2013 and will improve the entire highway network to a much higher general standard than currently exists with the investment of some £480m grant from DfT during the first 7 years of the contract term referred to as the Core Investment Period (CIP).

The business case for the PFI depicts improvements not only in the structure and integrity of the highway network but also increases in road safety, improved journey times and reductions in noise levels.

Until a full evaluation of the impact of the CIP has been conducted any changes to speed limits, therefore, will need to be considered very carefully to ensure best value for money.

## 2 KEY POINTS OF THE POLICY

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

- 2.2 Speed limits should be seen by drivers as the maximum rather than a target speed.
- 2.3 Highway authorities such as the Isle of Wight Council set local speed limits in situations where local needs and conditions suggest a speed limit which is lower than the national speed limit.
- 2.4 This policy is to be used for setting all local speed limits on single and dualcarriageway roads in both urban and rural areas.
- 2.5 This policy should also be used as the basis for assessments of local speed limits, for developing route management strategies and for developing the speed management strategies which can be included in the Local Transport Plan.
- 2.6 Highway authorities are asked by the Department for Transport to keep their speed limits under review with changing circumstances, and to consider the introduction of more 20 mph limits and zones, over time, in urban areas and built-up village streets that are primarily residential, to ensure greater safety for pedestrians and cyclists,

using the criteria in Section 6.

- 2.7 The Isle of Wight Council would like to see a transport system across the island that is an engine for economic growth, and one that is also more sustainable, safer, and improves quality of life in our communities. It is clear how setting appropriate speed limits with the aim of achieving safe and appropriate driving speeds can play an important role in supporting this vision.
- 2.8 This policy sets out the framework that the Isle of Wight Council, as Highway Authority, should follow when setting and reviewing local speed limits.
- 2.9 Roads should be designed so that mistakes made by road users do not result in death or serious injury. Effective speed management is part of creating a safe road environment that is fit for purpose. It involves many components designed to work together to require, encourage and help road users to adopt appropriate and safe speeds below the speed limit.
- 2.10 As well as being the legal limit, speed limits are a key source of information to road users, particularly as an indicator of the nature and risks posed by that road both to themselves and to all other road users.
- 2.11 Speed limits should, therefore, be evidence-led and self-explaining, and seek to reinforce people's assessment of what is a safe speed to travel and encourage self-compliance. They should be seen by drivers as the maximum speed rather than as a target speed at which to drive irrespective of conditions.
- 2.12 It is often not appropriate or safe to drive at the maximum speed limit.
- 2.13 The overall speed limit framework, including the setting of national limits for different road types, and which exceptions to these general limits can be applied, is the responsibility of the government. The three national speed limits are:
  - the 30 mph speed limit on roads with street lighting (sometimes
  - referred to as Restricted Roads)
  - the national speed limit of 60 mph on single carriageway roads
  - the national speed limit of 70 mph on dual carriageways and motorways.
- 2.14 These national limits are not, however, appropriate for all roads. The speed limit regime enables highway authorities to set local speed limits in situations where local needs and conditions suggest a speed limit which is different from the respective national speed limit.

- 2.15 Local speed limits are determined by highway authorities having regard to guidance issued by the Department for Transport as well as the appropriate legislation, including the Traffic Signs Regulations and General Directions 2002 (TSRGD 2002)
- 2.16 The Department for Transport asks highway authorities to:
  - keep their speed limits under review with changing circumstances;
  - consider the introduction of more 20 mph limits and zones, over time, in urban areas and built-up village streets that are primarily residential, to ensure greater safety for pedestrians and cyclists, using the criteria in Section 6.
- 2.17 Highway authorities continue to have the flexibility to set local speed limits that are appropriate for the individual road, reflecting local needs and taking account of all local considerations.
- 2.18 The Department for transport guidance makes it clear that local speed limits should not be set in isolation, but as part of a package with other measures to manage vehicle speeds and improve road safety.
- 2.19 Setting speed limits at the appropriate level for the road, and ensuring compliance with these limits, play a key part in ensuring greater safety for all road users.
- 2.20 The relationship between speed and likelihood of collision as well as severity of injury is complex, but there is a strong correlation.
- 2.21 This updated policy provides part of the framework for speed limits, where the Isle of Wight Council can set speed limits on their roads below the national limit, in response to local risk factors and conditions. It will help ensure appropriate and consistent speed limits, which will contribute to reducing the number of road deaths, as well as casualties overall; tackling pedestrian and cyclist casualties in towns and cities; improving the safety on rural roads; and reducing variations in safety from area to area and road to road.
- 2.22 Unless a speed limit is set with support from the local community, the police and other local services, with supporting education, and with consideration of whether engineering measures are necessary to reduce speeds; or if it is set unrealistically low for the particular road function and condition, it may be ineffective and drivers may not comply with the speed limit.
- 2.23 If many drivers continued to travel at unacceptable speeds, the risk of collisions and injuries would increase and significant and avoidable enforcement activity would be needed.
  - 3 THE UNDERLYING PRINCIPLES OF LOCAL SPEED LIMITS

- 3.1 It is important that highway authorities and police forces work closely together in determining, or considering, any changes to speed limits.
- 3.2 The full range of speed management measures should always be considered before a new speed limit is introduced.
- 3.3 The underlying aim should be to achieve a 'safe' distribution of speeds.
- 3.4 The key factors that should be taken into account in any decisions on local speed limits are:
  - history of collisions;
  - road geometry and engineering;
  - road function;
  - Composition of road users (including existing and potential levels of vulnerable road users);

existing traffic speeds; and

- road environment.
- 3.5 While these factors need to be considered for all road types, they may be weighted differently in urban or rural areas. The impact on community and environmental outcomes should also be considered.
- 3.6 The minimum length of a speed limit should generally be not less than 600 metres to avoid too many changes of speed limit along the route.
- 3.7 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.
- 3.8 A study of 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, including the presence or potential presence of vulnerable road users (including people walking, cycling or riding horses, or on motorbikes), or whether it needs to be changed.
- 3.10 Local residents may also express their concerns or desire for a lower speed limit and these comments should be considered.
- 3.11 Where limits for air quality are in danger of being exceeded, compliance with those air quality limits could be an important factor in the choice of speed limit.

- 3.12 But depending on the individual circumstances the imposition of a speed limit will not always be the solution. And the visible characteristics of a road affect the speed that a driver chooses: to be effective, the reasons for a limit need to be apparent.
- 3.13 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 .
- 3.14 These alternative measures should always be considered before proceeding with a new speed limit.
- 3.15 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.
- 3.16 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, or local education and publicity.
- 3.17 Enforcement may also be appropriate, but should be considered only after the other measures and jointly with the police force.
- 3.18 Another key factor when setting a speed limit is what the road looks like to the road users. 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.
- 3.19 A 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.
- 3.20 The following will be important factors when considering what an appropriate speed limit is:
  - history of collisions, including frequency, severity, types and causes;
  - road geometry and engineering (width, sightlines, bends, junctions, accesses and safety barriers etc.);
  - road function (strategic, through traffic, local access etc.);

- Composition of road users (including existing and potential levels of vulnerable road users);
- existing traffic speeds; and
- road environment, including level of road-side development and possible impacts on residents (e.g. severance, noise, or air quality).
- 3,21 Before introducing or changing a local speed limit, traffic authorities will wish to satisfy themselves that the expected benefits exceed the costs.
- 3.22 Many of the costs and benefits do not have monetary values associated with them, but highway authorities should include an assessment of the following factors:
  - collision and casualty savings;
  - conditions and facilities for vulnerable road users;
  - impacts on walking and cycling and other mode shift;
  - congestion and journey time reliability;
  - environmental, community and quality of life impact, such as emissions, severance of local communities, visual impact, noise and vibration; and
  - costs, including of engineering and other physical measures including signing, maintenance and cost of enforcement.
- 3.23 Different road users perceive risks and appropriate speeds differently, and drivers and riders of motor vehicles often do not have the same perception of the hazards of speed as do people on foot, on bicycles or on horseback. Fear of traffic can affect peoples' quality of life and the needs of vulnerable road users must be fully taken into account in order to further encourage these modes of travel and improve their safety.
- 3.24 Speed management strategies should seek to protect local community life.
- 3.25 In order to ensure compliance with a new lower local limit, as well as make it legally enforceable, it is important that the limit is signed correctly and consistently. The introduction of a new Speed Limit Order must coincide with the signing of the new limit.
- 3.26 The Isle of Wight Council must ensure that speed limits meet the legislative process and the requirements of the TSRGD.
- 3.27 Any new limit should also be accompanied by publicity and, where appropriate,

effective engineering changes to the road itself. Without these measures, the new limit is unlikely to be fully complied with.

- 3.28 Mean speed and 85th percentile speed (the speed at or below which 85% of vehicles are travelling) are the most commonly used measures of actual traffic speed.
- 3.29 The Isle of Wight Council will continue to routinely collect and assess both, but mean speeds should be used as the basis for determining local speed limits.
- 3.30 For the majority of roads there is a consistent relationship between mean speed and 85th percentile speed. Where this is not the case, it will usually indicate that drivers have difficulty in deciding the appropriate speed for the road, suggesting that a better match between road design and speed limit is required. It may be necessary to consider additional measures to reduce the larger than normal difference between mean and 85th percentile speeds or to bring the speed distribution more in line with typical distributions.
- 3.31 The aim for local speed limits should be to align the speed limit to the conditions of the road and road environment.
- 3.32 The minimum length of a speed limit should generally be not less than 600 metres to avoid too many changes of speed limit along the route. In exceptional circumstances this can be reduced to 400 metres for lower speed limits, or even 300 metres on roads with a purely local access function, or where a variable 20 mph limit is introduced, for example outside a school. Anything shorter is not recommended.
- 3.33 The length adopted for a limit will depend on the limit applied and also on the conditions at or beyond the end points. The terminal points of speed limits need to take account of the particular local circumstances, such as steep gradients, sharp bends, junctions, access roads, humpbacked bridges or other hazards, and also good visibility of the signs, and an extension of the speed limit may be needed to ensure this.
- 3.34 For consistency within routes, separate assessments should be made for each length of road of 600 metres or more for which a different speed limit might be considered appropriate. When this is completed, the final choice of appropriate speed limit for individual sections might need to be adjusted to provide reasonable consistency over the route as a whole.
- 3.35 Occasionally it may be appropriate to use a short length of 40 mph or 50 mph speed limit as a transition between a length of road subject to a national limit and

another length on which a lower limit is in force, for example on the outskirts of villages or urban areas with adjoining intermittent development. However, the use of such transitional limits should be restricted to sections of road where immediate speed reduction would cause risks or is likely to be less effective.

- 3.36 Where several roads with different speed limits enter a roundabout, the roundabout should be restricted at the same level as the majority of the approach roads. If there is an equal division, for example where a 30 mph road crosses one with a limit of 40 mph, the roundabout itself should take the lower limit.
  - 4 THE LEGISLATIVE FRAMEWORK
- 4.1 All speed limits, other than those on restricted roads, should be made by order under Section 84 of the Road Traffic Regulation Act 1984.
- 4.2 Any speed limits below 30 mph, other than 20 mph limits or 20 mph zones, require individual consent from the Secretary of State.
- 4.3 Unless an order has been made and the road is signed to the contrary, a 30 mph speed limit applies where there is a system of street lighting furnished by means of lamps placed not more than 200 yards apart.
- 4.4 The Isle of Wight Council has a duty to erect and maintain prescribed speed limit signs on their roads in accordance with the Traffic Signs Regulations and General Directions 2002 (TSRGD 2002).
- 4.5 If The Isle of Wight Council wishes to deviate from what is prescribed in signing regulations, they must first gain the Secretary of State's authorisation.
- 4.6 It is not permitted to erect different speed limit signs relating to different classes of vehicle.
- 4.7 Vehicle-activated signs must not be used as an alternative to standard static signing, but as an additional measure to warn drivers of a potential hazard or to remind them of the speed limit in force.
- 4.8 Most road traffic law pertaining to speed limits is contained in the Road Traffic Regulation Act 1984 (RTRA 1984).
- 4.9 Other relevant legislation includes the Highways Act 1980, in particular Sections 90A-F concerning the construction and maintenance of road humps and Sections 90G-I concerning other traffic-calming works.
- 4.10 Part VI of the RTRA 1984 deals specifically with speed limits, with Sections 81-84 dealing with different speed limits and the speed limit order-making process.

Section 82(1)(a) defines a restricted road in England and Wales as a road on which there is provided "a system of street lighting furnished by means of lamps placed not more than 200 yards apart". Section 81 makes it an offence for a person to drive a motor vehicle at a speed of more than 30 mph on a restricted road.

- 4.11 The establishment of speed limits is also a method through which legal sanctions can be brought to bear on those who exceed the limit set on a particular road. It is therefore important to preserve carefully all records relating to the making and validity of a speed limit and speed limit signs.
- 4.12 All speed limits, other than those on restricted roads or special roads (a highway which is a special road in accordance with s 16 of the Highways Act 1980), should be made by order under Section 84 of the RTRA 1984. This includes the making of a 30 mph speed limit on an unlit road.
- 4.13 All speed limits other than the national limits are made by speed limit order.
- 4.14 The Isle of Wight Council should comply with the consultation procedures and must, as a minimum, follow the full consultation procedure set out in legislation, before any new speed limit is introduced.
- 4.15 Section 82(2) RTRA 1984 (as amended) gives highway authorities powers to remove restricted road status, and give restricted road status to roads which are not restricted. This should be used only to reinstate restricted road status in those cases where a road which has a system of street lighting has previously had its restricted road status removed.
- 4.16 If a road with street lighting has a 40 mph limit and this is to be reduced to 30 mph, the 40 mph order under Section 84 should be revoked. Assuming the street lamps are no more than 200 yards apart, the road will be a restricted road by virtue of section 82(1)(a) RTRA.
- 4.17 Similarly, where a speed limit of 30 mph is imposed by order under Section 84 because there is no street lighting, that order should be revoked if street lighting is subsequently provided.
- 4.18 This is considers this is considered to be best practice
- 4.19 Any speed limits below 30 mph, other than 20 mph limits or 20 mph zones, require individual consent from the Secretary of State.
- 4.20 Section 11 of the Traffic Signs Regulations and General Directions 2002 (TSRGD 2002), as amended, defines the requirements for the placing of speed-limit repeater signs. This states that speed-limit repeater signs cannot be placed along a road on

which there is carriageway lighting not more than 183 metres apart and which is subject to a 30 mph speed limit. This direction applies regardless of how the speed limit has been imposed.

- 4.21 While increased understanding and acceptance of why a speed limit applies on a certain road will help compliance, drivers are aided by clear, visible and regular signing which enables them unhesitatingly to know what speed limit is in force.
- 4.22 Under Section 85 of the RTRA 1984 it is the duty of the Isle of Wight Council to erect and maintain prescribed speed limit signs on their roads in accordance with the Secretary of State's directions.
- 4.23 The Traffic Signs Regulations and General Directions 2002 prescribe the designs and conditions of use for traffic signs, including speed limit signing, in England,
- 4.24 The Isle of Wight Council should generally follow these Regulations when signing speed limits. If the Council wishes to deviate from what is prescribed, it must first obtain the Secretary of State's authorization and signing that is not in line with the Regulations must not be installed without such authorisation.
- 4.25 Speed limit signs which do not comply with the Regulations or which have not been authorised by the Secretary of State are not lawfully placed.
- 4.26 Where the sign is not lawfully placed, no offence is committed by a person exceeding the signed speed limit and any prosecutions are likely to fail accordingly. The Isle of Wight Council should therefore, remove any unlawful signs, bring them into compliance with the Regulations or obtain authorisation to make them lawful. (Note this is a key component of the Highways PFI contract that will see the removal of all non-compliant signs by the end of the second contract year)
- 4.27 Lower maximum speed limits apply on certain roads to certain traffic classes of vehicles. These are set out in Schedule 6 of the RTRA 1984 and in the Highway Code.
- 4.28 Drivers of these vehicles are expected to be aware of this and follow these special limitations without having to be reminded by specific speed limit signs for particular vehicles.
- 4.29 The legislation does not prescribe the use of countdown markers on the approach to speed limit terminal signs, and research has shown that they generally have little or no effect on vehicle speeds and can add to sign clutter.
- 4.30 Chapter 3 of the Traffic Signs Manual (Department for Transport, 2008) provides guidance to local traffic authorities on best practice when signing speed limits. It

includes tables and pictures to illustrate where speed limit signs should be placed. This complements TSRGD 2002, which sets out the mandatory requirements for signing.

- 5 URBAN SPEED LIMITS
- 5.1 KEY POINTS
- 5.1.1 Speed limits in urban areas affect everyone, not only as motorists but as pedestrians, cyclists and residents.
- 5.1.2 As well as influencing safety they can influence quality of life, the environment and the local economy.
- 5.1.3 The national speed limit on street lit roads is 30 mph.
- 5.1.4 Highway authorities can, over time, introduce 20mph speed limits or zones on 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.
- 5.1.5 This is in addition to residential streets in cities, towns and villages, particularly where the streets are being used by people on foot and on bicycles, there is community support and the characteristics of the street are suitable.
- 5.1.6 Where they do so, general compliance needs to be achievable without an excessive reliance on enforcement.
- 5.1.7 Roads suitable for a 40 mph limit are generally higher quality suburban roads or those on the outskirts of urban areas where there is little development.
- 5.1.8 Usually, the movement of motor vehicles is the primary function.
- 5.1.9 In exceptional circumstances, 50 mph limits can be implemented on special roads and dual carriageways, radial routes or bypasses where the road environment and characteristics allow this speed to be achieved safely.
- 5.1.10 Urban roads by their nature are complex as they need to provide for safe travel on foot, bicycle and by motorised traffic. Lower speeds benefit all urban road users, and setting appropriate speed limits is therefore an important factor in improving urban safety It is on urban roads that the majority of road casualties occur, including 87% of all pedestrian and 83% of all pedal cyclists casualties (DfT, 2011).
- 5.1.11 Collisions typically involve pedestrians and cyclists, including children, and knowledge of the relationship between vehicle speed and injury severity in any

collision must inform decisions on speed limits.

- 5.1.12 Research has shown that the risk of a pedestrian dying in a collision with a car increases slowly up to an impact speed of around 30mph, but at speeds above 30 mph the risk of death increases rapidly.
- 5.1.13 Car occupants also benefit from lower speeds. Research in London showed that the largest casualty reductions associated with 20mph zones were children killed and seriously injured, and car occupants (Grundy et al, 2008)
- 5.1.14 The standard speed limit in urban areas is 30 mph, which represents a balance between mobility and safety factors. However, for residential streets and other town and city streets with high pedestrian and cyclist movement, highway authorities should consider the use of 20 mph schemes.
- 5.1.15 Generally, efforts should be made to promote the use of suitable routes for urban through traffic and to manage the speed of traffic requiring access to residential streets using traffic calming and associated techniques.
- 5.1.16 In many urban centres, main traffic routes often have a mixture of shopping, commercial and/or residential functions. These mixed priority routes are complex and difficult to treat, but the most successful measures have included speed management to keep speed at appropriate levels in the context of both 20 and 30 mph limits and a reassignment of space to the different functions, taking into account the needs of people on foot or on bikes. Sometimes a decision about a road's primary or most important function needs to be taken.
- 5.2 20 MPH SPEED LIMITS AND ZONES
- 5.2.1 20 mph zones and limits are now relatively wide-spread, with more than 2,000 schemes in operation in England, the majority of which are 20 mph zones.
- 5.2.2 20 mph zones 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 50 m from such a feature. In addition, a terminal sign indicates the beginning and end of a zone. Zones usually cover a number of roads.
- 5.2.3 20 mph limits are signed with terminal and at least one repeater sign, and do not require traffic calming- 20 mph limits are similar to other local speed limits and normally apply to individual or small numbers of roads but are increasingly being applied to larger areas.
- 5.2.4 Important benefits of 20 mph schemes include quality of life and community

benefits, and 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 reduce pollution, unless an unnecessarily low gear is used.

- 5.2.5 Walking and cycling can make a very positive contribution to improving health and tackling obesity, improving accessibility and tackling congestion, and reducing carbon emissions and improving the local environment.
- 5.2.6 Based on this positive effect on road safety, and a generally favourable reception from local residents, the Isle of Wight Council is able to use its power to introduce 20mph speed limits or zones on 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. For example; where there are schools in the road or close by and that affect the usage of the roads albeit only at certain times of the day.
- 5.2.7 This is in addition to residential streets in cities, towns and villages, particularly where the streets are being used by people on foot and on bicycles, there is community support and the characteristics of the street are suitable.
- 5.2.8 Successful 20 mph zones and 20 mph speed limits are generally self-enforcing, i.e. the existing conditions of the road together with measures such as traffic calming or signing, publicity and information as part of the scheme, lead to a mean traffic speed 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.
- 5.2.9 Evidence from successful 20 mph schemes shows that the introduction of 20 mph zones generally reduces mean traffic speed by more than is the case when a signed-only 20 mph limit is introduced. Historically, more zones than limits have been introduced.
- 5.2.10 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, public transport providers and any other relevant local groups (including for example, groups representing pedestrians, cyclists, drivers, or equestrians).
- 5.2.11 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 and the road conditions.

- 5.2.12 20 mph zones are very effective at reducing collisions and injuries.
- 5.2.13 Research shows that overall average annual collision frequency could fall by around 60%, and the number of collisions involving injury to children could be reduced by up to two-thirds. Zones may also bring further benefits, such as a modal shift towards more walking and cycling and overall reductions in traffic flow, where research has shown a reduction by over a quarter
- 5.2.14 20 mph zones are predominantly used in urban areas, both town centres and residential areas, and in the vicinity of schools. They should also be used around shops, markets, playgrounds and other areas with high pedestrian or cyclist traffic, though 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.
- 5.2.15 A 20 mph zone is indicated by 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 less than 80 metres long).
- 5.2.16 The Department for Transport has recently made significant changes to facilitate and reduce the cost for providing 20 mph zones in England.
- 5.2.17 Highway authorities can now place any of the following:
  - repeater speed sign (TSRGD diagram 670)
  - a speed roundel road marking (TSRGD diagram 1065)
  - or a combination of both of these signs
  - traffic calming features
- 5.2.17 At least one traffic calming feature as defined in direction 16(2) TSRGD must be placed in a 20 mph zone and the features and signing must still be placed at intervals not greater than 100 metres: it is not the intention to remove physical features, but to ensure that the most appropriate measure is used to ensure the continuity of the zone.
- 5.2.18 Only where speeds are already constrained to near the limit should the Isle of Wight Council consider placing the speed limit sign or a roundel marking, in addition to physical features within a zone.

- 5.2.19 20mph speed limits on distributor roads where traffic calming features are not suitable, or for small individual roads or stretches of road, where mean speeds are already at or below 24 mph.
- 5.2.20 Where a 20 mph zone leads into a 20 mph limit, it is important to use the correct signing to indicate this. It is not appropriate to use the sign that indicates the end of a 20 mph zone and the start of a different, higher speed limit. Instead, a standard 20 mph terminal sign (TSRGD 2002, diagram 670) must be used.
- 5.2.21 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 the mean speed is already at or below 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.
- 5.2.22 Every English authority has a traffic sign authorisation which permits them to place a 20mph speed roundel road marking as a repeater sign, without the requirement for an upright sign, to reduce unnecessary signing.
- 5.2.23 The amendments regulations to TSRGD (January 2012) have also provided thresholds below which speed repeater signs are no longer required by Direction 11 of TSRGD, but may still be placed if considered necessary. These thresholds are determined by carriageway length and the applicable speed limit.
- 5.2.24 Where traffic calming measures are placed, they should be signed in line with regulations (TSRGD 2002, diagram 557.1–4 and 883).
- 5.2.25 The Isle of Wight Council has powers to introduce 20 mph speed limits 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 full-time 20 mph zone or limit, such as a major through road.
- 5.2.26 To indicate these limits, variable message signs are available (TSRGD, Regulation 58). To reduce costs and sign clutter, the Department for Transport will consider authorising the placing of a single variable message sign on the approaching traffic lane (rather than signs on both sides of the road) on a case by case basis.
- 5.2.27 The Secretary of State has provided a special authorisation for every English traffic authority to place an advisory part-time 20mph limit sign, with flashing school warning lights. This can be a more cost-effective solution, where appropriate, and reduces the requirement for signing.

- 5.2.28 Traffic calming involves the installation of specific physical measures to encourage lower traffic speeds. There are many measures available to help reduce vehicle speeds and ensure compliance with the speed limit in force. These are required at regular intervals in 20 mph zones and may be used in 20 mph limits.
- 5.2.29 As set out above, speed limit traffic signs and/or speed roundel markings can now also be used.
- 5.2.30 The Highways (Road Humps) Regulations 1999, The Highways (Traffic Calming) Regulations 1999, and Direction 16 of TSRGD 2002 (as amended) give details of the traffic calming measures that meet the requirements for a 20 mph zone.
- 5.2.31 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; and
  - rumble devices.
- 5.3 40 MPH AND 50 MPH SPEED LIMITS
- 5.3.1 30 mph is the standard speed limit for urban areas, but a 40 mph limit may be used where appropriate and, in exceptional circumstances, a 50 mph limit may be considered.
- 5.3.2 Roads suitable for 40 mph are generally higher-quality suburban roads or those on the outskirts of urban areas where there is little development. They should have good width and layout, parking and waiting restrictions in operation, and buildings set back from the road.
- 5.3.3 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. Alternatively, the isle of Wight Council should consider whether there are convenient alternative routes available.
- 5.3.4 In exceptional circumstances a 50 mph limit may also be used on higher-quality roads where there is little or no roadside development and such speeds can be achieved safely.

- 5.3.5 The roads most suited to these higher urban limits are special roads or those with segregated junctions and pedestrian facilities, such as primary distributors. They are usually dual carriageway, ring or radial routes or bypasses that have become partially built up.
- 5.3.4 The Isle of Wight Council will, however, always assess the potential impact upon the local community and non-motorised road users before considering such a limit.
  - 6 RURAL SPEED LIMITS
  - 6.1 KEY POINTS
- 6.1.1 The national speed limit on the rural road network is 60 mph on single carriageway roads and 70 mph on dual carriageways.
- 6.1.2 Rural dual carriageways with segregated junctions and facilities for vulnerable road users would generally be suitable for 70 mph limits. However, a lower limit may be appropriate if, for example, a collision history indicates that this cannot be achieved safely.
- 6.1.3 In 2011, 66% of road deaths in Britain occurred on rural roads, and 51% of road deaths occurred on single rural carriageway roads subject to the National Speed Limit of 60 mph limit.
- 6.1.4 The speed limit on single carriageway rural roads should take into account the history of collisions, the road's function, existing mean traffic speed, use by vulnerable road users, the road's geometry and engineering, and the road environment including level of road-side development.
- 6.1.5 It is government policy that a 30 mph speed limit should be the norm in villages. It may also be appropriate to consider 20 mph zones and limits in built-up village streets.
- 6.1.6 The Department for Transport recommends that the minimum length of a village speed limit should be 600 metres. However, the Isle of Wight Council may lower this to 400 metres, and in exceptional circumstances to 300 metres.
- 6.1.7 The vast majority of the rural road network is subject to the national speed limit of 60 mph on single carriageway roads, and 70 mph on dual carriageways.
- 6.1.8 On many of these roads, the majority of drivers are travelling below sometimes significantly below the speed limit because of the characteristics of the roads. This is especially evident on the C and Unclassified roads where the geometric characteristics include many narrow roads, bends, junctions and accesses.

- 6.1.9 Rural roads account for 66% of all road deaths, and 82% of car occupant deaths in particular, but only around 42% of the distance travelled. Of all road deaths in Britain in 2011, 51% occurred on National Speed Limit rural single carriageway roads (DfT, 2011).
- 6.1.10 The reduction in road casualties and especially deaths 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 60 mph is around 90%, but that this drops rapidly with speed, so that it is around 50% at 48 mph
- 6.1.11 Inappropriate speed, at levels below the legal limit but above those appropriate for the road at the time (for example, because of the weather conditions or because vulnerable road users are present), is a particular problem for rural roads.
- 6.1.12 Exceeding the speed limit or travelling too fast for the conditions are reported as contributory factors in 16% of collisions on rural roads. Specifically, inappropriate speed is recorded as a contributory factor in 20% of crashes on minor rural roads with a 60 mph limit.
- 6.1.13 Speed limit changes are therefore unlikely to fully address this problem and should therefore be considered only as one part of rural safety management. Where collision and casualty rates are high, the Isle of Wight Council should first seek to understand the particular types of crashes taking place and their causes, to allow them to choose effective solutions to reduce the risk.
- 6.1.14 If high collision rates persist despite these measures, then lower speed limits may also be considered. Again, to achieve a change in motorists' behaviour and compliance with the limit, supporting physical measures, driver information and publicity or other measures are likely to be required.
- 6.1.15 Such measures could include, for example, the use of vehicle-activated signs (VAS), which have proved particularly effective at the approaches to isolated hazards, junctions and bends in rural areas.
- 6.1.16 There should be no expectation on the police to provide additional enforcement to ensure compliance with a new limit beyond their routine activity, unless this has been explicitly agreed.
- 6.1.17 The aim of speed management actions is to deliver a balance between safety objectives for all road users and mobility objectives to ensure efficient travel, as well as environmental and community outcomes. So every effort should be made to

achieve an appropriate balance between actual vehicle speeds, speed limits, road design and other measures. This balance may be delivered by introducing one or more speed management measures in conjunction with the new speed limits, and/or as part of an overall route safety strategy.

6.1.18 While routine enforcement should normally only be considered after other speed management measures have been considered, there may be occasions where the use of average speed cameras may offer a solution through calming traffic speed over a stretch of road.

## 6.2 DUAL CARRIAGEWAY RURAL ROADS

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

#### 6. SINGLE CARRIAGEWAY RURAL ROADS

- 6.3.1 In most instances, consideration of collision history, road function, mix of road users including presence of vulnerable road users, road geometry, engineering and environment, and actual traffic speed should enable the Isle of Wight Council to determine the appropriate limit on single carriageway rural roads.
- 6.3.2 Such roads may have primarily either a through traffic function or a local access function. Both need to be provided safely.
- 6.3.3 Mobility benefits will be more important for roads with a through-traffic function, while environmental and community benefits are likely to be of greater importance for the local access roads.
- 6.3.4 There may be many roads below A and B classification that serve a mixed through traffic and access function. Where that traffic function is currently being achieved without a high collision rate, these roads should be judged as through-traffic roads. If, however, for all or parts of these roads there is a substantial potential risk to vulnerable road users, these sections should be assessed as roads with a local access function.
- 6.3.5 Within routes, separate assessments should be made for each section of road of 600 metres or more for which a separate speed limit might be considered appropriate. When this is completed, the final choice of appropriate speed limit for individual sections might need to be adjusted to provide consistency over the route as a whole.

- 6.3.6 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.
- 6.3.7 The DfT guidance Setting Local Speed Limits (at Table 2) sets out recommended speed limits for roads with a predominant motor traffic flow function and this will be followed by the Isle of Wight Council
- 6.3.8 If walking, cycling, horse riding, community or environmental factors are particularly important on any road section, consideration should be given to using the lower limit.
- 6.3.9 50mph should be considered for lower quality A and B roads that may have a relatively high number of bends, junctions or accesses can also be considered where mean speeds are below 50 mph, so lower limit does not interfere with traffic flow.
- 6.3.10 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.
- 6.3.11 For C and Unclassified roads with important access and recreational function, the following speed limits are deemed appropriate and the Isle of Wight Council should use these as guidance when reviewing the speed limits on these roads:
- 6.3.12 The national speed limit of 60 mph is only appropriate for the best quality C and Unclassified roads with a mixed (i.e. partial traffic flow) function with few bends, junctions or accesses. In the longer term, these roads should be assessed against through-traffic criteria.
- 6.3.13 For lower quality C and Unclassified roads with a mixed function and high numbers of bends, junctions or accesses 50 mph may be appropriate.
- 6.3.14 A speed limit of 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 (AONB), 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.
- 6.3.15 It is important to note that the above does not imply that speed limits should automatically be reduced. Indeed, in some cases the assessment may suggest that the existing speed limit may be too low, and a higher speed limit should be considered, as it is likely to be achievable safely.

#### 6.4 SPEED LIMITS IN VILLAGES

- 6.4.1 Fear of traffic can affect people's quality of life in villages and it is self-evident that villages should have comparable speed limits to similar roads in urban areas. It is therefore government policy that a 30 mph speed limit should be the norm through villages.
- 6.4.2 It may also be appropriate to consider 20 mph limits or zones in built-up village streets which are primarily residential in nature, or where pedestrian and cyclist movements are high. Such limits should not, however, be considered on roads with a strategic function or where the movement of motor vehicles is the primary function.
- 6.4.3 Traffic Advisory Leaflet 01/04 (DfT, 2004) sets out policy on achieving lower speed limits in villages. It suggests that reasonable minimum criteria for the definition of what constitutes a village, for the purpose of applying a village speed limit of 30 mph, would be that there are: 20 or more houses (on one or both sides of the road); and a minimum length of 600 metres.
- 6.4.4 If there are just fewer than 20 houses, extra allowance may be given for any other key buildings, such as a church, shop or school.
- 6.4.5 Where the character of a village falls outside this definition, the Isle of Wight Council may use its discretion in deciding whether a lower speed limit is appropriate.
- 6.4.6 The criteria above should give adequate visual messages to drivers to reduce their speed. It is recommended that the minimum length for the new limit is at least 600 metres to avoid too many changes in speed limits along a route, and to aid compliance. This may be shortened to 400 metres when the level of development density over this shorter length exceeds the 20 or more houses criterion and, in exceptional circumstances, to 300 metres.
- 6.4.7 In some circumstances it might be appropriate to consider an intermediate speed limit of 40 mph prior to the 30 mph terminal speed limit signs at the entrance to a village, in particular where there are outlying houses beyond the village boundary or roads with high approach speeds.
- 6.4.8 For the latter, other speed management measures to support the message of the speed limit and help encourage compliance so that no enforcement difficulties are created for the local police force should be considered.
- 6.4.9 Where appropriate, such measures might include a vehicle-activated sign, centre hatching or other measures that would have the effect of narrowing or changing the nature and appearance of the road.

- 6.4.10 Where the speed limit commences at the village boundary, the village nameplate sign (prescribed in diagram 2402.1 of TSRGD 2002) and speed limit roundel may be mounted together. The combined sign should be located at the point where the speed limit starts, and it may be helpful if drivers can see housing at the same time as the signs, reinforcing the visual message for reduced speed.
- 6.4.11 If there are high approach speeds to a village, or the start of the village is not obvious, village gateway treatments can also be an effective way to slow drivers down.
- 6.4.12 In situations where the above criteria for a village are not met and there is a lesser degree of development, or where engineering measures are not practicable or cost-effective to achieve a 30 mph limit, but a reduction from the national 60 mph speed limit is considered appropriate, alternative lower limits of 40 or 50 mph may be considered.

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