

20mph Default Speed Limit Review of Exceptions: Final Report

May 2024

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1 Introduction

- 1.1.1 This is the Final Report of the Review Team appointed by Welsh Government to gather information on how the Exceptions Guidance¹ for the default 20mph speed limit for restricted roads² in Wales was applied; and how it should be updated.
- 1.1.2 The Welsh Government has now decided to co-create and publish updated exceptions guidance with input from highway authorities and the County Surveyors Society Wales, by the end of July 2024. It has therefore asked us to report on our findings to date and draw conclusions on the principles upon which the new guidance should be based.
- 1.1.3 Our Interim Report³ was published on 20 February 2024. This report recommended, inter alia, that views of stakeholders should be sought on the existing guidance and how the revised guidance should be structured. To this end, an online survey was carried out which asked a series of detailed questions about the form and nature of the factors local authorities should consider when deciding on exceptions. The content and results of that survey are given in Section 2 of this report.
- 1.1.4 In addition, we have carried out a 'benchmarking' exercise, looking at the technical guidance and speed limit outcomes for a series of other locations which have implemented wide area 20mph speed limits. We report on this work in Section 3 below.
- 1.1.5 In Section 4 we give our recommendations for the refreshed exceptions guidance.

¹ <https://www.gov.wales/setting-exceptions-20mph-default-speed-limit-restricted-roads-html>

² A restricted road in Wales is defined in Section 82 of the Road Traffic Regulation Act 1984 as a road with a system of street lighting where lamps are placed not more than 200 yards (183m) apart.

³ <https://www.gov.wales/20mph-default-speed-limit-review-exceptions-initial-report>

2 Findings from the Survey Conducted by the Review Team

2.1 Background

- 2.1.1 After the publication of our initial report in February 2024, we continued our engagement work that we had started by speaking to the officers from highway authorities.
- 2.1.2 We devised a questionnaire addressed at key stakeholders, including but not limited to highway authorities, to get more specific feedback on the exceptions guidance.
- 2.1.3 This phase of gathering feedback through the questionnaire was going to be followed by some more detailed interview work, which we have not been able to complete, due to having been asked to bring the review to a close and to publish our findings in this report.

2.2 Questionnaire

- 2.2.1 With the help from the Engagement team at Transport for Wales, the invitation to register and fill in an online questionnaire was sent to key stakeholders on the 15th of March, and they were given until the 19th of April to respond.
- 2.2.2 Invitees included officers in the highway authorities and Council Transport Cabinet members. From the bus perspective, the questionnaire was sent to Confederation of Passenger Transport Cymru (CPT), Association of Transport Coordinating Officers Cymru (ATCO), Coach and Bus Association Cymru (CBAC) and the regional bus planning teams. On the health side, the CEOs and Chairs of the Health Boards and their communication officers were invited as was the NHS Confederation.
- 2.2.3 The invitation also went to emergency services, including GoSafe, the Assistant Chief Constable on roads policing, the Fire and Rescue Services and the Welsh Ambulance Service and NHS Trust (WAST). Other stakeholders identified by Welsh Government, included Disability Wales, Sustrans, Living Streets, Public Health Wales, AA, RAC Foundation, 20s Plenty for Us, Cycling UK, associations of driving instructors, National Private Hire and Taxi Association, Social Care Wales, Federation of Small Businesses (FSB), Royal Mail and Road Haulage Association (RHA).

2.3 Respondents

- 2.3.1 We received 27 responses to the questionnaire. 25 out of 27 responses were representing an organisation or a body whereas two responded in their personal

capacity. 14 responses were submitted by highway authorities, out of which 13 from Councils and one from NMWTRA. We also received responses from GoSafe, Public Health Wales, Living Streets, RAC Foundation, RHA, ATCO, Cycling UK, CPT Cymru, Health Education and Improvement Wales, WAST, 20s Plenty for Us and two respondents in their individual capacity.

2.4 Questionnaire Structure

2.4.1 The questionnaire (see Appendix A) was split into three parts. The first part examined the principles underpinning the guidance, the second part explored views on the various criteria (Place, Movement, Road Characteristics, Other) and examined views on minimum lengths of speed limit sections and part time limits. The final part gave respondents an opportunity to identify any other considerations and to include any supporting evidence.

2.5 Underlying Principles

2.5.1 In the first part of the questionnaire the vast majority (22 out of the 27 respondents) supported the main underlying principle of the current guidance, stating that a 20mph speed limit should be set where vulnerable road users and motor vehicles mix in a frequent manner, except where strong evidence exists that higher speeds are safe (Article 11 of the 'Stockholm Declaration'⁴).

2.5.2 Those dissenting were concerned with the subjectivity of the language, i.e. the terms 'significant' and 'potential' numbers of pedestrians and cyclists used in the current guidance and did not think that the term 'mixing' had been sufficiently defined. Respondents suggested more quantifiable evidence was needed about, for example, pedestrian and cyclist numbers and collision statistics.

2.5.3 Two respondents felt that the default 20mph limit was causing issues on arterial roads, as those roads are strategic corridors for bus and road transport/haulage. Therefore, having 20mph limits on these main arterial roads was counterproductive to encouraging modal shift to public transport. One respondent, disagreeing with the underlying principles, argued that a default 20mph should never have been introduced and thought that a more targeted use of 20mph limits would have been preferable.

2.5.4 Clearly, the terms 'significant' and 'potential' numbers of pedestrians and cyclists used in the current guidance, to translate the idea of 'vulnerable road users and

⁴ <https://www.roadsafetysweden.com/about-the-conference/stockholm-declaration/>

vehicles mix in a frequent and planned manner’ of the Stockholm Declaration into workable guidance, have caused difficulty, both to those that do not support the underlying principle and those who do.

- 2.5.5 Clarifying these terms to support highway authorities in applying the guidance more consistently is going to be the crux of any updated guidance and will need careful consideration. However, trying to quantify ‘significant’ and ‘potential’ is difficult, and could lead to unintended consequences if applied too strictly either way. Each location is unique, and places across Wales range from cities to small villages or settlements, with very different numbers of people living in those places.
- 2.5.6 There is also a moral question that arises if trying to apply numbers or ranges; one respondent questioned whether the life of ‘one pedestrian’ or ‘one cyclist’ is not just as important as if there were hundreds. Another respondent reminded us in their response that part of the rationale for the introduction of the new default limit was to lower existing speeds on restricted roads, so that more people felt that it was safe enough to walk or cycle, and to enable more active travel journeys. Accordingly, the existing guidance specifically states that decisions on exceptions should not be influenced by existing traffic speeds.
- 2.5.7 A further respondent, although supporting the underlying principles and the objective of road safety, pointed out how some authorities may not have taken local factors sufficiently into account due to concerns about liability when setting a higher speed limit.

2.6 Criteria

Movement

- 2.6.1 In the second part of the questionnaire dealing with the criteria to be used in setting exceptions, the majority (16 out of 27) of respondents wanted the ‘movement’ criterion of making most exceptions on A and B classified roads retained, as these would generally be the strategically important roads of the network. Those dissenting presented various reasons.
- 2.6.2 One respondent set out how main routes carrying traffic through urban areas are often in the most deprived areas. Road traffic injury rates in these areas are already significantly higher than those in the least deprived areas. So, by allowing more exceptions on those roads, there is a risk that inequalities will both be created and widened.

- 2.6.3 Three respondents pointed out that the road classification might not always be correct, or it might be outdated i.e. a busy C classified road may have more justification to remain at 30mph than a quiet B classified road. They thought that roads should be reviewed based on their own merits by highway authorities who know their roads best and can reflect the needs and wishes of local people. Two respondents felt that more or even most A and B roads should be exceptions.
- 2.6.4 Nine respondents said there should be additional criteria to capture the movement aspects of a section of road (such as traffic volumes or vehicle composition), eight thought there shouldn't and ten did not have a view.
- 2.6.5 One respondent stated that vehicles should not be the priority, hence no further movement criteria should be added. Another respondent, asking for no further criteria to be added, pointed out that the higher the volume of motorised traffic the higher the potential incidence of conflicts with vulnerable road users. Evidence shows that setting 20mph on some of the roads with highest volumes and speeds results in some of the largest reductions in speed and casualties, with little increase in journey time. A further respondent felt that assigning any additional criteria would be dangerous and would counter what the default 20mph limit is intended to promote.
- 2.6.6 Those who argued for more criteria on movement suggested that traffic volumes should be considered. One such respondent admitted that capturing data on vehicle composition and traffic volumes could be onerous and costly, however suggested that it could be used in borderline cases. Another respondent suggested considering the functionality of a section of road where it forms a key part of a community's bus network. Highway authorities could, for example, consider the number of buses per hour, or where buses move a certain % of those who travel on the road. This could mean allowing highway authorities to set a 30mph limit where the evidence shows that bus speeds have been significantly reduced since the implementation of the policy, and there is a sufficiently low risk to pedestrians and cyclists.
- 2.6.7 A further respondent supporting the inclusion of more movement criteria set out how having only place criteria in the guidance had meant that it had been very challenging to make exceptions on many A and B roads without risking exposing the local authority's decision to challenge. One respondent felt that additional criteria should not only take into account the wishes of people locally, but also reflect views of all those using the road network.
- 2.6.8 When asked about how thresholds for movement of traffic should be specified, most respondents agreed that it would be difficult to assign a numerical value, a range or

descriptors like 'moderate' as all locations and circumstances are different, and an individual assessment is needed for each road. One respondent suggested using percentages for different road user groups, i.e. if only a x % percentage of road users are pedestrians, then the limit could be 30mph. Another respondent felt that using numerical value and composition of traffic would be useful to understand presence of HGVs and buses. Two respondents thought that a numerical value or a descriptor based on the urban/rural split could work.

Place

- 2.6.9 When asked about the criteria for defining 'place' in the current guidance, 16 respondents agreed that they should be kept, whereas 10 argued against it. Some of the latter said that a more nuanced approach was needed. The mere presence of a community centre, for example, should not prevent an exception, but further understanding was needed about whether that community centre is regularly being used and how people get there. Conversely, another trip generator like a cemetery, not currently listed, could generate more pedestrian movement.
- 2.6.10 A point was made about access points and whether there might be other entrances to buildings from side roads. A further point was made about the presence of housing and retail premises not necessarily equating to a significant number of pedestrians and cyclists, because of the reality of our car-dominated society.
- 2.6.11 Another respondent argued that the slower speeds have led to the unintended consequence of slowing down buses, causing delays which, in turn, have led to increase in journey times translating into loss of income or having to cut bus stops or even entire routes. The respondent felt that there are better ways to encourage modal shift than using speed limits. **The role that a reliable bus service plays in delivering wellbeing for a place should not be overlooked.** A further respondent argued that a difference should be made between primarily residential areas which should be 20mph and key distributor roads (even if they have a high housing density) that should be 30mph.
- 2.6.12 When asked about whether alternative or additional place criteria should be added, one respondent highlighted the need for any criteria to be locally assessed and weighted in consultation with the community. Another respondent thought that the use of segregated infrastructure could be a mitigation and that actual and potential desire lines for walking and cycling should be taken into account rather than concentric circles, i.e. distance to a given facility/sensitive receptor.

- 2.6.13 When asked whether the criteria should be presented as numerical values, as they are in current guidance (e.g. 20 properties/km), or as distance to trip generators, or as a range or a description, opinions were divided and eight respondents out of 27 made further comments.
- 2.6.14 One of the respondents said that deprivation should be a factor for assessment, arguing that where a road is in the most deprived fifth areas, exceptions should not be possible. Similarly, if there is a mix of vehicles, particularly buses and HGVs as well as cars, exceptions should not be possible either. Another respondent pointed out that the definition of 'the number of properties fronting the road' needed strengthening to include a minimum number of properties, as 10 properties spread out over 500 metres would currently trigger this criterion.
- 2.6.15 A further respondent explained that while numbers give clarity, they can also be too rigid and create cliff-edges. If numbers are to be used then ranges are better than single point numbers, and it should be clear whether they are a rough guide or something more binding. A respondent favouring consistency across Wales thought that a numerical value weighed against volumes of traffic, based on an urban/rural split could be included. Yet another respondent favoured more flexibility in the guidance, hence moving away from numerical thresholds and granting highway authorities more latitude to reflect the real characteristics of a place; and therefore to be allowed to respond holistically to its transport needs, providing an opportunity to drive modal shift.

Road Characteristics

- 2.6.16 The next set of questions scrutinised 'road characteristics', which in the current guidance are expressed as 'Protected facilities for pedestrians and cyclists'. Half of the respondents (13) agreed with this criterion, one wanted it removed, three to be modified and seven wanted to further explain their views.
- 2.6.17 Three respondents thought the reference to the Active Travel Act Guidance should be removed, because there are protected facilities which do not necessarily meet its standards yet are adequate for the numbers of pedestrians and cyclists currently using them. One respondent pointed out the need to understand the actual usage level of protected facilities. 12 respondents felt no further criteria on road characteristics were needed, four thought that additional criteria were needed, and seven respondents wanted to explain their views further.

2.6.18 Additional road characteristics that were suggested included the width of footways, number of adjoining roads, number of lanes, presence of a median strip, crossing points and carriageway width. One respondent suggested road width, pavement parking, carriageway gradient and curvature; and that those should be weighted along with other factors (road purpose, realistic speeds, place criteria & local views) which should all be examined to reach a robust recommendation. Another respondent also felt the topography of places should be thought about, presumably when assessing the propensity to cycle (and walk). On the question about how criteria should be expressed (numerical, range or descriptively) views were split again and many made further comments.

2.6.19 One respondent pointed out that the way a road is engineered e.g. wider roads, clear sight lines (no parked cars) or wide splays at junctions, influences driver behaviour and expectations. Narrow roads naturally lead to slower speeds. Applying 20mph to wider roads free of obstructions (with no form of traffic calming) may seem counter intuitive and frustrating for people driving.

2.6.20 Another respondent suggested that each criterion or threshold should be given points within a weighted evaluation in which to rank a road section. Another respondent suggested a combination of range and description.

2.6.21 One respondent felt thresholds should be a matter for the highway authority to decide. Another argued that, even if certain road characteristics suggest a higher speed would be suitable for cars (several lanes, median strip), this did not necessarily mean it would be safe or feel safe for pedestrians. Therefore, the respondent wanted to highlight that highway authorities also have many other mandatory responsibilities beyond moving traffic, such as road safety, mobility equality, public health, noise and air quality. Hence the requirement for "robust and evidenced application of local factors" in the current guidance being of key importance and according to the respondent should be maintained.

Other Criteria

2.6.22 In the last part of the Criteria section of the questionnaire, respondents were asked to list any 'other criteria' in addition to 'place', 'movement' and 'road characteristics' that should be included in guidance.

2.6.23 One respondent repeated the plea for equality and deprivation to be considered. Other criteria suggested were pedestrian counts, measuring the 85th percentile speeds, as the respondent argued that if driven speeds were too high, a signage only

scheme would not work. Another respondent wanted to see consultation with the public added. Others thought the impact on public transport and freight routes should be considered. A further respondent added personal injury collisions, the type and function of the route, (i.e. strategic, feeder, bus, winter maintenance, diversion, seasonal effects) and regular local events and local requirements.

2.7 Minimum lengths of speed limit

- 2.7.1 Regarding minimum lengths of speed limit, respondents had differing views. Several thought it would not be good to have too many changes of speed limit, as this would lead to confusion and more braking and accelerating. It was also mentioned that it would be difficult for haulage to accurately change speeds and that speed limits that changed too often were not enforceable.
- 2.7.2 Some respondents did state that it would be useful to have guidance on the use of buffer speed limits, especially if coming down from the national speed limit (60mph) to 20mph limit.
- 2.7.3 A balance needs to be found between not having too many changes of speed limits yet having the 'right'/self-explanatory speed limit for a particular section of road, i.e. road users understanding why a particular speed is applied. In some locations more attention could be paid to where the 20mph speed limits should start, for it to be as effective as possible, i.e. at a point that appears obvious to road users as a transition into an urban area rather than necessarily the entrance to a village or where the previous 30mph limit started.

2.8 Part-time speed limits

- 2.8.1 The last question referred to part-time limits. Views were again mixed. Some respondents thought that part-time limits outside schools, particularly schools that are in rather remote locations with little pedestrian and cyclist activity at other times of the day, were useful. Others thought that part-time limits were confusing, complicated and expensive to sign correctly so that they are understood; and that anywhere other than outside schools it would be difficult to determine the correct time of operation. One respondent argued that it might lead to bus timetables having to be modified according to variable speed limits, adding further complexity. Two respondents suggested that speed limits could be applied seasonally.

2.9 Other considerations and supporting evidence

- 2.9.1 Various opinions were expressed on 'other considerations' about the introduction of the 20mph speed limit and any impacts it has had so far and will have in the future.
- 2.9.2 One respondent highlighted the fact that speeds had dropped yet remained above 20mph, leading to the public asking for traffic calming measures. This is something that should be addressed in conjunction with the guidance on speed limits, exploring ways of using low-cost speed management measures to support compliance.
- 2.9.3 Another respondent explained how increased awareness of speed limits had led to requests for lower speed limits from communities that had not been included in the 20mph rollout.
- 2.9.4 Several respondents stated the positive impact the introduction of the 20mph limit had had and will have for all road users and their safety, and the impacts that will be seen in collision statistics in the longer term. Another response drew attention to the potential to provide a significant health impact over the years to come.
- 2.9.5 Some respondents described how resource-intensive the implementation had been and continues to be. One respondent argued that the rollout had not sufficiently considered the constraints that highway authorities faced regarding traffic regulation order-making processes and signage legislation; and how there had been scant regard for the reputational damage that could be caused by not sufficiently considering the nuanced interfaces between legislation and the resultant lack of effective compliance, enforcement ability and disparate interpretation of guidance.
- 2.9.6 Further respondents highlighted the negative impacts on the bus, coach and school transport across four main areas:
- The punctuality and reliability of services – with knock-on effects on costs, the attractiveness of the network and long-term growth
 - The financial impact of the policy change, with the industry having to make significant investments in services to keep buses running and ensure timetables are met
 - The personal impact on drivers and staff, as a result of the poor communication of the policy and the public disquiet over it; and
 - The impact on vehicles as a result of slower speeds

Evidence was submitted on the impact of increased journey times for buses, which showed that inter-urban and rural bus routes faced the most significant challenges,

but the majority of services across Wales saw increased running times and reduced punctuality.

- 2.9.7 Another respondent outlined the impacts the policy has on freight, as they explained how our modern-day lifestyles are heavily dependent on the ready availability of efficient freight transport. It was stated that freight is vital to our economic well-being, and road transport policies must consider its essential nature to our economy and the negative consequences if policies increase inefficiencies and/or pollution.
- 2.9.8 Whilst understanding the principles of the exceptions guidance, the respondent urged Welsh Government not to overuse 20mph speed limits at the risk of the public rejecting them, particularly if a proposal to reduce the speed limit is not sufficiently evidenced or taking into account all competing factors, such as competitiveness and the economy, impact on deliveries and impact on freight vehicles running at lower speeds potentially leading to rerouting and increased pollution.
- 2.9.9 The respondent would have preferred more vigorous enforcement of the previous 30mph limit.
- 2.9.10 The impacts on Welsh Ambulance Service and NHS Trust service users and operational performance have been analysed with approximately 3 months of post-implementation data. The results show that differences in travel time are fairly modest, yet have had some impact:
- For Emergency Medical Service, 'Amber' incidents saw some correlation with increased average travel times (particularly travel time to the scene) with the impacts largely witnessed in urban localities.
 - Some noticeable difference in Community First Responder (CFR) average travel times at all Wales & Health Board level (except Cardiff & Vale) when considering CFRs as first attending to 'Red' incidents only.
 - Impact with some detrimental effect seen in the timeliness of inbound renal dialysis appointments for the NEPTS service (except in Cardiff & Vale Health Board).
 - The impact on road traffic collisions shows little difference at an All-Wales level.⁵
 - Using Post Production Lost Hours analysis, potential impact on other journeys such as return-to-base, meal-break related travel, and stand-downs Prior to and

⁵ This is only based on three months of data, and it will take some years before actual trends can be determined. Official collision data will be published by the Welsh Government Statistical Unit.

Post the 20mph changes was considered; however, no visible direct correlation was found.

- 2.9.11 One respondent hailed the introduction of 20mph in Wales as an important initiative for projecting Wales and its standards onto the world stage - indeed its introduction is being praised by many in global road safety circles as a positive, pragmatic and progressive move towards sustainability, safety, live-ability and public health.
- 2.9.12 The respondent also pointed out that each traffic regulation order for an increase in speed limit requires a statement of reason which should lay out the evidence that a change is appropriate. This is referred to in the current guidance as requiring “evidenced application of local factors”. Whilst the officers and councillors authorising any increase in speed limit may decide to deviate from guidance, they should be mindful of potentially breaching their duty of care to all road users when exercising their powers. Merely setting a higher speed limit “because there is a lot of traffic or being a main road” would not have fulfilled that “duty of care” and may open the Highway Authority to subsequent civil liability in the event of a collision or casualty. Each decision “must” take full account of the needs of vulnerable road users (Wales – Circular 24/2009 Setting Local Speed Limits Para 3.10). This equally applies to the Public Sector Equality Duties whereby the Equality Act legally requires a robust consideration of the needs of those with protected characteristics. This is particularly relevant to children, elderly, mothers and those with disabilities.

2.10 Conclusions

- 2.10.1 The feedback received throughout the process and from this questionnaire demonstrate the difficulty of writing guidance that is strict and descriptive enough to lead to consistency across Wales; yet leaving sufficient flexibility and freedom to highway authorities to apply their local knowledge and to assess each road on a case-by-case basis, taking into account local circumstances.
- 2.10.2 There was no consensus as to which of the two tendencies should be favoured; and, although guidance can try to be objective; its application can never truly be. An element of inherent conflict between seeking consistency and uniformity, on the one hand and flexibility and local variation on the other, will remain.
- 2.10.3 The current guidance was not clear enough in clarifying the core underlying principle of vulnerable road users mixing in a frequent and planned manner with motorised vehicles, and this has led to some confusion. This should therefore be clarified as far as possible in the updated guidance, as most of the respondents favoured keeping it as the underlying principle of where 20mph speed limits should be applied. This is

also in line with Welsh Government transport policy and broader commitments, and forms part of international best practice in road safety and is supported by science on human tolerance to speed.

- 2.10.4 The views on the current criteria and any additional criteria are varied and often opposing, therefore it is hard to draw any firm conclusions one way or the other from the questionnaire responses.
- 2.10.5 There seems to be broad consensus that on residential roads that are not of strategic importance to the network, 20mph is the right speed limit. Therefore, it seems that all (or at least the vast majority of C classified or unclassified roads) should not be reassessed, as most people seem to agree that the 20mph default speed limit is right there – except possibly in an industrial estate or when surrounded by open land.
- 2.10.6 The difficulty comes with roads that are considered main/arterial/strategic roads and often are strategic roads for bus and/or haulage, freight and deliveries, yet also have pedestrian and cyclist activity, housing, shops schools etc. If there are pedestrians and/or cyclists present, yet the road also has strategic importance for the network, the decision about whether a 20mph or 30mph limit should be applied will inevitably mean weighing different obligations and priorities the highway authorities have; and whilst creating benefits for some, it will mean disbenefits for others.

3 Benchmarking of Guidance and Outcomes

3.1 Introduction

- 3.1.1 An increasing number of jurisdictions across Europe are adopting 20mph or 30kph as the default speed limit for urban areas. Generally, however, authorities recognise that some roads within settlements should retain a higher speed limit.
- 3.1.2 We considered it would be helpful to the team which will be responsible for producing the new Welsh guidance for us to review the basis for such exceptions elsewhere; and to review the patterns of network speed limits that have resulted.

3.2 Guidance review

- 3.2.1 We obtained recently published guidance or other documentation from the following places:

UK local authorities:

- Cornwall
- Edinburgh
- Oxfordshire
- Surrey County Council
- West Sussex County Council

UK nations:

- Scotland

European cities/regions:

- Brussels
- Helsinki
- Kanton of Luzern, Switzerland

Other nations

- Ireland
- Spain

3.2.2 The summary analysis of our findings from this review are as follows.

- The 'Mixing Principle' set out in the Stockholm Declaration on road safety, which underpins the existing exceptions guidance, is referred to in several of the documents.
- The guidance typically includes both Movement and Place considerations, and in several cases the physical attributes of the road itself, such as visibility, car parking, pedestrian crossings etc. The document from Spain is entirely based on road characteristics.
- Few documents use numeric criteria to describe these factors (those from Edinburgh⁶ and Scotland being exceptions). Most use descriptive terms such as 'shopping street', 'visible residential frontages', 'core of village', 'school walking route', 'active travel corridor' etc.
- Several of the documents indicate that 20mph/30kph speed limits are more justified on roads with a lower Movement function
- Only Edinburgh's guidance considers whether the road is on a bus route
- The types of Place or road where 20mph/30kph is advised to be more appropriate include:
 - Urban/town/village centres and high streets with shops, community and health facilities etc
 - Schools and school walking routes
 - Active travel corridors
 - Areas with high number of collisions
- Other factors which are referred to include the number of collisions, and noise and air quality issues.
- The documents do not advise against 20mph/30kph limits if existing speeds are high (although 40mph roads are out of scope in Scotland), but some note that additional measures may be necessary to reduce speeds.
- Only two documents refer to part-time limits (Edinburgh and Brussels), and in connection with schools. None envisage seasonal variations in speed limits.
- A number of the UK documents provide guidance on minimum lengths of speed limits, in the range of 300m (exceptionally) to 600m (recommended), based on Traffic Advisory Leaflet 01/04. The Edinburgh guidance advises that limits should be 'as coherent as possible' and to avoid 'confusing changes in speed limit'.

⁶ Document currently under review

3.2.3 We have taken account of the findings from this exercise in developing our recommendations for the revision to the Welsh exceptions guidance, as set out in Section 4.

3.3 Review of Speed Limit Patterns

3.3.1 In our interim report we presented data on the proportion of the Welsh road network retaining 30mph limits, as a percentage of all former 30mph roads. This showed that there were significant differences across Wales; in Swansea some 10.5% of the former 30mph network remained at that speed limit, while in Wrexham the equivalent figure was only 1.3%.

3.3.2 Using the GIS system provided by Insight Warehouse⁷ we were able to review the current pattern of speed limits in towns and cities across Wales. Figures 3.1 to 3.4 show speed limits in the following places, which represent a range in the number of exceptions:

- Swansea (10.5% exceptions, authority-wide)
- Merthyr Tydfil (7.0%)
- Milford Haven (3.6%)
- Wrexham (1.3%)



Figure 3.1: Maps showing the speed limit of roads across Swansea city centre and surrounding area. Most arterial roads have a 30mph limit.

⁷ <https://insight-warehouse.co.uk/>

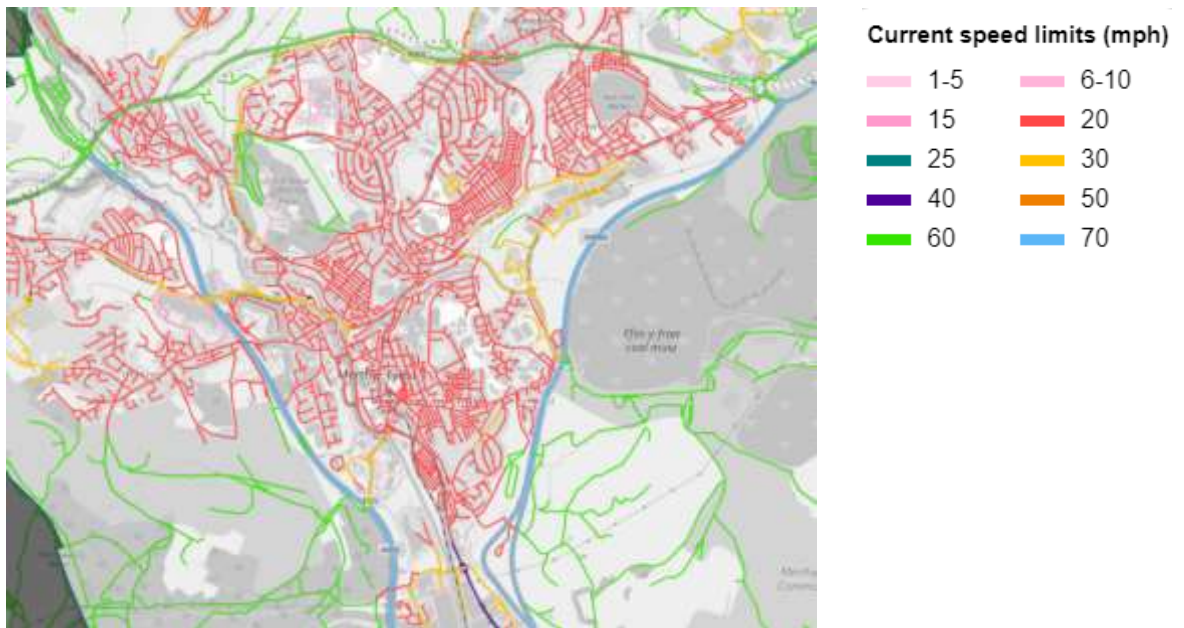


Figure 3.2: Map showing speed limits in Merthyr Tydfil. Some 30mph roads have been retained.

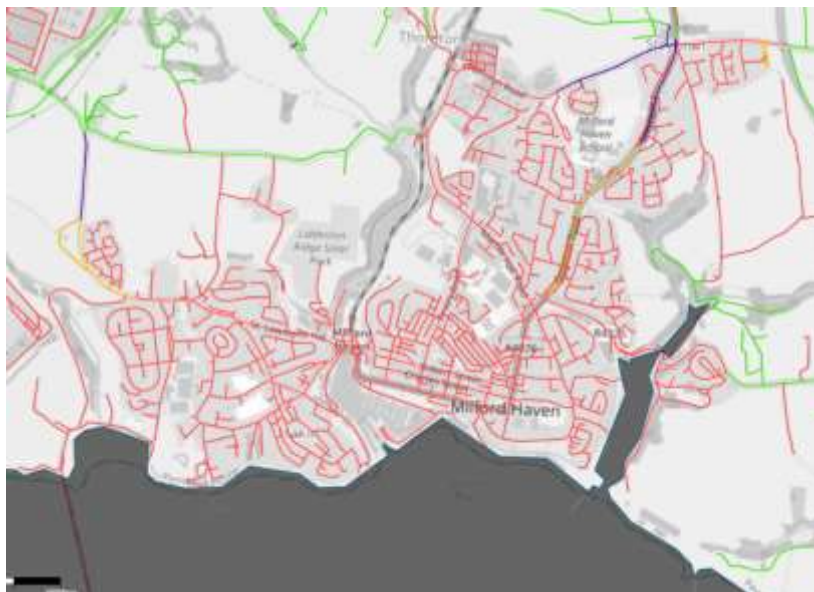


Figure 3.3: Map showing speed limits in Milford Haven. Only a few 30mph roads have been retained.

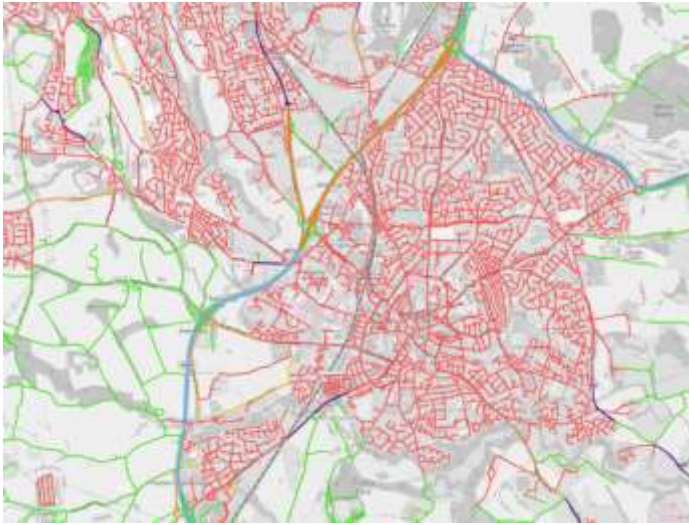


Figure 3.4: Map showing speed limits in Wrexham. Very few 30mph roads have been retained.

3.3.3 We have gone on to look at the following settlements of different sizes elsewhere in the UK which have implemented extensive 20mph speed limits – see Figures 3.5 to 3.11:

- Edinburgh
- Bristol
- Oxford
- Witney
- Scottish Borders towns (Hawick, Selkirk, Peebles)



Figure 3.5: Maps showing the speed limit of roads across Edinburgh city centre and surrounding area. Most arterial roads have a 30mph limit, apart from the inner city.



Figure 3.6: Maps showing the speed limit of roads across Bristol city centre and surrounding area. Most arterial roads have a 30mph limit, apart from the city core.



Figure 3.7: Maps showing the speed limit of roads across Oxford city centre and surrounding area. Several arterial roads have a 30mph limit, apart from the inner city.

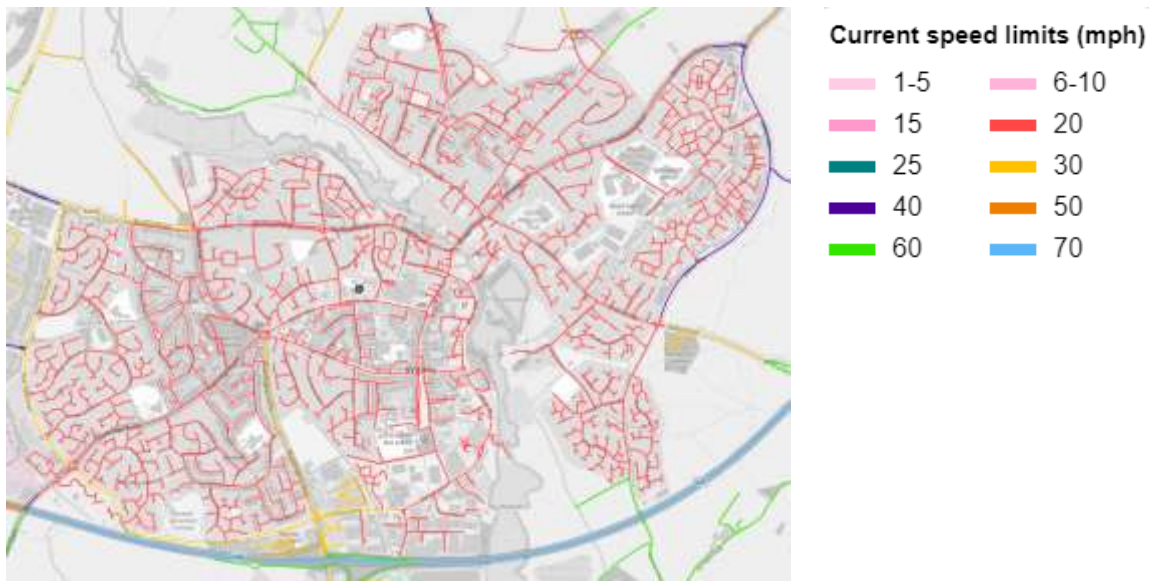


Figure 3.8: Map showing speed limits in Witney, Oxfordshire. Only a few 30mph roads have been retained.



Figure 3.9: Map showing speed limits in Howick, Scottish Borders. Only a few 30mph roads have been retained.



Figure 3.10: Map showing speed limits in Selkirk, Scottish Borders. Only a few 30mph roads have been retained.



Figure 3.11: Map showing speed limits in Peebles, Scottish Borders. No 30mph roads have been retained.

3.3.4 These maps show that local authorities in the larger cities of Edinburgh and Bristol have retained 30mph limits on the main radial routes, apart from in the city core (Bristol) and the inner city (Edinburgh).

3.3.5 Swansea, who's local authority has made the highest level of exceptions in Wales, has a similar pattern of speed limits, which suggests that it has implemented the

20mph default speed limit in a way which is broadly consistent with these two UK cities.

- 3.3.6 The smaller market towns we have analysed in Oxfordshire and the Scottish Borders have retained only a few 30mph roads, possibly in view of the smaller size of the settlements, the time required to travel across them and the intensity of traffic on the main routes.
- 3.3.7 The smaller towns in Wales we have reviewed are mostly not dissimilar to these places, with the exception of Wrexham, a larger city of some 45,000 people which has a 20mph speed limit covering almost all of its urban area.
- 3.3.8 This analysis indicates that the scale of any changes in Wales needed to bring speed limits in line with other places that have adopted wide-area 20mph limits does not need to be extensive, and where justified are likely to be limited to the main routes serving larger settlements and outside their centres.

4 Recommendations for updated Exceptions Guidance

4.1 Background

- 4.1.1 Almost all urban roads in Wales now have a speed limit of 20mph. Most highway authorities have already identified some roads that they will reassess once updated guidance has been published by Welsh Government. This is only a small number of roads, because it is generally accepted that 20mph is the appropriate speed on most C and unclassified roads, although local circumstances may vary. There is therefore no need to reassess all roads. Updated guidance should be written with this context in mind.
- 4.1.2 We would expect most 30mph exceptions to be or to be made on main/strategic roads outside city/town/village centres or high streets, outside other high-density areas and away from other places that attract frequent pedestrian and/or cyclist trips (unless they are segregated and protected from motor traffic).
- 4.1.3 Similarly, 30mph limits could be used on rural residential roads with no nearby facilities, roads with very low density of housing and/or very few houses altogether and on roads with houses only on one side and no need to cross the road (or if safe crossing points are available or made available).
- 4.1.4 30mph limits could also be applied on strategic roads that are important bus corridors/strategic for road transport where evidence exists that journey times have increased significantly. Again, if pedestrians and/or cyclists are present on those roads, they should be segregated from motorised traffic.
- 4.1.5 30mph limits could also be used on minor roads in industrial areas with little pedestrian and or cyclist traffic, or areas surrounded by open land.

4.2 Purpose of the Exceptions Guidance

- 4.2.1 The purpose of the updated and clarified guidance will be to help highway authorities in striking the right balance between the **disbenefits** of higher speeds, e.g. increased casualties and severity of casualties, noise, perceived risk (potentially discouraging walking and cycling, which in turn leads to impacts on both physical and mental health); with the **benefits** of reduced travel times (leading to shorter journey times for travellers, potential economic savings and efficiency) on important movement routes.
- 4.2.2 Highway authorities should be given guidance which sets out a systematic, auditable procedure for assessing sections of road that have been designated as being subject

to a 20mph speed limit, by default, to consider their suitability for the speed limit being raised to 30mph.

4.2.3 To ensure consistency of approach, within and between highway authorities, we recommend adopting a systematic procedure, that can be demonstrated as such during a legal challenge, if the need should arise.

4.2.4 This would include:

- Applying a set of criteria that are relevant in determining the appropriate speed limit (comprising a set of recommended 'common' criteria and any additional ones, determined by the local highway authority).
- Making clear the trade-offs between the values of the different criteria that may have been made, and the justification for the decisions taken.

4.2.5 In this context, it will be useful to remind highway authorities of their wider duties and statutory functions, i.e. the Equality Act 2010, the Active Travel Act 2013, the Wellbeing of Future Generations Act 2015 and the Environment (Air Quality and Soundscapes) (Wales) Act 2024 and the more transport-specific duties in the Traffic Management Act 2004 (to expedite the movement of traffic) and the Road Traffic Act 1988 (to prevent accidents).

4.2.6 It will not always be possible to achieve the fulfilment of all such duties to an equal degree when setting speed limits, e.g. achieving both improved road safety and reduced travel times, so the duties will need to be weighed and balanced against each other. Yet, it could in some circumstances be possible to achieve what are on the face of it competing duties, (improved safety and reduced travel times) if changes can be made to the road characteristics – e.g. by installing suitable segregated facilities for pedestrians and cyclists.

4.2.7 When setting a 50% higher speed limit than the national urban default, highway authorities will have to consider the risk of liability. The risk of liability can be mitigated by demonstrating that the highway authority has followed a rational process and being able to demonstrate factors that have been considered in coming to a balanced decision.⁸

⁸ [Highway Risk and Liability Guide - 2009 2 - Edition 2 Vers\205\) \(theihe.org\)](#), Chapter 5

4.3 Form of the Guidance

4.3.1 We generally recommend replacing numbers (precise or ranges) with descriptions of the criteria to be applied. This will allow highway authorities to exercise more flexibility to consider local circumstances. In fact, having precise numbers in the current guidance has not prevented variations between authorities.

4.3.2 We also recommend providing a simple process diagram or flow chart showing different factors that should be considered and weighed against each other.

4.3.3 When considering whether a 30mph limit can be set (or conversely a 30mph limit removed and the road restricted to default to 20mph), highway authorities should consider the potential benefits and disbenefits of raising the speed limit (or lowering the speed limit).

4.3.4 Factors to consider include:

Benefits of higher speeds

4.3.5 Roads and streets are corridors for movement and reductions in motor vehicle travel times can have significant social, economic and operational benefits – e.g. quicker journeys to key destinations, faster bus services and freight deliveries, timely responses to emergency and non-emergency health care, etc.

4.3.6 The potential benefits of higher speeds should be assessed by considering:

- The importance of the route as a movement corridor for motor traffic (whether Strategic A road, A road, B road), the volume of traffic, typical length of journeys, vehicle composition etc.
- The expected journey time savings that could result if the speed limit was raised to 30mph- considering junction delays, congestion, length of route, etc.
- Impacts on bus services, as prioritising bus punctuality and reliability is particularly important in view of the Llwybr Newydd mode hierarchy.

4.3.7 Small individual journey time savings, in particular for leisure journeys (WelTAG value of time), should be considered less important than the economic benefits of reduced travel times for buses, haulage, freight and deliveries etc.

Disbenefits of higher speeds

4.3.8 The Stockholm Declaration ‘mixing principle’ should be retained as the basis for assessing the effect of higher speeds on harm to pedestrians and cyclists (but note

that the Declaration refers 'frequent' mixing rather than using the terms 'significant' and 'potential' numbers of pedestrians or cyclists). It should be noted that higher speeds are also likely to increase the frequency and severity of vehicle-vehicle collisions, but this will also be influenced by the road characteristics.

- 4.3.9 Raising the speed limit in urban areas will have negative consequences on a range of important outcomes, particularly in view of the clear relationship between impact speed and the frequency and severity of casualties.
- 4.3.10 The crash record – a high frequency of collisions and casualties (when the limit was previously 30mph) would indicate against raising the limit - but conversely the absence of collisions should not be automatically used as a reason to justify a higher speed limit, since pedestrians and cyclists could have been deterred by high speeds.
- 4.3.11 The potential for collisions – the numbers of pedestrians and cyclists travelling along and across a road (which will need to be assessed separately). This can mainly be determined through land use and proximity (Place), e.g. are there places to walk from and to; and is it an important walking or cycling route?
- 4.3.12 Noise and air pollution – related to the flow and composition of traffic, proximity of dwellings to carriageway, etc.
- 4.3.13 Suppression of walking and cycling demand leading to health disbenefits (physical and mental)
- 4.3.14 Real and perceived danger of higher speeds making places and communities less attractive, and therefore more difficult to achieve community cohesion and interaction
- 4.3.15 Many of these judgements will be affected by local road characteristics:
 - Are pedestrians and cyclists protected from motor vehicles? It will be necessary to separately consider the degree and quality of protection along (footway/cycle track) and across the road (crossings)
 - Width of footway and cycle facilities – is there a risk of pedestrians and cyclists straying into the carriageway?
 - Highway geometry/road design speed - visibility, alignment, presence of parked cars etc

The trade-off between benefits and disbenefits



Benefits of 30mph speed limit, e.g. importance of the route, journey time savings, better bus service.

Disbenefits of 30mph speed limit, e.g. more collisions and casualties, less active travel, effect on communities.

4.3.16 In some situations, the assessment will clearly point to the appropriateness of a 20mph or a 30mph speed limit. But in other cases, some criteria might suggest a 30mph limit, and others to retain the current 20mph limit. In such cases, low-cost physical adjustments could be made to justify/support an increase in the default 20mph speed limit to 30mph, or to modify the road characteristics to signal that this is a 20mph environment.

4.3.17 For example, where most criteria would support an increase to 30mph on a section of road, except for the presence of a secondary school with its entrance fronting onto the road, then consideration could be given to relocating the school entrance to a side road and providing a protected pedestrian crossing on the main road.

4.3.18 Similarly, if there was support to increase the speed limit, yet there is also frequent pedestrian and cyclist activity and/or high housing and/or retail density, then pedestrians and cyclists would need to be catered for - with safe segregated provision and protected crossings.

4.3.19 Where most criteria would support the retention of the default 20mph speed limit, but there is evidence of bus routes being adversely affected and added journey time leading to cuts to services or cuts to areas served to catch up on time, then the potential for bus priority measures should be looked at along the bus route.

Other issues to cover in the guidance

4.3.20 There are other detailed issues that should be covered in the updated guidance. These include the minimum length of speed limits used. The guidance should use the values in Setting Local Speed Limit in Wales Guidance (SLSLiW) to avoid too frequent changes which can lead to driver confusion.

4.3.21 The guidance should also cover buffer speed limit use, especially for approaches from higher speed limits to 20mph or where there is poor visibility.

- 4.3.22 Part-time limits can be appropriate around schools; but some authorities find they are not easy to sign, confusing to road users and not easy to enforce. The potential to use of seasonal speed limits should be explored further.
- 4.3.23 One numeric value that we recommend considering for inclusion is the definition of what constitutes a village, (SLSLiW Part 6.12.) namely 20 or more houses (on one or both sides of the road) over a minimum length of 600 metres.
- 4.3.24 Something that highway authorities could look into in their assessment is rerouting and displacement of traffic away from 20mph roads to other roads, potentially creating road safety issues or congestion elsewhere on the network.
- 4.3.25 Yet a further issue to potentially be included in guidance is the maximum distance or time anyone needs to travel on 20mph roads until they reach a higher speed limit road, regardless of their point of departure and arrival.

Appendix A: Questionnaire

20mph default speed limit – review of exceptions

Questionnaire on exceptions guidance and criteria

We (the review team) announced in our [initial report](#) that we would be seeking views of organisations and stakeholder groups on the general principles and criteria for deciding whether the speed limit on a road should be 20mph or not. This includes restricted lit roads that defaulted to 20mph and roads with a speed limit made by Traffic Regulation Order. The review is NOT looking at the limits that apply on specific sections of road.

Through this questionnaire we are seeking the views of interested bodies. This questionnaire covers several topics, some of which may be less relevant, so you only need comment on the sections of interest. Towards the end there are opportunities to express views on points not covered and, if appropriate, to provide us with supporting information/evidence.

The questionnaire refers to the Exceptions Guidance, published by the Welsh Government in November 2022 to support highway authorities in making decisions on setting exceptions to the national default of 20mph. This can be found here: [Setting exceptions to the 20mph default speed limit for restricted roads \[HTML\] | GOV.WALES](#)

YOUR ORGANISATION/STAKEHOLDER GROUP

1. What is the name of your organisation/stakeholder group?
2. Whom do you represent (if appropriate)?

THE EXCEPTIONS GUIDANCE

The principles

Section 2.1 of the aforementioned exceptions guidance sets out the principles for considering whether a 30mph exception should be made on a section of road.

The underlying principle is that a 20mph speed limit should be set where pedestrians and/or cyclists and motor vehicles mix in a frequent manner, except where strong evidence exists that higher speeds are safe.

Highway authorities should consider two principal questions:

Question A: Are there significant numbers (or potential numbers, if speeds were lower) of pedestrians and cyclists travelling along or across the road?

- *If the answer to A is 'no' then an exception for a 30mph speed limit may be appropriate.*

Question B: If the answer to A is 'yes', are the pedestrians and cyclists mixing with motor traffic?

- *If the answer to B is 'no' then a 30mph speed limit exception may be appropriate.*
- *If the answer to B is 'yes' then a 20mph speed limit will be appropriate unless the robust and evidenced application of local factors indicates otherwise.*

3. Your views:

- Do you support these principles? If not, please indicate why and suggest alternatives.
- Are they easy to interpret and apply, in practice? If not, please indicate why and suggest alternatives.

The criteria

In the current exceptions guidance, there are sets of criteria relating to the Movement function of the road section (Road Classification), Place Criteria and Road Characteristics. We are seeking your views on whether these criteria are appropriate, sufficient, clear and practical.

A) Movement:

The current guidance states in Section 2.2.6. that most exceptions are expected to be made on A and B classified roads. These generally form the main routes carrying traffic through urban areas.

4. Your views:

- Do you agree with including this criterion, should it be modified (e.g. only apply to A roads), or dropped?
- Should there be additional criteria that are used to capture the movement and network significance of a section of road (e.g. such as traffic volumes, main bus routes, or vehicle composition)?
- If additional criteria are added under this heading, how should limits or thresholds be specified? For example, as:
 - A numerical value (e.g. 20,000 vehicles per day), or
 - A range (e.g. 15-20,000 vehicles per day), or
 - Descriptively (e.g. Moderate traffic levels)

B) Place:

The existing criteria are listed in Section 2.2.8 and provide guidance on where roads may have significant demands for walking and cycling:

- Within a 100m walk of any **educational setting** (e.g. primary, secondary, further education and higher education)
- Within 100m walk of any **community centre**
- Within 100m walk of any **hospital**

- Where the number of **residential and/or retail premises** fronting a road exceeds 20 properties per km.

5. Your views:

- Do you agree with including all, or any, of the above-mentioned four criteria [NOT taking into account the values – these are covered in Question 5c]? If not, please explain why not.
- Should there be additional or alternative criteria to capture the Place characteristics of a section of road (e.g. bus stops, public houses, level of car ownership)? If so, please propose new criteria.
- How should limits or thresholds be specified? For example, as:
 - A numerical value (i.e. 20 properties/km or 100m, as now), or
 - As a distance to/from trip generators, or
 - A range (e.g. 20-50/km, 100m – 150m), or
 - Descriptively (e.g. Frequent, Nearby)

C) Road Characteristics:

In the current guidance, this feature is captured as 'Protected facilities for pedestrians and cyclists' (Section 2.2.18), which meet the Welsh Government's Active Travel Act Guidance (2021).

6. Your views:

- Do you agree with this criterion? If not, please explain why not.
- Should there be additional or alternative criteria to capture the characteristics of a section of road (e.g. width of carriageway, number of lanes, presence of a median strip)? If so, please propose new criteria.
- How should any criteria or thresholds be defined (e.g. 7m carriageway width or a 'wide road'?)

D) Other Types of criteria

7. Your views:

Are there other types of criteria that should be considered, in addition to Movement, Place and Road Characteristics? If so, please specify.

E) Minimum lengths of speed limit sections

The exceptions guidance advises that short sections of 30mph exceptions should not be made and refers to a minimum length of 300m (in exceptional circumstances).

8. Your views:

Do you agree with this minimum length? If not, what should be the minimum length of speed limit sections?

F) Part time speed limits

The guidance advises that highway authorities may set a part time speed limit where the highway authority considers an exception is appropriate only at some times.

9. Your views:

Do you have any comments on this advice?

OTHER CONSIDERATIONS

Your views:

10. Are there other things that should be addressed in the guidance that currently are not? If so, please give details.

11. Has the introduction of 20mph had a significant impact (either positive or negative) on your organisation and/or those you represent? If so, please give details, or attach other documentation.

CONTACT DETAILS

The Review Team may be interested in holding follow-up exchanges or meetings with some organisations, to discuss their views in more detail. If you would be willing to engage with the Team, then please provide a contact:

Name

Email address

Phone number