Towards changing the default urban speed limit to 20mph
About this report

This report was produced by Brake, the road safety charity, in autumn 2015, with kind sponsorship from Bridgestone. It is divided into two sections: a literature review exploring current evidence on 20mph limits and their effects, and results of a survey of local authorities exploring their implementation and experiences of 20mph limits.

Introduction

While Britain has one of the best road safety records in Europe, per mile travelled, you are more likely to be killed on foot or bicycle than in many of our European neighbours. Professor Oliver Carsten argues that, if we walked and cycled as much as people in Sweden or the Netherlands, Britain would fall down the road safety rankings significantly. In other words, our road safety record is skewed by the fact that so few people walk and cycle compared to other countries.

Surveys indicate that danger from traffic is one of the main factors preventing families and commuters from walking and cycling. Britain also ranks among the lowest in Europe in terms of how well people know others in the local area.

In this way there is much that can be done to improve safety for pedestrians and cyclists, both to reduce casualties and enable more people to use these non-harmful, non-polluting, sociable and affordable modes of travel.

Road crashes are not accidents; they are devastating and preventable events, not chance mishaps. Brake believes that calling them accidents undermines work to make roads safer, and knows it can cause insult to families whose lives have been torn apart by needless casualties. The term accident appears in this report only when quoting others.

Key findings

- Reducing the default speed limit from 30mph to 20mph across Britain would have a significant and meaningful impact in reducing crashes and serious injuries. Pedestrian and cyclist safety would particularly benefit.

- As a worst-case scenario, it is reasonable to expect a 1mph reduction of average speeds with an associated 6% reduction in crashes and collisions in these areas.

- It is reasonable to expect that reducing the default limit from 30mph to 20mph could aid wider efforts to encourage active and sustainable travel, and therefore help deliver significant health, wellbeing and environmental benefits.

- The guidance provided by central government to local authorities on 20mph limits, while giving the councils the opportunity to introduce widespread 20mph limits, does not show the leadership to make broader changes, and certain elements pose a significant barrier to some local authorities moving towards area-wide 20mph limits. This contributes to the implementation of 20mph limits across councils being mixed.

- There are still unnecessary costs associated with local authorities implementing 20mph limits at local level (as opposed to a national change in the default limit), especially related to present signage regulations.
This literature review first explores the legislative framework surrounding the introduction of 20mph limits, a measure recommended by the World Health Organisation to improve pedestrian safety. Second, it explores some of the issues surrounding the potential benefits and problems if urban speeds were reduced.

A distinction is usually made between 20mph zones and limits, which this report adheres to:

- **20mph limits** are areas marked by signs-only, with no physical traffic-calming measures in place. They are cheaper to implement than 20mph zones.

- **20mph zones** have physical traffic calming measures, for example speed humps, chicanes and road narrowing. They are more expensive to implement, and usually cover smaller areas.

The legislative framework

The default limit

The default limit is the speed limit, defined by law, which is in place on a road unless another speed limit is in force and signs displayed. Across the UK, the default limit in built up areas is 30mph.

The urban default limit evolved at the start of the 20th century. It was defined in the Road Traffic Act 1934, the same act that made the driving test compulsory, and at a time when road deaths were at 7,343 a year.

Laws and government guidance: England and Wales

The key relevant laws governing urban speed limits in England and Wales are:

*The Road Traffic Regulation Act 1984* sets the speed limit at 30 mph on “restricted roads”: these are defined, in England and Wales, as “there is provided on it a system of street lighting furnished by means of lamps placed not more than 200 yards apart”. These are the roads that local traffic authorities now have the power to lower the limit to 20mph. Regulations surrounding road signs, including the requirement to have repeater signs for areas with 20mph limits, are outlined in the *Traffic Signs Regulations and General Directions*, and the 2011 amendments.

One of the key pieces of advice for local councils is *Department for Transport Circular 01/2013: Setting Local Speed Limits*, which gives local authorities guidance on setting speed limits, and 20mph limits in particular.

The impact of reduced speed on communities

Research finds that a reduction of traffic speed potentially has an impact not only on road safety but also other key areas of health and wellbeing within communities.

Crash risk

The relationship between speed and crash rates is well established. Generally, the rule-of-thumb is that a reduction in average speeds of 1mph on a section of road reduces the number of crashes by 5%. On urban roads specifically, a 1mph reduction in average speeds reduces the rates of collisions by 6%.

This is related to how long it takes a vehicle to stop at different speeds: stopping distances increase exponentially with increases in speed, and are a primary factor in whether a driver can avoid a crash. Small increases in speed may therefore feel inconsequential to drivers but have a major impact on crash risk. Other aspects being equal, at 30mph, a driver’s stopping distance is almost double that at 20mph.

There is an argument that, rather than focusing on reducing average speeds, road safety work should focus on addressing the danger of speeding drivers, since individual vehicles moving far faster than other traffic have higher crash rates. Certainly, detailed research by TRL revealed that reducing the number of speeding drivers is an important factor in reducing collision rates. Yet their research highlights how both the number of speeding drivers and the average speed are factors in road crashes. Both of these factors need to be tackled to reduce collisions from speed.

Pedestrian injuries

When a collision between a motor vehicle and a pedestrian occurs, a multiplicity of factors come into play as to the injuries that the pedestrian will suffer, including the age of the pedestrian and the design of the vehicle. Yet the prime factor is vehicle speed. There has been an increased emphasis in improving the design of vehicles to improve the safety of pedestrians if struck, such as through pedestrian safety becoming an inherent part of EuroNCAP safety ratings given to vehicles. Yet speed remains the most important factor.
The risk of death, or serious injury, when an adult pedestrian is hit by a motor vehicle follows a curve: at low speeds, hit below 15mph, the risks are relatively low: the chance of death is 2-5%, and the chance of severe injury is 9%. At faster speeds, however, a small increase in speed results in a larger increase in risk. Hit at 25mph, 30% of pedestrians sustain severe injuries, and 20% die. Hit at 40mph, 79% sustain severe injuries and 45% die. 11

According to Erik Rosén and Ulrich Sander, in the case of adult pedestrians, for fatal injuries, “the risk at 50 km/h [31 mph] is more than twice as high as the risk at 40 km/h [25 mph] and more than five times higher than the risk at 30 km/h [19 mph]. This shows the importance of keeping impact speeds as low as possible within city areas where most pedestrian accidents occur.” 12 The risks are higher for older pedestrians: a 70-year-old hit by a car at 25mph has similar risk to a 30-year-old hit at 35mph. 13

CHILDREN have trouble seeing that vehicles are approaching if the vehicle is moving at more than 20mph.

Casualty causation

There are a number of problems with current reporting of crash causation that can undermine work to reduce speeds and speed limits. It is true in the UK, and across the world, that the reporting of the cause of crashes by police doesn’t take everything into account: “Speed of impact, the underlying determinant of injury severity, is usually not the reported cause in most official reporting systems, which are legally oriented in terms of individual blame and liability or circumstance for the “accident” and not risk for the injury. Equating circumstance with cause leads to fundamental distortions in defining priorities for enforcement.” 15

Breaking the speed limit or travelling too fast for conditions is recorded (by police at crash scenes) as a contributory factor in more than one in four (28%) fatal crashes in the UK. 16 However given that almost every crash can be avoided and/or made less severe through lower speeds, it can be reasoned that speed is a factor in all crashes.

Protecting children

There are specific calls for 20mph limits to help protect children, in particular. 17 Children under 15 have difficulties seeing that vehicles are approaching at over 20mph. 18

A 1999 study argued that children in the UK are more at risk on our roads than children in France and the Netherlands. A significant proportion of that risk is because children in the UK spend more time on streets with speed of 30mph and above than children in these other countries. 19

Children have trouble seeing that vehicles are approaching if the vehicle is moving at more than 20mph.

20mph limits are argued to reduce pedestrian injuries and social inequality, due to children in deprived areas being more at risk.

Social interaction

There is a link between traffic and levels of social interaction at street level. David Appleyard’s 1969 study revealed the relationship between traffic volumes and social interaction: on streets in San Francisco, residents of streets with light traffic had three times as many friends on those streets than those with heavy traffic. 20 Furthermore, the way in which streets are seen and understood by residents differs according to traffic volume. Appleyard’s findings have been replicated numerous times in subsequent decades, most recently in Bristol. 21

The relationship between traffic and social interaction certainly should inform the debate over 20mph limits, yet a conclusion cannot directly be drawn from the quantified aspects of Appleyard’s work: the essential factor explored by Appleyard and his successors is traffic volume, rather than speed. Further work is needed into any direct relationship between traffic speed and social interaction on our streets.

Yet it is certainly the case that speeding traffic is perceived as a major social concern for people across the UK. In the British Crime Survey 2003-4, “speeding traffic” was perceived by residents as the most concerning anti-social behaviour in people’s communities, regardless of their age or gender. 22
Even though speeding is not always seen as a criminal act\textsuperscript{25}, it is seen as a deeply anti-social one. This suggests that it is the nature of high-speed traffic itself, rather than whether drivers are breaking the law, that is the concern of people in communities.

**Speeding traffic is regarded as the most problematic anti-social behaviour in people’s local communities.**

### Climate change and pollution

There is some public debate over whether limiting traffic speed to 20mph rather than 30mph has an impact upon fuel use and emissions. A key aspect of answering this is whether emissions can be reduced by encouraging and achieving modal shift – people moving from driving to other forms of transport – which is addressed below. Modal shift aside, the balance of the evidence is that emissions are not increased by 20mph limits. A model of traffic emissions revealed no significant increase or decrease in emissions moving from 50 km/h (31mph) to a 30 km/h (19mph) limit\textsuperscript{26}.

This is backed up by findings from the City of London, where a comparison between 30mph and 20mph streets found that the introduction of 20mph limits would not be detrimental to air quality\textsuperscript{27}. The London study emphasised the differences in driving styles between 30 and 20mph areas: there was less acceleration and breaking in the areas with 20mph limits. However, a study of the impact of physical traffic calming reveals that road humps increase vehicle emissions and fuel consumption, because drivers tend to accelerate sharply between the humps\textsuperscript{28}.

### Modal shift

The benefits of reducing speeds are amplified if it encourages drivers to choose alternative methods of travel. This “modal shift”, as road users move from cars to walking and cycling, has the potential to significantly add to the benefits of 20mph limits highlighted in this review.

Risk, and its perception, is the most important factor in people shifting to walking and cycling\textsuperscript{29}. While perceptions of risk do not always exactly follow the reality on our roads, reducing the speed of vehicles is known to have an impact on both pedestrian and cyclist safety, as highlighted in the section above on risk. For cycling, a reduction in danger has a correspondingly higher increase in rates of cycling\textsuperscript{30}. A reduction in traffic speed and volume is likely to increase walking and cycling\textsuperscript{31}. In Bristol, there was an increase in walking and cycling in areas where pilot 20mph limits were introduced\textsuperscript{32}.

It is worth noting that the perceived dangers of cycling do not affect all groups equally. For example, Steinbach et al. (2011) argue that cycling in London is perceived as being a risky, assertive and aggressive activity: this is an explanation for why cycling is more common among men, as it is regarded as a masculine activity\textsuperscript{33}. However, Steinbach et al also argue that it is the relative unusualness of cycling in London that has led to this strong “cyclist” identity: so an increase in the numbers cycling overall would add to the number of women cycling.

### Health

If 20mph limits can help achieve modal shift and increased levels of active travel, it would have a significant benefit for public health. It has been estimated that 37,000 lives a year could be saved if everyone met the guidance of the Chief Medical Officer of 150 minutes of moderate physical activity a week (which includes walking and cycling)\textsuperscript{34}. Walking is an excellent activity for encouraging sedentary adults to do physical activity, and it is more likely than other forms of exercise to become part of their routine\textsuperscript{35}.

 Across Britain, bicycle journeys make up 2% of journeys and average walking trips per person have decreased by 27% since 1995, now making up less than a quarter (22%) of trips\textsuperscript{36}. Currently, 14% of children and a quarter of adults in England are obese\textsuperscript{37}. Persuading people to integrate active travel into their routines is a simple, constructive way to address this: incorporating physical activity into everyday life through activities such as walking and cycling is as effective for weight loss as supervised exercise programmes\textsuperscript{38}.

Research has also found that, on top of the physical health benefits of active travel, people who commute by walking, cycling or public transport have better mental health than those who drive to work. Active commuters are better able to concentrate and less stressed than car commuters\textsuperscript{39}.

In addition, it is now estimated that as many as 12,000 premature deaths a year in the UK are related to pollution from road traffic\textsuperscript{40}. Therefore if 20mph limits encourage people to drive less, it can also reduce air pollution and related health problems.

**The most important factor in persuading people to shift to walking and cycling instead of driving is risk and perception of risk.**

**Persuading people to incorporate walking and cycling into their routines is an effective way to address obesity, and promote better mental health.**
The relationship between speed limits and speed

Changing the speed limit in itself does not mean an equal change in average vehicle speed, whether that is a raise or lowering of the speed limit\(^1\). Reviews of literature have revealed that “20mph zones and limits are effective in reducing accidents and injuries, traffic speed and volume, as well as improving perceptions of safety”\(^2\).

A study by the TRL in 1998\(^3\) found that the impact of different measures were as follows for moving from 30 to 20mph speed limits:

- Physical traffic calming measures reduce both mean and 85th percentile speeds by around 10mph. (This was backed up by later research in London\(^4\).)
- Speed cameras reduce mean 85th percentile speeds by 5mph.
- Flashing, vehicle-activated signs reduce mean and 85th percentile speeds by 4mph.
- Signs-only measures in general have a mean reduction of 2mph, but for 20mph limits this is 1mph.
- In areas with signs-only limits, public awareness and enforcement campaigns can have a further reduction of around 3mph.

Signs-only 20mph limits have been found to typically reduce mean speeds by 1mph, with greater reductions possible through awareness, enforcement and traffic calming.

In June 2015, Brake sent out Freedom of Information requests to all 206 local traffic authorities in Great Britain. We received 122 replies providing information on each council’s introduction or consideration of signs-only 20mph limits.

Who has introduced 20mph limits?

From a qualitative analysis of the answers provided by councils, the following categories were developed:

- A: Councils that had either already introduced widespread 20mph limits, or had made the commitment to do so. This included councils who had more extensive pilot schemes that marked the first phase of rolling out 20mph limits.
- B: Councils that had some limited trials or implementation of widespread 20mph limits.
- C: Councils that have no widespread 20mph limits, and no plans to introduce them. These councils might have: no streets reduced to 20mph; 20mph zones with physical traffic-calming but no signs-only 20mph limits; or signs-only 20mph limits that only cover a limited area (e.g. outside of schools).

The implementation of widespread 20mph limits by councils

It is important to consider the differences between councils when considering their varying output or position on 20mph limits. Each individual council is operating within its own context. For example, some rural councils were keen to emphasise that the nature of their roads meant that they did not have widespread limits. So too were the needs and considerations of London councils different; for example one London borough council stated that if enough of their neighbours introduced 20mph limits then they would reconsider their opposition.
Similarly, councils are in very different political contexts and have diverse starting points. For example, one council had not implemented 20mph limits or zones on local roads between 2006 and 2014. Following a change in administration in 2014, they saw themselves as just starting on the journey of using speed limits, and speed calming measures, in any broad way. Whereas some councils already have a large number of traffic-calmed 20mph zones: one of the councils with the highest proportion of these in the country has no signs-only 20mph limits, and no plans to introduce them.

Why have councils not ‘GOOne 20’?

The decision for councils to introduce 20mph limits is tied to a variety of factors:

- **Safety:** a pure road safety concern – the reduction of casualties – appears to be a necessary requirement for a council to introduce widespread 20mph limits. However, a council that is concerned only with casualty reduction is unlikely to push through widespread 20mph limits: they may instead decide to implement localised 20mph limits or other measures in specific areas where casualties have occurred.

- **Active travel:** Making the streets safer for active travel, and so encouraging walking and cycling, is a common part of the reasons for introducing 20mph limits. Some councils are targeting particular groups in this, for example the elderly or less confident cyclists.

- **Public health:** Councils may link 20mph limits to a broader public health agenda.

- **Community:** A rarer reason is to encourage community cohesion and social interaction on the streets: “To create streets which are more attractive, social and people friendly.,” or bring about “calmer” streets.

- **Changing social norms:** The challenging and changing of social norms (see below).

Councils that have and have not introduced 20mph limits tend to agree on average speed reductions likely to be achieved, and the need to manage expectations about this. The difference seems to come from whether councils interpret this speed reduction as being significant to road safety or not. One council said: “There is sufficient evidence to support the hypothesis that a default 20mph speed limit will be of benefit to the borough. However it is important to understand the modest reductions of 1-2mph that can be achieved. The main risk with the 20mph speed limit scheme would be raising unrealistic expectations.”

“[We are] continuing to face … unprecedented reductions in Government funding, including the capital funding required to improve our highway and transport network.” (A city council)
Modest reductions in average speeds

Some councils felt the reductions in average speed likely to be achieved from implementing 20mph limits were so modest that they were not worth introducing more broadly. Some were basing this on their own trials. One said, “Evidence indicates that where 20mph speed limits have been introduced without traffic calming measures they have little or no effect on reducing speeds.” Another council stated, “Signed-only 20mph speed limits are unlikely to bring about a significant reduction in traffic speed.”

There is, in fact, little disagreement between councils over what reduction in mean speeds they would see with the introduction of 20mph limits on a road: 1-2mph is expected by councils that do introduce the limits. The question is whether this is seen as a significant, with some councils acknowledging it is and others not. According to research identified in part one of this research, a 6%-12% reduction in crashes and collisions would be expected with a fall in mean speeds of this size.

Both councils that are and aren’t ‘GOing 20’ say they would expect average speed reductions of 1-2mph from signs-only 20mph limits.

A few councils leave open the possibility that their current “case-by-case” approach (of considering whether individual roads or section of road should have 20mph limits) may evolve in the future. A London borough council, which is currently using this approach, says it would consider broader 20mph limits if a) the 2017 government research recommends the introduction of widespread 20mph limits; b) enough 20mph limits come into play to cover a large proportion of the council’s roads, or c) neighbouring borough councils introduce widespread 20mph limits.

The role of central government

Government guidance is one of the key factors in the discourse and decisions of almost all councils that responded – both those that have decided to introduce 20mph limits and those that have decided not to. The coalition government 2010-2015 set a localism agenda for many areas of policy. The 2011 Strategic Framework for Road Safety laid out the coalition’s approach to road safety, following a decentralising agenda. This involved the removal of casualty reduction targets, and stated “We will ensure that local authorities are clear that they can make full use of existing powers and flexibilities, for example in setting speed limits and speed enforcement.” In addition, the strategic framework explicitly cited the value of “Making the links with other local agendas, such as public health and sustainable travel and helping to remove barriers to increasing walking and cycling.”

The strategic framework led to the introduction of a heavily revised guidance ‘circular’ on setting local speed limits, in 2013, which clearly has influenced the introduction of 20mph limits. This research shows this circular is a key factor that has come into play. However, the overall assessment of the coalition government’s record on road safety is not good, according to a report by PACTS and the RAC Foundation. They found the government’s less prescriptive approach, and reduction in budgets, was seen as having a negative affect on road safety by councils and other stakeholders. In particular, the lack of leadership and strategy from central government was a major cause of concern for local councils. This reflects concerns voiced by Brake at the time of the government drafting its strategic framework for road safety, in a Transport Select Committee inquiry, and at various points during the coalition’s time in office.

This lack of national leadership is a central issue in councils’ decisions on 20mph limits. On the one hand, if the aim was to stimulate local leaders to take initiative, then the revised guidance on setting local limits certainly was more enabling of councils to introduce them than the previous circular, which in some respects treated 20mph limits as a last resort. On the other hand, the lack of central leadership, including a lack of clear goals and national targets, alongside more limited funding, has clear downsides. It could be argued that this lack of leadership impacts upon one of the most important aspects of the way in which government guidance is interpreted: how current mean speeds should be used as determinants for whether to implement 20mph limits. The circular states: “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.” This is interpreted by some councils as being the government’s guidance that 24mph mean speeds are a “cut off” for the introduction of 20mph limits, i.e. if mean speeds are higher than this then 20mph limits should not be introduced. This is clearly affecting some councils’ decision not to implement 20mph limits.

For example, one council told us, “The Council undertakes speed surveys to determine the existing mean speeds and 20mph limits are not introduced on those roads which have mean speeds above 24mph.” Another council adopted the approach of introducing 20mph limits only where they would be “self-enforcing and where mean vehicle speeds were at or below 24mph”, and another refers to government...
guidelines by saying, “the DfT Circular states that 20mph limits are only suitable when the mean speeds are already at or below 24mph.”

However, where some councils have gone further than government guidance, by implementing 20mph limits on roads with higher mean speeds, they have found greater speed reductions and therefore safety benefits, tallying with an evaluation of the effect of Portsmouth’s city-wide 20mph limits.

Many councils interpret government guidance as saying that 20mph limits are not suitable on roads with existing mean speeds above 24mph.

But those that have implemented 20mph limits on faster roads have seen greater reductions in mean speeds.

The role of police

Councils are often strongly influenced by the police position. This can come from the force in their area, or the advice from the National Police Chiefs’ Council (NPCC), formerly the Association of Chief Police Officers (ACPO).

The police position is outlined in the ACPO Speed Enforcement Guidelines. It states that – as with all speed limits – 20mph limits should be largely “self-enforcing”: that is, that the road should look and feel like a 20mph limit. That look and feel is from the perspective of the “visiting motorist.” Thus, the police position is to advise to “only introduce where average speeds are already close to the limit imposed (24 in a proposed 20mph area) or with interventions that make the limit clear to visiting motorists.”

Councils appear to take slightly varying views of the police position, but overall the issue of enforcement is a common concern, with councils conscious that resource is lacking for police to enforce 20mph limits. One stated, “Our key concern is enforceability - without the use of expensive and unpopular measures enforcement would rely upon a heavy and unrealistic commitment from the police.”

In Scotland there is a mixed picture about the police stance on 20mph limits, with some councils regarding it as unsupportive, while others state they are increasingly supportive. One said, “Police Scotland have indicated in the Good Practice Guide that they would not enforce 20 mph limits.” Whereas another said, “More recently, the Police have been more willing to support 20mph limits with less physical traffic calming.”

Towards changing the default urban speed limit to 20mph

Responses revealed variation in the approach taken by different local authorities in considering and rolling out 20mph limits.

Determining priority areas

One urban council explained how it was using localised 20mph zones around schools (which in denser urban areas can cover a significant proportion of the streets) as the starting point for introducing widespread 20mph limits. This council already has around a fifth of its residential streets covered by 20mph limits due to existing 20mph limits and zones around primary schools.

The council had rolled out the limits and zones around primary schools using a scoring system to determine the priority given to particular schools, primarily taking into account the previous injuries sustained by children and adults, but also taking into account issues of existing mean speeds and traffic flow. The plan is, once all schools in the council’s area have been covered by 20mph limits or zones, that similar schemes are to be rolled out across other residential areas in the city, using a similar scoring mechanism to determine priority.

There were some issues that were notably absent from almost all councils’ internal discussions. These include themes that are common among vocal anti-20mph limit supporters on blogs and on social media. The first was any discussion over how 20mph limits would affect journey times. The second was a discussion over the broader impact of 20mph limits upon the economy because of this. The third point is over the broader politics of speed, and how lower limits may be considered as infringing civil liberties. All of these points are notably absent within councils work on the subject of 20mph limits. Thus, while certain aspects of the driving lobby may have some influence for the general public, it is not an issue that emerges within councils on the discussion of 20mph limits. It is clear that the focus of these debates more often than not is about road safety rather than economics.

On the other hand, it is possible that councils coming from a negative point-of-view are making technocratic arguments because this is easier, when their central beliefs are different. It could also be argued that in some cases councils might more effectively raise public awareness about 20mph limits, and address potential objections, by making clearer their findings and position on issues like journey times.
Costs of ‘going 20’

With traffic calming measures such as speed humps carrying a considerable expense to install, signs-only limits can be considered a “cheap option”. While certainly cheaper than the introduction of physical measures, there are still considerable costs involved with implementing 20mph limits. Many of these costs, however, could be eliminated through a change in regulations, without the need for additional primary legislation. As one authority said, “The main costs are the supply, installation and maintenance of the signs required along with any consultation, statutory traffic order making and monitoring costs.”

Often the largest cost of the implementation of 20mph limits is signage. Typically, a 20mph repeater sign costs £80-90 when attached to an existing post, or £160-250 for a new sign (single or double-sided). For example, one council’s 20mph programme cost a total of £1.87 million. 75% of this cost was the capital works associated with signage.

In another council, more than 6,000 20mph repeater signs were required; taking into account the poles, the cost of repeater signs alone was more than £400,000.

Repeater signs do not represent only a financial cost, but may be regarded as adding to the visual “clutter” in streets. Sign clutter does not seem to present a major reason why a council would not introduce 20mph limits, but it is a factor for some in decision-making. One council said, “The introduction of 20mph speed limits would increase the number of signs needed on streets, also resulting in increased maintenance liability and street clutter.”

For one council, 75% of the cost of GOing 20 was signage.

However, 20mph schemes are still regarded by some as cost-effective. One council that introduced 20mph limits found a speed reduction of 1mph, and “applying the DfT valuations on accident prevention, even this relatively small change results in quite an appreciable on-going benefit, with the first year rate of return (the annual value of accident prevention compared with the scheme cost) exceeding 100%... It would appear therefore that the 20mph limits in Oxford have likely made a cost-effective contribution to improving safety and that there is a potential for these benefits to increase, even in the absence of any very significant increase in the use of supporting measures or enforcement.”

There are some absurdities that are thrown up by the current signage regulations when trying to introduce 20mph limits. There is a particular illogicality of the repeater sign rule when it comes to a certain situation: to quote one authority, “The establishment of a 20mph speed limit on a cul-de-sac street adjoining a 20mph route would provide no benefit to that street if existing mean traffic speeds are already less than 20mph. Whilst it might seem illogical for an such street to retain a legal 30mph speed limit, the signing required to designate a lower limit would only introduce unnecessary visual clutter, restriction of the available footways and an on-going maintenance liability without delivering any road safety benefits.”

An additional cost of GOing 20 is the costs of research and local consultations. The amount of such work that councils have conducted varies. This is another area where there is a potential to reduce costs: rather than having each council produce research of their own, central government could provide more guidance in this direction.

Achieving behaviour change

Ultimately, the most ambitious councils are looking to change social norms. One council sees the point of 20mph limits as being: “To change driver behaviours to accept that driving at 20mph is normal.” Similarly, another said, “the reason for rolling out the 20 mph limits to all residential streets is aimed at creating a shift in driver behaviour such that the social norm is that everyone understands that 20 mph is the accepted speed in residential streets.” Yet, as one council put it, “behavioural change is extremely difficult and resource intensive to achieve.”

With the stated goal of changing norms, this makes 20mph limits far more than a “poor man’s speed bump”. Other road engineering methods are designed to work with a driver’s existing understanding of the road to deliver slower speeds. 20mph limits, on the other hand, are aimed at changing that understanding: to make the same road that previously “looked like” a 30mph road now “look like” a 20mph road. This is particularly powerful because the arguments for this, and the associated education, link this reduction in speed to the safety and broader wellbeing of all road users. Thus, it means that the link between a drivers’ particular speed and the reasons for the slower speed is maintained, unlike for example the reasoning that a driver slows down for a speed hump to protect his or her car.

“[The point of 20mph limits is]... to change driver behaviours to accept that driving at 20mph is normal.” (A metropolitan borough council)
Differences in Scotland

It is important to note that local authorities in Scotland are operating within a slightly different context to those in England and Wales, influencing decision-making and progress on implementing 20mph limits.

The Road Traffic Regulation Act 1984 defines restricted roads in Scotland as: "provided on it a system of carriageway lighting furnished by means of lamps placed not more than 185 metres apart and the road is of a classification or type specified for the purposes of this subsection in regulations made by the Secretary of State".

The Scottish Government released its guidance on 20mph limits at the end of 2014 – the equivalent to the Department for Transport circular in place for England and Wales from 2013 – in the form of a Good Practice Guide on 20mph Speed Restrictions. The guide makes it clear that the Scottish Government believes that 20mph limits will contribute to health, the environment and safety: "By reducing speed on our roads we can create streets where the space is shared more equally between different road users and create a safer environment, encouraging people to make active travel choices." In this way it is arguably more forthright than the England and Wales circular in encouraging the implementation of 20mph limits.

Yet as the advice was only issued at the end of last year, some Scottish councils are still considering the measures outlined, and how the new advice will alter their own policy positions.

Conclusion

20mph limits may be becoming an increasingly common feature of streets across the UK, but there is still work to be done before the proven benefits can be placed out to all communities. The road safety benefits of 20mph limits are clear, as even modest reductions of speed can have a large impact on the safety of communities. Yet there is still a range of factors hampering their roll-out, including UK government guidance and leadership, signage regulations impacting on the cost, limited local authority budgets, and worries about public perceptions.

In order to achieve the broader changes and benefits of 20mph limits, we have to re-contextualise the limits within the broader picture: it has to be seen as a way to change social norms, to not only prevent road casualties, but also enable people to live healthier, happier lives, and make our communities stronger. If the public and local and national policy makers begin to understand 20mph in this way, we can bring about genuine change on our streets.

Brake’s GO 20 campaign

Brake believes everyone – adults and children – should be able to walk and cycle in their communities, for their health and enjoyment, and as a sustainable way to get about, without being put in danger. That’s why Brake launched the GO 20 campaign: to put people’s safety first, and empower us all to enjoy healthy, active lifestyles.

Brake is part of a broad coalition of charities under the GO 20 coalition calling for 20mph limits to become the norm in our cities, towns and villages, making them safer, healthier, more sociable places.

Ultimately, we want the government to change the national default urban speed limit from 30mph to 20mph. Changing the default would end the postcode lottery and remove the need for local authorities to make legal orders, run separate awareness campaigns and install repeater signs. It may also improve compliance, as 20mph becomes the new norm.

In the meantime, we support local authorities’ work implementing widespread 20mph limits, and we continue to raise awareness among drivers about the importance of slowing down to 20mph or below around homes, schools and shops, even where the limit is still 30mph. Visit www.brake.org.uk/go20

Recommendations:

- Change the urban default limit to 20mph: this is the only way that the benefits of 20mph limits can be fully realised, changing norms to help bring about safe streets, a cleaner environment and healthier, happier communities.
- In the meantime, remove red tape to make it easier for local authorities to GO 20: factors identified as putting off authorities from GOing 20 should be changed, with measures that do not require changing primary legislation:
  - Remove the requirement for repeater signs on 20mph streets.
  - Revise guidance on setting local speed limits to make it less prohibitive around introducing 20mph limits, particularly the part about current average speeds being below 24mph.
- Make clear the potential of 20mph limits to benefit road safety (especially for pedestrians and cyclists), the environment, health and community: central government, councils, organisations and the public should be made aware of the broader benefits of 20mph limits.
Towards changing the default urban speed limit to 20mph.