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accidents don't have to happen

A Guide to 20mph zones and limits

THINK!

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Executive Summary

The purpose of this guide is to give a brief introduction to 20mph speed limits and zones, present the research that has been conducted on the effectiveness of limits and zones and provide advice on when they are most appropriate. There has been substantial expansion in the number of 20mph schemes throughout Great Britain over the last few decades, beginning with 20mph zones, and in more recent years, 20mph limits.

20mph limits without traffic calming, are most effective where speeds are at 24mph or below. However, they are less expensive than 20mph zones and so can cover larger areas, which may make them a more cost-effective measure, if they are help to reduce collisions and the severity of that do occur. Local communities often support them and limits encourage sustainable travel, such as walking and cycling. They are viewed as an important element of clean air strategies.

20mph zones use traffic calming measures to reduce the adverse impact of motor vehicles on built up areas. The principle is that the traffic calming slows vehicles down to speeds below the limit, and in this way the zone becomes 'self-enforcing'. Speed humps, chicanes, road narrowing, planting and other measures can be introduced to both physically and visually reinforce the nature of the road. Generally, they produce greater speed reductions than limits, but are more costly to implement and so tend to be placed in smaller areas with a history of crashes involving pedestrians and cyclists.

The objective of 20mph roads is to create conditions whereby drivers choose to drive at no more than 20mph thereby reducing the likelihood of collisions, and the severity of any that do occur. Drivers who travel at higher speeds have less time to identify and react to what is happening around them. It takes them longer to stop, and if they are involved in a collision, it is more severe, causing greater injury to any vehicle occupant, pedestrian or rider involved.

Extensive evidence indicates that that speed significantly increases the likelihood of collisions, the chances of those collisions causing injury and the severity of those injuries, and that both 20mph zones and 20mph limits reduce the number and risk of these crashes and the casualties they cause.

The Department for Transport (DfT) commissioned report into the evaluation of 20mph limits, published in November 2018, had several key findings[1]:

- 20mph limits are supported by the majority of residents and drivers
- 20mph speed limits are more effective when they are supported by street design that indicates that a lower speed is appropriate
- There has been a small reduction (less than 1mph) in average (median) speed in areas with a 20mph limit
- Vehicles travelling at higher speeds before the introduction of the 20mph limit have reduced their speed more than those already travelling at lower speeds
- There was a small but statistically significant increase in reported levels of cycling and walking.

[1] DfT (2018), 20mph research study - process and impact evaluation: headline report, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/757307/20mph-headline-report.pdf- accessed June 2023

The evaluation also noted that there was no evidence yet to conclude that there had been a significant change in collisions and casualties following the introduction of 20mph limits in residential areas. However, this may change as more data becomes available.

This guide summarises the recent evaluation evidence and experience of local authorities about 20mph limits and zones.

Introduction

In 2022, 770 people were killed, 20,467 were seriously injured, and 79,392 were slightly injured in reported road collisions on built up roads in Great Britain[2]. A large proportion of these collisions happened on roads with a 30mph speed limit.

Table one: Number of casualties, by severity, on built-up roads and percentage of collisions by speed limit on all built up roads in the UK (2022)

Speed Limit (mph)	Fatal	Seriously injured	All casualties
20	68	3,260	18,453
30	532	14,422	69,727
40	170	2,785	12,449

In 2022, speed limit compliance was generally lower on 30mph roads compared to motorways and national speed limit roads with 50 per cent of car drivers exceeding the speed limit on 30mph roads; 45 per cent on motorways and 11 per cent on national speed limit roads. Compliance with speed limits is even lower on 20mph roads. Under free flow conditions, 85 per cent of car drivers exceeded the speed limit on 20mph roads, with 16 per cent exceeding it by 10mph or more. It is important to note that this data is based on a sample of automatic traffic counters and may not represent the typical speed for all 20mph roads[3].

A survey conducted in 2017 with 2,000 UK drivers revealed that over half (52 per cent) admitted to driving at speeds of 25mph or higher in a 20mph speed limit area. Additionally, 26 per cent admitted to regularly exceeding the speed limit in 20mph zones at least once a week. Among different age groups, individuals aged 25-34 were most likely (73 per cent) to drive at speeds of 25mph or higher in a 20mph speed limit, while those aged 55-64 were least likely (45 per cent)[4].

We know that driving at higher speeds significantly increase the likelihood of sustaining injuries in a collision. Research has consistently shown that the risk of pedestrians being killed in a collision rises with higher impact speeds, although the specific risk levels may vary across studies. The risk of fatality for pedestrians struck by cars increases gradually until impact speeds reach around 30mph. Beyond this speed, the risk increases rapidly. For instance, a pedestrian hit by a car driver traveling at 30-40mph is three-and-a-half to five-and-a-half times more likely to be killed compared to someone struck by a car traveling below 30mph[5].

[2] Department for Transport (2023) Table RAS0301: Casualties by speed limit, built-up and non-built-up roads https://www.gov.uk/government/statistical-data-sets/reported-road-accidents-vehicles-and-casualties-tables-for-great-britain#geographical-breakdowns-ras04 : Accessed 02/10/2023

[3] DfT (2023), Vehicle speed compliance statistics for GB: 2022, https://www.gov.uk/government/statistics/vehicle-speed-compliance-statistics-for-great-britain-2022/vehicle-speed-compliance-statistics-for-great-britain-2022#:~:text=As%20shown%20in%20Figures%2013a,limit%20by%20more%20than%2010mph: Accessed 02/10/2023

[4] Brake (2017) 'More than half of UK drivers admit to speeding in 20mph areas' https://www.highwaysindustry.com/more-than-half-of-drivers-admit-breaking-20mph-speed-limit/: Accessed 02/10/2023

[5] Rosén, (2011) 'Literature review of pedestrian fatality risk as a function of car impact speed', Accident Analysis and Prevention, 43, 2011

20mph roads in the UK

The purpose of 20mph limits is to create conditions in which drivers naturally choose to drive at around 20mph because of the nature of the area. Enabling drivers to drive at lower speeds, meaning that they can react and identify what is happening around them means that if they are involved in a collision, it is likely to be less severe and cause less serious injury to the occupants of the vehicle and any other road user involved.

In 1999, the Road Traffic Regulation Act (Amendment) Order 1999 introduced changes to the law, granting Highways Authorities more flexibility in implementing two distinct types of 20mph speed areas: 20mph limits and 20mph zones.

20mph limits are areas where the speed limit has been reduced to 20mph but there are no physical measures to reduce vehicle speeds within the area. Drivers are alerted to the speed limit with 20mph speed limit repeater signs.

20mph zones use traffic calming measures to reduce the adverse impact of motor vehicles on built up areas. The principle is that the traffic calming slows vehicles down to speeds below the limit, and in this way the zone becomes 'self-enforcing'. Speed humps, chicanes, road narrowing, planting and other measures can be introduced to both physically and visually reinforce the nature of the road.

There are four main techniques to traffic calming programmes:

- **Vertical deflections** - these are seen as the most effective and reliable of the speed reduction methods, techniques include road humps, speed tables, speed cushions and rumble strips
- **Horizontal deflections** – generally classified as chicanes; can be used in isolation or combined with vertical deflections
- **Road narrowing** – the effectiveness of this measure in controlling speed can be increased if the carriageway width is reduced to a single lane, depending on the balance of the opposing traffic flows. The extra space created by road narrowing can be used to provide widened footways, dedicated cycle lanes, formalised parking bays and bus lanes
- **Central islands -** central islands have only a limited effect on reducing speeds unless combined with another measure such as a chicane. They do, however, provide useful pedestrian refuges.

The Department for Transport's current guidance is set out in Setting local speed limits (DfT Circular 01/2013). The guidance encourages traffic authorities to consider implementing more 20mph limits and zones, in urban areas and built-up residential streets to enhance the safety of cyclists and pedestrians and to create conditions in which motorists drive at around 20mph as a result of traffic calming measures or the nature of the road. It also advises that 20mph limits over a larger number of roads should be considered where mean speeds at or below 24mph are already achieved.

The guidance sets out several important factors when considering what is an appropriate speed limit:

- history of collisions, including frequency, severity, types and causes
- road geometry and engineering (width, sightlines, bends, junctions, accesses and safety barriers etc.)
- road function (strategic, through traffic, local access etc.)
- composition of road users (including existing and potential levels of vulnerable road users)
- existing traffic speeds and;
- road environment, including level of road-side development and possible impacts on residents (e.g. noise, or air quality).

Many local authorities are adopting 20mph limits to reduce road risk, promote active travel, and improve air quality. To be effective, drivers must be aware of and comply with these limits, and this may require a change in behaviour and speed choice. It is essential to have a coordinated strategy to inform road users about 20mph limits and involve relevant stakeholders in the development of 20mph roads.

There has been substantial expansion in the number of 20mph schemes throughout England, with schemes in Bristol, Birmingham and London as well as schemes in Wales and Scotland. To assist Local Highway Authorities when reviewing and deciding appropriate speed limits, the Department for Transport have a speed limit appraisal tool, which can be accessed here.

Scotland

In January 2015, the Scottish Government published their Good Practice Guide in relation to the setting of 20mph speed restrictions (updated 2016). The document aims to provide greater clarity on the options available to local authorities in setting 20mph speed restrictions throughout Scotland. Whilst encouraging consistency across the country, local authorities the have option to introduce them near schools, in residential areas and in other areas of our towns and cities where there is a significant volume of pedestrian or cyclist activity. It also aims to encourage local authorities to set 20mph speed restrictions, where appropriate.

Local authorities have several options when considering introducing a 20mph speed restriction, including:

- 20 mph speed limit zones
- 20 mph limits
- Variable and part-time 20 mph limits

The Scottish Government announced plans for 20mph to be the norm on built-up roads by 2025[6].

Wales

In July 2022, legislation to lower the default national speed limit on residential roads and busy pedestrian streets from 30mph to 20mph was approved by the Senedd[7]. The aim of introducing the 20mph speed limit is to reduce road collisions and noise and encourage people to walk or cycle. The new 20mph limit will came into force in September 2023. The new legislation does not apply a blanket speed limit on all roads, it will make the default limit 20mph, leaving local authorities to engage with the local community to decide which roads should remain at 30mph.

The rationale for reducing speed limits was in part to reduce traffic speeds and therefore the number and severity of collisions and also to be a stimulus for driving behaviour change. The speed reductions aim to help the Welsh Government realise its vision for walking and cycling to be the natural mode of choice for short everyday journeys[8].

[6] The Scottish Parliament, The Restricted Roads (20 mph Speed Limit) (Scotland) Boll, https://archive2021.parliament.scot/parliamentarybusiness/currentcommittees/110202.aspx: Accessed 02/10/2023
[7] Senedd Wales (2022), SL(6)228 – The Restricted Roads)20 mph Speed Limit) (Wales) Order 2022, https://business.senedd.wales/mgIssueHistoryHome.aspx?IId=39677: Accessed 02/10/2023
[8] Transport for Wales (2023), Default 20mph speed limit on restricted roads Phase 1, Interim monitoring report, https://tfw.wales/sites/default/files/2023-03/Phase-1-20mph-Interim-Monitoring-Report_Final-publish-17-March.pdf: Accessed 02/10/2023

Evidence on 20mph speed limits

In 2014, Atkins, an engineering consultancy firm, was commissioned by the Department for Transport (DfT) to evaluate the effectiveness of 20mph speed limits without physical traffic calming measures[1]. The evaluation focused on 12 case study schemes in England and comparable areas with a 30mph speed limit.

It had long been thought that most residents and drivers support 20mph schemes, and this study confirmed it. However, there was a concern amongst members of the public regarding a lack of enforcement of 20mph limits and a view that the chance of being caught exceeding the speed limit is very small.

Overall, the introduction of 20mph limits led to a small reduction in median speed (0.7mph in residential areas and 0.9mph in cities), but vehicles travelling at higher speeds before the change of speed limit reduced their speed more than those already travelling at lower speeds. This confirmed what had been found in previous research from other countries.

The Atkins study did not gather enough evidence to conclude that in residential areas the introduction of 20mph limit had led to a significant change in casualty and collision rates, but this may change as more data becomes available. Despite this, there was a small but statistically significant rise in reported levels of cycling and walking. Five per cent of residents reported walking more and two per cent said they were cycling more since the introduction of 20mph limits.

Portsmouth[9]

A study conducted in 2007 found that reducing the speed limit from 30mph to 20mph on 94 per cent of the roads in Portsmouth resulted in an average speed reduction of 1.3mph. The reduction varied between 0.6mph and 1.7mph, with the average speed dropping from 19.8mph to 18.5mph. The study also reported a 21 per cent decrease in reported injuries of all severities, although there was a slight increase in killed or seriously injured casualties. The impact on pedestrian activity was inconclusive.

Bristol

Bristol City Council piloted 20mph limits using various measures, including speed limit signs, communications campaigns, education initiatives, and road markings. Two years later, speed surveys showed reduced mean daytime speeds on 65 per cent of the 20mph limit roads. Residential roads experienced an average speed reduction of 0.4mph, while main roads saw a larger reduction of 1.7mph. Casualties slightly decreased in one pilot area but increased in another, although the data was limited.

The key lessons learned were that most people living in the pilot areas wanted safer and more pleasant streets, conducive to walking and cycling. The results suggested that 20mph limits, when introduced with community engagement, communication, and driver education, can influence travel mode choices. Differentiating between streets with shops, schools, and homes (where pedestrian activity is currently suppressed) and arterial routes (where speed has a lesser impact on communities) was also highlighted as important[10]. Support for 20mph limits

[9] Interim Evaluation of the Implementation of 20 mph Speed Limits in Portsmouth , DfT, 2010, http://www.wirralpedestrians.org.uk/files/20mphzoneresearch.pdf : Accessed 02/10/2023

[10] 20mph Speed Limit Pilot Areas: Monitoring Report', Bristol City Council, 2012 http://www.bristol20mph.co.uk/wp-content/uploads/2016/06/20mph-Monitoring-Report-pilot-areas-2012.pdf - accessed June 2023

among residents ranged from 70 per cent to 82% per cent but driver attitudes did not always align with behaviour [11].

A recent evaluation of the Bristol 20mph limit scheme showed a statistically significant 2.7mph decrease in vehicle speeds on roads where the 20mph speed limit was introduced. In areas that had 30mph limits, there was a statistically significant but negligible reduction in speed (0.04 mph). The evaluation estimated that the scheme resulted in the avoidance of 4.53 fatal, 11.3 serious, and 159.3 slight injuries annually, leading to cost savings [12].

Edinburgh[13]

The implementation of the city-wide 20mph speed limit intervention was associated with meaningful reductions in traffic speeds but not volume. The reduction observed in road traffic speed may act as a mechanism to lessen the frequency and severity of collisions and casualties, improve road safety, and improve liveability[14].

'Before' and 'after' speed surveys found that where the speed limit was reduced to 20mph, 'before' speeds fell by an average of 1.9mph. Where the speed limit remained at 30mph, the average reduction in speed was 0.8mph. Some locations with an average 'before' speed over 24mph saw an average fall of 3.3mph. However, there were slight increases in speeds in some locations and some areas continued to have average speeds over 24mph, despite the reduction of the speed limit to 20mph.

The 20mph speed limit resulted in an overall reduction in speeds in most cases. Although 75 per cent of the locations still had average speeds of more than 20mph, in all but four of the locations, speeds were below 24mph. There was also strong residential support for 20mph limits to improve safety for children walking around the area and playing in the street and walking and cycling conditions. In the following year, there were lower vehicle speeds and there was a seven per cent increase in journeys by foot, a per cent per cent increase in journeys by bicycle and a three per cent reduction in journeys by car.

Hampshire

In 2022, Hampshire County Council conducted a further review into the 20mph speed limits, building on previous reports from 2018. The 2022 review found that there was mixed support for 20mph zones, however, this varied across the county. Most people who supported 20mph limits cited safety and to slow speeding traffic as the main priorities, the majority with didn't support 20mph limits stated that they were unnecessary and would be ignored[15]. The review found that on average, the limits produced a reduction in speed of 0.7mph. It also found that whilst there had been a reduction in the number of collisions, this was not a statistically significant change.[16]

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[11] Support and compliance with 20 mph speed limits in Great Britain', Transportation Research Part F: Traffic Psychology and Behaviour, Tapp et al, 2015.
[12] The Bristol Twenty Miles Per Hour Limit Evaluation (BRITE) Study. Project Report. Pilkington et al, 2018.
[13] Turley, M. (2013) South Central Edinburgh 20mph Limit Pilot Evaluation, Transport and Environment Committee, August 2013. https://www.edinburgh.gov.uk/downloads/file/25176/south-central-edinburgh-20mph-limit-pilot-evaluation-2013 : Accessed 02/10/2023
[14] Nightingale, G et al (2021), Evaluating the citywide Edinburgh 20mph speed limit intervention effects on traffic speed and volume: A pre-post observational evaluation, https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0261383: Accessed 02/10/2023
[15] Hampshire County Council (2022), 20mph speed limit review. Key findings – October 2022, https://democracy.hants.gov.uk/documents/s104349/Appendix.pdf: Accessed 02/10/2023
[16] Hampshire County Council (2023), 20mph task and finish group: Outcomes, https://democracy.hants.gov.uk/documents/s104348/Report.pdf: Accessed 02/10/2023

20mph zones

The first widespread evaluation of 20mph zones in the UK was carried out by TRL in 1996[17]. It found that injury collisions were reduced by 60 per cent, and child injury collisions were reduced by 67 per cent. The evaluation did not find evidence that collisions increased on surrounding roads due to drivers changing their route. There was a decrease in traffic of 27 per cent in the zones during the evaluation period, but the authors attributed a large part of this to bypasses which were also built in conjunction with some of the schemes to take through traffic away from the area.

A major review of road casualties in London between 1986 and 2006 was published in the BMJ in 2009[18]. It demonstrated that 20mph zones reduced the number of casualties by over 40 per cent (41.9 per cent). The 20mph zones were slightly more effective in preventing fatal or serious injuries to children, which were reduced by half (50.2 per cent). There was a smaller reduction in casualties among cyclists than any of the other groups of road users studied, with a reduction of 16.9 per cent.

The analysis showed that the reduction in road injuries in 20mph zones occurred at a greater rate than the overall trend of reduction in casualties in London, and that there was no displacement in collision risk to roads close to the 20mph zones.

[17] Webster, D. C. and Mackie, A. M. (1996) *Review of traffic calming schemes in 20 mph zones*, UK: TRL.
[18] Grundy, C. et al (2009) 'Effect of 20 mph traffic speed zones on road injuries in London, 1986-2006: controlled interrupted time series analysis', *British Medical Journal,* 2009; 339:b4469.

Reduction in traffic flow

20mph zones and limits can also have several other benefits, such as a reduction of traffic flow in the area. Although results of studies do vary, it is generally suggested that traffic volumes reduce following the implementation of a 20mph zone or limit.

Between 2007 and 2008, levels of motorised traffic in Portsmouth 20mph areas fell by three per cent, which was higher than the national average reduction in traffic. However, the report concluded that data suggested that traffic had not re-routed systematically from the roads subject to 20mph limits to main roads on the cordon[19]. A 2014 report suggested that there is a reduction in traffic volumes of 5.2 per cent for 20mph areas without traffic calming and 13.4 per cent for areas with traffic calming[20]. A 2022 review of 20mph speed limit interventions in Belfast also found that there was an overall reduction in traffic volumes in 20mph limit sites[21].

Traffic volumes appear to generally decrease on 20mph roads, although this impact is highly variable and depends on the characteristics of the area. The level of motor vehicle traffic is an underpinning cause of injury on the roads, with research indicating that traffic volume is predictive of the number of cyclist and pedestrian injuries. This means that reducing traffic volume has the potential to improve cycle safety, pedestrian safety, and road safety in general.

Lower traffic speeds and health

A 2019 study aimed to investigate the effects of 20mph zones and limits on public health outcomes such as collisions and air quality. The results of the study suggest that 20mph zones have a very positive effect on public health outcomes. Overall, research does indicate that 20mph limits are beneficial, but further evaluation is needed, with the use of comparison groups, to identify the specific public health effects.

Research that investigates the effects on non-road safety related public health outcomes, such as pollution, is limited. It is possible that 20mph zones and limits could increase pollution, as some vehicles will operate inefficiently at low speeds. However, it is also possible that reduced speeds encourage smoother driving and reduced acceleration, which reduces emissions and therefore has no net negative impact on exhaust emissions[22]. Regardless, any negative effects could be seen as insignificant when considering the road safety benefits found as a result of 20mph zones. Some studies showed that 20mph interventions resulted in individuals feeling safer and calmer in areas that were previously full of high-speed traffic, encouraging them to walk and cycle more[23].

Local Highway Authorities should consider the type of traffic calming measure used within 20mph zones, as some features can lead to more vehicle pollution than others. This is illustrated in a report published by Imperial College London which explored the effects of a London 20mph speed restriction on vehicle emissions. It was found that

[19] Atkins (2010) ' Interim Evaluation of the Implementation of 20 mph Speed Limits in Portsmouth' URL: http://www.wirralpedestrians.org.uk/files/20mphzoneresearch.pdf: Accessed 02/10/2023

[20] Steer Davies Gleave (2014) 'Research into the Effectiveness of 20mph speed limits and zones', http://www.roadsafetyknowledgecentre.org.uk/downloads/20mph-reportv1.0-FINAL.pdf: Accessed 02/10/2023

[21] Hunter, R et al (2022), Investigating the impact of a 20 miles per hour speed limit intervention on road traffic collisions, casualties, speed and volume in Belfast, UK: 3 year follow-up outcomes of a natural experiment, https://jech.bmj.com/content/77/1/17: Accessed 02/10/2023

[22] TfL (2018), Speed, emissions and health.the impact of vehicle speed on emissions and health: an evidence summary, https://content.tfl.gov.uk/speed-emissions-and-health.pdf: Accessed 02/10/2023

[23] Cleland CL, McComb C, Kee F. Effects of 20mph interventions on a range of public health outcomes: A meta-narrative evidence synthesis [published online ahead of print October 4, 2019]. Journal of Transport & Health. 2019. doi: 10.1016/j.jth.2019.100633.

cars can produce up to 98 per cent more nitrogen oxides and up to 64 per cent more carbon dioxide when driving over a speed bump as opposed to a speed cushion (these are shallower and do not span the entire width of the road)[24].

Assessment of any unintended negative consequences

Vehicle damage

Research to evaluate the impact on road humps on both vehicle damage and the likelihood of occupant injury by TRL and Millbrook[25] included testing vehicles on speed cushions and road humps and creating computer models of vehicles and their occupants.

The tests did not show evidence of any vehicle damage from the humps or significant and permanent changes to the vehicle's suspension systems. The report concluded that the levels of discomfort caused by the humps were generally acceptable if they were traversed at an appropriate speed (15-20mph) and that the forces on the spine were an order of magnitude smaller than what typically causes an injury. However, some people with conditions such as degenerative discs or weak bones are more susceptible to an injury.

Emergency services response times

TRL research looked at the average speed of a fire tender running over different types of traffic calming in an estate in Surrey[26]. The authors estimated that on average, traffic calming measures caused a time delay of 1.25-1.40 seconds, and that the average speeds were lowest over flat top humps, and highest over speed cushions.

When implementing 20mph zones, consultation with the emergency services, as well as the local community would be beneficial to identify any issues before the traffic calming is put in. This would help to provide safer roads and consider the needs of the emergency services, or to identify other ways to ensure rapid response times without losing the significant road safety benefits of a 20mph zone.

It is important that communities, and other stakeholders, know what they are getting from a 20mph zone or limit and have a say in their development. Results from the Inner-City Road Safety Demonstration Project[27] highlight that residents often had concerns about the amount of available on street parking, and proposals which reduced it were opposed. There was both opposition and support for traffic calming features, with greater levels of support for it in residential areas. One important finding from the demonstration project was that consultation must be 'right first time'.

[24] Transport and Environmental Analysis Group (2013) An evaluation of the estimated impacts on vehicle emissions of a 20mph speed restriction in central London. Centre for Transport Studies, Imperial College London. https://docplayer.net/21571182-An-evaluation-of-the-estimated-impacts-on-vehicle-emissions-of-a-20mph-speed-restriction-in-central-london.html: Accessed 02/10/2023

[25] Kennedy, J. et al (2004) *Impact of road humps on vehicles and their occupants,* UK: TRL.

[26] Boulter, P. G. et al. (2001) *The Impacts of Traffic Calming Measures on Vehicle Exhaust Emissions*, UK: TRL.

[27] DfT, (2011), *Inner City Road Safety Demonstration Project - Final Report,* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/3732/icsdpreport.pdf : Accessed 02/10/2023

RoSPA's Policy Position on 20mph Zones and Speed Limits

Inappropriate speed is one of the most serious road safety problems on Britain's roads and causes death and injury to thousands of people each year.

A coordinated speed management strategy must include education, training and publicity, highway engineering and design, vehicle engineering and enforcement measures. Setting appropriate speed limits is an important part of this strategy.

20 mph zones

RoSPA strongly supports the use of 20mph zones as they are an effective means of reducing road crashes and casualties. They are very effective at protecting our most vulnerable road users, including children, pedestrians and cyclists, and significantly decrease the risk of being injured in a collision. RoSPA encourages their greater use, especially in residential areas.

20 mph limits

RoSPA supports and encourages the wider use of 20mph limits. They have been shown to reduce traffic speed, although not as much as 20mph zones with traffic calming. However, they are considerably less expensive to implement, which means that wider areas can be covered. They also provide additional benefits, such as encouraging more physical activity, such as walking and cycling. They can also greatly improve the character of a residential area and quality of life of the residents.

20mph limits are most appropriate for roads where average speeds are already low, below 24mph, and the layout and use of the road also gives the clear impression that a 20mph speed or below is the most appropriate.

Although a high proportion of urban roads are suitable for 20mph limits, RoSPA does not believe that 20mph speed limits are suitable for every road in a local authority area. They should be targeted at roads that are primarily residential in nature and on town or city streets where pedestrian and cyclist movements are high (or potentially high), such as around schools, shops, markets, playgrounds and other areas. Roads which are not suitable for 20mph limits are major through routes.

Local Authorities are the bodies responsible for determining where 20mph zones and limits should be introduced

Local Authorities should take advantage of opportunities to introduce 20mph roads where they are needed. 20mph areas should initially be prioritised to places where they are most needed, for example, in areas of social deprivation which have large populations, areas which consistently display collision problems or have other issues which a 20mph zone could alleviate, and in residential areas around locations which are common urban destinations. The need for 20mph zones can be examined when developing safer routes to school.

Speed limits can, and should, be supported by other measures to help drivers drive at safe speeds, and to enforce the limits for drivers who choose to ignore them.

Consultation and engagement with local communities and other stakeholders is of vital importance

Consultation and engagement with local communities and other stakeholders is of vital importance.

Local communities should have input into the scheme's development. Emergency services must be consulted when implementing 20mph zones to ensure that their requirement to use the roads quickly is balanced with the considerable benefits of a 20mph zone.

The underpinning idea behind the 20mph schemes is that the speed limit – if adhered to – reduces the risk of crashes occurring and presents a strong chance of avoiding fatal or serious injuries if one does occur. In built up residential areas, RoSPA believes that 20mph represents the best compromise between mobility and risk.

Other benefits

20mph limits are not just a road safety measure. Therefore, when assessing their value and effectiveness, it is important to consider increases in walking and cycling and improvements in quality of life indicators, such as health improvements, community cohesion and better air quality, as well as reductions in vehicle speeds and road crashes and casualties.

For more information on speed, view our 'Inappropriate speed' factsheet.