

RURAL ECONOMY AND CONNECTIVITY COMMITTEE

RESTRICTED ROADS (20 MPH SPEED LIMIT) (SCOTLAND) BILL

SUBMISSION FROM RAC MOTORING SERVICES

About the RAC

With more than eight million members, the RAC is the oldest and one of the UK's most progressive motoring organisations, providing services for both private and business motorists. As such, it is committed to making driving easier, safer, more affordable and more enjoyable for all road users.

The RAC, which employs more than 1,600 patrols, provides roadside assistance across the entire UK road network and as a result has significant insight into how the country's road networks are managed and maintained.

The RAC is separate from the RAC Foundation which is a transport policy and research organisation which explores the economic, mobility, safety and environmental issues relating to roads and their users.

The RAC website can be found at www.rac.co.uk.

In September 2018, the RAC published its latest [Report on Motoring](#).

Background

The Rural Economy and Connectivity Committee has launched an inquiry inviting views from the public and stakeholders on whether they would support a change in the law to introduce a 20 mile per hour speed limit in built up areas throughout Scotland.

The Restricted Roads (20 mph Speed Limit) (Scotland) Bill would reduce the speed limit on most residential and urban streets (technically known as restricted roads) from 30mph to 20mph. The aims of the Bill include improving pedestrian and cyclist health and safety, and reducing pollution from vehicle emissions.

RAC Response

- **Is reducing the speed limit to 20mph to in 30mph areas the best way of achieving the aims of the Bill?**

The aims of the Bill include improving pedestrian and cyclist health and safety, and reducing pollution from vehicle emissions. The RAC supports the introduction of 20mph limits in areas where there is an urgent road safety need to reduce excessive speeds and where there are high levels of vulnerable road users – typically this would be in densely residential areas with schools and hospitals present. However, we are yet to see conclusive evidence which suggests reducing 30mph limits to a default 20mph limit in built-up urban areas will provide a safer environment.

In November 2018, the UK Government Department for Transport published research it commissioned to evaluate the effectiveness of 20mph (signed only) speed limits¹, based on 12 case study schemes in England and various comparator areas with a 30mph limit in place. The top line findings suggested:

- There is not enough evidence to conclude that there has been a significant change in collisions and casualties following the introduction of 20mph limits in residential areas.
- There is support for 20mph limits from a majority of residents and drivers
- There has been a small reduction in average (median) speeds – however this is less than 1mph.

Additionally, in 2017, Manchester City Council reviewed the decision to roll out 20mph limits across the city after the impact of the limits were called into question². A report suggested that the number of pedestrians and cyclists hurt in accidents fell by more than a third between 2012 and 2016 - but the rate was lower in 20mph zones. The council concluded that it should thus look at the effectiveness of the existing 20mph zones. The cost to the council to set up the zones was £640,000 – it is important that should this Bill be introduced in Scotland that the financial impacts on local councils be also taken into account.

The RAC has evidence to suggest compliance with 20mph limits across the United Kingdom has worsened over recent years as the number of 20mph limits and 20mph zones have increased.

The RAC Report on Motoring³ is an annual survey of a representative cross-section of UK motorists. It enables the RAC to understand both what is on the mind of motorists and also asks a series of self-reporting questions on speed limit compliance (amongst many other road safety issues).

The RAC asked drivers whether they exceed 20mph limits in urban areas. In 2012, 36% of drivers admitted to breaking the 20mph limit, however by 2016, this had risen to 46% admitting to breaking the limit. By 2018, this had fallen back slightly to 39%, however overall, the long-term trend is one of worsening compliance to these urban limits.

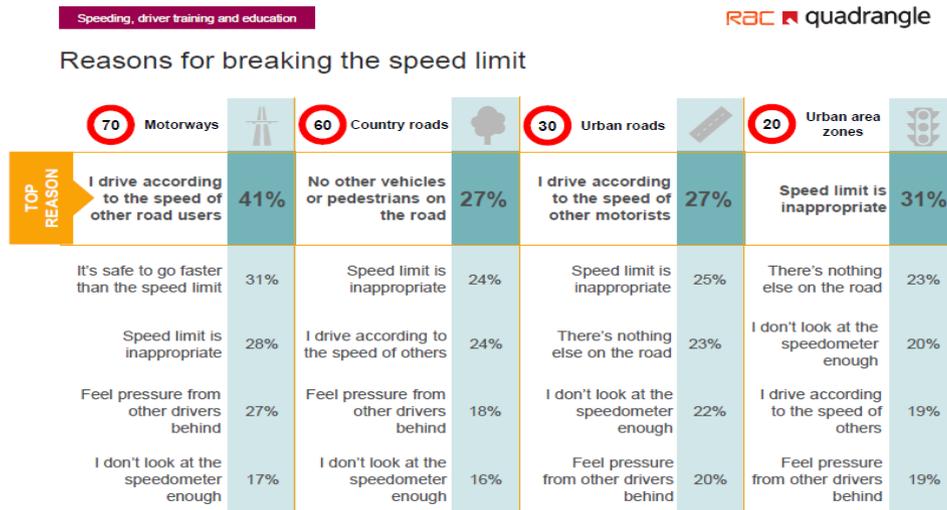
We also ask those who break the 20mph limit why they do so, and the most cited reason was that drivers felt the speed limit was inappropriate for the road. Those saying this is the reason has risen from 26% in 2016 to 31% by 2018. This rise has coincided with an expansion in many UK cities from targeted 20mph limits to more widespread 20mph zones. The full range of other reasons for non-compliance are shown in figure 1:

¹ <https://www.gov.uk/government/publications/20-mph-speed-limits-on-roads>

² <https://www.bbc.co.uk/news/uk-england-manchester-39231956>

³ <https://www.rac.co.uk/report-on-motoring>

Figure 1 – reasons for breaking speed limit – RAC Report on Motoring 2018



Ministers in Scotland should also look at the merits of promoting variable limits to be used on urban roads which could be based upon the time of day and conditions. For example, in the mornings, late afternoon and early evenings when there is likely to be a higher proportion of vulnerable road users. These could be set according to each local authority's assessment of need – and could also benefit in increasing awareness amongst drivers of why 20mph limits are required in certain areas at certain times of the day, perhaps increasing compliance. We would welcome trials of this to determine whether compliance levels increase and if so, the feasibility of further rollout.

Figure 2 – example of the use of part-time 20mph limits/variable limits:



Pollution and vehicle emissions:

The RAC has genuine reservations about claims that reducing vehicle speeds will benefit air quality. The evidence that reducing speeds on urban roads will have any benefit in reducing pollution from vehicle emissions is mixed and much depends on driving style and the flow of traffic. Stop-start traffic and heavy braking and acceleration tends to lead to greater levels of emissions. A study by the City of London found that 20mph limits tended to increase emissions from petrol engines and reduce emissions from diesel engines⁴ when compared to 30mph limits.

Furthermore, the potential impact on urban congestion from reduced speeds and the inevitable longer journey times may increase emissions. We believe this requires closer attention to prove or disprove the environmental and air quality benefits of a shift to 20mph.

Efforts to improve traffic flow and ‘smooth out’ the design of urban road networks to reduce stop start driving behaviours which should be part of any improvements will have a positive impact and reduce emissions.

• How will the 20mph Bill affect you?

The Bill does not affect the RAC directly, however our patrols should always keep to within the speed limit no matter where they operate.

• It is proposed that a national awareness campaign is required to introduce a 20mph speed limit. Do you agree with this? And if so – what shape should any campaign take?

We agree that a national awareness campaign would be required as part of any change to the default limit in urban areas, but we also feel that local authorities should be required to look at road layouts and physical infrastructure which enables smooth and safe traffic flow to encourage compliance with new speed limits. It is important that motorists understand why a speed limit has been set and whether that matches the ‘feel’ of the road – in other words whether the limit is appropriate for the surroundings and road conditions.

Speed humps are an often-favoured mechanism to slow vehicles down, however the RAC has concerns about the use of speed humps as they encourage sharper braking and acceleration and do not promote smooth or environmentally beneficial driving. This increases both tailpipe emissions and particulates from braking. Alternative physical designs (including speed cushions) could be considered – we outline this further in our response.

• Should Police Scotland be required to take additional enforcement action,

⁴ <https://www.cityoflondon.gov.uk/business/environmental-health/environmental-protection/air-quality/Documents/speed-restriction-air-quality-report-2013-for-web.pdf>

over and above that used to enforce the current 30mph limit, following the introduction of a default 20mph limit on restricted roads?

The RAC is generally supportive of the use of speed cameras as a way of enforcing speed limits. Our research suggests that more than half of motorists (53%) in the UK believe that speed cameras have helped improve road safety, with only 20% disagreeing. However, 74% believe that speed cameras represent an easy option for authorities to raise additional revenue from motorists.

Where 20mph limits are used, we would encourage the use of physical features which promote smoother, safer driving. These may include:

- Traffic islands and kerb extensions
- Chicanes which encourage smoother driving, rather than stop start driving
- Flashing advisory signs indicating the speed a vehicle is travelling
- Speed limits painted on to the road surface
- Speed cushions (as opposed to speed humps)

Therefore, we believe a combination of enforcement and traffic calming is likely to encourage better compliance. It is important, however, that the main priority should always be encouraging safe speeds and safe driving standards.

• What kind of timescale is needed for the 20mph speed limit to be introduced?

The length of time required to implement 20mph speed limits is likely to depend on the location and type of road. A phased introduction beginning on those roads where there is a deemed to be the greatest need for 20mph (again near schools and hospitals) and where it is likely to result in greatest compliance is the best likely first step.

However, the RAC reiterates the evidence that shows that following the introduction of 20mph limits in residential areas, there has not been a significant change in collisions and casualties. Therefore, setting a default limit of 20mph may not deliver the reduction in casualties the Bill hopes to achieve and may adversely impact upon journey times on some routes.

• Do you have any comments on the impact that the Bill might have in relation to sustainable development, or island, rural or remote communities?

The RAC's 2018 Report on Motoring found that compliance with 20mph limits amongst those that live in rural communities was better than the UK average overall, and that fewer respondents in rural communities deemed it acceptable to travel 25mph in a 20mph zone. As expected, the data also suggests that a greater number of those living in rural communities do not drive on urban roads where 20mph is set as a limit. See figures 3 and 4 for data comparisons with the UK average:

Figure 3 – Self reporting compliance (UK average vs rural & village respondents)

And how often do you break the speed limit, if at all? Please answer for each road category - Urban areas - 20mph zones	UK Average	Rural & village respondents
Net – frequently and occasionally	39%	32%
Net – Never	57%	61%
I don't drive on this type of road	4%	7%

Figure 4: Acceptability to travel 25mph in a 20mph zone (UK average & rural & village respondents)

“It is acceptable to travel 25mph on residential roads with a speed limit of 20mph”	UK average	Rural & village respondents
Net disagreement	66%	75%
Net agreement	20%	14%

This data indicates that while the number of people that live in rural communities that claim to never use urban roads where 20mph limits are set is low, the proportion is higher than the UK average as a whole.

Should the Bill be passed into law in Scotland, the Scottish Government should be mindful that for a greater proportion of drivers in rural Scotland, these limits are likely to be a much newer phenomena.