

## RURAL ECONOMY AND CONNECTIVITY COMMITTEE

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

SUBMISSION FROM **Brake, the road safety charity**

#### Introduction

1. Brake fully supports a reduction in the default speed limit to 20mph on restricted roads in Scotland for the following reasons:
  - 20mph is widely accepted as the most appropriate vehicle speed limit for population dense areas;
  - Lower speeds help create a safer environment for active travel, which, in turn, delivers improved health outcomes through increased exercise and pollution reduction;
  - There is public backing for the introduction of 20mph limits.
2. It is important to note that the success of the policy will be dependent on the delivery of a successful awareness/communications campaign and enforcement strategy.
3. The following sets out Brake's response to the questions in the Committee's call for evidence.

#### Is reducing the speed limit to 20mph the best way of achieving the aims of the Bill?

4. The below details Brake's response to this question in the context of the aims of the bill:

#### Enhancement of Road Safety

5. Speed is a factor in all road crashes as the faster a vehicle is travelling, the longer it takes to stop and the greater the impact in the event of a collision. Brake has long called for a reduction in the national default limit in built-up areas from 30mph to 20mph to enhance road safety. 20mph is widely accepted as the safest speed in built up areas, with the World Health Organisation emphasising the need for 20mph limits, stating that in areas where '*motorised traffic mixes with pedestrians, cyclists, and moped riders, the speed limit must be under 30 km/h (20mph)*' due to the vulnerability of these road users.<sup>1</sup>
6. The road environment, particularly in built-up areas, which have greater population and road user density, is unpredictable and if something unexpected happens on the road ahead – such as a child stepping out from between parked cars – a vehicle's speed will determine whether the driver can stop in time and, if

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<sup>1</sup> [Managing Speed, Page 8](#), World Health Organisation, 2017

they can't stop, how hard they will hit. Reducing default limits to 20mph on restricted roads will mean that if someone unexpectedly steps into the road in front of a car travelling at the limit, the car's stopping distance, and the impact of any collision, will be much reduced than if the car was travelling at the 30mph limit, thereby contributing to a safer road environment. As a comparison, stopping distances at 20mph are 40 feet, or three car lengths, compared to 75 feet, or six car lengths, at 30mph.<sup>2</sup> Research by TRL has also shown that a 1mph reduction in the average speed of a road leads to a 5% decrease in the collision rate, so simply put the lower the speed of the vehicles on a road, the safer it is.<sup>3</sup>

### **Change in driving culture and promoting compliance**

7. Lowering the national default limit would instantly change the way that drivers think about their speed and driving behaviour by creating a new normal (e.g. driving which was previously deemed within the law, travelling between 20-30mph in urban areas, would now be considered illegal behaviour). However, a change in the law alone would likely not be enough to achieve speed compliance.
8. Acceptance of 20mph limits is broadly high. The recent Atkins report on 20mph found that overall, most residents (78%) and non-resident drivers (67%) in areas with 20mph limits felt that 20mph was an appropriate speed for their areas.<sup>4</sup> Furthermore, a 2010 Brake report on 'Speed' found that 56% of drivers thought that there should be 20mph limits in all urban areas used by high numbers of people on foot and bicycles.<sup>5</sup>
9. Regarding compliance, the Government's Vehicle Speed Compliance statistics, indicate that 86% of cars exceed the speed limit on 20mph roads. However, it is important to note that these measurements are taken under free-flow conditions, which, as the report itself states: "... may not be typical of most 20 mph roads". It is also important to consider that these statistics have been gathered in an environment in which a 20mph speed limit is a localised exception, rather than the national norm. There would be an expectation that the "new normal" of a default 20mph limit would help drive compliance and, additionally, such a policy would be rolled out with an extensive national awareness and enforcement campaign, further heightening the likelihood of compliance.
10. Lessons from the introduction of seat belts and the ban on smoking indicate that creating a new normal (or, in the words of this call for evidence, changing the driving culture) and delivering compliance can be achieved with extensive awareness, communication campaigns, and increased enforcement.

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<sup>2</sup> [Stopping Distances](#), The Highway Code UK, 2014

<sup>3</sup> [The effects of drivers' speed on the frequency of road accidents](#), TRL, 2000

<sup>4</sup> [20mph research study](#), 2018

<sup>5</sup> [Direct Line & Brake Reports on Safe Driving: Speed](#), 2010

## Improved health outcomes and more active travel

11. Lowering the speed limit in built-up areas to 20mph would help achieve more active travel and, as a result, improve health outcomes through increased exercise and pollution reduction.
12. Safety, or perception of safety, is the main deterrent to active travel and getting more people cycling and walking and speed is one of the primary determining factors in road safety. In 2017, 62% of adults aged 18+ in England agreed that “it is too dangerous for me to cycle on the roads” showing that there is a fear factor, potentially speed, preventing people from choosing means of active travel.<sup>6</sup> Lowering the default limit to 20mph would reduce the risk of fatal injury to pedestrians involved in a crash from 5.5% at 30mph to 1% at 20mph, improving road safety and creating a safer environment for people to take up means of active travel.<sup>7</sup> Furthermore, surveys of public attitudes towards traffic speeds carried out in Edinburgh before and after the implementation of a 20mph limit, showed that the percentage of respondents expressing a level of concern for traffic speeds fell from 32% in the ‘before’ survey, with 30mph limits, to 24% in the ‘after’ survey, with 20mph limits, showing that people tend to feel safer with slower speeds.<sup>8</sup>
13. Low levels of walking and cycling have serious public health implications at a time when 1 in 5 children in year 6 and just over a quarter (26%) of adults in England are obese.<sup>9</sup> Persuading people to integrate active travel into their everyday 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. 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.<sup>10</sup> The introduction of 20mph limits helps people to undertake active travel; walking and cycling levels rose in most areas of in Bristol after a pilot 20mph limit was introduced, thus contributing to improved health outcomes.<sup>11</sup>

## Inequality

14. The volume and speed of motorised traffic within an area can negatively impact on local communities, reducing social interaction within neighbourhoods and encouraging an increasing sense of isolation in residents in higher speed areas, particularly those with limited mobility, such as the elderly and those with

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<sup>6</sup> [DfT Walking and Cycling Stats](#), England: 2017

<sup>7</sup> [Relationship between Speed and Risk of Fatal Injury: Pedestrians and Car Occupants, Department for Transport](#), Road Safety Web Publication No. 16, September 2010,

<sup>8</sup> [City of Edinburgh Council, Before and After: Research into the implementation of 20mph speed limits in South Edinburgh](#), 2013

<sup>9</sup> [NHS Statistics on Obesity](#), 2018

<sup>10</sup> [Walking or cycling to work improves wellbeing](#), University of East Anglia, 2014

<sup>11</sup> [20mph speed limit pilot areas: monitoring report](#), Bristol City Council, 2012

disabilities.<sup>12</sup> Reducing default limits to 20mph makes streets and communities more welcoming, through less traffic noise and reduced fear from the volume and speed of traffic. This can, therefore, encourage more community mobility, and may have additional benefits on those who are disabled with limited movement, due to illness or age, who previously would not have felt safe travelling alongside, or crossing, these roads.

## **Pollution**

15. Reducing the speed limit to 20mph would help reduce air pollution - which is attributable to around 40,000 deaths each year in the UK - by tackling one of the main sources of emissions, transport, which accounted for 49% of the UK's Nitrogen Oxide (NOx) emissions in 2016.<sup>13</sup><sup>14</sup> This reduction would be delivered through emission reduction from the vehicles on the road and through the impact of modal shift.
16. Many academics and organisations agree that the best way to reduce vehicle emissions, other than through the shift to ultra-low emission vehicles, is by promoting appropriate driving techniques which avoid constant acceleration and deceleration. NICE recommend 20mph limits to improve air pollution because it encourages smoother driving and reduces 'stop-go' driving, leading to less emissions.<sup>15</sup>
17. Lowering the speed limit to 20mph will also create a safer road environment and reduce the fear that deters people from using means of active travel. This, in turn, will have a beneficial effect on levels of pollution through modal shift. With more people using means of active travel, this will mean less car journeys and thus less emissions, improving air quality.<sup>16</sup>

## **How will the 20mph Bill affect you?**

18. Brake is a national road safety and sustainable transport charity, founded in 1995, that exists to stop the needless deaths and serious injuries that happen on roads every day, make streets and communities safer for everyone, and care for families bereaved and injured in road crashes. Brake promotes road safety awareness, safe and sustainable road use, and effective road safety policies. We do this through national campaigns, community education, services for road safety professionals and employers, and by coordinating the UK's flagship road safety event every November, Road Safety Week. Brake is a national, government-funded provider of support to families and individuals devastated by road death and serious injury, including through a helpline and support packs.

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<sup>12</sup> [Working together to promote active travel: a briefing for local authorities](#), Public Health England, 2016

<sup>13</sup> [Every breathe we take: the lifelong impact of air pollution](#), Royal College of Physicians, 2016

<sup>14</sup> [Emissions of air pollutants in the UK, 1970 to 2016](#), Defra National Statistics Release, 2018

<sup>15</sup> [Air pollution: outdoor air quality and health](#), NICE Guideline, 2017

<sup>16</sup> [Working together to promote active travel: a briefing for local authorities](#), Public Health England, 2016

19. Brake actively calls for a national default limit of 20mph on restricted roads as part of a safe systems approach towards achieving a vision of zero deaths and injuries on our roads. The implementation of this Bill would be a step towards achieving this aim.

**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?**

20. Brake agrees that a national awareness campaign is required to introduce a 20mph speed limit. Without widespread awareness raising, drivers would likely be unaware that the national default limit had changed, potentially leading to non-compliance with the new 20mph speed limit. Behavioural change, even when accompanied by regulation, is a gradual process and therefore a long-term national awareness campaign is required to lead the change.

21. The fundamentals of any good campaign should incorporate a social media strategy/messaging, community engagement to gain public support for the proposals, and wider stakeholder engagement, such as with the police, local businesses, road safety organisations etc. Brake would suggest looking at the examples set by Bristol and Edinburgh when implementing 20mph limits for a guide to best practice for an awareness campaign. The lessons to take away from those pilots, are that there needs to be a willingness to commit to the campaign over a long period of time to achieve compliant behaviours, and that social media and community engagement is key. Lessons should also be learnt from how the lowering of the drink drive limit in Scotland was implemented. The recent study by the University of Glasgow surprisingly found that the lowering of the drink drive limit did not lead to a reduction in road traffic collisions. The study's author suggested that this could be down to a lack of enforcement or public awareness or both, therefore, to avoid a similar negative outcome for any 20mph policy change enforcement and public awareness are key.

**Should Police Scotland be required to take additional enforcement action, over and above that used to enforce the current 30mph limit, following the introduction of a default 20mph limit on restricted roads?**

22. If the introduction of a default 20mph limit on restricted roads in Scotland is to happen, it is crucial to the policy's success that additional enforcement is undertaken by the police to ensure compliance with the new limit (alongside the aforementioned national awareness campaign). As discussed in the Social Marketing Plan drafted for the Bill, enforcement is a key component of getting drivers to comply with the 20mph limit and we recommend that lessons are learnt from the case study on West Midlands Police Force. Brake has consistently called for greater enforcement on the roads through investment by the UK Government in roads policing and would welcome additional enforcement in Scotland.

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

23. We would want to see the 20mph speed limit introduced as soon as is practically possible. Due diligence should, however, be done to ensure that the appropriate infrastructure changes, such as limit signage, are in place, alongside a comprehensive communication and enforcement strategy ahead of the policy's introduction.

**Is there anything else that should be included or excluded from the Bill?**

24. The Bill should include a mechanism to evaluate the short and long-term impact of changing the national default speed limit from 30mph to 20mph. This could include looking at key road safety indicators such as speed limit compliance, casualties, average speeds, bicycle use/miles travelled etc., compiling data and detailed evidence that could then be used to evaluate the effectiveness of the legislation and which can be utilised by other jurisdictions to make the case for a similar change.