

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

POLICY MEMORANDUM

INTRODUCTION

1. As required under Rule 9.3.3 of the Parliament’s Standing Orders, this Policy Memorandum is published to accompany the Restricted Roads (20 mph Speed Limit) (Scotland) Bill introduced in the Scottish Parliament on 21 September 2018. It has been prepared by the Non-Government Bills Unit (NGBU) on behalf of Mark Ruskell MSP, the member who introduced the Bill.

2. The following other accompanying documents are published separately:

- statements on legislative competence by the Presiding Officer and the member who introduced the Bill (SP Bill 39–LC);
- a Financial Memorandum (SP Bill 39–FM);
- Explanatory Notes (SP Bill 39–EN).

POLICY OBJECTIVES OF THE BILL

3. The Bill’s purpose is to reduce the general speed limit on a “restricted road” from 30 mph to 20 mph.

4. In so doing, it makes 20 mph the norm in built-up areas, rather than the exception, while still allowing a limited network of through-routes in towns and cities which are subject to speed limits higher than 20 mph. The Bill is intended to encourage a change in social and cultural attitudes towards road safety by restricting speeds in built-up areas.

BACKGROUND

Historical background

5. Speed limits were first introduced in the early years of motoring, including by the notorious “Red Flag Act” of 1865¹, which imposed a limit of 4 mph in the country and 2 mph in towns, and required all cars to be preceded by an escort carrying a red flag. In 1903², cars were

¹ Locomotive Act 1865, available at: <https://sites.google.com/site/motormiscellany/motoring/law-and-the-motorist/locomotive-act-1865>

² Motor Car Act 1903, available at: <https://sites.google.com/site/motormiscellany/motoring/law-and-the-motorist/the-motor-car-act-1903>

made subject to a 20 mph speed limit, but this was so widely flouted that it was abolished in 1930³. However, the high level of fatalities, particularly in towns, led to this policy being reversed in 1935 with the introduction of a general speed limit of 30 mph for all motor vehicles in built-up areas⁴. With the exception of “blackout” restrictions during World War 2, the general speed limit for built-up areas has remained the same since it was first introduced, despite technological advances in road surfaces and vehicle capabilities, changes in attitude and policy in road and transport planning, and changing expectations of road users.

National speed limits and signage

6. The 30 mph speed limit in built-up areas sits alongside the “national speed limit” – which, for cars, is 60 mph on a single-carriageway road (outside built-up areas), and 70 mph on motorways and most dual-carriageways; for other classes of vehicles, the national speed limit is sometimes lower (e.g. for a goods vehicle over 7.5 tonnes on a motorway, the limit is 60 mph).

7. Signage regulations provide that, where one of the above limits applies, signs indicating that limit are placed only where it first applies (e.g. a 30 mph sign where a road enters a built-up area). Repeater signage is used only to remind motorists where the speed limit on a stretch of road is an exception to these limits (e.g. 40 mph in a built-up area, or 50 mph on a dual-carriageway) – and motorists are therefore expected to observe the “default limit” (30 mph in a built-up area, the national speed limit on other roads) except where signs indicate otherwise.

8. Accordingly, the Highway Code states that roads in built-up areas are 30 mph for all traffic unless signs show a different speed limit. The 30 mph limit differs from the national speed limit in that it doesn’t vary according to the class of motor vehicle.

Classes of roads

9. All roads fall into the following classes:

- Special roads – certain types of traffic are prohibited, under the Highways Act 1980. All motorways are special roads, together with some high-grade dual carriageways.⁵
- A roads – major roads intended to provide large-scale transport links within or between areas.
- B roads – roads intended to connect different areas, and to feed traffic between A roads and smaller roads on the network.
- Classified unnumbered – smaller roads intended to connect together unclassified roads with A and B roads, and often linking a housing estate or a village to the rest of

³ Road Traffic Act 1930, First Schedule, available at:

http://www.legislation.gov.uk/ukpga/1930/43/pdfs/ukpga_19300043_en.pdf. For passenger vehicles (other than heavy motor cars or invalid carriages) with pneumatic tyres, adapted to carry no more than seven passengers and not drawing a trailer (i.e. most cars), there was “no limit”.

⁴ Road Traffic Act 1934, Section 1, available at:

http://www.legislation.gov.uk/ukpga/1934/50/pdfs/ukpga_19340050_en.pdf

⁵ Examples of special roads in Scotland include the A720 Edinburgh city bypass and the A1 (between the junction with the A720 and the Thistly Cross roundabout near Dunbar).

the network. Similar to “minor roads” on an Ordnance Survey map and sometimes known unofficially as C roads.

- Unclassified – local roads intended for local traffic. The majority (60%) of roads in the UK fall within this category

Current legal basis for the speed limit in built-up areas

10. Current provision on speed limits is laid out in Part VI of the Road Traffic Regulation Act 1984.

11. Section 81 of that Act sets the general limit applicable in built-up areas – the current version of the provision first made in the 1934 Act. Subsection (1) states: “It shall not be lawful for a person to drive a motor vehicle on a restricted road at a speed exceeding 30 miles per hour.”

12. Under section 82(1)(b) of the 1984 Act a road is restricted if “... in Scotland, there is 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 Scottish Ministers”.

13. The Restricted Roads (Classification or Type) (Scotland) Regulations 1985 defines restricted roads as classified unnumbered (C roads) and unclassified roads.

14. In addition, other roads may become restricted roads (and hence subject to the general speed limit applicable on such roads) by virtue of an order under section 82(2)(b) of the 1984 Act. Roads that otherwise would be restricted roads (i.e. because they are C class or unclassified and have street-lighting) may be “de-restricted” by an order under section 82(2)(a).

15. Section 84(1) of the 1984 Act allows a traffic authority, by order, to impose a speed limit for motor vehicles on any road (other than a special road). Where such an order is made on a permanent basis (under paragraph (a) of section 84(1)), the road (by virtue of section 84(3)) ceases to be a restricted road for the purposes of section 81(1) – i.e. the general speed limit of 30 mph no longer applies.

16. As a result, every restricted road is subject to a 30 mph limit unless (as a result of an order made under section 84(1)(b) or (c) of the 1984 Act) it has been made subject to another speed limit on a part-time or temporary basis.

17. Within built-up areas, there is a mixture of roads: leaving aside a very small number of urban motorways, these may be A, B, C or unclassified. The A and B-class roads will generally be the through-routes. Most of these are not restricted roads (except where they have been restricted by an order under section 82(2)(b) of the 1984 Act); some are subject to 30 mph (or 20 mph) limits, and some to higher limits (40 or 50 mph). The C and unclassified roads, assuming they are street-lit, will generally be “restricted roads” (except where they have been de-restricted by an order under section 82(2)(a) of the 1984 Act and/or had an alternative speed limit imposed

on them, on a permanent basis, by order under section 84(1)(a) – the effect of which, under section 84(3) is that they are no longer restricted roads).

Speed limits oversight and policy

18. The Scottish Ministers are the traffic authority⁶ for all trunk roads and “special roads” (including motorways) in relation to devolved functions, while the Secretary of State is the traffic authority for such roads in relation to reserved functions. For any other road, the traffic authority is the local authority (council) within whose area the road is.

19. The Local Authorities’ Traffic Orders (Procedure) (Scotland) Regulations 1999 defines the process councils must follow when setting or varying speed limits in accordance with the 1984 Act – including where they wish to lower the speed limit on a road in a built-up area from 30 mph to 20 mph. Councils must also refer to a range of other regulations, guidance and directions. Overall, the process is commonly regarded as expensive, administratively burdensome and time-consuming.

20. Information on traffic orders made by local authorities is held locally so there is no clear data on the number of roads in built-up areas that are subject to a 20 mph speed limit nor on the factors considered in deciding that speed limit.

21. In recent years, a number of local authorities such as Edinburgh, Fife and Clackmannanshire have adopted a strategic approach of making most residential streets within built-up areas subject to 20 mph limits. This requires specifying every exception to the general speed limit (of 30 mph). In Edinburgh, for example, the City of Edinburgh Council (Various Roads, Edinburgh) (20 mph Speed Limit) Order 2016 lists around 2,500 streets in a schedule (divided into six areas according to when the new speed limit came into force).

22. At the national level, the Scottish Government and previous administrations have expressed views on road speeds and specifically on the adoption of a 20 mph limit. In 2006, the then Scottish Executive outlined its vision for local authorities⁷ by stating “The Executive encourages and supports 20 mph limits and zones in situations where there is a particular risk to vulnerable road users”. The Scottish Government in 2009 described its goal as reducing the number of road fatalities to zero and significantly limiting the severity of injury in its strategic vision⁸. In 2010, the Scottish Government published a policy statement⁹ which focused on the needs of all road users and stated that “for residential streets, a maximum design speed of 20 mph should normally be an objective.”

⁶ Section 121A of the 1984 Act, available at: <http://www.legislation.gov.uk/ukpga/1984/27/section/121A>

⁷ *Setting Local Speed Limits: Guidance for Local Authorities*, Scottish Government, ETLLD Circular 2006, available at: <https://www.gov.scot/Publications/2006/08/14134225/0>

⁸ *Go Safe on Scotland’s Roads – it’s Everyone’s Responsibility: Scotland’s Road Safety Framework to 2020*, Scottish Government, 2009, available at: <https://www.gov.scot/Publications/2009/10/01090036/0>

⁹ *Designing Streets: A Policy Statement for Scotland*, Scottish Government, 2010, available at: <https://www.gov.scot/Publications/2010/03/22120652/0>

23. The Bill takes a more proactive approach to achieving the strategic vision of successive administrations by mandating change on a Scotland-wide basis, rather than encouraging local authorities to take action locally.

Roads that will be subject to a 20 mph speed limit as a result of the Bill

24. Classified unnumbered roads (C roads) and unclassified roads, with street lights not more than 185 metres apart, are restricted roads and so would be subject to a change in the general speed limit for such roads from 30 mph to 20 mph.

25. Other roads which do not meet the street light criteria, or which are not C class or unclassified roads, can become “restricted roads” by means of an order under section 82(2)(b) of the Road Traffic Regulation Act 1984. These roads, having been restricted, would also be subject to the Bill’s reduction of the general speed limit on restricted roads from 30 mph to 20 mph.

Roads that will not be subject to a 20 mph speed limit as a result of the Bill

26. A Class C or unclassified road which meets the street light criteria may have had restricted status removed under section 82(2)(a) of the Road Traffic Regulation Act 1984. It is likely that this will have been coupled with the application of a speed limit other than 30 mph to the road. The speed limit on such a road will not be affected by the Bill.

27. Section 84(1)(a) of the 1984 Act allows the speed limit on any road to be varied on a permanent basis, and where such an order is in force the road is not treated as a restricted road for the purpose of section 81 (that is, the default speed limit under that section does not apply).¹⁰ As such, the Bill will not alter the speed limit applying on such a road.

28. Special roads are never restricted roads and so are not subject to this Bill.

POLICY AIMS

Road safety

29. The Bill is designed to serve a number of policy aims, the foremost of which is the enhancement of road safety. This is founded on the premise that lower speeds are safer. It envisions substantially improved road safety for pedestrians and drivers in built-up urban areas, particularly in residential areas, on pavements and in busy public spaces. There is a significant body of research which draws a causal link directly from slower speeds to outcomes such as fewer accidents, fewer deaths, better recovery rates for those injured and fewer long-term, persistent conditions resulting from collisions.

30. Transport Scotland’s *Good practice guide on 20 mph speed restrictions*¹¹ revisits the recommendations made in its initial 2009 report *Go Safe on Scotland’s Roads: it’s Everyone’s*

¹⁰ Section 84(3) of the 1984 Act, available at: <http://www.legislation.gov.uk/ukpga/1984/27/section/84>.

¹¹ *Good practice guide on 20 mph speed restrictions*, Transport Scotland, June 2016, version 2, available at: <https://www.transport.gov.scot/media/38640/20-mph-good-practice-guide-update-version-2-28-june-2016.pdf>

Responsibility as part of a mid-point review, presses for appropriate speeds and sees a strong argument for 20 mph restrictions. The 2016 report renews its commitment to roads which focus on the needs of all road users and recognises that road users such as pedestrians and cyclists are more vulnerable to accidents. It states that 20 mph is the ideal speed limit for residential and built-up areas in Scotland. Furthermore, the document states that “The Scottish Government is committed to encourage initiatives that cut speed, particularly 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.” The *Good Practice Guide* sets out that the Scottish Government’s policy is to “encourage the creation of shared spaces and social streets to encourage active travel and create places that people can enjoy and that for residential streets, a maximum design speed of 20 mph should normally be an objective”.

31. In its *Road Safety Framework Mid-Term Review*¹² in 2016, Transport Scotland committed to Vision Zero, which involves reducing road casualties until Scotland becomes a nation with zero road deaths. The *Mid-Term Review* also identified the introduction of 20 mph zones or limits as a “Priority One”. Similarly, it identified speed as a national priority to tackle.

32. A 2010 Department for Transport (UK) report¹³ found that the risk of fatal injury to a pedestrian rises from under 1% at an impact speed of below 20 mph, to 5.5% at 30 mph and then 30% at 40 mph. It is important to note that this rise is not a linear relationship between higher speeds and higher fatalities, but a steep increase above 20 mph. The Department for Transport¹⁴ suggested that the average speed is currently 25 mph on roads which have a 20 mph limit but that small decrease will help reduce the frequency of road accidents. Further, the Department for Transport reported in 2017¹⁵ that inappropriate speed contributes to 15% of crashes resulting in a serious injury and 24% of collisions that result in a death. An earlier report¹⁶ prepared in 2000 for the Department of the Environment, Transport and the Regions (UK) found that the number of accidents fell by between 4% and 6% for each 1 mph reduction in average speed on the type of urban roads likely to be considered for a 20 mph speed limit.

33. The Royal Society for the Prevention of Accidents (ROSPA) cites a study in Graz, Austria, that showed that 20 mph limits led to a 12% reduction in accidents causing slight injury and a 24% reduction in accidents causing serious injury. It also cites research on the

¹² *Road Safety Framework Mid-Term Review*, Transport Scotland, March 2016, available at:

<https://www.transport.gov.scot/media/1416/ts-road-safety-framework-mid-term-review-march-2016.pdf>

¹³ *Relationship between Speed and Risk of Fatal Injury: Pedestrians and Car Occupants*, Department for Transport, Road Safety Web Publication No. 16, September 2010, available at:

https://nacto.org/docs/usdg/relationship_between_speed_risk_fatal_injury_pedestrians_and_car_occupants_richards.pdf

¹⁴ *Free Flow Vehicle Speed Statistics: Great Britain 2015*, Department for Transport, 2016, available at:

<https://www.gov.uk/government/statistics/free-flow-vehicle-speeds-in-great-britain-2015>

¹⁵ *Table RAS50001: Contributory factors in reported accidents by severity, Great Britain, 2016*, Department for Transport, 2017, available at: <https://www.gov.uk/government/statistical-data-sets/ras50-contributory-factors>. The 15% and 24% figures combine those for “exceeding speed limit” and “travelling too fast for conditions”.

¹⁶ *The effects of drivers’ speed on the frequency of road accidents*, Taylor, M. C., Lynam, D. A. and Baruya, A. 2000, available for download at <https://trl.co.uk/reports/TRL421>. See section 6.2 (Conclusions) on page 34, point 4.

implementation of widespread 20 mph limits in Portsmouth which saw an overall average speed reduction of 1.7 mph and a 21% reduction in casualties.¹⁷ Overall, it concludes:

“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.”

34. A British Medical Journal report in 2009¹⁸ found that the introduction of 20 mph zones (which include traffic-calming measures) was associated with a 41.9% reduction in road casualties. The percentage reduction was greatest in younger children and greater for the category of killed or seriously injured casualties than for minor injuries. The conclusion reached was that 20 mph zones are effective measures for reducing road injuries and deaths.

35. The National Institute for Health and Care Excellence (NICE)¹⁹ in its report on preventing unintentional injuries on the roads, specifically for under 15s, calls for the creation of city or town-wide 20 mph limits and zones on appropriate roads, underpinned by the consideration of factors such as traffic volume, speed and function to decide which roads are appropriate.

36. A review of the 20 mph pilot in Fife²⁰, which included both 20 mph limits and 20 mph zones (with traffic calming measures), examined the road injuries and fatalities over a ten-year timespan from 2003 to 2013 and found an overall reduction of 20% in the number of injuries and fatalities. The figures, which compare rates for the three years prior to introduction and the three years following, show zero fatalities where previously there were three and a fall from 57 serious injuries to 49 and from 245 slight injuries to 194. Taking the rates for children in isolation, the number of slight injuries fell from 89 to 61 and the number of serious injuries fell from 21 to 19.

37. A comprehensive 2018 review²¹, by the University of the West of England, of the 20 mph rollout project in Bristol found that average speeds had reduced by 2.7 mph and concluded that “there had been a reduction in the number of fatal, serious and slight injuries from road traffic

¹⁷ *20 mph zones and speed limits*, ROSPA, November 2017, available at:

<https://www.rospa.com/rospaweb/docs/advice-services/road-safety/drivers/20-mph-zone-factsheet.pdf>

¹⁸ *Effect of 20 mph traffic speed zones on road injuries in London, 1986-2006: controlled interrupted time series analysis*, Grundy et al, British Medical Journal, 2009, available at: <https://www.bmj.com/content/339/bmj.b4469>

¹⁹ *Unintentional injuries on the road: interventions for under 15s*, NICE, November 2010 available at: <https://www.nice.org.uk/guidance/ph31/resources/unintentional-injuries-on-the-road-interventions-for-under-15s-1996292434885>

²⁰ *Safer Communities committee papers*, Fife Council, 21 January 2016, available for download at: <https://www.fifedirect.org.uk/publications/index.cfm?fuseaction=publication.pop&pubid=AF049844-B981-D659-2749C8B3C988157B>. See Tables A and B on page 20.

²¹ *The Bristol Twenty Miles Per Hour Limit Evaluation (BRITE) Study – Analysis of the 20 mph Rollout Project*, Pilkington et al, Bristol Centre for Public Health and Wellbeing, University of the West of England, February 2018, available for download at: <http://eprints.uwe.ac.uk/34851/>. The 2.7 mph reduction was based on Automatic Traffic Count data; Trafficmaster GPS data found a reduction of 0.8 mph; the differences are explained in sections 3.1 and 4.1 of the report.

collisions, equating to estimated cost savings of over £15 million per year.” The City of Edinburgh Council’s evaluation of its pilot of 20 mph limits in south central Edinburgh showed a reduction in average speed of 1.9 mph.²²

38. The risk of injury and death was the most frequently listed concern in the public consultation with almost 40% of respondents explicitly citing an improvement in safety as the sole or main reason to support the proposal.

Change in driving culture and promoting compliance

39. At present, there is a presumption that the speed limit on roads in built-up areas is 30 mph, except where signage indicates that a lower (or occasionally higher) limit applies. The member seeks to reinforce the safety message by setting the general limit for restricted roads at 20 mph. This would make the default for urban driving 20 mph and require local authorities to make the case for increased speeds instead of having a higher limit as the default with local authorities having to make the case to lower it. This approach in itself is set to change the way stakeholders think of appropriate speeds and contribute to a change in driving culture. The member draws parallels between the anticipated change in attitude to 20 mph limits with that of restrictions on smoking in public areas or wearing seat belts.

40. The member is keen that the change in law is preceded by a driver awareness programme and by changes in decision-making at local and government level which help promote the appropriate use of 20 mph speed limits. Research commissioned by the member and delivered by the University of the West of England²³, recommended an approach which combined three strands: targeted enforcement, a population level social marketing “culture change” campaign, and community-level engagement activities. The three would act in synergy and reinforce each other to create powerful behaviour change. This recommendation is in recognition of the fact that driver compliance with 20 mph limits can be very low and that social disapproval of speeding is a key factor in changing the current levels of acceptance. Increasing the levels of disapproval and introducing the clear links between inappropriate speed, collisions and injuries are key in creating a step change in attitudes which is then expected to translate to behaviour modification where drivers lower their speed. At the same time, the positives of supporting 20 mph – which include better safety, opportunities for active travel, encouraging a healthier lifestyle, living in more pleasant surroundings – should be underlined. The member views this as an essential component of implementing the legislation to encourage compliance and for the safety benefits to be realised.

²² “South Central Edinburgh 20 mph Limit Pilot Evaluation”: report to the Transport and Environment Committee for its meeting on 27 August 2013, para 2.14. Available at: http://www.edinburgh.gov.uk/download/downloads/id/7820/south_central_edinburgh_20mph_limit_pilot_evaluation_2013.pdf

²³ Tapp, Alan and Davis, Adrian (2018). *Driver Compliance with 20 mph Limits in Scotland: A Social Marketing Plan*. Available at: <https://greens.scot/files/driver-compliance-with-20-mph-limits-a-social-marketing-plan-finalfinalpdf>

Improved health outcomes and more active travel

41. It is expected that the Bill will improve health outcomes. The aforementioned survival rates and recovery after accidents are immediate positive results. However, in accepting that slower speeds lead to less hazardous environments, it is anticipated that there are also long-term benefits such as an increase in active travel (i.e. travel by bicycle and on foot); a citizenry more engaged in its surroundings through better use of public spaces and amenities; and more opportunities for sports and activities. Outputs such as these are viewed as key in challenging sedentary habits and reducing physical health problems such as obesity as well as supporting positive mental health. A number of other health conditions such as diabetes, asthma and heart disease can also be improved through better movement and regular exercise.

42. Transport Scotland's *Good Practice Guide*²⁴ makes the case for 20 mph limits as a means to protect vulnerable road users (cyclists and pedestrians) and encourage active travel. It notes the advances made by both 20 mph zones, which incorporates other traffic calming measures, and roads which have applied 20 mph limits without any additional measures. Citing Edinburgh's 20 mph limit pilot, it describes a perception of improved conditions for walking and cycling. This is echoed by Sustrans in a recent blog²⁵ which sees 20 mph as a vital step in keeping towns and cities thriving. Aside from the opportunities to encourage active travel, the blog also cites an increase in shop footfall of between 20% and 40%.

43. An evaluation of the South Central Edinburgh 20 mph pilot scheme found that the number of children (of all school ages) walking to school increased from 63% to 65%, there was a threefold increase in the number of such children cycling to school (4% to 12%) as well as a sharp upswing in the number of older primary-age children playing outside unsupervised (31% to 66%)²⁶. These results were cited by the Glasgow Centre for Population Health²⁷ in a report that identified safety concerns and traffic speed as two of the main considerations which influence people's active travel decisions, noting that lower speed limits encourage active travel.

44. There is evidence of increases in active travel in streets with 20 mph speed limits. For example, areas piloting a 20 mph limit in Bristol²⁸ saw an increase of 12% in walking and cycling. This is supported by the 2018 University of the West of England report²⁹ which concluded that more people walked or cycled for 10 minutes or more in their local area most days following the introduction of 20 mph speed limits. It also noted that more children walk (31%) or cycle (59%) to school in these areas.

45. The consultation responses often paired increased active travel with the benefits of living in more pleasant surroundings that were not dominated by motor vehicles. In considering these

²⁴ *ibid.*

²⁵ *Why Sustrans supports 20mph limits*, Sustrans website, March 2017, available at: <https://www.sustrans.org.uk/blog/why-sustrans-supports-20mph-limits>

²⁶ For source, see footnote 22; the figures cited are from para 2.27 (page 11 of the report)

²⁷ *Synthesis report: Active travel in Glasgow - what we've learned so far*, Glasgow Centre for Population Health (Jill Muirie), 2017, available at: http://www.gcph.co.uk/assets/0000/6211/Active_travel_synthesis_WEB.pdf

²⁸ *Greater Bristol Cycling City – End of Project Report*, Better by Bike, June 2011, available at: <https://betterbybike.info/wp/wp-content/uploads/2014/08/Cycling-City-end-of-project-report.pdf>, page 7.

²⁹ *ibid.*

points, the member is confident that a 20 mph limit on restricted roads would bring about increased levels of active travel and do much to tackle poor health.

Inequality

46. A recent Durham University study recognised that transport is a “well-known social determinant of health. There is also a well-established association between socio-economic status (SES) and risk of road accidents, with the lowest SES group in England and Wales being five times more likely to be injured in accidents compared with those in higher SES groups”. The review, which concludes that 20 mph zones and limits are “effective at reducing accidents and injury, traffic speed and volume”, found a lack of research on the likely effect on health inequalities, but suggested that targeting interventions in the most deprived areas may be beneficial.³⁰ NICE makes the point, in its report on preventing injuries amongst under 15s³¹, that “the likelihood of dying as a car occupant is 5.5 times higher if their parents are unemployed than if they have managerial or professional jobs. This ratio exceeds 20 among pedestrians and cyclists.” The NICE report supports this with evidence from an article published in the British Medical Journal³² which argues that the largest factor in the difference in death rates is exposure to danger rather than behaviour in that people from lower socio-economic groups are more likely to live in neighbourhoods with on-street parking, high speed traffic and few or no off-street play areas.

47. As noted previously, the Fife review of the 20 mph pilot³³ found an overall reduction of 20% in the number of injuries and fatalities. However, in the 20 mph zones within the 20% most deprived areas in Scotland, as identified using the Scottish Index of Multiple Deprivation, the number of injuries and fatalities fell by 34%.

48. The Glasgow Centre for Population Health’s analysis of trends in pedestrian and cyclist casualties in Scotland 1999/2003 and 2009/2013, reported by Living Streets³⁴, showed that pedestrian casualties are more likely to result from accidents that take place in the most deprived areas and are more likely to affect pedestrians who live in deprived areas. Child pedestrian casualties were three times higher in the most deprived areas when measured against comparable least deprived zones.³⁵

³⁰ *Go slow: an umbrella review of the effects of 20 mph zones and limits on health and health inequalities*, Cairns et al, Journal of Public Health, Volume 37, 2015, available to download from: <http://dro.dur.ac.uk/13621/>.

³¹ *ibid.*

³² *Deaths from injury in children and employment status in family: analysis of trends in class specific death rates*, Edwards et al, 2006, available at: <https://www.bmj.com/content/333/7559/119>

³³ *ibid.* See Table E on page 22.

³⁴ *A Review of Practice in the Implementation of 20 mph Limit Areas*, Living Streets, March 2015, available at: <https://www.livingstreets.org.uk/media/3468/review-of-current-practice.pdf>, page 5.

³⁵ *Reflections on our learning; transport, active travel and inequalities*, Jill Muirie, Glasgow Centre for Population Health, 2017, presentation to a seminar on Creating Liveable Cities – the role of active and sustainable travel, Glasgow 2016, available at: http://www.gcph.co.uk/assets/0000/6101/Jill_Muirie_Active_Travel.pdf. Original source: Bruce Whyte and Craig Waugh, “Pedestrian and cyclist casualty trends in Scotland”, August 2015, available at: https://www.gcph.co.uk/publications/572_pedestrian_and_cyclist_casualty_trends_in_scotland

49. NICE³⁶ is in favour of implementing 20 mph limits in England and Wales as a means of encouraging active travel and tackling inequality, saying “Implementing 20 mph zones, with priority given to protecting children and young people in disadvantaged areas who face the greatest risk, could lead to a 100% return on investment in the first 12 months.”

Pollution

50. The member expects that the Bill will contribute to a reduction in pollution from vehicle emissions.

51. The picture for reducing emissions and improving air quality is a complex one. There are a number of factors such as the size and type of vehicle engine, the density of traffic, the implementation of wider 20 mph zones or single 20 mph roads as well as the choice of indicators with which to measure pollution or emissions. Reports by respected organisations from academia, groups representing interests such as motorists or cyclists, or businesses give conflicting views on emission levels as a result of a slower speed. However, despite the variance in opinion, most agree that the key point is the use of appropriate driving practices as a means to reduce emissions.

52. According to 20’s Plenty for Us³⁷, “37% of cars on UK roads were diesels. Where a 20 mph limit is implemented the reduction in total NO_x and PM₁₀ emissions is large enough to be the equivalent of taking nearly half of the 63% petrol cars off the roads”.

53. This conclusion was based on research from Imperial College London³⁸ which concluded overall that air quality is unlikely to be made worse by 20 mph limits, and that wear on brakes and tyres, which produces particulate pollution, is likely to be reduced at the lower speed. There is a body of evidence which suggests that congestion is a key factor in increasing pollution. For example, Greener Journeys³⁹ put forward the view that “congestion drastically worsens air quality. In nose-to-tail traffic, tailpipe emissions are four times greater than they are in free flow traffic”. Further, NICE⁴⁰ has set out guidance on the links between traffic related pollution and ill-health and recommends 20 mph limits without physical measures in urban areas where average speeds are already low (below about 24 mph) to avoid unnecessary accelerations and decelerations.

³⁶ *Tackling the causes of premature mortality (early death)*, NICE, 2015, available at: <http://www.hullpublichealth.org/assets/NICE/lgb26.pdf>, page 17.

³⁷ *20 mph limits offer a toxic diesel fume reduction equivalent to taking half the petrol cars away*, 20’s plenty for us, October 2015, available at: http://www.20splenty.org/emission_reductions

³⁸ *An evaluation of the estimated impacts on vehicle emissions of a 20mph speed restriction in central London*, Centre for Transport Studies, Imperial College London, April 2013, available at: <https://www.cityoflondon.gov.uk/business/environmental-health/environmental-protection/air-quality/Documents/speed-restriction-air-quality-report-2013-for-web.pdf>

³⁹ *Tackling Pollution and congestion*, Begg and Haigh, Greener Journeys, 2017, available to download at: <https://greenerjourneys.com/publication/tackling-pollution-congestion/>, para 2.1 (page 10).

⁴⁰ *Air pollution: outdoor air quality and health*, NICE, 2017, available at: <https://www.nice.org.uk/guidance/ng70>

54. The City of Edinburgh Council in an online report⁴¹ prior to the launch of its roll-out of 20 mph zones anticipated that vehicles would flow more smoothly through junctions at slower speeds, with reduced levels of acceleration and braking which may help to reduce fuel consumption and emissions.

55. Crucially, in any discussion on pollution, it is important not to focus solely on the emissions of the vehicles present on the roads. There is an opportunity for increased walking and cycling as a result of 20 mph limits which, in many instances, replace car journeys and have an impact on the reduction of pollutants overall.

56. The issue of noise pollution, raised in the consultation responses, is addressed by a study by the UK Noise Association⁴². Its report, citing examples in Bristol and Munich, suggests that reducing speeds by 10 kph (6 mph) in urban areas with speed limits of between 30 and 60 kph (between 20 and 40 mph) would reduce noise levels by 40%.

ALTERNATIVE APPROACHES

57. A possible alternative to changing the default limit would have been to make it easier for local authorities to create extensive 20 mph limits by order. The process for making an order which varies speed limits is generally viewed as complicated, demanding, labour intensive and expensive by local authorities. Therefore, a streamlining of the order-making process was a possible alternative to allow local authorities to create greater change without being hampered by a cumbersome and costly process.

58. A number of local authorities have already successfully implemented 20 mph initiatives using the existing order-making process. However, the more that process is used as a means to bring lower speed limits to specific streets, then the more often urban driving is done at a non-default speed. That means that the logic of a default speed laid out in the 1984 Act, and the principle that speed limit signage is used to indicate exceptions, is undermined. As the order-making process was designed to apply specific considerations to particular roads, there is a limit to how much the process could be streamlined without compromising the ability of local people (living on or using the roads in question) to have a say.

59. In addition, while a streamlined order-making process might lead to increased numbers of roads with a 20 mph speed limit, it would not address local variations in how decisions about speed limits are made and would therefore not contribute to the more consistent approach to setting speed limits which underpins the safety arguments of the policy. The member reports that residents have voiced frustration in seeking speed reduction in local areas, reporting uneven application of the order-making process by councils or inconsistent policies on the matter; lack of clarity in how factors are considered; poor levels of consultation and long processing timelines. The member is keen to capitalise on the dividends that a 20 mph general speed limit on restricted roads could bring, based on supporting research that normalising 20 mph as the

⁴¹ *Busting the myths around Edinburgh's 20mph roll-out*, City of Edinburgh Council, January 2015, available at: https://www.edinburgh.gov.uk/news/article/1743/busting_the_myths_around_edinburghs_20mph_roll-out, Myth 4.

⁴² *Speed and road traffic noise: the role that lower speeds could play in cutting noise from traffic*, Paige Mitchell, UK Noise Association, 2009, available at: http://www.ukna.org.uk/uploads/4/1/4/5/41458009/speed_and_road_traffic_noise.pdf, page 6

maximum speed in built-up areas helps to undermine the social acceptability of speeding and can lead to better observation of that speed limit.⁴³

60. In considering this option, the member saw the cultural change brought about by a reduction in the general speed limit on restricted roads as the primary consideration. The Bill still allows local authorities to make decisions, choosing speed limits according to the circumstances in individual cases, except that the starting point for variation is 20 mph rather than 30 mph. The member anticipates that the number of variations upwards from 20 mph to 30 mph will be far smaller than the number of variations downwards from 30 mph to 20 mph under the current law. As a result, fewer orders to vary speed limits will be needed, with the associated reduction in administration and cost, while still retaining local decision-making.

61. A further factor is that the Scottish Government already has the power to streamline the order-making process (via amending regulations), meaning that a Bill is not necessary to achieve this.

62. Based on these considerations, the member felt that the most appropriate route to achieving the policy aim was to make statutory provision for a lower general speed limit on restricted roads.

63. In that context, there was the option of extending the reduction beyond the technical category of “restricted roads” so it applied to all roads in built-up areas. However, this would have been substantially more complex in drafting terms, as it would have cut across the established structure of the statute law, and could have exceeded the Scottish Parliament’s legislative powers. In any case, given that the aim was not to impose a “blanket” 20 mph limit in urban areas but rather to allow local authorities to retain locally determined networks of through-routes subject to higher speed limits, it made sense to reduce the speed limit only on restricted roads – a category of road that overlaps very substantially with the set of roads on which lower speed limits are most likely to be deemed appropriate.

64. Having decided that reducing the general speed limit on restricted roads was the best option, a new limit of 20 mph was the obvious choice. In the first instance, speed limits within the Scottish, and wider UK, framework are set in increments of 10. Secondly, in any instance where speed limits have been reduced across Scotland, 20 mph has been established for more than two decades as the next speed limit down from 30 mph. Thirdly, as evidenced within this document, there is a strong body of research which indicates that a 20 mph speed limit is the most appropriate one to use where urban road safety is the priority. Finally, as a result of orders which vary speed limits, there are hundreds of roads which are currently subject to a 20 mph speed limit throughout Scotland and so it is a familiar part of the driving landscape.

CONSULTATION

65. The member lodged a draft proposal on 12 May 2017 and the accompanying consultation ran until 15 September. NGBU prepared a summary of the responses.⁴⁴

⁴³ *Delivering soft measures to support signs-only 20mph limits: report on research findings*, Sarah Toy, University of West of England, 2012, available at: <http://www2.uwe.ac.uk/faculties/BBS/BUS/Research/BSMC/20mph%20Research%20Findings.pdf>

66. A total of 1,355 responses were received comprising 1,131 from individuals and 224 from organisations. In addition, 1,090 near-identical responses as part of two campaigns organised by Friends of the Earth Scotland and the Scottish Green Party were received.

67. Overall, 891 survey respondents (66% – just under two-thirds) were fully or partially supportive, while 435 (32% – just under a third) were partially or fully opposed. If the 1,090 near-identical responses received via the Friends of the Earth and Scottish Green Party online tools – all of which were supportive – are included, 1,981 respondents (81%) supported the proposal, while 435 (18%) opposed it.

EFFECTS ON EQUAL OPPORTUNITIES, HUMAN RIGHTS, ISLAND COMMUNITIES, LOCAL GOVERNMENT, SUSTAINABLE DEVELOPMENT ETC.

Equal opportunities

68. In relation to the provisions contained in the Bill, the member considers that there will be positive impact for a number of groups with limited mobility. This includes women in the latter stages of pregnancy; parents with prams/pushchairs and/or small children; older people with less confidence on their feet; and people with disabilities. It is anticipated that these groups, as well as the population in general, will feel and be safer when using the pavements and crossing the road.

69. Transport Scotland⁴⁵ noted that younger and older people were less likely to drive every day and less likely to hold a driving licence. Just over one third of those aged 20-29 drove every day compared to 56% of those aged 40-49. Only 27% of those aged 70-79 and 15% of those aged 80+ drove every day. Given those figures, increased levels of safety in using the pavements and crossing the roads are likely to be felt more keenly by younger and older citizens.

70. The consultation identified that older people and females are less likely to cycle as a result of feeling unsafe. This is reinforced by a Sustrans survey⁴⁶ of 7,700 people which found that twice as many men as women ride a bike regularly and that 59% of women surveyed viewed cycling as dangerous or unsafe. It is intended that the Bill will increase the actual and perceived levels of safety for road users and particularly those who feel less safe such as older people and women.

71. The Bill is not considered to discriminate on the basis of other protected characteristics namely, marriage and civil partnership, gender reassignment, race, religion and belief, sex or sexual orientation.

⁴⁴ Available at: <http://www.parliament.scot/parliamentarybusiness/Bills/104723.aspx>

⁴⁵ *Transport and Travel in Scotland 2016*, Transport Scotland, 2017, available at: <https://www.transport.gov.scot/publication/26-september-2017-transport-and-travel-in-scotland-2016/>, Table 20

⁴⁶ *Women: reducing the gender gap*, Sustrans, June 2018, available at: https://www.sustrans.org.uk/sites/default/files/file_content_type/bikelifewomen2018_reducinggendergap_0.pdf

Human rights

72. The Scotland Act 1998 requires legislation of the Scottish Parliament to be compatible with “the Convention rights” (rights under the European Convention on Human Rights). Improving public safety is fundamental to the policy of the Bill and its desired outcomes. The Bill aims to create conditions in which life-threatening accidents occur less frequently, and thus supports compliance with the right to life (Article 2 of the Convention). In any event, it is considered that the Bill does not raise any incompatibility issues with Convention rights.

Island communities

73. The Bill is designed to benefit the population of Scotland as a whole and does not have any specific implications for those living in island communities.

Local government

74. The Bill will have the biggest benefit for local authorities that have yet to implement an extensive network of 20 mph limits in built-up areas. The reduction to 20 mph of the general speed limit will largely secure such an outcome without the authority being required to make orders imposing this limit on large numbers of identified streets; instead, they will only need to identify those streets, presumably many fewer in number, which they wish to retain as 30 mph through-routes (using existing order-making powers). Local authorities, such as the City of Edinburgh Council, that have already implemented widespread 20 mph limits will not benefit to the same extent but should find that the reduced general speed limit will reinforce the policy they have already adopted and should enable them to simplify the signage in their areas. Where existing orders (imposing 20 mph limits on specified roads) are superseded by the reduction in the general speed limit, the Bill provides (in section 3) a simplified process for revoking or amending those orders.

75. In addition, local authorities, like other public sector bodies, will be expected to take appropriate action to encourage wider cultural and social change in how speeding is regarded.

76. Engagement has been undertaken with the Convention of Scottish Local Authorities (COSLA), local authorities, and community councils. Statutory agencies involved in traffic and travel – including Transport Scotland, Police Scotland, health agencies and emergency services – and parent councils of schools have also been consulted. A number of non-governmental agencies have also been involved in discussions, including road safety charities; cycling organisations and representative bodies; transport organisations and representative bodies; equalities organisations and campaign groups.

Sustainable development

77. It is anticipated that the Bill provisions will have a strong positive impact on the health and well-being of Scotland’s citizens through increased opportunities for active travel, safer spaces within which to live and commute, increased positive health outcomes through exercise and positive surroundings as well as a reduction in road deaths and injuries.

78. Consultation respondents who commented on sustainable development expected positive economic, social or environmental outcomes from the Bill, and that initial outlay costs would be recouped within the medium to long term. It was anticipated that areas where traffic is less intrusive would produce safe and more resilient communities and be more desirable places to live and shop.

79. The potential environmental impact has been considered and it is anticipated that the Bill will have a positive, albeit minor, impact. There are conflicting views the effect of a lower speed limit on emission levels, and debate on how the wider environmental impact, based on numerous variables, should be measured. The member expects that pollution levels will at first remain static and then over time, as drivers become accustomed to the new default speed and active travel increases, show modest improvement.

80. By reducing the default speed, it is expected to increase participation and interaction within communities and environment. This may have a limited impact on drivers in terms of journey time. Research specific to this issue is limited⁴⁷ but it is expected that any increase in journey time will be small in reality and far outweighed by the road safety benefits. It is not anticipated that if there is an impact that it will reduce the ability of drivers to meet their needs. To that end, the Bill seeks to strike an appropriate balance between keeping traffic moving and making communities safer and more accessible.

81. It is intended that the change in the law will impact on future generations by creating a culture of speed appropriate to the surroundings. With that attitude in mind, the Bill will bring about increased levels of road safety, fewer fatalities and serious injuries, positive health benefits such as increased opportunities for exercise and more pleasant surroundings as well as strengthening communities.

⁴⁷ *North Croydon Area-wide 20 mph speed limit – frequently asked questions*, Croydon Council, undated, available at: https://www.croydon.gov.uk/sites/default/files/20mph_faq.pdf, Q20

*This document relates to the Restricted Roads (20 mph Speed Limit) (Scotland) Bill (SP Bill 39)
as introduced in the Scottish Parliament on 21 September 2018*

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

POLICY MEMORANDUM

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