Proposed Restricted Roads (20mph Limit) (Scotland) Bill

Page 2: About you

Are you responding as an individual or on behalf of an organisation?
on behalf of an organisation

Which of the following best describes you? (If you are a professional or academic, but not in a subject relevant to the consultation, please choose "Member of the public".)
No Response

Please select the category which best describes your organisation
Public sector body (Scottish/UK Government/Government agency, local authority, NDPB)

Please choose one of the following; if you choose the first option, please provide your name or the name of your organisation as you wish it to be published.
I am content for this response to be attributed to me or my organisation

Please insert your name or the name of your organisation. If you choose the first option above, this should be the name as you wish it to be published. If you choose the second or third option, a name is still required, but it will not be published.
City of Edinburgh Council

Please provide details of a way in which we can contact you if there are queries regarding your response. Email is preferred but you can also provide a postal address or phone number. We will not publish these details.

Page 7: Your views on the proposal

Q1. Which of the following best expresses your view of the proposal to replace the current 30mph default speed limit on restricted roads with a 20mph limit.
Fully Supportive

Q1. Which of the following best expresses your view of the proposal to replace the current 30mph default speed limit on restricted roads with a 20mph limit.

Please explain the reasons for your response

Edinburgh, along with a number of other local authorities, is moving towards a street network where a high percentage of urban streets will have a 20mph speed limit. In this context, at a city level, it would make sense for 20mph to replace 30mph as the default speed limit on street-lit roads. This would significantly reduce signing requirements, installation costs, and street clutter implications associated with 20mph limits. The City of Edinburgh Council has therefore committed, through its Active Travel Action Plan, to "encourage the Scottish Government to seriously consider reducing the default urban speed from 30mph to 20mph". At present the default speed limit for restricted roads in Edinburgh remains 30mph. Policy Safe4 within the Council's Local Transport Strategy 2014-2019 sets out an approach to speed limits in the urban area by seeking to significantly extend the scope of 20mph speed limits. This, however, requires the publication of a Traffic Regulation Order for every street or section of street affected, accompanied by appropriate signage and traffic calming features to ensure legality/enforceability. This policy was influenced by the successful outcome of the South Edinburgh 20mph pilot project, whereby the Council introduced 20mph limits across south-central Edinburgh, and measured changes to vehicle speeds and volumes, road traffic incidents, and the attitudes of residents to walking, cycling, and the local environment. The benefits evidenced from the pilot include lower vehicle speeds in 85% of the 28 streets that were monitored, perceived improvements in the safety of streets for children, a perception of improved conditions for walking and cycling and strong support from residents of the area for the 20mph limit. There has been a high level of support for 20mph speed limits amongst Edinburgh residents for a number of years. The 2012 Edinburgh People Survey which uses a methodology that seeks to ensure a statistically representative sample of Edinburgh citizens revealed a high level of support for extending 20mph speed limits. The highest level of support was for such limits in 'residential' streets, with 75% in favour, 2% opposed, 23% unsure. For busy shopping streets support was 69 % with 4 % opposed and 27 % unsure. For all city centre streets support was 67 % with 5 % opposed and 29 % unsure. Edinburgh is the first city in Scotland implementing a citywide 20mph network. The Scottish Government already supports the introduction of further 20mph zones, a move in keeping with many UK and European Cities and supported by organisations such as Police Scotland, the National Institute for Health and Care Excellence (NICE), and the Royal Society for the Prevention of Accidents (ROSPA). The network was approved by the Transport and Environment Committee in January 2015 following several years of consultation and research. The final phase of the network is scheduled to come into effect on 31 January 2018. At the 'Ready for 20mph' conference held in Edinburgh last year there was near unanimous support in favour of a national Scottish default position. The conference was attended by councillors, transport planners, road safety officers, highways engineers, public health officers, police officers, campaigners, consultants and service providers. Councillor Lesley Hinds wrote, in her role as the then Convener of Transport and Environment for the City of Edinburgh Council, to the Transport Minister, Humza Yousaf MSP registering her support for 20mph speed limits and a national urban 20mph limit for Scotland. Further information regarding the introduction of 20mph speed limits in Edinburgh is available at www.edinburgh.gov.uk/20mph. The national trend towards 20mph as a normal urban speed limit, with 30mph reserved for suburban main roads, means that a move to 20mph as the national default urban speed limit is fully supported by the City of Edinburgh Council.

Q2. Could the aims of this proposal be better delivered in another way (without a Bill in the Scottish Parliament)?

No

Please explain the reasons for your response

- Cost-effectiveness in an already challenging public sector environment: it is far less resource efficient in-terms of staff time and scheme costs to implement 20mph schemes within the confines of a 30mph default, especially as more and more local authorities turn to implementing 20mph speed limits. - Simpler, quicker and less expensive to roll out 20mph limits if the default speed limit was 20mph: 6 times less expensive in the case of Edinburgh (see Q6 – Financial Implications) - Creates a consistency of approach at a national level: standardised offering that would help road user understanding (and national economies of scale). Maximises the likelihood of driver acceptance and therefore compliance, reducing the need for enforcement and possible future supplementary measures to reduce speeds. - Streetscape: reduced street clutter, especially in conservation areas/heritage sites. Reduced ongoing maintenance requirement for signs and road markings in-particular (20mph roundels) - Sustainable legacy

Q3. What do you think would be the main advantages, if any, of the proposal?

Main advantages are derived from the principle of places for people rather than motor traffic. This principle is a key aspect of myriad inter-related supporting Scottish Government policies, including Designing Streets, Creating Places, National Planning Framework, Cycling Action Plan for Scotland, Scotland's Road Safety Framework, National Walking Strategy, and Cleaner Air for Scotland.

Safety
Lower speeds help to reduce the risk and severity of road collisions and related casualties.

- UK Transport Research Laboratory(1): looked at the effect of speeds on overall accident numbers and found a clear relationship – it is estimated that for every 1mph reduction in the average speed of motorists, the likelihood of an accident would reduce by about 6 per cent for an urban road with low average speed.
- A 2010 Department for Transport (DfT) publication which looked at the relationship between speed and risk of fatal injury found that the risk of fatal injury to pedestrians rose from under 1% at an impact speed of 20mph to 5.5%, or 1 in 20, at 30mph. Above 30mph risk increased substantially, to over 30% at an impact speed of 40mph. If a child suddenly steps in front of a car, you are much less likely to seriously injure or kill them if you keep to a 20mph limit.

A default 20mph speed limit would help to create a culture whereby speeding is perceived as socially unacceptable (akin to the smoking in public places following the introduction of legislation), and would go a long-way towards a Vision Zero approach to road safety, the principle that no-one should be killed or be seriously injured on our roads. A default 20mph speed limit would also maximise the likelihood of driver acceptance and therefore compliance, reducing the need for enforcement and possible future supplementary measures to reduce speeds.

Health/Active Travel
Health professionals see lower traffic speeds as a foundation for increasing "active travel", leading to healthier communities. Lower speed limits help to create a calmer, safer environment for all, which help to make walking and cycling more attractive options leading to better health, less noise, more social interaction and stronger communities.
The introduction of slower speeds helps ensure that streets become safer and more pleasant for all, particularly children, older members of the community and disabled people. Walking to school will become a safer option for children, which will have a positive effect on their health and wellbeing. At the moment, 12% of commuting journeys in Edinburgh are already made by people using bicycles and the 20mph zones will help to encourage yet more people to commute, explore their neighbourhoods and visit local shops either on foot or by bike.

Evaluation of the 20mph pilot project in Edinburgh identified that the proportion of children (all school ages) walking to school increased marginally from 63% to 65%, whilst the proportion of children cycling to school increased from 4% to 12%. Evidence from other cities, such as Bristol and Portsmouth, also reported increased levels of walking and cycling since the introduction of 20mph.

Air Quality
Whilst studies have so far not conclusively proven either a positive or negative effect on emissions through driving at 20mph (driving at 20mph causes some emissions to rise slightly and some to fall), research indicates that at slower speeds, vehicles flow more smoothly through junctions. As such, within an urban environment, 20mph may help to improve traffic flow. In addition, as a result of reduced acceleration and braking, 20mph may help to reduce fuel consumption and associated emissions. Some environmental benefit from the change is expected from helping to unlock the potential for walking or cycling short distances instead of driving.

A recent paper ('Twenty miles per hour speed limits: a sustainable solution to public health problems in Wales', in the Journal of Epidemiology and Community Health, BMJ, March 2017) concludes that "Road traffic injuries, air pollution and obesity are an inter-related, interdependent triad. The challenge facing public health today is identifying robust interventions that will have positive effects on all three as a minimum; default 20mph limits is the solution to increasing public health problems [in Wales]". In reaching this conclusion the authors note that, with regard to air pollution, deaths attributed to nitrogen dioxide (NO_2) may rise but a significantly greater number of deaths attributed to particulates ($PM_{2.5}$) may decrease. Their evidence review suggests benefits in terms of road traffic casualties, air quality, active travel, noise pollution, greater social inclusion, greater community cohesion and local business viability.

Q3. What do you think would be the main advantages, if any, of the proposal?

(1) Taylor, M. C., Lynam, D. A. and Baruya, A. (2000) The effects of drivers' speed on the frequency of road accidents.

Q4. What do you think would be the main disadvantages, if any, of the proposal?

Potential cost increases to:
- Police Scotland as they would be expected to give more attention to enforcing 20mph streets
- local authorities who had not intended to pursue 20mph speed limits

Q5. What other measures do you think would be needed to maximise compliance with the new national 20mph speed limit on restricted roads, for example in relation to advertising signage and police enforcement.

Communications - need for national communications campaign
- compliance improves from country-wide messaging to drivers and conformity of limits.
- Need for greater emphasis on the relationship between speed reduction and casualty reduction
- Need for greater emphasis on the health benefits, aided by vocal support from public health partners
- Emphasis on people and communities, and not cars and increased journey times, aided by vocal support from community groups, pedestrian and cycle groups/users
- Fuller and more positive reporting of the results of the South Edinburgh 20mph pilot (speed reduction, increased public support, active travel in schools – as detailed under Q11)
- Evidence to mitigate the perception that 20mph limits result in notable increases to journey times. From a recent test of journey times in Edinburgh on 6 typical city centre-suburb routes (travelling at 20mph and at 30 mph), total journey times increased by less than one minute across these entire routes. Research from Edinburgh, and other cities, suggest journey times do not significantly increase, with changes not expected to exceed 25 seconds per mile. In central parts of Bristol, for example, where a 20mph limit has been introduced, it took only 10 seconds longer to travel one mile at 20mph as opposed to 30mph.

Enforcement
- A national approach to default speeds would make it easier for police to enforce 20mph speed limits.
- Whilst a 20mph default speed limit might reduce the need for enforcement, compared to widespread 20mph limits introduced under a 30mph default regime, there would need to be continued and ongoing support from Police Scotland.
- To maximise compliance of a national 20mph speed limit, there would need to be an investigation into ways in which Police Scotland can be supported to enforce a new national limit e.g. additional dedicated resources, more widespread use of speed cameras, community speedwatch.

Page 12: Financial implications

Q6. Taking account of both costs and potential savings, what financial impact would you expect the proposed Bill to have?

	Significant increase in cost	Some increase in cost	Broadly cost-neutral	Some reduction in cost	Significant reduction in cost	Unsure
Scottish Government						X
Local Authorities				X		
Motorists					X	
Other			X			

Q6. Taking account of both costs and potential savings, what financial impact would you expect the proposed Bill to have?

Police Scotland						

Please explain the reasons for your response
It is worth noting that all responses above were provided on the assumption that all/most local authorities would reduce their speed limits to 20mph from 30mph: Local Authorities If the introduction of a 20mph default limit was mandatory then there would be cost increases for local authorities who would not have otherwise considered 20mph limits for their roads. On the contrary, there would be significant cost reductions for those keen on pursuing 20mph through savings associated with TROs, infrastructure, staff time, and consultation etc. The Edinburgh scheme relies primarily on legislation, signage and road markings. Although this is cheaper to introduce than physical calming methods and also reduces maintenance costs over the longer term, the costs in terms of construction, staff time and publicity are considerable. From Edinburgh's experience in implementing a citywide 20mph network, the current estimate for the works (encapsulates construction, design, project management, communications, and statutory costs) are in the order of £2.8m. If a 20mph default had been in place it is estimated that it would have costed £450,000 to implement an equivalent scheme – six times less! Had a default 20mph been in-place, the Edinburgh scheme would have required far fewer TROs and would have necessitated far fewer design alterations, which would have had clear cost savings. In such a scenario, the implementation of a citywide 20mph network could have been achieved in fewer delivery phases (potentially a single phase), which could also have resulted in significant cost savings. This approach would certainly have reduced driver confusion, whilst improving driver acceptance and compliance. In addition, it would also have allowed us to monitor, report and assess whether supplementary measures were needed much more quickly. Motorists - Reduced acceleration and braking may help to reduce fuel consumption (and associated emissions – costs to society). - Steadier traffic flows may similarly help to reduce fuel consumption and associated emissions. - Depending upon levels of enforcement, some motorists may have to pay fines for breaching the new limits. Other Road Users - From Edinburgh's experience of implementing a citywide 20mph network, there was little in-the-way of concerns or issues raised by businesses with regards to costs or delays due to lower speed limits. Original concerns raised by bus operators to 20mph limits (due to perceived timetable delays – need for extra vehicles/drivers to adhere to the timetable) were not realised due to close liaison to establish issues, and mitigation opportunities. A fundamental aspect of the Edinburgh network is that a strategic network of 30mph roads were retained, thus allowing for a citywide approach to the movement of goods and people. Another aspect of mitigation, for example, was on road sections where delays were anticipated/evidenced according to the bus operator. In such instances, public transport proposals like junction priority were progressed. Public services: - Increased resource potential upon the police and the Procurator Fiscal, though it is not clear how much enforcement resources are applied to current 30mph limits. - Reduced pressure on the NHS and emergency services due to likely anticipated reductions in the severity of incidents resulting from lower speeds. - There are also broader future cost savings anticipated through a lower default speed limit, due to the anticipated reduction in, and severity of, casualties due to lower speeds. Reported Road Casualties Scotland 2015 provides an average financial cost for each accident, and each severity type, for example a fatal accident costs £2,119,521, a serious accidents costs £248,350, whilst a slight accident costs £24,952. - Improved conditions which encourage increased levels of walking and cycling will in-turn improve public health and further reduce strain on the health system.

Q7. Do you believe there will be any other benefits to reducing the speed limit from 30mph to 20mph?

From Edinburgh's experience in introducing a citywide 20mph network approach, we can advise that a default 20mph limit would greatly reduce the administrative requirement to establish the 20mph speed limit, significantly reduce the signage requirements (and associated urban visual "clutter") and reduce the opportunity for driver "confusion" by setting a clear and understandable national policy rather that a variety of approaches within different local authorities. There would also be a consequent reduction in the associated costs of introducing reduced speed limits.

In addition to the main benefits outlined under Q3, additional benefits include:
- Steadier traffic flows at lower speeds would also help to reduce noise emissions
- Aligns with the Community Empowerment Act by contributing towards community safety (directly through lower speeds, but also through increased pedestrian activity – natural surveillance), and

Q7. Do you believe there will be any other benefits to reducing the speed limit from 30mph to 20mph?

providing opportunities for community events and public realm improvements geared towards placemaking by facilitating streets for people.

Page 14: Equalities

Q8. What overall impact is the proposed Bill likely to have on the following protected groups (under the Equality Act 2010): race, disability, sex, gender re-assignment, age, religion and belief, sexual orientation, marriage and civil partnership, pregnancy and maternity?

Positive

Please explain the reasons for your response
The principle of streets for people enacted through a reduction in the national speed limit provides conditions that support pedestrian mobility for people of all ages, incomes, race, and gender. Increased pedestrian journeys and activity, and a focus of places for people, helps support opportunities for socialising, social inclusion, and public health and well-being improvements. A default 20mph speed limit also contributes to the 'Duty of Care' of the vulnerable - especially children, whose eyesight isn't developed enough to judge the speed of traffic or reliably cross with traffic at 25mph until 14 years old. Reduced speed limits are also better for independence and equality, especially amongst vulnerable groups including elderly people, the infirm, and those who are mobility impaired.

Q9. Could any negative impact of the proposed Bill on any of these protected groups be minimised or avoided?

As outlined under 'other road users' potential impacts to public transport journey times can be mitigated though the retention of a core 30mph strategic network, and targeted infrastructure improvements i.e. bus priority at lights. This helps to reduce the impact of the many city residents who rely on the bus network to access jobs and services across the city.

Page 16: Sustainability of the proposal

Q10. Do you consider that the proposed Bill can be delivered sustainably i.e. without having likely future disproportionate economic, social and/or environmental impact?

Yes

Please explain the reasons for your response:
Without doubt, the proposed speed reduction bill could be delivered sustainably. By setting a default limit of 20mph for 'restricted' roads (i.e. roads with street lighting) Scotland can benefit from all the experience already gained in the UK and Edinburgh on 20mph limits. These can be delivered by local authorities for Scottish communities in a cost effective and administratively efficient manner to protect people and raise their everyday quality of life. A national speed limit would also be more practical and economical to implement than changing road signs on a large number of streets to 20mph.

Page 17: General

Q11. Do you have any other comments or suggestions on the proposal to establish a 20mph default speed limit on restricted roads?

The below reflect Edinburgh's significant practical experience gained in implementing 20mph speed limits.

The City of Edinburgh Council 20 mph pilot scheme reduced the speed limit from 30 mph to 20 mph on 38km of streets. A further 34km of streets in the area were already included in 20mph zones. Speeds were monitored at 28 locations on the streets with newly reduced speed limits and no traffic calming. At these locations, the average speed reduced by 1.9 mph from 22.8 mph to 20.9 mph. 85th percentile speeds fell by 2.9mph to 25.1mph. In the 12 locations where the average speed prior to the introduction of the pilot scheme exceeded 24 mph, there was an average drop of 3.3 mph to had been a 20 per cent casualty reduction, though this is not statistically significant given the relatively low number of casualties involved.

It also showed that locations with an initial mean speed of higher than 24mph generally experienced the highest drops in speeds. With this experience, and similar elsewhere, in mind, it can be appropriate to impose 20 mph limits on some streets with a mean speed of higher than 24 mph, in a context of other nearby streets with lower existing averages. This can have the benefit of avoiding a piecemeal speed network in a predominantly 20 mph limit area.

Based on consultation, the proposals were adapted to retain a 30mph strategic road network to allow the city to function.

From Edinburgh's experience, a number of factors should be taken into account when making an assessment about whether to introduce a 20 mph speed limit. These should include - but are not restricted to - the following:-

- road/street functions - including 'place' roles such as shopping streets, mainly residential, and 'movement' bus services, through traffic, local access, numbers of pedestrians and cyclists, formal walking and cycling routes;
- composition of road users - including existing and potential levels of vulnerable road users;
- existing traffic speed;
- accident data - including frequency, severity, types and causes;
- road environment - including width of road and footway, sightlines, bends, junctions, pedestrian crossings; and
- local community - including consultation with emergency services, public transport providers and impact on residents (e.g. usage of road, parking facilities, noise and air quality).

With regard to the introduction of a citywide 20mph scheme, some of the key challenges are:
• Time – the project will be active for approximately 4 years
• Scale and time – phased introduction over large areas and lengthy period leads to potential user confusion and creates multiple opportunities for objections to be voiced
• Multiple phase procurement costs
• Ties up internal resources for a long period
• Huge number of roads require TROs – detailed design development and errors require additional TROs to amend – all time consuming and cannot automatically be processed as Traffic Orders section have additional priorities
• New roads appear in developments during the currency of the project, requiring further TROs – less likely that new main roads are created if 20mph was default
• Time taken to plan and deliver engagement and communication
• Significant political support required to lead the process