MRC/CSO Social and Public Health Sciences Unit Consultation Response

<table>
<thead>
<tr>
<th>Title of consultation</th>
<th>Proposed Restricted Roads (20mph Limit) (Scotland) Bill - Consultation</th>
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<td>Name of the consulting body</td>
<td>[Scottish Parliament] Member’s Bill - Mark Ruskell MSP, Member for Mid Scotland and Fife</td>
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<td>Why did the MRC/CSO Social and Public Health Sciences Unit contribute to this consultation?</td>
<td>The Unit has a longstanding interest in the evaluation of transport and other policies that seek to improve population health through action beyond the health sector.</td>
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<td>Our consultation response</td>
<td>Response to 20 mph consultation (Section 2)</td>
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<td>1. Overall view</td>
<td>Partially supportive. There is some evidence from evaluations of reduced urban speed limits to suggest that lowering the default limit to 20mph would have beneficial effects on public health via a combination of reductions in the number of accidents and level of air pollution, and an increase in active travel. The strongest evidence relates to reductions in accidents, and even here the evidence is patchy: there is strong evidence that 20 mph zones with physical traffic calming measures reduce traffic speeds and accidents; the evidence that 20mph limit areas have such effects is much weaker, and derives from small local studies or from models of the relationship between traffic speeds, accidents and vehicle emissions, rather than from well-designed, adequately powered evaluations of the implementation of 20mph limit areas. This highlights the importance of coupling any extension of 20mph limits with a thorough programme of evaluation.</td>
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<td>2. Alternative measures</td>
<td>Unsure. The current patchwork of 20mph limit areas suggests that national legislation for a default 20mph limit in built-up areas would have significant benefits in terms of extending coverage and reducing costs of implementation. The extent of these benefits will depend on how the legislation is implemented, how it is ‘marketed’ and enforced, the level of exemptions, and the behavioural response by road users. There are significant uncertainties around all of these factors, which underlies the need for a thorough evaluation if the Bill becomes law.</td>
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3. Advantages

There is evidence to suggest there would be improvements in public health, but the evidence is not sufficient to make precise calculations of the size and nature of the improvement, especially in relation to changes in travel behaviour. It would be much more straightforward to identify the effects of a national 20mph limit in built up areas than it is to measure the impacts of smaller local schemes.

4. Disadvantages

There is a lack of evidence to suggest adverse impacts – but this does not mean we can be confident there are none, and this is something an evaluation would have to explore. There would be costs associated with implementation, and evaluation should include a cost-effectiveness or cost-benefit study to determine whether the benefits exceed the costs. Given the evidence that 20mph zones with physical traffic calming measures are effective, it is important that 20mph limit areas are not seen as a cheap alternative until their effectiveness is proven.

5. Measures to maximise compliance

A review for the UK DfT of legislative measures to change the behaviour of drivers and other road users concluded that 'There have been considerable successes in changing behaviour based on strong enforcement of existing or new laws. This can apply even if the initial legislation was controversial, provided that there is a clear rationale, unambiguous tests of compliance, and a mood which reinforces legislation with social dis/approval. To make it an effective intervention, the behaviour required by the legislation should be unambiguous, easy to be monitored, policed and enforced, be within the competence of the individual to comply, have a clear rationale understood by the public, have a severe and multi-faceted penalty for non-compliance; and have an associated high probability that non-compliance will be detected.' ([http://www.dft.gov.uk/pgr/scienceresearch/social/behaviour-changes/pdf/transport-and-health.pdf](http://www.dft.gov.uk/pgr/scienceresearch/social/behaviour-changes/pdf/transport-and-health.pdf)). This suggests that a combination of signage, social marketing and enforcement will be needed to maximise the benefits of a default 20mph limit.

6. Financial implications

All unsure.

Estimating the costs and benefits of the legislation should be a key focus of evaluation.

7. Other benefits

Don’t know.

8. Equalities

Unsure.

A recent review of the health effects of 20mph zones and limit areas concluded that 'Whilst there [is] no direct evidence on the effects of interventions on health inequalities, targeting such interventions in deprived areas may be beneficial. Further controlled evaluations that specifically examine SES effects are required.' [REF Cairns] As national legislation would not be targeted on particular areas, estimating the effects on health inequalities should be a key focus of evaluation.

9. Negative impacts
As noted above, given the evidence that 20mph zones with physical traffic calming measures are effective in reducing accidents, it is important that 20mph limit areas do not ‘crowd out’ investment in 20mph zones, until the effectiveness of a default 20mph limit is proven.

10. Sustainability

Unsure.

There is no evidence to expect disproportionate economic, social or environmental impacts, but these possibilities should be considered in designing evaluation.

11. General

We have drawn attention to the lack of robust evidence for many of the benefits claimed for a default 20mph limit in built-up areas. This is particularly so for long term effects on drivers’ and other road users’ behaviour. Existing reviews tend to conflate the evidence for zones and limit areas, even though their effects are likely to differ quantitatively, or to rely on models rather than direct evidence from implementation studies. This is not to undermine the case for legislation, but to stress the importance of good evaluation, to inform both the implementation process and the case for retaining a lower speed limit if it proves to be an effective public health measure.

When was the response submitted?
5 September 2017

Find out more about our research in this area
www.glasgow.ac.uk/sphsu

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