

Transport and Environment Committee

10.00am, Tuesday, 28 October 2014

Response to Consultation on Draft Scottish Government Good Practice Guide on 20mph Speed Limits

Item number	7.12
Report number	
Executive/routine	
Wards	All

Executive summary

This report sets out a response to Transport Scotland on a draft Good Practice Guide on 20mph Speed Limits and asks for endorsement by the Committee. To meet consultation deadlines the response was submitted in draft on 12 September 2014. Key changes sought are:

- Greater clarity on the relationship between speed reduction and casualty reduction;
- The Guide clearly allowing substitution of signs and 20mph 'roundels' for traffic calming features;
- Fuller and more positive reporting of the results of the South Edinburgh 20mph pilot;
- More flexibility in relation to existing speeds on streets where a 20mph limit may be introduced; and
- More explicit flexibility to allow a hybrid 20mph zone/limit as introduced in south Edinburgh.

Links

Coalition pledges	P19
Council outcomes	CO22
Single Outcome Agreement	SO4

Response to Consultation on Draft Scottish Government Good Practice Guide on 20mph Speed Limits

Recommendations

- 1.1 It is recommended that the Committee:
 - 1.1.1 approves the response to the draft Scottish Government Good Practice Guide on 20mph Speed Limits; and
 - 1.1.2 delegates further negotiation on the matter to the Convener, Head of Transport, or their nominated representatives.

Background

- 2.1 The proposed Scottish Government Good Practice Guide on 20mph Speed Limits is needed to update advice on this subject in line with the positive stance on such limits in Scotland's Road Safety Framework (SRSF) and the recently refreshed Cycling Action Plan for Scotland (CAPS).

Main report

- 3.1 The draft Good Practice Guide is broadly supportive of introducing 20mph speed limits on a range of urban streets. However a number of changes would be helpful to this and other Councils wishing to introduce such limits. Comments and suggested changes are summarised below. They are set out in more detail in Appendices 1 and 2.

Summary of comments on and suggested changes to the draft document

- 3.3 The current draft underplays the relationship between speed and casualties. In particular, the document could highlight more clearly the results of research papers, to which it refers, on the speed/casualty relationship.
- 3.3 The document does not clearly indicate that signs and 20mph roundels may be substituted for road humps and other traffic calming measures within a 20mph zone. It is important that this is made clearer.

- 3.4 The draft summarises the results of the South Edinburgh 20mph pilot project. However, in doing so it underplays the results and does not report some key positive findings, notably benefits perceived by residents of the pilot area.
- 3.5 Most significantly, the guidance is prescriptive in its approach to streets on which a 20mph limit (ie predominantly signs only) should be considered – suggesting that 20mph limits should not be considered where current average speeds (ie with a 30mph limit) exceed 24mph. However, evidence from the South Edinburgh pilot, and elsewhere, is that mean speeds fall more on streets with higher ‘before’ speeds (often significantly exceeding the 24mph threshold).
- 3.6 In South Edinburgh, 12 streets had an average speed of over 24mph before the 20mph limit was introduced. This reduced to four streets with the new limit in force. With this in mind, it is suggested that the document give Councils scope to bring in 20mph limits on streets with current average speeds exceeding 24mph. It could also highlight that additional measures may be necessary on some streets, particularly when a 20mph limit has failed to bring average speeds below 24mph.
- 3.7 The Guide replicates a distinction between two different types of 20mph speed restriction; this is in accordance with the UK ‘Traffic Signs Regulations and General Directions’ which sets out the regulatory framework. As such it would be difficult for the guidance to ignore the distinction. However, the South Edinburgh pilot project used a pragmatic ‘hybrid’ approach which appears to be working. With this in mind it is suggested that this type of hybrid approach is explicitly mentioned in the Guide and also explicitly permitted/encouraged.
- 3.8 The Appendices also contain some comments and suggestions relating to the length and structure of the Guide.

20mph as the default urban speed limit

- 3.9 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 streetlit roads. This would significantly reduce signing requirements (and hence installation costs and street clutter implications) for 20mph limits.
- 3.10 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 worthy of serious consideration.
- 3.11 Prior to any such change, it is suggested that consideration be given to amending the good practice guide to encourage an approach to using 20mph speed limits with minimal repeater signs, with a parallel change in approach on 30mph roads whereby repeater signs can be used (at present they are not generally permitted).

Measures of success

- 4.1 If the draft Guide is revised as recommended in this report, it will be of greater help to this Council, and other Scottish local authorities, in introducing 20mph speed restrictions efficiently and effectively.

Financial impact

- 5.1 If the draft Guide is revised as recommended in this report, it should simplify the introduction of 20mph speed limits and therefore reduce costs.

Risk, policy, compliance and governance impact

- 6.1 There are not expected to be any negative health and safety, governance, compliance or regulatory implications, arising from the proposals set out in the report.

Equalities impact

- 7.1 The response to this consultation has no direct impact on equalities or rights. An equalities and Rights Impact Assessment was carried out on the roll out of the 20mph speed limit and reported to this Committee at its meeting on 3 June 2014.

Sustainability impact

- 8.1 See text under Equalities impact.

Consultation and engagement

- 9.1 The Council has been consulted as part of a limited consultation, undertaken by the Transport Scotland. No further consultation has been carried out by the Council.

Background reading/external references

[South Central Edinburgh 20mph Limit Pilot Evaluation – Transport and Environment Committee, 27 August 2013 \(Item 7.3\).](#)

Transport Research Laboratory Report 421. Taylor, M. C., Lynam, D. A. and Baruya, A. (2000) *The effects of drivers' speed on the frequency of road accidents.* – see link below

<http://20splentyforus.org.uk/UsefulReports/TRLREports/trl421SpeedAccidents.pdf>

UK Department for Transport: Road Safety Web Publication No16

Relationship between Speed and Risk of Fatal Injury: Pedestrians and Car Occupants - see link below

<http://assets.dft.gov.uk/publications/pgr-roadsafety-research-rsrr-theme5-researchreport16-pdf/rswp116.pdf>

Detailed comments on and suggested amendments to the initial draft guidance are available to view by contacting 20mph@edinburgh.gov.uk

John Bury

Acting Director of Services for Communities

Contact: Phil Noble, Senior Professional Officer

E-mail: phil.noble@edinburgh.gov.uk | Tel: 0131 469 3803

Links

Coalition pledges	P46 – Consult with a view to extending current 20mph zones..
Council outcomes	CO18 – Green – We reduce the local environmental impact of our consumption and production. CO19 – Attractive Places and Well Maintained – Edinburgh remains an attractive city through the development of high quality buildings and places and delivery of high standards and maintenance of infrastructure and public realm.
Single Outcome Agreement	S04 – Edinburgh's communities are safer and have improved physical and social fabric.
Appendices	1 Key Comments in more detail. 2 Short Supplementary discussion of DfT Road Safety Web Publication 16 (D C Richards) and TRL report 421

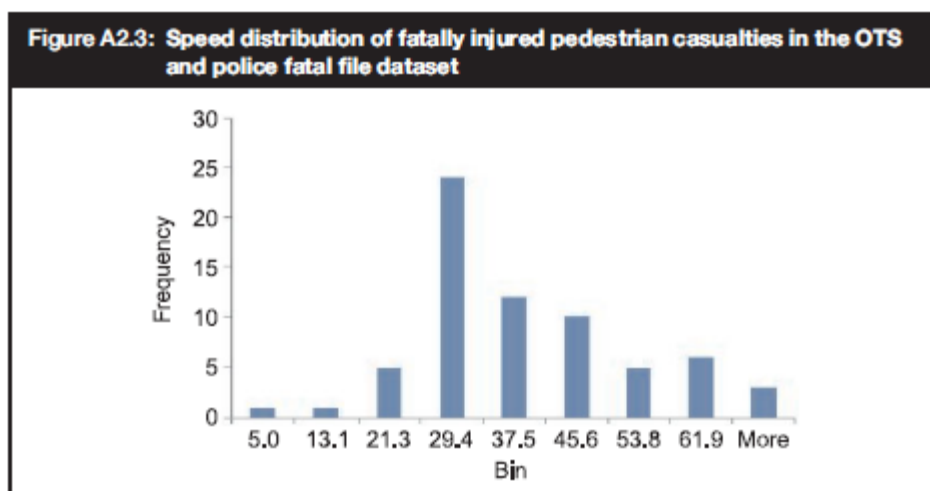
Appendix 1: **Response in more detail**

1. Relationship between speed and casualties

The current draft underplays the relationship between speed and casualties:

- a. The D C Richards DfT (TRL) paper quoted as reference 7 in paragraph 13 found a risk of fatal injury to a pedestrian in a collision at 20mph of 0.8%. This rose to 5.5% at 30mph and 30.3% at 40mph. (Data from Appendix 3 to the paper, which examines the most recent UK data in detail). The pedestrian risk data is most relevant in the urban context – roughly 60% of KSI casualties in Edinburgh involve pedestrians or cyclists.

We would argue that the change in risk of death as quantified in this paper, from less than 1 in 100 at 20mph to more than 1 in 20 at 30mph is very significant indeed. This point is given added importance by an examination of the raw numbers of fatalities at different speeds. (See graph below). See Appendix 2 for a short further discussion of this issue.



- b. TRL report 421 gives a breakdown of types of road on which different rates of speed reduction are likely. The figure of about 6% is given for urban roads with low average speeds; about 4% for medium speed urban roads – these numbers are the most relevant for roads on which a 20mph limit is being considered. The report concludes that “In urban areas the potential for accident reduction (per 1mile/h reduction in average speed) is greatest on those roads with low average speeds (Figure A). These are typically *busy main roads in towns with high levels of pedestrian activity, wide variations in speeds, and high accident frequencies.*”

We have suggested changes to paragraphs 13, 14 and several others which we consider help reflect the conclusions of these two key pieces of research.

- 2 Ability to substitute signs and 20mph roundels for road humps and other traffic calming measures within a 20mph Zone

The document does not clearly indicate that signs and 20mph roundels may be substituted for road humps and other traffic calming measures within a 20mph Zone. It is important that this is made clearer (as is the case in DfT "Setting Local Speed Limits" para 80).

- 3 Reporting of the South Edinburgh 20mph pilot project

The draft summarises the results of the South Edinburgh 20mph pilot project. However in doing so it underplays the results and does not report some key positive findings, notably benefits perceived by residents of the pilot area. We have proposed changes to the text box and paragraphs describing the pilot. We recognise that longer term monitoring of speed effects is desirable and hope to arrange further repeat surveys for spring next year - we would be happy for this to be referred to.

- 4 Degree of prescriptiveness of guidance on 'before' speeds

The guidance is prescriptive in its approach to streets on which a 20mph limit (ie predominantly signs only) should be considered – suggesting that 20mph limits should not be considered where current average speeds (ie with a 30mph limit) exceed 24mph. However evidence from the South Edinburgh pilot and elsewhere is that mean speeds fall more on streets with higher 'before' speeds (often significantly exceeding the 24mph threshold).

In South Edinburgh, 12 streets had an average speed of over 24mph before the 20mph limit was introduced. This reduced to four streets with the new limit in force. On these streets average speeds fell by 3.3mph and 85% speeds by 3.9mph. Both falls were larger than the average for all 28 monitored streets (which were 1.9mph and 2.9mph respectively).

With this in mind, it is suggested that the document give Councils some scope to bring in 20mph limits on streets with current average speeds exceeding 24mph. It could also highlight that additional measures may be necessary on some streets, particularly when a 20mph limit has failed to bring average speeds below 24mph. Amendments have been proposed to effect these suggestions.

5 Distinction between 20mph speed limits and 20mph speed limit zones

- a. The Guide replicates a distinction between two different types of 20mph speed restriction; this is in accordance with the UK 'Traffic Signs Regulations and General Directions' which sets out the regulatory framework. As such it appears difficult for the guidance to ignore the distinction. However the distinction is confusing and the accompanying expectation that motorists will be able to distinguish between the two types of restriction with their subtle differences in signing is perhaps unrealistic.
- b. There is also a terminology issue. Use of the word 'limit' both as a general descriptive term and to apply to one of the two means of applying 20mph speed restrictions is somewhat confusing. Perhaps the word 'restriction' could be used for the general description with the word limit reserved for one of the two specific means of applying a 20mph restriction.

6 Hybrid zones as per Edinburgh Pilot

The Edinburgh pilot used 'zone' signing but with repeaters at the pragmatic 'limit' intervals - in practice 200m was used. The flexibility shown in permitting this approach was very welcome and we consider the result is clear to road users. We have received no complaints of confusion arising from this hybrid approach. We would urge you to consider explicitly mentioning and permitting or even encouraging this hybrid approach. It significantly reduces the requirement for repeater signs/traffic calming compared with the full zone requirements, whilst avoiding the need to sign traffic calming features that would come with the limit requirements.

7 Structure and length of the guide

We feel that in some parts the structure of the guide is confusing. In particular, specific guidance on 20mph Limits, as opposed to Zones, seems to be given in two separate parts of the guide (paras 36 to 41 and then 59 to 61). This difficulty is, we believe, strongly related to the terminology issue covered in 5b above.

The Guide is rather long, particularly in its introductory sections, and we suggest might benefit from shortening. We have made some suggestions.

8 20mph as the default urban speed limit

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 streetlit roads. This would significantly reduce signing requirements (and hence installation costs and street clutter implications) for 20mph limits.

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 worthy of serious consideration.

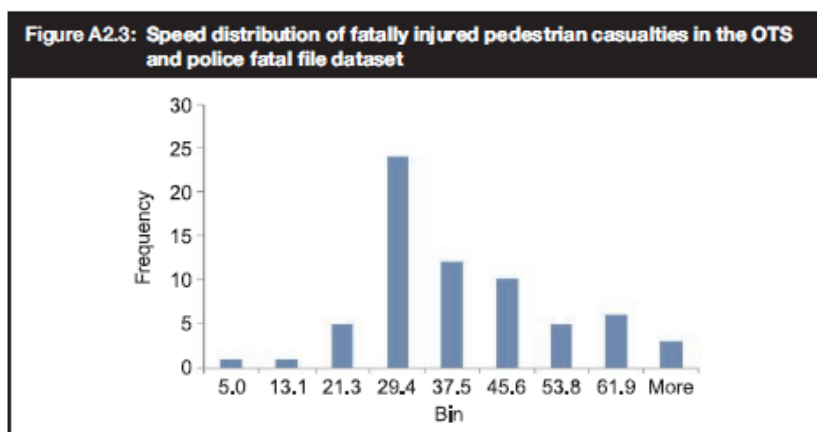
Prior to any such change, it is suggested that consideration be given to amending the good practice guide to encourage an approach to using 20mph speed limits with minimal repeater signs, with a parallel change in approach on 30mph roads whereby repeater signs can be used (at present they are not generally permitted).

Appendix 2:

Short Supplementary discussion of DfT Road Safety Web Publication 16 (D C Richards) and TRL report 421

It is revealing to look at tables and graphs showing the speed distribution of pedestrian fatalities in appendices 2 and 3 of the D.C. Richards DfT paper. These highlights the fact that despite the fact that risk of death grows very significantly above 30mph, most pedestrian fatalities occur at impact speeds around 30mph. This is not surprising given that the great bulk of pedestrian activity will be taking place in urban areas.

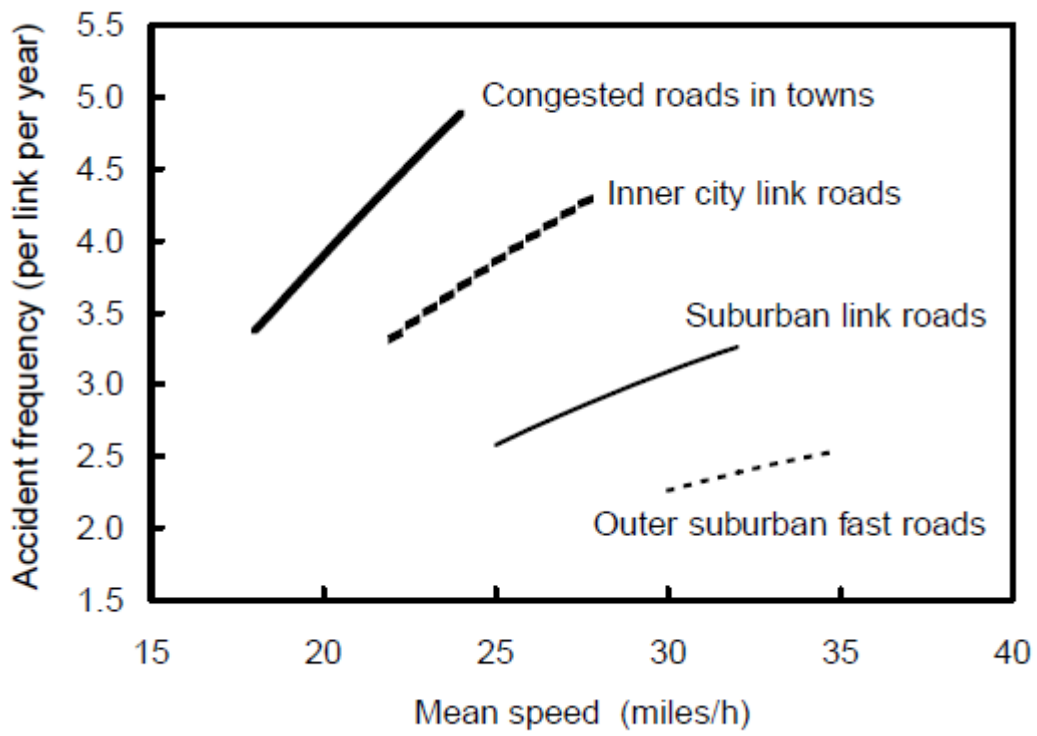
This, together with the evidence TRL 421, suggests that there are significant benefits to be gained by large scale reductions in urban speed limits to 20mph, particularly on busy roads with high numbers of pedestrians.



Both the graph above and the table below are extracted from the DfT research paper by D C Richards.

Table A3.1: Summary of pedestrian dataset from OTS and police fatal files

Age group	Injury severity	Impact speed group (mph)						Total
		0-10	11-20	21-30	31-40	41-50	50+	
0-14	Fatal	0	1	4	1	3	0	9
	Serious	5	11	5	1	0	0	22
	Slight	7	15	1	0	0	0	23
	All	12	27	10	2	3	0	54
15-59	Fatal	1	2	8	5	5	9	30
	Serious	4	13	7	9	1	0	34
	Slight	3	14	8	0	0	0	25
	All	8	29	23	14	6	9	89
60+	Fatal	1	2	16	3	3	0	25
	Serious	1	5	3	1	0	0	10
	Slight	1	2	1	0	0	0	4
	All	3	9	20	4	3	0	39
Unknown	Fatal	0	0	1	0	0	1	2
	Serious	1	2	3	1	1	0	8
	Slight	0	4	1	0	0	0	5
	All	1	6	5	1	1	1	15
Total		24	71	58	21	13	10	197



Graph extract from TRL report 421