

CENTRAL MANAGEMENT BRANCH



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Paul Carlisle
Clerk to the Committee for Regional Development
Committee Office
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Dear Paul

Road Traffic (Speed Limits) Bill

Thank you for your letter of 19 March 2014 seeking additional information in connection with the briefing provided by officials on the Road Traffic (Speed Limits) Bill. This correspondence sets out the Department's responses to the queries raised.

1. *Can the Department provide the Committee with statistical data with regards to the cost of fatalities and serious injuries against the cost of providing traffic calming measures to self-enforce speed restrictions?*

The information provided below has been extracted from the Department for Transport's Accident and Casualty Costs (RAS60), Table RAS60001, which deals with accident impacts including lost output, medical and ambulance, human costs, police costs, insurance and admin, and damage to property as at 2012.

<https://www.gov.uk/government/statistical-data-sets/ras60-average-value-of-preventing-road-accidents>

RAS60001**Average value of prevention¹ per reported casualty and per reported road accident²:
GB 2012**

Accident/casualty type	£ June 2012	
	Cost per casualty	Cost per accident
Fatal	1,703,822	1,917,766
Serious	191,462	219,043
Slight	14,760	23,336
Average for all severities	50,698	72,739
Damage only	-	2,048

1 The costs were based on 2012 prices and values

2 The number of reported road accidents were based on 2012 data

The values for the prevention of fatal, serious and slight casualties, given in the Table, include the following elements of cost:

- Human costs, representing pain, grief and suffering to the casualty, relatives and friends, and, for fatal casualties, the intrinsic loss of enjoyment of life, excepting consumption of goods and services;
- Loss of output due to injury. This is calculated as the present value of the expected loss of earnings plus any non-wage payments (national insurance contributions, etc.) paid by the employer. This includes the present value of consumption of goods and services that is lost as a result of injury accidents; and
- Ambulance costs and the costs of hospital treatment.

Extracted costs of traffic calming schemes have been provided in the response to Q5.

2. *Can the Department provide comparable costs between traffic calming and traffic signage?*

While the Department has installed a small number of traffic calming schemes that were subsequently included on a 20mph speed limit order and retrofitted with 20mph signs, these have been in discreet areas where there are a limited number of entry points to the scheme areas. Therefore, while the total length of road that was traffic calmed is

significant, the number of signs required was fairly small. One such example would be the Scrabo Estate in Newtownards where, despite there being a considerable total length of roads traffic calmed, there are only 4 entry points that required signing. Extracted costs of traffic calming schemes have been provided in the response to Q5.

3. *How many speed limit areas did the 1998 research consider? Was there any correlation between these and the 250 areas considered in the 1996 research?*

The 1998 research paper was commissioned to study and evaluate the range of measures that can be used to manage speed on residential and other urban roads that are not going to be dealt with as self-enforcing 20mph zones. As well as drawing on the information on the 250 zones contained within the 1996 research paper, it considered the impact of various measures that TRL had collated on a database from reports from various sources in the UK and overseas.

For this reason, there was no correlation between the areas included in the 1996 and 1998 reports.

4. *What evidence do you have that indicates local communities would be opposed to the blanket introduction of speed limits as proposed in the Private Members Bill?*

The Department carries out extensive public consultation prior to the introduction of any new legislation. As the intention of the Bill is to change the speed limit on approximately 4300km of residential streets without further consultation, we believe this could lead to a situation where communities or individuals affected by the change in speed limit seek to opt out of implementation of the new limit for their area.

We will be in a better position to gauge the level of support for the change following consultation on the pilot schemes currently being progressed.

5. *Can the Department undertake a modelling up of the costs of the 500 schemes completed to date in respect of the 4300 km of unclassified roads in Northern Ireland?*

The Department has not tabulated sufficient detail on the schemes completed to date to be able to carry out this exercise. However, using information from a number of recently completed schemes, we have determined the average cost for the installation of a standard road hump is £2000. In addition, these humps are normally set out with an average spacing of 80m metres. This would produce an estimated cost to treat the 4300 kms of £110m. There may, however, be additional costs associated with the provision of drainage, signs, lines and other ancillary items.

We have also obtained the costs and lengths of 3 recently completed schemes and these indicate an average cost of £30,000/km. This would produce an estimate to complete 4300 kms of £130m.

As these figures have a narrow base, they should only be regarded as indicative.

6. *Can the Department provide the Committee of some of the early statistics relating to speeds in the pilot projects?*

Details of the current average speeds and collision figures in the areas covered by the 5 pilot sites are shown in the table below. The Department would be content to share the corresponding figures after treatment but it should be borne in mind that collision statistics are normally taken over a 3 year period.

Pilot site	Average speed	Collision History
The Rosses, Ballymena	23.8 mph	1 collision 2008-2011
Whitehall, Ballycastle	21.2 mph	2 collisions in 2008-2011
Langley Road Estate, Ballynahinch	24.25 mph	No collisions 2008-2011
Merville Garden Village, Newtownabbey	32 mph but no through route	1 collision 2008-2011
Belfast City Centre	13 mph	52 collisions in 2011

7. *You state that your favoured solution of using engineered measures have “...proven to be very successful over the years and have helped to significantly*

reduce pedestrian and cyclist fatalities and serious injuries”. What statistics do you have to support this and doesn’t this negate your cost argument?

The table below contains a summary of the average annual reduction in collisions throughout Northern Ireland based on the known effectiveness of the various mitigation measures installed as part of the schemes. More detailed information on the improvements in road safety resulting from individual schemes can be provided, if required. While these schemes are very effective in reducing casualties, they are only one type of measure that the Department undertakes to improve road safety.

Year	Expenditure (£)	Number of Schemes	Collision History (3 year)	Average Yearly Reduction In Collisions
1990/91	18,391	1	3	1
1991/92	24,000	1	3	3
1992/93	210,000	6	37	4
1993/94	251,517	11	47	2
1994/95	395,781	21	174	21
1995/96	598,503	23	152	21
1996/97	588,615	26	163	20
1997/98	1,256,236	32	229	27
1998/99	1,084,468	35	378	24
1999/00	1,340,740	34	345	37
2000/01	896,437	31	331	35
2001/02	1,508,611	50	374	41
2002/03	1,513,773	50	474	59
2003/04	1,930,200	65	478	61
2004/05	2,567,142	79	308	44
2005/06	2,836,961	66	189	31
2006/07	1,357,255	51	158	31
2007/08	1,372,750	59	165	29
2008/09	1,804,945	74	234	26
2009/10	1,164,800	53	155	18
2010/11	891,749	26	75	17
2011/12	1,304,400	46	132	14
Total up to 2011/12	24,917,274	840	4,604	565

8. *Did the Department respond to the public consultation issued by the Bill Sponsor?*

The Department was not aware that any public consultation was carried out. We therefore did not have an opportunity to submit any response.

9. *The public consultation carried out by DOE in its preparation for the Road Safety Strategy for Northern Ireland to 2020 showed a healthy support for 20mph speed limits. In fact, it also highlighted that people wanted to move away from physical traffic calming measure like speed humps. Does your research point to a change in attitudes on this?*

The online questionnaire for the Road Safety Strategy for Northern Ireland asked a question “Do you agree with the proposal to develop a programme of 20mph zones and limits in residential and other areas where there is a high presence of vulnerable road users such as pedestrians, children and cyclists?” It should be noted that it did not differentiate between 20mph zones and limits. Of the 1,132 respondents, 76% were in favour, 14% had no opinion and 10% were against.

Other feedback was of a qualitative nature and included written responses from organisations, such as Councils and campaigning groups, as well as responses from various focus groups. Although many written responses supported proposals to develop a programme of 20mph speed limits at rural schools where the national speed limit applies and the wider introduction of 20mph limits in urban areas, there were also a number of comments opposing such measures for economic and traffic flow reasons. Of those respondents who did support the principles of 20mph limits, many wished to see the proposals extended to include all schools, all rural towns and villages and more urban areas. The absence of traffic calming engineering measures from some 20mph schemes was particularly welcomed both in the general comments received and in comments specific to rural areas. Other respondents, however, disagreed suggesting that traffic calming measures were effective in changing driver behaviours.

It was noted that 20mph limits would encourage walking and cycling activities and this was to be welcomed. It was further suggested that the concept might be broadened to incorporate Home Zones, an initiative where roads and streets are physically altered to

balance the needs of all road users. A policy that encouraged traffic in residential areas to move at speeds more appropriate to sharing the space with pedestrians was welcomed.

Some respondents gave a more cautious welcome to 20mph limits and suggested that such limits only be applied to locations where specific need had been identified, rather than adopting it as a standard operational policy. If this were to be the case, one respondent, representing the freight and haulage sector, indicated their strong objection.

There was also some debate about the difference between areas with 20mph zones or limits and whether they would be more effective as 'advisory' or 'enforceable' limits in residential and other urban areas where they are applied. Better signage when approaching restricted speed areas would be welcomed. A proposal also requested more off-road parking facilities at schools and more right turn lanes at the entrance to schools.

Some respondents were concerned that the introduction of 20mph limits might conflict with other government commitments to reduce greenhouse gas emissions and improve air quality. In particular, Belfast City Council asked that appropriate environmental assessments be carried out to assess the impact of lower speeds and associated increases in vehicle emissions.

All of the above were based on the opinions of the various responding parties and it would be impossible to quantify them.

I hope this information is sufficient to address your questions.

This letter is fully disclosable under FOI.

Yours sincerely

A handwritten signature in black ink, appearing to read 'A. Doherty', with a horizontal line extending from the end of the signature.

ALAN DOHERTY
Departmental Assembly Liaison Officer