

Ph (44) 01730829416

Mobile (44) 07717222459

e-mail [irfrancis@onetel.com](mailto:irfrancis@onetel.com)

GU32 1LD

Sunny Bank,  
Church Lane,  
West Meon,  
Petersfield,  
Hampshire

24 Feb 10

Speed Management Branch  
Road User Safety Division, Zone 2/13  
Department for Transport  
Great Minster House,  
76 Marsham Street  
London SW1P 4DR

#### Notes

- 1/ Some of the attached documents have been copied before to the DfT but are included here for convenience.
- 2/ I was not aware until yesterday of the DfT's request for comment on 20mph zone, but even though the notional deadline has passed it seems appropriate to submit these comments to the address specified.
- 3/ I do not yet have, but await, that part of Atkins' report supposedly comparing Portsmouth's results with national trends.

#### Bogus Claims of success for Portsmouth's 20mph zone

Dear Sirs,

Having spent several thousand hours studying road casualty data, trends and policies over the last 10 years I was astonished to read last Autumn of the Conference called by **Portsmouth City Council** to announce "*encouraging results*" in the first year of their 20mph zone, and to encourage other Councils to do the same. I say "astonished" because it has long been recognised that, even for national data, results from a **single year are too vulnerable to random variation** (weather, the economy and chance itself etc) to provide statistically meaningful indications of changes in trend. Given that there are typically 50 slight and 10 serious injuries for every fatality, this is even more true for the more serious injuries.

That anyone, let alone supposed safety professionals, could claim "*encouraging results*" or success on the basis of **single year changes in tiny casualty numbers in one part of one city** simply beggars belief. That they should then – whether deliberately or not - misrepresent data which, **if it suggests anything, suggests failure, to conjure up the impression of success** serves only to increase my astonishment, especially as road safety policies based on bogus analysis and/or wishful thinking risk worse levels of road casualties than would otherwise occur. Road users in Portsmouth and elsewhere deserve better than **policies based on defective analysis of small amounts of volatile data, supported by wishful thinking.**

I was so surprised last November that I submitted a Freedom of Information request to Portsmouth Council for all available information, and received amongst other items some (but not all) pages of the **Atkins report** into the first year of the scheme. I was not however copied the pages containing **Atkins' comparison of Portsmouth's results with the national trend** that somehow lead to the extraordinary conclusion (quoted in the DfT's invitation to comment) that the **evidence "suggests that overall casualty benefits above the national trend are likely"**. **They suggest no such thing**, as I demonstrate below and in the attached analysis. In fact where direct comparison is possible, **Portsmouth's results were worse or much worse than the national results 22 times out of 24!**

Having received the documents from Portsmouth I submitted to the Council on **4<sup>th</sup> January 2010 the attached complaint** about their figures and claims, explaining in detail why they are nonsense and asking them to withdraw all such claims. Despite two reminders, the latter including a deadline of Monday 22<sup>nd</sup> February, the **Council has failed to acknowledge, let alone respond to my complaint.** Two or three Councillors did contact me in largely sympathetic terms, but the Council as a body has not. For the record, I consider that to be unacceptable behaviour by a public body.

What the Council did do however was to circulate an **inaccurate, misleading, weasel-worded briefing note** to Councillors, two of whom then copied it to me. The **attached copy** includes my responses pointing out the errors and misleading analysis in that note. Like my original complaint both were copied to all Councillors and relevant MPs. As of today no reply has been received to that either.

Having now read the DfT's invitation to comment, I realise that the original source of these spurious claims might have been the Atkins report, and that the Council was merely repeating that nonsense. That Atkins quote their casualty reduction figures, including the comparisons with other 20mph zones, without adjustment for the 12% reduction in traffic is both extraordinary and unforgivable. That PCC refuse to admit that this adjustment is necessary is worse still.

It would serve no purpose to repeat here the detail you may read in the attached correspondence, setting out surely irrefutable evidence that there is **no statistical basis whatever for claims of success or benefit**. I would however at this point wish to dispute the statement in your invitation to comment that:

*“Research shows that on urban roads with low average traffic speeds any 1 mph reduction in average speed can reduce the accident frequency by around 6 % (Taylor, Lynam and Baruya, 2000).”*

With respect, this simplistic statement might well be seriously misleading, at least in the present context, as shown by the Portsmouth data and the attached correspondence. Again I need not repeat the detail here but it is clear that while average speeds fell by 0.9mph, and at 17 higher speed sites by 7mph, **of the 159 sites monitored, speeds did not change at 21 and increased at 59 sites**. Given that most drivers drive most of the time at speeds they consider safe, it is impossible to predict whether measures which result in **drivers slowing down below speeds they previously considered safe, but speeding up elsewhere above what they thought were safe will result in more accidents or fewer**. The **likely asymmetry** of the **speed/risk relationship** either side of drivers’ assessment of safe speed however suggest greater risk overall – and indeed, if the results do mean anything, they confirm that assessment.

In any case it is important that the **balance of risk** is not determined by the number of sites where speed increases compared to those where they fell, but by those sites, **each weighted by it’s traffic volume**. As that traffic data is not available arguing more or less risk due to these speed changes is **quite pointless – yet the 7mph reduction at only 17 out of 159 sites has been headlined as a benefit!** I would have fired out of hand anyone who had made such glaring errors in my own company, because as a commercial enterprise we could not afford such mistakes.

Please note that brief comparison tables in my correspondence with PCC did not separate out the different types of road users, and that the changes in national trends were based on 2008 compared to 2007. I stated in my response to the briefing note that I would prepare a new and more detailed analysis, which I now attach. I need not repeat here the explanatory notes on the second page, or the detailed figures. Instead I point out the following:

1/ **Column 4** - adjusted for the 12% reduction in traffic volume (which PCC still refuses to do when making its claims). Of the 28 Portsmouth comparisons between 2005/6/7 and 2008, **16 show worse figures (Red) but only 12 show improvements (Blue)**

2/ The adjustments for traffic 2007 to 2008 in national data are slightly more complex, being a **1% fall over all vehicles**, and hence for car traffic, an **8% fall in motorcycle traffic and a 12% increase in cycle traffic**. Each group has been adjusted on that basis.

3/ **Column 13** – (the difference between changes at **Portsmouth** and **nationally** data on the same 3 years before/ 1 year after basis. **21 show worse figures (Red) but only 3 show better (Blue)**).

Note that I have discounted the fatality data because 1 cyclist death over 3 years, followed by none in one year is no basis for any meaningful comparison.

Not even the most misguided optimist could pluck encouragement or success out of such figures. As for speed changes, what surely matters is not speed per se but the accident rate. If as it seems – if the data provides any meaningful statistical evidence – who benefits if speeds fall marginally but more people are injured? How many injuries can be justified by a supposed improvement in the highly subjective feel-good factor?

I hope that you will take all necessary steps to stop the propagation of this nonsense, and to ensure through your imminent new guidance documents that local authorities are aware of these issues.

Incidentally, I am not opposed to 20mph areas per se – what I am opposed to are bogus claims of benefit where none exist, the expense of 20mph zones relying solely on 20mph signs, know to have only very marginal effects on speed and policy expanding across the country on the basis of what seems to be no more than incompetence and/or wishful thinking

**Yours sincerely**

**Idris Francis B.Sc. FIOD**