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04 Jan 10

To All Councillors,
Portsmouth City Council,
Portsmouth,
Hampshire.

cc all Police Forces and Road Safety Partnerships, the DfT, Highways Agency, the media and others.

Note that all comments and criticism contained in this complaint are addressed to Portsmouth City Council as a corporate body, and not to individuals.

All data and reports referred to below, and many more documenting the catastrophic failure of speed camera and other road safety policies over the past decade and a half are available on a CD from the undersigned, on request. A copy will in any case be sent to the Council.

Portsmouth's Claims of Success for 20mph Zone Are Without Foundation

Dear Sirs,

Comments and criticisms below are based on thousands of hours over the past eight years studying road accident data, trends and policies, following a long career as an electronic engineer familiar with such matters.

Anyone with even the most cursory understanding and experience of road accident and casualty data knows that year-on-year comparisons of data are almost meaningless in statistical terms because of the many other factors involved such as pure chance, weather, boom/bust etc. Three year rolling averages are generally considered to be the minimum period on which to base even modestly reliable conclusions about trends and the results of changes in policy – and that even for national figures, let alone very much smaller numbers for individual police areas, inevitably more volatile and statistically unreliable, still less parts of one City. Given that for every fatality there are typically 10 Serious Injuries (SI) and 50 Slight Injuries (SL) this is even more true for serious casualties than for minor.

Further, the British Medical Journal report of June 2006 pointed out that the 35% or so fall in SI in police figures from 1995 to 2005 is not reflected in hospital data - hospitals show no such falls at all. The report claims that the falls are only in already low reporting levels. SI numbers are therefore even less reliable, and there is no reason to suppose that the same does not apply to slight injuries.

I was therefore astonished when almost two years ago Portsmouth City Council decided to continue to support speed cameras, while "*waiting to see what happens at Swindon*", where three or four speed cameras were to be switched off. It really should not be necessary for me to point out that single digit casualty numbers over one year at three or four sites, each about 1 km. square, can never be statistically significant.

I was even more astonished when I read at the end of September 2009 that PCC had called a conference to announce "*encouraging signs*" based on a single year's results, still more so when I realised that their claims failed to adjust either for national trends or traffic volume. I was also astonished - and appalled - that PCC then sought to persuade other areas to do the same, on the basis of this clearly bogus analysis. Does PCC not understand that road safety policy based on bogus, misrepresented or misunderstood data costs lives and limbs, not least by diverting resources away from better, and better proven, methods?

For all of these reasons I used the Freedom of Information Act to obtain a copy of the official Atkins report on the PCC 20mph zone and answers to a few other relevant points.

1/ Your reply dated 18th November tells me that although £575,000 was budgeted for the 20mph scheme, "**PCC does not hold any recorded information regarding financial savings**". In other words, a decision was made to spend £575,000 of taxpayers money with neither prior nor post implementation estimates of any kind of what benefits - or indeed adverse effects - might result. I consider this to be utterly astonishing, a **dereliction of duty and arguably a serious breach of the statutory duty of care the Council owes to the public**.

2/ Had the Council investigated the likely effects in advance it would have discovered what Atkins state in their report:

"Table 6.1 shows that 20 mph Zones [with traffic calming] are more effective than 20 mph Speed Limit signed only schemes for casualty and speed reduction, with reductions in the number of casualties three times greater than that achieved by signing alone. This is likely to be attributable to the corresponding larger speed reductions of about 9 mph"....."implementation of 20 mph Speed Limit schemes with signing alone results in a 1 mph reduction in speed

Atkins also state of the PCC zone that, *"the combined results for all the three sectors do not show a statistically significant change in average speed.....20 mph signs were applied largely on roads where traffic speeds were already close to 20 mph"*. (my emphasis)

3/ For all I know there might be people out there who really do believe that a 1mph reduction in average speed will bring about meaningful reductions in accidents – despite drivers having to concentrate more on their speedometers and less on the road – or pedestrian - ahead. I emphatically do not, nor does anyone else I know, not least because as any mathematician knows, “average” can hide wide variations. It is at least possible that the increases in speed can cause more problems than the reductions solve. In other words, given that most drivers drive safely most of the time, it is at best uncertain whether slowing traffic below speeds previously felt safe will eliminate more accidents than speeding up elsewhere, above the speeds drivers previously felt safe, will cause. There is certainly nothing in the results to show that it does.

4/ Highlighting the reduction in average speed of 7mph on a few roads and the overall reduction of 0.9mph, PCC chose not to highlight the changes on other roads. The Atkins report however shows that of the 159 sites monitored, speeds did not change at 21 and increased at 59.

5/ The report provides traffic volume figures for only 2 of the 6 areas, failing to state whether data was recorded for the other 4. It seems reasonable to assume that (a) they were not stated because they were not recorded and (b) the 12% fall recorded in 2 areas probably applied to all 6 areas. The rest of this analysis assumes that this is the case.

6/ The first year of the PCC 20mph area appears to run from April 2008 to March 2009 while the DfT Main Results data is for calendar years. The slight mismatch in timing cannot be significant.

7/ The DfT 2008 data shows a fall of **1%** in traffic volume, a **14%** fall in fatalities (K), a **6%** fall in Serious Injuries (SI), a **7%** fall in Slight Injuries (SL) and a **7%** fall in All casualties. **It is against these figures, and not the 2007/8 PCC figures that the 20mph area changes must be compared.**

8/ The numbers already being so small, there is no point in looking at separate figures for each small PCC area, as their volatility is too great, as in any case it is for the one fatality in 3 years before.

9/ The Atkins report gives figures both for accidents and for casualties. The patterns are obviously similar, but as the number of casualties is more important than the number of accidents which cause them, only casualty numbers are considered below. (Accident numbers can be misleading, as when 1 fatal accident involving 3 fatalities is clearly worse than 2 fatal accidents involving only 2 fatalities.)

10/ Adjusted for traffic volume, the real comparisons for the whole 20mph zone are as follows:

Severity	PCC Claim	GB	GB Adjusted	PCC Adjusted	
Killed	see note C	14%	13%	see note C	
SI	-1%	6%	5%	-9%	MUCH WORSE
KSI	0%	7%	6%	-7 %	MUCH WORSE
SL	17%	7%	7%	6 %	MUCH THE SAME
ALL	15%	7%	7%	4%	WORSE

Corrected from 7% and Worse, as in original version

Notes.

a/ Positive % are falls.

b/ Casualty changes adjusted for 12% traffic flow fall in PCC, 1% fall in GB.

c/ The “before” fatality figure was 1 in 3 years, the “after” figure was 0 in 1 year. While the theoretical fall is 100%, the numbers are too small to be at all meaningful..

d/ As always, all of these numbers are too small to be meaningful in any real statistical sense.

Summary

For all the talk of “*encouraging signs*” and “*we’ll have to wait until it has been running for three years before we get the full picture*” the blunt truth is that:

i/ At best, there is no statistically significant evidence whatever of any safety benefit, the claims amounting to no more than wishful thinking or incompetence or both.

ii/ Nor can there be, given the amount of data, even after three years.

iii/ At worst, and to the limited extent that the data might have any significance, it indicates that the PCC 20mph results are no different from what happened everywhere else, with the exception of Serious Injuries, where the PCC results were markedly worse.

iv/ That there was no fatality in the year, compared to 1 in the prior 3 years, is meaningless in statistical terms.

v/ I am also concerned to see that, having been refused mobile speed cameras for the first year, PCC is now using them, despite there being no meaningful statistical evidence of any benefits from such cameras – most such claims are also bogus, as I can explain in more detail.

vi/ I am also astonished to read in the press and elsewhere that the Department of Transport has repeated these bogus claims of “success” in Portsmouth and is encouraging other areas to follow suit. Does no one at the DfT these days understand even the most basic statistical principles? Will they when they receive this?

vii/ I therefore call on Portsmouth City Council publicly to withdraw any and all claims of success, to advise the DfT in particular that they have done so, and then to stop wasting taxpayers’ money on simplistic policies, spin and wishful thinking and instead concentrate on real road safety measures with proven benefits.

viii/ PCC must also consider whether those responsible for these blunders are competent to influence road safety policies and the expenditure of large amounts of public money. I am reminded of the senior military man giving evidence recently to the Iraq Inquiry who said, devastatingly, of the shambles he experienced in Iraq, “*Amateurs are now in charge*”.

ix/ PCC should also establish how much Atkins were paid to produce a report into data which, from the outset, clearly never could provide any meaningful information, who authorised it, and who will prevent a similar waste of money in future.

Yours faithfully,

Idris Francis B.Sc. FIoD