

Phone (44) 01730829416
Mobile (44) 07717222459
e-mail irfrancis@onetel.com

Sunny Bank,
Church Lane
West Meon,
Petersfield,
Hampshire GU321LD
10 July 2012

The Chief Executives of:
East Riding of Yorkshire Council, Hull City Council,
N. Lincolnshire Council, N.E. Lincolnshire Council

cc to all Councillors in the above Councils, also to Humberside MPs and MEPs, Humberside Police, Fire and Rescue, The Yorkshire Post, other media and others.

Bogus Claims of Benefit Provided by Safer Roads Humber's "Safety" Cameras

Dear Sirs,

As I am sure you agree, it is important that **policy and spending decisions be based on accurate data and competent analysis**, especially now. I am sure you will agree **too that this is particularly true in the context of road safety** where the likely consequences of badly-informed decisions are not just worse cost effectiveness but more deaths and injuries than would otherwise have occurred.

It is for these reasons that I write to bring to your attention **very serious discrepancies in Safer Roads Humber (SFR)'s 2010/11 Report of March 2012 relating to financial savings and accident reductions supposedly provided by their "safety" cameras**. (Throughout what follows, "accidents" should be read as meaning "accidents and casualties".) As I set out below, these claims are not just **nonsense but nonsense on stilts, not just fiction but fantasy** - though less polite words such as "**delusional**" also come to mind. I emphasise again that these are not just minor errors of little importance, but **gross and numerous errors** that should never have occurred, or seen the light of day if they did.

I need not repeat here the detailed explanations I have provided to Safer Roads Humber of how and why their claims cannot conceivably be valid because all correspondence, data and analysis is available at www.fightbackwithfacts.com/humberside-safer-roads-false-claims/ but in summary:

1/ Calculations of lives and injuries prevented.

(a) Over the eight year review period **accidents fell markedly** across the country and indeed in Humberside as a whole, yet SRH **claim camera benefit as being the falls compared to the pre-camera levels without adjustment for national trends**. No other Report I have read makes such a fundamental error..

(b) Their own data shows an average **fall in traffic volume at their sites of some 12%** - although **national figures hardly changed** over the same period. Much the most likely reason was that some drivers diverted to avoid cameras, taking their share of accidents with them. As any road safety analyst should know, accident numbers **should always be adjusted for traffic volume** - but SRH did not. They are therefore in effect **claiming to have prevented accidents which were for the most part simply diverted to other locations**.

(c) Successive national reports on speed camera effectiveness cover in detail the statistical effect "**regression to the mean**", which in this context means that any site selected on the basis of unusually high accident numbers is likely to experience falls **as numbers revert to their normal mean level or trend**. Appendix H in the **4th National Report** estimates that **RTTM** at the sites studied accounts perhaps for **60%** of the observed fall in fatal and serious injury accidents (KSI) with **Trend** (see point (a) above) accounting for **20%** and **cameras for only 20%**. However the estimate also points out **that without traffic volume figures** they were unable to adjust for traffic diversion which, at the **5%** figure they thought possible would have still further reduced camera benefit to **15%**. **Yet SRH claims for itself the full 100%**. And in doing so they claim, in effect, that (at least at their sites) rapid and wide-scale improvements in **vehicles, safety systems, medical skills and response speeds and the many other factors which have reduced fatalities per 10bn km by a factor close to 20 to 1 since 1950** - with barely a camera in sight - have made no contribution whatever.

(d) Since 2006 the DfT have published Police Stats19 causation factors showing that speeds above limits are involved in **only 5% of Slight, 9% of Serious and 15% of Fatal accidents**. However closer study shows that the "involved" figures include "**possible**" as well as "**very likely**" and are therefore **inherently overstated**. Also, "involved" is not the

same as "primarily caused by" and more detailed studies, for example recently by Derbyshire Police, show that the figures for "**primarily caused by**" are of the order of **half** of the above numbers - and even then included "possible" as well as "very likely".

For all of these reasons, even if camera totally eliminated speeding - which they far from achieve - Humberside's figure being about 1/3) - it would be **statistically impossible for them to eliminate more than some 2% of Slight, 4% of Serious, 5% of KSI and 7% of fatal accidents.** Accordingly claims *such as "42 per cent reduction in injury crashes"* are **self-evident nonsense and indefensible.**

(e) And in any case, the **wholly spurious precision** with which the numbers are reported - for example "**411" people alive and well today**" - given the nature and unreliability of much of the raw data, implies a lack of understanding of what the numbers mean and the significance that can be attached to them.

2/ Calculation of Financial Benefits.

(a) In 1955 in Third Form Physics my teacher pointed out to me that I should **never provide an answer to greater accuracy than the information available to calculate it** - yet the authors of this Report takes DfT estimates of casualty values - **inherently subjective and volatile and variable as they are**, multiply them by **accident reduction** numbers which are themselves **questionable and inaccurate** (to say the least) - and arrives at a supposed saving to the State of **£73,223,760** - specified to **seven (yes 7) significant figures** - or **1 part in 7 million!** Back here in the real world, even if the data were at least reasonably accurate, there is no basis for **more than two significant figures of accuracy, if that.**

(b) **The DfT values - ludicrous though they are - include:**

i/ **The direct cash costs - damage, emergency services, medical costs** etc. These are **relatively modest** apart from long term care of serious injuries, though (subject to checking) I wonder if they might be overstated through failing to adjust for costs including VAT and income taxes paid to the State. (If you were to ask whether the DfT is capable of such errors of analysis, my reply would have to be that they most certainly are, as I have shown time and time again, including as below.)

ii/ **What SRH calls emotional costs.** While I have no objection in principle to the DfT or anyone else allocating cash values to such intangibles as "*emotion*" and "*pain and suffering*" for the purposes of comparing policy alternatives, it is important always to remember that **these sums are "values", not cash**, and therefore (as the **National Audit Office** has confirmed) should **not be presented as if they were cash** in the way that the Report does in its statement that "*in financial terms, this equates to a saving to society of more than £73 million*". **In reality much of this sum is not cash at all and appears in no known ledger, State or otherwise, this side of the Pearly Gates.**

iii/ **What SRH calls "loss of earnings"** but which the DfT calls "**Lost Output**".

I will deal first with "**loss of earnings**". While it is of course true that someone who is killed or injured loses earnings, the iron law of any economy, that **output is determined by demand**, ensures that **earnings lost by one incapacitated person soon finds its way to whoever takes over his work**, to maintain output at the level determined by demand. (To believe otherwise would be to believe that any employer who loses an employee shrugs his shoulders and resigns himself to a corresponding loss of output. None do of course - they either hire someone else, allow more overtime or lose the business to someone else who does.) It is therefore beyond rational dispute that while death or injury on the roads does result in a **loss of earnings to the individual**, there is a **corresponding gain to his replacement, with no net cost to "society" whatever.**

Much the same applies to the DfT's "**lost output**" figures - whether for fatal or non-fatal injuries **they are largely nonsense and I have recently filed a formal complaint with the Transport Select Committee to that effect.** A detailed analysis of this nonsense will be found at <http://www.fightbackwithfacts.com/bogus-dft-values/>.

This includes that the **real cash cost to the State even of a fatal accident** is in reality little more than **£20,000 not the £1.6m to £1.9m** stated in recent years.

3/ Overall Financial Benefits Compared to Costs.

As I have set out above, the Report's claims both of accident **reductions achieved** and the **cost savings they represent to the State are wildly exaggerated.** I am unable as yet to do more detailed analysis because I am still

waiting for SRH to send me the separate data for each severity of accident - though in any case the raw numbers are far from reliable.

However as the **purpose of the Report was presumably to tell Councillors, other decision makers and indeed the taxpayer what benefit they supposedly receive for the £2m p.a. SRH costs**, and indeed to encourage them to continue funding, it would be as well to review cost-effectiveness in the light of the corrections which should be applied to the claims:

It is curious the March 2010 **Press Release quotes £73m benefit** apparently over **8 years**, but the report itself specifies over **7 years**. Also curious is that the Report cites the DfT's **valuation of Serious Injury accidents** but not of Fatal or Slight accidents, and that the £73m figure seems to relate only to **Fatal and Serious accidents but not slight**. Yet more confusion in what could and should have been clear numbers.

The Report provides an **operating cost figure of £2m p.a.** for 2010-11 so if we assume the same applied to all 7 years that would be a total of **£14m**, and a **benefit/cost ratio of around 5 to 1** on the basis of SRH's largely bogus claims. Or perhaps **a little more if Slight accidents** - with their inherently lower costs - were included.

However, given that the claims of **accident reductions are of the order of 10 times greater than would ever be possible** (see above), that adjustment alone would reduce benefit cost ratios **at best to 1 to 1, and at worst to 0.5 to 1**.

The killer fact of course is that **even break-even (at best) relies on largely spurious DfT Values for accidents avoided so that** (even including "pain and suffering values" as if they were cash costs) **benefits then fall to well below costs**. Aka "the game isn't worth the candle".

4/ What Next?

The web site documents include my formal complaints to SRH and East Riding Council that the claims are clearly spurious, and in detail why this must be so. It is surely **highly significant** that not a single refusal to withdraw the claims has challenged my analysis or disputed any of the facts I present but has instead adopted the **Ostrich Defence** - "**head down, and perhaps the problem will go away**". **Sorry, no.**

I filed a formal complaint against SRH with **Humberside Police**, though I pointed out that due to their own Force's close relationship with SRH they would need to refer it to an outside Force for investigation. They chose to handle it under their **Professional Standards rules** - which apply to police officers not to civil servants - and decided that they could legitimately rule on a complaint which involved their own Force. The officer involved also assured me that he could think of **no circumstances in which a civil servant who published false information in a public document** could ever be guilty of an offence - even though I had already referred him to the Perjury Act 1911 which makes that very provision. Nor does he accept that the Duty of Care (owed by all, but even more so by civil servants) to others allows censure in these circumstances.

He did refer me to **the IPCC**, but as expected their acknowledgement pointed out, as later did **their rejection** of my complaint, that their authority extends only to whether the Police had **followed the correct procedures**, not to the merits of my original complaint. I will add the IPCC rejection to the web site shortly.

So where now? Having failed to have these false claims withdrawn and failed (so far) to ensure legal action is taken both against those who published and later refused to withdraw them, **I can at least ensure by means of this letter that your Councils and those who make decisions on whether funding Safer Roads Humber's cameras makes any sort of economic sense are aware of the real evidence.**

I would also ask you to consider whether it makes sense **to continue to employ people who (at best) have so little understanding of their work that they can make such gross errors, and those and others who then refuse to withdraw these false claims** when the facts are brought to their attention.

I would be happy to respond to any questions you might have

Yours Faithfully,

Idris Francis

This letter has been edited slightly since paper copies were posted to Councils, to correct a few typing errors or to clarify some points, without changing the meaning.