Ph (44) 01730829416
Fax (44) 01730829416
Mobile
e-mail irfrancis@onetel.com
GU321LD

Sunny Bank,
Church Lane
West Meon,
Petersfield,
Hampshire

8th November 06

The Clerk to the Transport Select Committee,
House of Commons,
London SW1

cc Mrs Gwyneth Dunwoody MP ((Chairman), Mr David Clelland MP, Mr Jeffrey M. Donaldson MP Clive Efford MP, Mrs Louise Ellman MP, Mr Robert Goodwill MP, Mr John Leech MP, Mr Eric Martlew MP, Mr Lee Scott MP, Mr Graham Stringer MP, Mr David Wilshire MP Also **Dr. Stephen Ladyman MP**, Dept of Transport, Dr. John Reid, Home Sec, Mr. Robert Gifford

Serious Discrepancies in Home Office and Department of Transport Figures for Relative Cost Effectiveness of Flashing Signs and Speed Cameras

Dear Sir,

Having studied road safety and casualty issues in great detail for five years or more, I read your recent report *"Roads Policing and Technology: Getting the right balance"* with great interest, and in retrospect wish I had known last January that submissions had been solicited. Though impressed by much of the content of your report I disagree vehemently with some aspects, most notably the claims for speed camera benefits, which I believe to be seriously overstated. Equally, I note that the many possible adverse effects on driver behaviour were ignored - as indeed they always have been. In short, it is impossible to reconcile the (theoretical and subjective) claims of camera benefit with the reality of the what has happened in the last decade, **by far the worst peace time decade since records began** in terms of reduction of deaths per distance travelled. (Appendix 4)

I note also that there is no mention of recent reports available on the DfT web site that continuing falls in **serious road injuries shown in police figures are not reflected in hospital records**, which show no such falls since 1996. Given that claims for speed camera policy and that KSI targets for 2010 will be met rely totally on falling Serious injuries, news that SI is not really falling at all is surely a devastating blow for speed camera proponents.

Neither for that matter did your report mention my application **(O'Halloran and Francis v UK)** to the **European Court of Human Rights**, despite the imminent prospect of a verdict in favour of the applicants by the twenty one judges of the ECHR Grand Chamber that may soon make camera law inoperable.

I will write again on those other issues, but what follows is entirely about the way your Committee has been **gravely misled by the Home Office and Department of Transport (DfT)** into rejecting flashing signs as an alternative to speed cameras. **It is impossible to over-estimate the adverse consequences of that decision, both for road safety and indeed the national economy.**

Cost Effectiveness of Flashing Signs

1/ Declaration of Interest

I have no commercial interests whatever in terms of speed cameras, flashing signs or other equipment, rather that I spend my own time and money campaigning for what I believe to be vitally necessary changes in road safety policy, and speed camera policy in particular.

2/ TRL 548 - Ignored Since 2003 (see Appendix 3)

I have been aware of **Transport Research Laboratory report TR548 into flashing signs ever since it's commissioning by the DfT and publication in 2002**. This report of large scale trials on 62 sites of several types of vehicle operated flashing signs showed clearly that these **signs are significantly more effective**

than speed cameras at very substantially lower cost (see below). Given these results, I had hoped that by now large numbers of these signs would be installed, that many of them would have replaced speed cameras and that installation of new cameras would come to an end. As you know, this has not happened, only very limited numbers of such signs been installed while speed camera numbers continue to escalate, while fatality trends continue to stagnate as indeed do hospital records of serious injuries..

3/ Your Assessment of Flashing Signs

My surprise that your Report fails even to mention TRL 548 is exceeded only by my astonishment at your statement (Para. 117) that: ***"In terms of the value for money, however, the speed camera was shown to be the most cost-effective (the first year rate of return was 12 times the cost, compared to….. 10.6"*** (for flashing signs). – a statement grotesquely at odds with the findings of TRL 548, which shows the **cost effectiveness of flashing signs to be orders of magnitude greater than speed cameras** (see below). The significance of this is of course that using flashing signs instead of cameras would be (a) the same level of benefit at far lower expense or (b) massively more benefit for the same expense, or (c) a mixture of the two. **Yet your report, in a single sentence, kicks those highly desirable options into touch, and does so on the basis of gravely flawed information provided by the Home Office and DfT.**

4/ The Data on which Your View was Based

Even if the figures provided by the Home Office and DfT (Appendix 2) had been above reproach, **it surely cannot make sense summarily to dismiss the flashing sign option simply because it appears to be 12% less cost effective** – an unreliable margin so small that other factors should surely have been taken into account, factors such as the on-costs of camera systems that do not apply to signs (e.g. administration, fines, court and legal costs, police time, lost licenses, jobs, businesses and even marriages).

It cannot make sense to base such important decisions on figures from just one camera site and one flashing sign site. Opinion polls take at least one thousand opinions to achieve accuracy to a few percent. Just one more accident in five years, however minor, at the camera site would have made the calculated cost effectiveness virtually identical.

It cannot make sense to base such important decisions on small difference between inevitably different mixes of fatal, serious and slight injuries when the notional value of the reduction of each of the three types of injury can only ever be rough estimates.

It cannot make sense to base such important decisions on small differences arising from cost figures of £14,000 and £7,000 which (to the extent that they have any meaning at all) were clearly either guesses or more accurate figures that have been rounded up or down – quite possibly by more than the 12% difference in question!.

In short, a handful of random accidents at only two sites, multiplied by order of magnitude guesses and then divided by rounded-off ball park estimates cannot be expected to provide reliable answers – as developers of early computers knew full when they coined the phrase **"Garbage in, Garbage out."**

5/ Gross Errors in Home Office and DfT Figures

But even that **assumes that the Home Office/DfT figures were valid within their inherent limits. – but they are not.** Indeed, they are so wildly out that it is utterly impossible to reconcile them with other well established data. The issues are these:

The Home Office/DfT quote **"implementation costs" of £7,000 for speed cameras** and, astonishingly in comparison, **£14,000 for a flashing sign** – but of course what matters in this context is not just "implementation" costs (whatever that might mean and how it might have been calculated) but the total cost amortised and averaged over a long period, say ten years. It must surely be intuitively obvious even to the man in the street that a system which merely has to trigger a **flashing light is inherently of substantially lower cost than one that needs to take photographs,** develop and print them and employ people to send out Notices of Intended Prosecution - and everything that follows.

TRL 548 (section 3.3 Pg 6) reports a cost of **£5,000 for the installation of a flashing sign,** while figures of **£30,000 to £50,000 for speed camera installation** have been widely reported. Furthermore TRL 548 reports **negligible running costs for flashing signs** (essentially just the electricity bill) while costs of the order of **£30,000 per annum for speed cameras** have been widely reported. Averaged over ten years, the cost of a flashing sign is well below **£1,000 per annum but around £35,000** for cameras – yet bizarrely the Home Office submitted figures of **£14,000 to £7,000 respectively.** As if this was not bad enough, the detailed analysis in **TRL 548 shows that flashing signs are significantly more effective** at reducing accidents and injuries, so the **cost effectiveness of signs is roughly fifty times greater than cameras – yet the Home Office and DfT claim that they are almost identical!**

That the Home Office and DfT, in response to your direct request for information on cost effectiveness of other methods not only totally ignored TRL 548 (that the DfT itself commissioned) but provided such grotesquely misleading data is surely a matter your Committee will raise with them.

6/ The Future – Flashing Signs or Cameras?

In response any defence that **flashing signs might be suitable only for rural roads,** I see no logical reason why this should be the case, but even if they were less effective on suburban and main roads than on rural, given the difference in cost effectiveness of fifty to one, that is unlikely in the extreme to fall to anywhere near the effectiveness of speed cameras, wherever used. What would be more effective for the same overall costs – fifty flashing signs or one camera?

As your report shows, the massive increase in fines over recent years has not yet led to a corresponding increase in driving bans, presumably because they have been spread rather evenly across the majority of drivers who had few penalty points to start with. But the **longer camera policy continues the more the current figure of one million (near paranoid) drivers on nine points will escalate, the more drivers will be banned,** the more jobs lost and businesses destroyed and the more marriages split apart.

In other words, , even if the ECHR ruling does not stop the use of cameras, **the economic and political consequences of continued escalation of camera numbers much beyond the 3% of road area they now cover, will make that expansion impossible.** In contrast, given their negligible running cost, flashing signs could continue to spread across the country without any backlash at all, and at lower cost even than maintaining the existing camera network. The figures are very simple: Take down one camera, install a flashing sign: elimination of running costs would pay for the flashing sign within two or three months (even sooner if the camera were modified into a sign). Note that this is not a one-off project – the continued saving of the running costs of the camera would continue to pay for a new sign every few months, until we arrive at the point that all the necessary signs are in place and costs are effectively at an end. The benefits to road safety – and to public satisfaction and the ever more vital relationship between police and public would be incalculable. But not if cameras continue to bludgeon thirty-four million drivers into submission. Incidentally, the popular support for cameras claimed in your report is not reflected in my experience or that of anyone I know – recently 91% of tens of thousands of readers told Auto Express they are opposed to cameras. Neither for that matter do the amazing claims by Speed Camera Partnerships relate in any way to what is happening on their roads – see Sussex graph (Appendix 5) as just one example.

Summary

I bring these facts to your attention in the hope that you will reconsider your report in the light of the above, TRL 548 and its implications. I would be happy to co-operate in any way you wish to help bring this about. I will in any case write again to point out in some detail the gross discrepancies between the claims of the DfT and Camera Partnerships and what has really happened on our roads

Yours faithfully,

Idris Francis

Supplement dated 22 Nov 06

Speed camera partnerships and police forces routinely **announce casualty reductions on their routes and sites in percentage** terms (perhaps to hide the reality that as these sites and routes represent no more than 3% or so of our roads, the numbers are very small) In their answer to the Committee however they Home Office and DfT **chose not to quote percentages, but numbers** - an average reduction of 2,2 casualty accidents pa at the speed camera site, and 3.1 accidents pa at the flashing sign site.

The reason they dared not quote the usual percentage figures becomes obvious the moment we assess them the fall at camera sites was down 2.2 from 5.8, **a reduction of 40%** - but at the flashing sign down 3.1 from 3.1 **a 100% fall**! On that basis of 100% to 40%, the greater benefit of cameras is **not the 1.4 to 1 used to calculate the cost benefit comparison, but 2.5 to 1.**

But even that is not all - the choice in the first place of a flashing sign site averaging only **3.1 accidents a year compared to 5.8** for the camera site, **inherently limited the potential benefit of signs to 3.1 per annum.** In other words, had the flashing sign site previously suffered the same 5.8 accidents pa, it **probable that the fall in accidents would have been significantly more than 3,1 and possibly as high as 5.8.**

Summary

These figures suggest that whoever produced them and authorised their release had **decided the answer (greater cost effectiveness for cameras) in advance, and worked backwards to the data from TRL548 to achieve it.** This was done by:

(a) using figures from **only one site of each type** (despite their being statistically meaningless, and because average figures for all 62 sites could not be changed)

(b) choosing a **camera site with double the prior accident rate** of the flashing sign site (as above)

(c) using **numbers not percentages** for accident reductions.

(d) (perhaps) skewing the results further by combining notional and subjective values of reductions in three types of accidents without specifying the mix.

(e) using cost figures **only for the first year of implementation**, thus skewing the answer heavily in favour of cameras by excluding their very high running costs in subsequent years.

(f) providing, without detail or explanation, **self-evidently ludicrous cost comparisons** showing that flashing signs cost twice as much as speed cameras.

(g) giving a **first year cost of 7,000** for a speed camera, so far below widely known **installation costs of 30,000 to 50,000 and annual running costs of 30,000** or so that there seem to be only two logical explanations - either a **misplaced decimal point** or that **income from speeding fines having been deducted** from the true costs without this having been stated - and as if there is somehow a moral or economic difference between taxes and fines.

Idris Francis 22 Nov 06