The Speed Camera Delusion*

* a belief that is held with strong conviction despite superior evidence to the contrary. Wikipedia

Here, all in one place, you will find not only that superior evidence but explanations of why other analyses are so seriously flawed.

This detailed analysis of the effects of several thousand cameras on collisions within 1km is the result of many thousands of hours' work over many years, getting to grips with the subject, obtaining and analysing data and writing and re-writing the documents available below.

Most of those hours, though a necessary part of the "learning curve", were in one sense wasted because I initially assumed that the academic and professional authors of existing analyses must know what they were doing and that I would need to understand their methods and then use them.

Later, when I realised that the reductions in collisions they had claimed far exceeded what cameras could ever achieve, it became clear that despite their qualifications and experience, those analysts had failed to understand the problems, failed to solve them, and applied inappropriate methods to seriously flawed data.

In particular, they had failed to appreciate that installation of cameras over many years allows the use of *synchronous detection* principles familiar to generations of electronic engineers, accurately to differentiate the effects of cameras from those of all the confounding factors that had defeated them.

I therefore tackled the problems from first principles, including those learned in my former life as an electronic engineer. I soon established that, given large volumes of reliable data, analysis is not complex as statisticians believe but very simple indeed, yet capable of providing accurate, reliable and consistent results.

No prior experience of statistics is needed to understand this analysis. To keep it to a reasonable length and easy to read, the more detailed explanations of particular topics that might help newcomers to these subjects are covered in Appendices A to O, identified in the main text.

The now undeniable truth about speed and red-light cameras is that they cause significantly more collisions than they prevent — and that's without allowing for the collisions that would have been prevented had similar resources been spent on effective road safety measures.

All we need now is for those responsible for this long-running, dangerous and expensive farce to admit that they were wrong all along and to decide to scrap them.

To encourage them to do so, please circulate the URL of this analysis to everyone you know.

Idris Francis

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