# Correspondence early in 2018 with the SERC group at the London School of Economics

Ph (44) 01730829416 Mobile (44) 07717222459 www.fightbackwithfacts.com e-mail idris.francis@btinternet.com	Sunny Bank, Church Lane, West Meon, Petersfield,		
Dogs Mr. Tong	Hampshire GU32 1LD		
Dear Mr. Tang,			
	last 15 years obtaining and analysing collision data near speed pecially as, like me, you use Stats19 data instead of partnership site		
statistician. Having noted last night several point	I will read it again properly today, albeit as an engineer not a is that puzzled or surprised me and which I will now identify them in d both to note my interest and also to ask whether you would be I would like to raise.		
I should mention that my own analysis of month-by-month collision totals at some 4,000 fixed, mobile and red-light cameras consistently shows no reductions whatever in the first two years from installation and - even worse - marked increases thereafter.			
Sincerely			
Idris Francis			
Dear Professors Gibbons and Overman,			
_	le experience of analysing data I have spent tens of thousands of vsing speed camera data and reading innumerable analyses, almost		
•	n analysis that shows beyond rational dispute that cameras cause ppy to copy it to you in as much detail as you might wish.		
assessment of it. As you will see, the Paper is rid	per 221 Do Speed Cameras Save Lives?" and I now attach my dled with false assumptions, errors of fact and some of the most e ever read. In particular, its conclusions are clearly and wildly e assessment.		
I would look forward to reading your response to	o my criticisms.		
Yours sincerely			

**Idris Francis** 

To: Idris Francis <idris.francis@btinternet.com>, "Gibbons,S" <S.Gibbons@lse.ac.uk>

Subject: RE: SERC Discussion Paper 221 "Do Speed Cameras Save Lives?

Thank you for your comments. We will pass them on to the author.

Best regards

Henry

#### **Dear Professors Overman and Gibbons,**

Thank you for your prompt response, though I am surprised and disappointed that, despite having been Mr. Tang's supervisors, you have not commented at all on the serious errors I identified.

The history of speed cameras since 2001 has been a succession of similarly flawed analyses claiming benefits which do not exist and ignoring adverse effects outside narrowly-define site boundaries. As a result some £2bn to £3n, that could have been used to good effect in other ways, has been wasted on cameras, millions of safe drivers have been penalised and some have been killed and injured as a direct result of the presence of cameras.

The last thing we need now is yet another seriously flawed analysis appearing to support the use of cameras so I urge both of you to take my criticisms seriously and arrange for the Paper to be withdrawn.

#### Sincerely

# **Idris Francis**

To: Idris Francis <idris.francis@btinternet.com>

CC: "Gibbons,S" <S.Gibbons@lse.ac.uk>

Subject: RE: SERC Discussion Paper 221 "Do Speed Cameras Save Lives?

Dear Mr Francis,

Thank you for your email.

I took an initial look at your comments and do not agree with your assessment that the paper is 'seriously flawed'.

The paper has been presented at multiple academic conferences and seminars and thus subject to rigorous scrutiny by a large number of peers. It has also been subject to internal review.

As I said in my original response, I've passed your comment on to the author. If he thinks your comments need addressing then I am sure he will consider them, alongside any other comments he receives, as the work is further developed.

#### Dear Sirs,

Yours sincerely

Further to my 5th December criticisms of SEC Paper 221 "Do Speed Cameras Save Lives" I attach my more detailed assessment covering many more serious errors and discrepancies, with supporting evidence.

Given that the last thing road users and road safety professionals need is yet another seriously flawed and misleading analysis of the effects of speed cameras I await your promp and considered response.

In particular, I draw your attention to Appendix D which outlines my simple yet accurate method of analysis which establishes beyond rational dispute that (a) the **relatively sudden reductions in collisions which should follow the installation of effective cameras do not occur but (b) collision rates worsen in nearby areas.** 

I would be happy to copy to you as much detail as you wish of this method and the compelling evidence it provides that cameras are worse than useless.

# Idris Francis ----Dear Idris

As Professor Overman stated earlier, the author is aware of your comments and will consider them in future revisions. Thank you for taking so much time to provide your criticisms.

We disagree that the analysis is 'seriously flawed'. The work has been presented at many academic conferences and been subject to review by various colleagues. The results appear to be in broadly line with another UK study using different methods to deal with selection issues (Li et al 2013 in Accident Prevention and Analysis).Â

In terms of you arguments about 'cognitive dissonance' I can reassure you that the author has no vested interests and had no strong prior beliefs regarding the effectiveness of these interventions. He is simply applying an alternative scientific method to assess if previous studies were in fact over estimating the impacts. To anyone other than an anti-speed camera campaigner, the results would, I think, seem relatively uncontroversial.

One way to have your analysis and critique taken seriously and receive constructive feedback would be to seek to publish your own report in a peer reviewed journal.

Steve Gibbons

Stephen Gibbons
Professor of Economic Geography
Department of Geography and Environment (Deputy Head)
London School of Economics
Personal web page:
<a href="http://personal.lse.ac.uk/gibbons">http://personal.lse.ac.uk/gibbons</a>

Director of the Spatial Economics Research Centre (SERC) and Urban Programme at the Centre for Economic Performance, LSE <a href="http://www.spatialeconomics.ac.uk">http://www.spatialeconomics.ac.uk</a> <a href="http://cep.lse.ac.uk">http://cep.lse.ac.uk</a>

On Tue, 2 Jan 2018 at 11:50, Idris Francis <idris.francis@btinternet.com> wrote:

#### Dear Sirs,

Further to my 5th December criticisms of SEC Paper 221 ?Do Speed Cameras Save Lives" I attach my more detailed assessment covering many more serious errors and discrepancies, with supporting evidence.

Given that the last thing road users and road safety professionals need is yet another seriously flawed and misleading analysis of the effects of speed cameras I await your prompt and considered response.

In particular, I draw your attention to Appendix D which outlines my simple yet accurate method of analysis which establishes beyond rational dispute that (a) the **relatively sudden reductions in collisions which should follow the installation of effective cameras do not occur but (b) collision rates worsen in nearby areas.** 

I would be happy to copy to you as much detail as you wish of this method and the compelling evidence it provides that cameras are worse than useless.

#### Yours sincerely

#### **Idris Francis**

#### **Dear Professor Gibbons,**

Thank you for your prompt response to my criticisms of Paper 221, although it no more addresses the substantive issues I raised than did Professor Overman's response to my first email.

Other than noting that your response is in many ways another classic example of the *cognitive dissonance* and "*confirmation bias*" problems I identified in Appendix A, I will now deal only with the substantive issues you have chosen to ignore:

I copied to you a list (below) of more than 20 significant flaws, errors and discrepancies, challenging you to prove me wrong on any of them - but you response was merely that "We disagree that the analysis is 'seriously flawed'.

# Those errors are of two main types:

**Factual errors** such as the significance of speeding in accident causation, the cost of collisions (with huge implications for claims of cost-effectiveness), results based on estimates and assumptions yet specified to 5 or 6 significant figures, for example a claim of £21,119 benefit per camera based on the 5% difference between two large and highly subjective estimates and many other examples of sloppy research and calculations

Serious flaws in the method of analysis, including analysing only collisions on the roads on which cameras are installed (thereby ignoring adverse effects nearby), claiming to have dealt with selection bias despite failing to do so, matching pairs of sites with and without cameras without realising that selection bias compromises the comparisons, assuming that matched sites would follow the same patterns of collisions had the camera not been installed, despite random chance being the predominant factor at individual sites.

I fail to understand how, given these errors, you still deny that the Paper is seriously flawed so I again challenge you and your colleagues to prove me wrong about any of the errors I have identified. And if you are unable to do so, to admit that the Paper is indeed seriously flawed and should not just be "revised" but withdrawn.

I summarised in Appendix D my simple and logical method of analysis showing that the installation of speed cameras is followed not by reductions in collisions but by significantly adverse changes of trend. Note that neither the method nor the many graphs it provides rely in any way on assumptions, estimates of selection bias, probability theory or complex mathematics etc. but are simply a direct record based on Stats19 data of what happened near cameras after they were installed.

I offered to provide you with all the relevant detail and data, but you chose to ignore both the method and my offer. Why?

Yours sincerely		
Idris Francis		

At 09:17 03/01/2018, Stephen Gibbons wrote:

Dear Idris

As Professor Overman stated earlier, the author is aware of your comments and will consider them in future revisions. Thank you for taking so much time to provide your criticisms.

We disagree that the analysis is 'seriously flawed'. The work has been presented at many academic conferences and been subject to review by various colleagues. The results appear to be in broadly line with another UK study using different methods to deal with selection issues (Li et al 2013 in Accident Prevention and Analysis).Â

In terms of you arguments about 'cognitive dissonance' I can reassure you that the author has no vested interests and had no strong prior beliefs regarding the effectiveness of these interventions. He is simply applying an alternative scientific method to assess if previous studies were in fact over estimating the impacts. To anyone other than an anti-speed camera campaigner, the results would, I think, seem relatively uncontroversial.

One way to have your analysis and critique taken seriously and receive constructive feedback would be to seek to publish your own report in a peer reviewed journal.

Steve Gibbons

# Dear Professor Gibbons, Professor Overman and Mr. Tang,

In the absence of any meaningful response to my challenges of 2nd and 4th January to prove me wrong on any of the twenty or so serious flaws I identified in Paper 221 I am copying my criticisms and supporting evidence to others involved in SERC. I also extend to them my offer to provide all the data and analysis which demonstrates beyond doubt that rather than reducing collision rates, speed cameras increase them significantly.

I take this opportunity of attaching a series of graphs, some based on official camera site data, others on Stats19 records of collisions within 1km of camera sites and several independent analyses, all confirming that cameras are

Idris Francis		
Yours sincerely		
I await your response.		
worse than useless.		

#### 14 Feb 2018

Revised Critique of SERC Discussion Paper 221 'Do Speed Cameras Save Lives"

#### Dear Professor Gibbons, Professor Overman, Mr. Tang and others,

In September the SERC published Mr. Tang's analysis of the effects of speed cameras. When I came across it early in December I wrote to Professor Gibbons, Professor Overman and Mr. Tang to point out many serious errors of fact and analysis which made nonsense of the conclusion that cameras were effective or cost effective.

Following Professor Overman's brief reply dismissing my objections despite failing to identify any errors on my part, I sent on the 16th of January a more detailed 15 page assessment to all three, copied to all those listed on the SERC web site as being involved (see the CC field above).

I included a direct challenge to prove me wrong about any aspect of my complaint but to date have received only one response, from "Duranton, Gilles" <duranton@wharton.upenn.edu>, that not only failed to address any of the points I made, objected to my being contacted at all.

Four weeks after I copied this to all those listed above and before I escalate my complaint to higher authority, I write again to ask:

# 1/ What is the point of issuing a "discussion paper" if no one involved is prepared to discuss it?

2/ or is it the case (see the "confirmation bias" syndrome I identified) that you prefer to restrict discussion to those who agree with your views?

3/ Do you not understand that progress all aspects of human history, from science to statistical analysis to politics to health and everything else, is **critically dependant on all voices being heard, not suppressed by those with vested interests in the status quo?** 

4/ most of my criticisms are simple, clear, obvious and in my view irrefutable, an assessment confirmed by the failure of any one of you to identify even a single error on my part.

5/ While some in academia might see the SEC paper and subject as some sort of intellectual statistical exercise, out here in the real world its effect unless withdrawn, is likely to be to add support to the use of speed cameras which, as I have set out in detail, not only waste a great deal of money but actually result in more collisions, fatal or otherwise, than would otherwise occur. Whatever happened to integrity, morality and the duty of care we all owe one another?

I ask again for substantive replies including in respect of each of my criticisms, agreement that I am right or otherwise why you think I am mistaken.

#### Yours sincerely

#### **Idris Francis**

.....

To: m.shafik@lse.ac.uk

Subject: 1/ Seriously flawed SERC paper 221 analysing speed camera effects

Cc: rachel.knight@lse.ac.uk, r.donovan-hill@lse.ac.uk, Pugh@lse.ac.uk, m.d.smith2@lse.ac.uk,

j.hemmings@lse.ac.uk

# Seriously flawed SERC paper 221 analysing speed camera effects

#### Dear Ms. Shafik,

Your Spatial Economics Research Centre has repeatedly failed to provide any meaningful response to my criticisms of the above paper so I am now copying the information to you in the hope that you or your colleagues will refer it to someone who will take it seriously.

As an engineer not a statistician I have analysed claims for speed camera effectiveness and the data on which they are based for more than 12 years (Google my name, "camera" and "ECHR" for more information about my efforts over the years.)

Using far more and better data than other analyst I am now able not only to prove beyond rational dispute (see Appendix D attached) that cameras cause more collisions than they prevent but also to identify the many errors of fact and method that led other analysts to claim camera benefits that were not just absurd but also literally incredible.

The documents I provide being largely self-explanatory I need show here only this brief summary:

Compared even to the abysmal standards set by most other analyses, SERC's discussion paper 221 is the worst I have ever read. Indeed, I needed 15 A4 pages to identify and explain the paper's many extraordinary and inexcusable errors (see Revised Critique of SERC paper, attached).

As you will see, most of those involved with the SERC have simply ignored my criticisms while Professors Gibbons and Overman replied only briefly, dismissing them out of hand without explanation.

My primary concern is of course that this ludicrously incompetent and misleading paper risks lending more unjustified support to the speed camera industry, leading to yet more deaths and injuries than would otherwise have occurred. Accordingly I believe that this analysis should be withdrawn or else its serious errors identified in a follow-up paper.

Finally, I find it astonishing that the LSE, "an international centre of academic excellence and innovation in the social sciences [and is] ranked] 2nd in the world for social sciences and management" could ever have allowed such abject

nonsense to be published.

Yours sincerely

**Idris Francis** 

To: "Overman, HG" < H.G. Overman@lse.ac.uk >

Subject: RE: Critique of SERC Discussion Paper 221 'Do Speed Cameras Save Lives" - Not one response?

Cc: "Gibbons,S" <S.Gibbons@lse.ac.uk>

#### **Dear Professor Overman,**

Thank you for your reply to which I will respond in more detail overnight. For now I must point out that your comments (below) indicate that you seem not to understand the greater detail I provided lasts time and have again chosen to ignore the blatantly misleading treatment of costs and economic benefit and the adverse effects near but outside official site boundaries.

You wrote:

1/ "Looking for a sudden reduction at installation sites makes no sense because of the problems that you highlight in appendix B and C selection of sites, regression to the mean, different pre-trends, random variations and the small numbers problems"

# My interim response

You seem not to understand neither that my method was devised to eliminate those very problems or how it does so:

a/ By definition (and as has been understood for more than 100 years and you should surely know) selection bias and regression to mean must end no later than the installation date. It follows that they have no effect whatever on the post-installation data or therefore on my results.

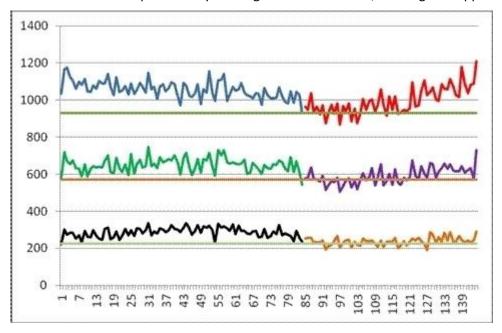
Indeed, the entire camera debate over 20 years has been skewed by the original error of site selection criteria ensuring a high degrees of bias and then by the absurd belief - or pretence - by so many analysts that they can correct for it. The most important aspect of my method is that, having realised that it is quite impossible to do so, I chose to analyse data once it has no effect.

**b/** Because camera installation was spread over many years **long and short-term trends** (or indeed any other factor not positioned in time relative to camera installation) **are automatically averaged out and reduced by more than 90% to trivial levels**. Incidentally, this is an inherent consequence of summing the data correctly relative to installation dates and has many parallels in electronics, including in synchronous detection of signals.

**c/** I provide two formats of graph - **trend-adjusted and not trend-adjusted**, the latter adjusted in exactly the same way other analysts use. Correcting for trend clearly makes no difference to the results.

c/ My analysis uses far larger "numbers" than any other I have seen and for that reason it is preposterous to criticise my analysis for "small numbers" Especially when my data allows me to draw month-by-month graphs providing clear and damning evidence that there is no quite sudden reduction shortly after installation.

The most accurate results are of course provided by the largest volume of data, as in Fig 1 of Appendix D, also below:



FSC from 7 years before installation to 5 years after

While the data I provide in Excel format allows analysis by any combination of camera type and police area, accuracy does of course decrease with the volume of data, but in practice the results do not change signficantly as volume falls. In any case, it is the overall effect which matters.

#### You also wrote:

"This is why the impact evaluation literature – across a wide range of fields - favours the use of a **valid comparison group**, careful consideration of pre-trends, consideration of inference, etc."

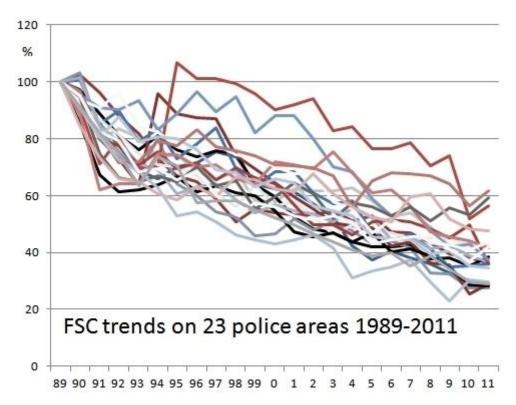
I accept the basic principles of course, the problems lie in what happens when they are applied to cameras. Several years ago I did just that but identified the problems, including

# Using *a valid comparison group* is problematical because

The comparisons are necessarily subjective

The volume of data that can be used is inherently limited by the the complxit of matching and the accuracy of the results fall as the number of parameters compared increases.

The exercise relies heavily on assumptions that changes at sites will be similar to those at the comparison sites, and results are heavily qualified by wide confidence intervals - as for example Appendix H of the 4th Report of 2005. Yet the graph below shows the enormous variations in FSC in 23 police areas, raising the question of whether data should be adjusted for police area trend or national trend or indeed the wider question of whether this sort of comparison has any validity at all.



see page 1 of Appendix D

I have already dealt with the issue of pre-trend.

I do not know what you mean by *consideration of inference* but again confirm that when data is summed correctly relative to installation date not calendar date, all effects other thana those positioned in time relative to installation all-but disappear.

In summary, no method that relies on comparison groups can ever lead to accurate results - mine does.

# You also wrote

" In the discussion paper you are referring to, the author has chosen sites for future speeds cameras as the comparison group **because these sites have been selected by the authorities using similar decision criteria** to those used to select the cameras recently installed"

Even by the standards of the rest of the paper, that decision was extordinary and I covered it in my 15 page assessment including that both sets of sites are heavily subject to selection bias and RTM.

There is no credible explanation of why the author thought that this would lead to more accurate results, and I must point out that the use of "similar decision criteria" in no way means that changes in collision numbers and severity will be the same.

#### You also wrote

I am also puzzled by your observations on **cognitive dissonance**. I have no strong prior view on speed cameras and would form any opinion on their effectiveness from looking at the balance of the evidence in well executed empirical studies.

That response, similar to an earlier one that Mr. Tang was not biased about cameras, suggests that you have misunderstood my "cognitive dissonance" point.

I accept of course that the term can relate to someone with a long-held belief and who instinctively rejects any alternative view.

But it can equally relate to those who, like you and Mr. Tang (as I am happy to accept) held no particular view until the analysis was completed, but will then argue vehemently to avoid at all costs admitting that they were wrong!

Further, your second sentence identifies another two of the problems I mentioned in Appendix A - "*group think*" and "*confirmation bias*", both of which have the effect of sustaining often flawed, dangerous and expensive ideas long after they have been exposed as such.

and then

"The SERC discussion paper provides one such piece of evidence. I would discount it a little as it has been subject to considerable discussion at seminars/conferences and with other scholars, but has not yet passed through the anonymised peer review process at an academic journal."

My comment is that many of the errors of fact and method are so blatantly obvious and beyond rational dispute - which is perhaps why you ignore them - that the paper should never have been published.

"If you want your evidence to be considered in the same way, then I can only echo Steve Gibbons suggestion that you write it up and subject it to rigorous peer review".

My comment - as in " even though the peer review process itself may be susceptible to such biases. https://link.springer.com/article/10.1007%2FBF01173636 beginning

#### **Abstract**

Confirmatory bias is the tendency to emphasize and believe experiences which support one's views and to ignore or discredit those which do not. The effects of this tendency have been **repeatedly documented in clinical research**. However, its ramifications for the behavior of scientists have yet to be adequately explored. For example, although publication is a critical element in determining the contribution and impact of scientific findings, little research attention has been devoted to the variables operative in journal review policies. In the present study, 75 journal reviewers were asked to referee manuscripts which described identical experimental procedures but which reported positive, negative, mixed, or no results. In addition to showing poor interrater agreement, **reviewers were strongly biased against manuscripts which reported results contrary to their theoretical perspective.** The implications of these findings for epistemology and the peer review system are briefly addressed.

After more than 10 years trying to persuade officials of all kinds that the claims for cameras are nonsense, I have no intention whatever of writing a conventional Paper and then trying to get peer approval for publication in - what - 3 years' time?

Instead I am close to finalising a detailed analysis in several formats, including Power Point and video, for the widest possible circulation to the public.

Sincerely	
Idris Francis	

Dear Mr Francis,

Thank you for your recent emails.

As I said in my last reply, I've passed your original email on to the author for him to consider whether he needs to make any adjustments in light of your comments.

One observation I would make is that your proposed alternative method (appendix D) is very problematic. Looking for a sudden reduction at installation sites makes no sense because of the problems that you highlight in appendix B and C (selection of sites, regression to the mean, different pre-trends, random variations and the small numbers problems). This is why the impact evaluation literature — across a wide range of fields - favours the use of a valid comparison group, careful consideration of pre-trends, consideration of inference, etc. In the discussion paper you are referring to, the author has chosen sites for future speeds cameras as the comparison group because these sites have been selected by the authorities using similar decision criteria to those used to select the cameras recently installed.

Note by Idris as of 23 April 18 – the above paragraph is complete nonsense because Professor Overman has failed –or prefers not – to understand that

a/ site selection bias and regression to mean end, by definition before installation and therefore have no effect whatever on the numbers after installation

b/ trends, random variations are averaged out by the synchronous detection nature of the analysis and any significant changes in their original values are reduced by more than 90%, to insignificant levels.

That is why there is no need whatever to look for "a valid comparison group" – or incur the errors that imperfect matching of them will introduce.

As I wrote, he simply does not understand the basic points I make

I am also puzzled by your observations on cognitive dissonance. I have no strong prior view on speed cameras and would form any opinion on their effectiveness from looking at the balance of the evidence in well executed empirical studies.

The SERC discussion paper provides one such piece of evidence. I would discount it a little as it has been subject to considerable discussion at seminars/conferences and with other scholars, but has not yet passed through the anonymised peer review process at an academic journal. If you want your evidence to be considered in the same way, then I can only echo Steve Gibbons suggestion that you write it up and subject it to rigorous peer review. Best regards

Henry

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Prof Henry G. Overman
Director, What Works Centre for Local Economic Growth
Professor, Department of Geography Environment, London School of Economics
Web: <a href="http://www.whatworksgrowth.org/">http://www.whatworksgrowth.org/</a>

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Dear Mr Francis,

Please don't spend more time on refining your response.

I'm an expert on evaluation methodology and perfectly capable of assessing your approach and what, if anything, we can learn from it.

I've passed on your comments to the author and asked them to consider what, if any changes, are needed to deal with your points.

I don't intend to spend any more time in corresponding with you on these issues (and I suspect the same is true of my colleagues).

As I suggested, if you have confidence in your approach and findings I would recommend submitting them for peer review at an academic journal.

Best regards

Henry

.....

To: m.shafik@lse.ac.uk

Subject: Please respond to my email about seriously flawed SERC paper 221 analysing speed camera effects

Cc: rachel.knight@lse.ac.uk, r.donovan-hill@lse.ac.uk, ugh@lse.ac.uk, m.d.smith2@lse.ac.uk, j.hemmings@lse.ac.uk

#### to all addressees:

In the thirty years I ran my own electronics company I very rarely went home without answering all comunications received that day or at least acknowledging them when it was not possible to provide a full reply immediately.

But if there was one person who was absolutely guaranteed a full response the same day, it was anyone who had a complaint or otherwise brought problems to my attention.

It is now 7 days since I copied to all of you compelling evidence that Paper 221 published by the SERC section within the LSE is very seriously flawed indeed. Yet not one of you has as yet even acknowledged my email, let alone responded to the serious issues it raised.

This is perhaps all the more surprising and unforgiveable given the current media furore about large organisations failing to act when wrong-doing is brought to their attention. In that context I repeat my comment that it is totally unacceptable that the SERC and LSE have published a seriously flawed analysis that, until withdrawn, risks lending further support to a failed and dangerous camera policy that leads to more deaths and injuries than would otherwise occur.

I confirm that I am prepared to review these issues with you in whatever detail is necessary,
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Sincerely,	
Idris Francis	

#### 14th February 2018

#### Seriously flawed SERC paper 221 analysing speed camera effects

#### Dear Ms. Shafik,

Your Spatial Economics Research Centre has repeatedly failed to provide any meaningful response to my criticisms of the above paper so I am now copying the information to you in the hope that you or your colleagues will refer it to someone who will take it seriously.

As an engineer not a statistician I have analysed claims for speed camera effectiveness and the data on which they are based for more than 12 years (Google my name, "camera" and "ECHR" for more information about my efforts over the years.)

Using far more and better data than other analyst I am now able not only to prove beyond rational dispute (see Appendix D attached) that cameras cause more collisions than they prevent but also to identify the many errors of fact and method that led other analyst to claim camera benefits that were not just absurd but also literally incredible.

The documents I provide being largely self-explanatory I need show here only this brief summary:

Compared even to the abysmal standards set by most other analyses, SERC's discussion paper 221 is the worst I have ever read. Indeed, I needed 15 A4 pages to identify and explain the paper's many extraordinary and inexcusable errors (see Revised Critique of SERC paper, attached).

As you will see, most of those involved with the SERC have simply ignored my criticisms while Professors Gibbons and Overman replied only briefly, dismissing them out of hand without explanation.

My primary concern is of course that this ludicrously incompetent and misleading paper risks lending more unjustified support to the speed camera industry, leading to yet more deaths and injuries than would otherwise have occurred. Accordingly I believe that this analysis should be withdrawn or else its serious errors identified in a follow-up paper.

Finally, I find it astonishing that the LSE, "an international centre of academic excellence and innovation in the social sciences [and is] ranked] 2nd in the world for social sciences and management" could ever have allowed such abject nonsense to be published.

Yours sincerely	
Idris Francis	

# Dear Mr Francis

Thank you for your emails and comments on the SERC discussion paper, 'Do Speed Cameras Save Lives?' We fully accept your right to dispute the research findings and the methodology employed. As per Professor Gibbons' suggestion, we would encourage you to engage with the research team through normal academic practice and publish your own report in a peer reviewed journal.

The LSE has a Code of Research Conduct, which incorporates our policies and procedure for the investigation of research misconduct – it is available here:

http://www.lse.ac.uk/intranet/LSEServices/policies/pdfs/school/codResCon.pdf. Your emails and comments have been reviewed by the School Secretary, the Director of the Research Division and myself. We do not feel that your complaint provides evidence of unacceptable conduct on the part of the researchers concerned. However, if you feel strongly that it does, please refer to our Code of Conduct and clarify if you wish to make an allegation of research misconduct, and if so, on what grounds.

#### With regards

Lyn Grove
Dr Lyn Grove
Research Governance Manager
Secretary, Research Ethics Committee
London School of Economics & Political Science
Tel: 020 7852 3629 E: I.grove@lse.ac.uk research ethics webpage

Follow <u>@LSE\_RD</u> on twitter

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#### Dear Dr. Grove,

Thank you for your email, I will reply overnight in more detail as I am tied up this afternoon.

I must however make one point clear that this stage - at no point in my correspondence have I mentioned "misconduct" and I confirm that nothing I wrote was intended to imply it. That being the case I have to wonder whether your introduction of that word might be yet another example of straw man\* technique with which I have become wearily familiar over the last 15 years correspondence with those attempting to defend the indefensible.

I am happy to accept, in the context of replies from Professors Overman and Gibbons, that Mr. Tang had no view of the effectiveness of cameras prior to carrying out his analysis and therefore that the discrepancies I identified were due not due to deliberate or for that matter unconscious, bias but to fundamental errors of fact, understanding and method.

Accordingly what matters is not why Mr. Tang's analysis is seriously flawed and misleading but that it is.

More later.

**Sincerely** 

**Idris Francis** 

https://en.wikipedia.org/wiki/Straw\_man

Straw man

From Wikipedia, the free encyclopedia This article is about the logical fallacy.

A straw man is a common form of <u>argument</u> and is an <u>informal fallacy</u> based on giving the impression of refuting an opponent's argument, while actually refuting an argument that was not presented by that opponent. One who engages in this fallacy is said to be "attacking a straw man".

The typical straw man argument creates the illusion of having completely refuted or defeated an opponent's proposition through the covert replacement of it with a different proposition (i.e., "stand up a straw man") and the subsequent refutation of that false argument ("knock down a straw man") instead of the opponent's proposition. [2][3]

This technique has been used throughout history in <u>polemical</u> debate, particularly in arguments about highly charged emotional issues where a fiery "battle" and the defeat of an "enemy" may be more valued than <u>critical</u> thinking or an understanding of both sides of the issue.

More detailed response by Idris Francis at 4.50pm 21 Feb 2018

#### Dear Dr. Gove,

Given that, as above, my objections to SEC paper 221 made no mention of *misconduct\** I do not understand why it was passed to you for a response rather than being handled by other staff perhaps more familiar with these subjects. However, I leave it to you to decide whether to continue or to refer it to others.

\* That said, it remains open to me to file another complaint about the ethics of ignoring damning evidence that the paper lends support to cameras which, as I can prove beyond rational dispute, cause more collisions than would otherwise occur.

#### **Errors, Omissions and False or Misleading Assertions**

As you know, the list of discrepancies in paper 221 I copied to various SERC/SER staff extends to fourteen A4 pages, and I challenged Professors Overman and Gibbons and later others to prove me wrong on any of the points I raised. They have not just failed to do so but have not even bothered to try.

I repeat that challenge now and for your convenience I copy below the list shown on page 2 of that 14 page document. Page 3 onwards provide all the necessary details. I have struck out a few lines that duplicated others.

- 2/ Wildly exaggerated costs/values of collisions
- 3/ Wildly exaggerated contribution of speeding to accident causation
- 4/ Failing to recognise the degree of under-reporting of non-fatal collisions
- 5/ Incorrect and misleading definition of serious injuries
- 6/ Ignoring nearly 40 adverse effects and serious flaws in official data.
- 7/ Using calendar year installation dates
- 8/ Restricting analysis to roads selected for cameras
- 9/ Claiming to deal with selection bias but failing lamentable to do so
- 10/ Misrepresenting the rules for 3-year selection periods
- 11/ Claiming wrongly to have dealt with selection bias
- 12/ Nonsense about regional specific shocks that could correlate with the camera installations
- 13/ Nonsense about bad weather shocks correlated with camera installations
- 14/ Failing to realise that 60mph collisions fell because so many 60mph roads were changed to 50mph

- 15/ Claiming to analyse how effects vary across space but still only on the specific road
- 16/ Absurd claims of camera effectiveness
- 15/ Failure to recognise that higher proportions of fatalities at sites are due to selection bias
- 16/ Rigorous assessment of camera benefits that is self-evident nonsense
- 17/ Absurd claims of camera benefit, far beyond anything possible
- 18/ Speculation on why fatality reductions are high when the real reason is failure to account for bias
- 19/ Failure to realise that camera warning signs outside official site boundaries can trigger collisions not recorded in site data
- 20/ Quoting widely discredited earlier analyses
- 21/ Failure to understand trends
- 22/ Again the fundamental error of restricting analysis only to the roads with cameras
- 23/ More claims for far greater reductions than ever involve speeding in the first place
- 24/ Absurd claims that camera effectiveness continues to increase for many years
- 25/ More claims that ignore adverse effects in surrounding areas
- 26/ Cost/benefit analysis the economics of the madhouse, from beginning to end!

Note that proving me wrong on just a few of these points would not be sufficient as many of them are sufficient on their own to invalidate the paper's claims.

I have already explained that I have no intention of submitting a paper for peer review, not least because of the delays involved but because of the very real risk that those peers would suffer from the same confirmation bias, cognitive dissonance and perception bias.

#### Sincerely

#### **Idris Francis**

# **Dear Professor Overman,**

This will take only a very few minutes but will, I hope, clarify the problems inherent in almost all speed cameras to date, and how my method eliminates them.

#### 1/ Problems common to nearly all analyses to date:

# Analyses have been carried out by statisticians who:

a/ as a profession not only have obvious vested interests in complexity but are also influenced by *cognitive* dissonance, confirmation bias and the "not invented here" syndrome. Nor do they appear to have any knowledge, let alone understanding, of methods used in other scientific disciplines to solve similar problems (see end)

b/ as a profession, are long familiar with applying methods such as probability theory to insufficient and/or flawed data to arrive at results which they then have to qualify by wide confidence intervals

c/ as a profession and for the above reasons (see also "unable to see the wood for the trees") are disinclined even to look for more and better data which might in turn allow simple methods which can (and do) provide accurate results

d/ use official data restricted to the particular roads on which cameras are located, thus ignoring close to 40 known adverse effects which can (and do) extend beyond those narrow boundaries

e/ either ignore, or claim to have corrected for, selection bias and regression to mean, without realising that it is literally impossible to do so accurately or indeed that both, by definition, have no effect after installation.

f/ use annual collision/injury totals and calendar year installation dates which make it impossible to determine which collision/injuries in the year of installation occur before installation and which after

g/ use annual collision/injury totals and calendar year installation dates which make it impossible to monitor accurately the quite sudden reductions which should occur from the moment of installation of an effective camera

h/ attempt to quantify camera effects as a single % fall (the reduction from the prior 3-year average the post 3-year average) without regard to the variations which occur over the latter

i/ assume that any reduction estimated as in h/ above will continue indefinitely

j/ fail to realise that summing collision/injury data relative to installation dates instead of calendar years has the effect of averaging out all effects (such as long and short-term trends etc.) to trivial levels i.e. <10% of their original values.

k/ appear not to realise that it is literally impossible for cameras to bring about reductions in collisions/injuries far greater than ever involve speeding in the first place

I/ treat notional "values" or "costs" of collisions/injuries as if they were cash saved when a collision/injury is prevented

m/ use in cost-effectiveness calculations DfT figures for the "lost output" of casualties that ignore at least similar savings in lost consumption

#### 2/ Engineers have to think differently

**Results subject to wide confidence intervals being of no use whatever to design engineers**, for example, they have no alternative when faced with insufficient or flawed data **but to obtain more**.

Many analysts have noted the low volume and poor quality of official camera data but apart from me some years ago and now Mr. Tang, failed to ask the obvious question "How can there be a shortage of data when every reported injury collision has been recorded at least since 1979, in great detail, in police Stats19 records?" The answer is of course that there never was a shortage of good data, only of data issued by camera authorities. Once this has been realised and the data obtained, accurate analysis becomes possible using only simple arithmetic and eliminating the above problems.

#### The much greater volume of data:

n/ inherently leads to **greater accuracy** especially (as the wider surrounding areas are included) in terms of the nearby adverse effects ignored by others)

o/ reduces volatility, allowing smooth and meaningful graphs to be drawn of month-by-month collision/injury totals. This is particularly important in the year or two following installation when numbers should fall if cameras were effective. (In fact they do not)

p/ allows **focussing on accurate post-installation data** so that selection bias and regression to mean, which by definition must end no later than installation, are irrelevant

q/ allows graphs showing the effects of cameras not as a single number but as variations over more years than other analyses cover and in particular shows clearly the significant increases from year 2 that other analysts miss

r/ eliminates any need for probability theory or other complex statistical methods

s/ eliminates the need for assumptions, approximations and other subjective and error-prone methods.

#### **Cost Effectiveness**

The points I raised about spurious values and costs, though valid, become irrelevant once it has been established that cameras increase, not reduce collision rates.

#### In conclusion

I have completed my large scale analysis using the methods outlined in part 2 above and also in Appendix D copied. All of the raw data has been checked independently and is available on request. My methods are fully explained and transparent. The results are unequivocal and consistent, that cameras initially have no identifiable effect but then lead to more collisions than they prevent.

I will ensure that my analysis obtains the widest possible publicity in the near future

Sincerely	
Idris Francis	

#### Dear Mr Francis

It is a healthy characteristic of academic research that authors should question and critique the findings and methodology of others. We are not ignoring your evidence, as you claim, but as per our earlier emails, the correct path to challenging the research in question would be to do so via publishing in a journal.

You yourself have noted that you are not alleging any misconduct, and thus there is no further recourse through our governance procedures. We thus consider the matter closed. We kindly ask you not to send any further correspondence to staff and students within the research centre, or others at the School. You may of course reply to myself if you have any further complaint, and I will discuss with the correct senior management staff.

With regards

Lyn Grove

To: Research.Ethics < Research.Ethics@lse.ac.uk>

Subject: Re: Critique of SERC Discussion Paper 221 - More detailed response.

#### Dear Dr. Grove,

Thank you for your prompt response, unsatisfactory though it is.

My first reaction is that neither your organisation nor any other has the right to ignore complaints unless they involve misconduct, as fools are as capable as knaves of causing mayhem. Indeed I would be astonished to hear of any organisation that disclaims responsibility in that unethical way.

You claim that you are not ignoring my evidence but your first reply made it clear that you reviewed it only in the context of possible misconduct, I will not contact the other staff you mention, if as you offer, you t refer my complaint to "correct senior management staff" willing and able to review on its merits the evidence I provided that paper 221 is so seriously flawed that it should never have been publised and should now be withdrawn.

# Yours sincerely

#### **Idris Francis**

Dear Mr Francis

As I stated previously, we are not ignoring your complaint, but have advised you as to the correct way to challenge the findings of the paper with which you take issue. We would never ask another university to withdraw a piece of research because one or more of our academics disagree with the findings. You need to challenge the findings of the paper via normal academic practice.

With regard	S
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Lyn

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To: Research.Ethics < Research.Ethics@lse.ac.uk >

From: Idris Francis <idris.francis@btinternet.com>

Subject: RE: Critique of SERC Discussion Paper 221

Cc:

Dear Dr. Gove,

Thanks but as stated previously the inevitable problem of overcoming the cognitive dissonance, confirmation bias of possible peer reviewers, and even if that were achieved, of doing the same with a publisher in any sensible time scale, completely rule out what you suggest.

I am an engineer not a statistician or economist, so I have long recognised that I have to correct promptly any errors I make because for us the ultimate test we face is not a peer review or someone else's opinion but **Mother Nature** and the laws of Physics or other (real) sciences. In other words, hard facts not someone else's opinion.

I put it to you again that many of the errors in the paper that I identify in my list are so blatantly obvious that they could have been "schoolboy howlers" and would be recognised as such not only by academic peers but by any schoolboy randomly selected from any bus queue.

For that reason, it is no less than preposterous that you and your colleagues, time after time, refuse to address ANY of the specific points I have raised, let alone to try to prove me wrong.

It is perfectly clear that all of you must realise that I am right on many of those points, it is perfectly clear that the reason none of you challenge any of the points I have raised and that you repeated suggest that I resort to Peer Review of what a child of 10 could understand, is no more and no less than an attempt to delay the public exposure which that absurd paper, and now clearly the LSE itself, so richly deserves.

In any case and particularly these days, publication is possible in many ways, including in specialist journals such as *Local Transport Today*, on my own web site and even - please understand that I am deadly serious - **as paid advertisements in national newspapers.** 

advertisements in national newspapers.	
I therefore ask, once again, that you refer this matter to senior people who will see sense.	

Sincerely

**Idris Francis**