

<b>Institution: BRUNEL UNIVERSITY (H0113)</b>
<b>Unit of Assessment: 20 – Law</b>
<b>Title of case study: Speed Cameras in England and Wales</b>
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)</p> <p>Corbett's research, which was broadly positive about the introduction of speed cameras, informed the DETR decision to roll-out of speed cameras nationally. Four statements developed in the research became part of the benchmark criteria used to assess public opinion on speed cameras and have featured in local audits of attitudes to speed cameras since 2008. Subsequent research has concluded that lives have been saved by speed camera installation thus Corbett's research has contributed positively to national road safety culture. Some estimates suggest that speed cameras save 1,000 people from death or injury per annum, 6,000 people since 2008.</p>
<p><b>2. Underpinning research</b> (indicative maximum 500 words)</p> <p>Speed cameras were introduced in 1992 under the Road Safety Act 1991, when their effectiveness in terms of reducing road collision casualties and influencing driver behaviour was unknown. The Department for Environment, Transport and the Regions (DETR) commissioned at least two studies to explore their effectiveness – one based on objective observed data at camera sites, and the other, conducted by Corbett and researchers at Brunel's Law Department, based on drivers' self-reported responses to different strategies linked with camera deployment and their attitudes to cameras.</p> <p>The research was funded by a DETR grant, totalling £322,000, between 1993-1997, awarded to the Department of Law, Brunel University. Four Brunel staff members worked on the project: Dr Claire Corbett (lead researcher), Dr Frances Simon, Dr Jeff Crick, and Dr Brian Block.</p> <p>The study adopted a quasi-experimental design with a series of 12 surveys in five police force areas arranged in five sets having some cross-sectional and some longitudinal elements. Depth interviews were also undertaken. Almost 7,000 drivers took part. The camera interventions focused on the impact of camera signing alone, two kinds of publicity campaigns, the effect of cameras when first installed and over time, and the impact of prosecution following detection by speed camera.</p> <p>The results indicated that all measures investigated seemed useful in lowering drivers' speed (according to self-report) and most of the effects of installation lasted several months. A key feature of the research is that an earlier four-part typology of drivers' responses to cameras had been devised by Corbett (1995; 2000), and this research was designed partly to explore the attitudinal and behavioural responses of different types of driver to cameras. The study showed that all four categories reduced their speeds somewhat in regard to all deployment strategies and all approved of them, though attitudes and behaviours varied. Two of these driver categories, 'manipulators' and 'defiers', presented the most concern for road safety, and subsequent discourse has focused around manipulators in particular.</p> <p>It was also found that the majority of drivers prosecuted for speeding via cameras in one survey also supported cameras as a means to encourage compliance (), lending support to the widespread approval of cameras at that time.</p> <p>Other important findings were that drivers' reported speed reductions at camera sites generalised to other similar roads (supporting their generalised efficacy) and that reduced speeds persisted over time. These were positive findings, supporting the subsequent decision to roll-out cameras nationally.</p> <p>In 2006, Corbett, as lead researcher, and colleagues from the Transport Research Laboratory were commissioned by the DfT to conduct research designed <i>inter alia</i> to inform understanding of the deterrent effect of speed cameras and of the motivations underpinning the behaviour of repeat speed offenders (Corbett et al, 2008). This study reinforced some key findings from the earlier research, especially that a slight majority of convicted speeding drivers with varying patterns of penalty points supported the use of speed cameras as a method of casualty reduction.</p>

## Impact case study (REF3b)

**3. References to the research** (indicative maximum of six references)

- Corbett, C. 'Drivers' responses to speed cameras: self-report measures'. In *Behavioural research in road safety IX*. (ed. G. Grayson.) (1999) 116-125. Crowthorne: Transport Research Laboratory.
- Corbett, C., and Simon, F. *The Effects of Speed Cameras: How Drivers Respond*. (1999) Road Safety Research Report no. 11. London: DETR;  
<http://www.popcenter.org/problems/speeding/PDFs/corbett1999.pdf>
- Corbett, C. (2000) 'A typology of drivers' responses to speed cameras: implications for speed limit enforcement and road safety'. *Psychology, Crime and Law* 6(4), 1-26.  
<http://dx.doi.org/10.1080/10683160008409809>
- Corbett, C. and Caramlau, I. (2006) 'Gender differences in responses to speed cameras: Typology findings and implications for road safety'. *Criminology and Criminal Justice*, 6(4), 411-433.
- Corbett, C., Delmonte, E., Quimby, A. and Grayson, G. (2008) *Does the Threat of Disqualification Deter Drivers from Speeding?* Road Safety Research Report 96;  
<http://webarchive.nationalarchives.gov.uk/20090417002224/http://www.dft.gov.uk/pgr/roadsafety/research/rsrr/theme2/threat.pdf>

**4. Details of the impact** (indicative maximum 750 words)

There have been several impacts of the research.

Firstly, in Corbett's research, approval of cameras was determined by a calculation of an attitude score derived from an 8-item questionnaire that we devised that was used with all drivers in the study. Subsequently, four of these eight statements were used to assess respondents' attitudes to speed cameras in all three National Speed Camera Partnership (NSCP) evaluations commissioned by the Department for Transport, (DfT, 2003: 5-2, 5-3; Gains et al, 2004: 45-50, 2005: 7, 62, 73). This means that those local Road Safety Partnerships which evaluated local drivers' attitudes to speed cameras since 2008 as part of their annual road safety audits are likely to have continued to use these four statements as part of their official evidence base for assessing support for cameras and whether to develop coverage of speed cameras in their areas. Hence drivers' responses to the four statements have become part of the official barometer to test public opinion on cameras. This information is noted by Wells, H. (2010) p.66 – 68.

Secondly, indirect beneficiaries of the Brunel research are the road using public because as a result of the increase in speed camera installations after the research was published, fewer people have been killed or injured as a result of speed-related collisions. This is affirmed by Professor Allsop's (2010) review of the effectiveness of speed cameras which concluded that taking all factors into consideration, speed camera operations prevented around 1,000 people from serious injury or being killed in 2004 in Great Britain. He concluded that similar fatality savings would be expected in other years. Thus this research has ultimately contributed to road casualty reductions since 2008, probably around 6,000, through flagging up continued majority support for cameras as measured by local SCP audits and hence encouraging and facilitating their continued use nationally and now internationally (e.g. Europe, the USA and Canada).

Thirdly, the Brunel research work fed into public debates about the worth of speed cameras in saving lives and whether the intention of cameras is solely altruistically based and not linked with revenue generation for government. The questionnaire dimensions, including the four statements mentioned above, tapped into these debates and so contributed towards raising public awareness of speed camera enforcement and speeding. The topic is still emotive.

Fourthly, not only have the fruits of the Brunel 1999 research project and the 2008 joint Brunel/TRL study made a 'major contribution to the evidence base on drivers' responses to speed cameras and penalty points for speeding', they also 'have helped shape the government's policy options and policy development for improving compliance on the roads', as acknowledged by Mrs D O'Reilly, Head of Social Research and Evaluation of the Department for Transport (see no. 5). For example, the 2008 study found that a slight majority of 1100 drivers with different profiles of penalty

**Impact case study (REF3b)**

points approved of cameras as a useful means of casualty reduction, though a significant minority of them referred to cameras being used for revenue-generation rather than collision reduction, possibly undermining public confidence in the use of cameras for enforcement. This information would have been helpful to government and to local authorities and their road safety partnerships in decisions whether to continue to operate speed cameras at a time of some public disaffection with cameras as expressed in the popular print media.

**5. Sources to corroborate the impact** (indicative maximum of 10 references)

- 1) Allsop, R. (2010) *The Effectiveness of Speed Cameras: A review of evidence*. London: RAC Foundation.  
[http://www.racfoundation.org/assets/rac\\_foundation/content/downloadables/efficacy\\_of\\_speed\\_cameras\\_allso\\_181110.pdf](http://www.racfoundation.org/assets/rac_foundation/content/downloadables/efficacy_of_speed_cameras_allso_181110.pdf)
- 2) Department for Transport (2003) *A cost recovery system for speed and red-light cameras – two year pilot evaluation*. London: DfT Publications.  
<http://www.dft.gov.uk/pgr/roadsafety/speedmanagement/nscp/nscp/recoverysystemforspeedan4596.pdf>
- 3) Department for Transport (2013) Research database: Project: Relationship between Penalties for Speed Offences and Driver Behaviour
- 4) <http://www.dft.gov.uk/rmd/project.asp?intProjectID=12556>
- 5) Gains et al (2004) *The National Safety Camera Programme – Three-Year Evaluation Report*. London: PA Consulting.  
<http://www.eltis.org/docs/studies/thenationalsafetycameraprogr4598.pdf>
- 6) Gains, A. et. al (2005) *The National Safety Camera Programme – Four-Year Evaluation Report*. London: PA Consulting.  
<http://www.eltis.org/docs/studies/thenationalsafetycameraprogr4598.pdf>
- 7) Wells, H. (2012) *The Fast and the Furious: Drivers, Speed Cameras and Control in a Risk Society*, Ashgate Publishing.