



CCTV and its effectiveness in tackling crime

Standard Note: SN/HA/5624
Last updated: 1 July 2010
Author: John Woodhouse
Section: Home Affairs

The use of closed circuit television cameras for the purposes of tackling crime has greatly increased over the last decade. There is no official figure for how many cameras are in use, although a figure of 4.2 million, based on academic research, is often cited.

Although the rationale for CCTV use is that it “prevents crime”, a number of studies have questioned the assumptions underlying this claim and drawn attention to a complex range of factors that should be taken into account when assessing CCTV’s effectiveness. A 2007 report by the Campbell Collaboration claimed that CCTV has a “modest but significant desirable effect on crime” but that its use should be “more narrowly targeted” than at present.

This note provides background to the use of CCTV before outlining some of the main research studies.

This information is provided to Members of Parliament in support of their parliamentary duties and is not intended to address the specific circumstances of any particular individual. It should not be relied upon as being up to date; the law or policies may have changed since it was last updated; and it should not be relied upon as legal or professional advice or as a substitute for it. A suitably qualified professional should be consulted if specific advice or information is required.

This information is provided subject to [our general terms and conditions](#) which are available online or may be provided on request in hard copy. Authors are available to discuss the content of this briefing with Members and their staff, but not with the general public.

Contents

1 Background 2
1.1 Use of CCTV for crime prevention 3
2 Research 4
2.1 Campbell Collaboration 4
2.2 Swedish National Council for Crime Prevention 5
2.3 Home Office studies 5
2.4 Lords Constitution Committee report 6

1 Background

A useful summary of the introduction of closed circuit television (CCTV) and the subsequent increase in its use can be found in the Home Office's *National CCTV Strategy*, published in October 2007. The strategy notes that:

The origins of CCTV provision for public space in this country lie in the early 1980s. Since then the use of CCTV systems has expanded gradually but significantly. The earliest systems were funded in a small number of cases by the police or local businesses, but in the majority of cases by local authorities through what were then known as City Challenge or Safer Cities Initiatives

Subsequent Government funding took the form of the CCTV Challenge Competition between 1994 and 1999, under which £38.5 million was made available for some 585 schemes nationwide.

In turn, between 1999 and 2003, major investment was made in public space CCTV through the Home Office-funded Crime Reduction Programme (CRP). A total of £170 million of capital funding was made available to local authorities following a bidding process. As a result of this funding, more than 680 CCTV schemes were installed in town centres and other public spaces. The end of the Crime Reduction Programme signalled the end of a dedicated central funding regime for public space CCTV. However, local areas continued to have access to Home Office grant monies in the form of general funding for crime reduction...

(...)

...most public space CCTV is now owned, monitored and managed by local authorities, many of whom have procured different systems at different times and with a range of different specifications, leading to a mix of schemes across the country. Although the Government has invested heavily in public space CCTV schemes, so too have local authorities and local partnerships. Local authorities also continue to carry much of the burden for the ongoing costs of running and maintaining their schemes...

(...)

...while there exists a large number of local authority operated CCTV cameras, it is a very small proportion of the nation's CCTV provision, since the vast majority are commercially owned.¹

When attempting to assess the effectiveness of CCTV it is important to be aware that there are differing systems in use. A 2005 Home Office research study has explained some of the main differences.² The National CCTV Strategy also notes that the technology underlying CCTV has changed considerably in recent years.³

Data on the number of CCTV cameras operating locally or nationally is not held centrally by the Home Office.⁴ The National CCTV Strategy does, however, refer to a 2002 study that estimated there were around 4.2 million operational cameras in the UK.

1.1 Use of CCTV for crime prevention

A [NACRO report](#) has summarised some of the assumptions behind the use of CCTV for crime prevention purposes:

- **Deterrence** The potential offender becomes aware of the presence of CCTV, assesses the risks of offending in this location to outweigh the benefits and chooses either not to offend or to offend elsewhere
- **Efficient deployment** CCTV cameras allow those monitoring the scene to determine whether police assistance is required. This ensures that police resources are called upon only when necessary
- **Self discipline -**
 - by potential victims** They are reminded of the 'risk' of crime, therefore altering their behaviour accordingly
 - by potential offenders** ...the threat of potential surveillance (whether the cameras are actually being monitored may be irrelevant) acts to produce a self discipline in which individuals police their own behaviour...the CCTV camera may produce a self-discipline through fear of surveillance, whether real or imagined
- **Presence of a capable guardian** The 'Routine Activity Theory' suggests that for a crime to be committed there must be a motivated offender, a suitable target and the absence of a capable guardian. Any act that prevents the convergence of these elements will reduce the likelihood of a crime taking place. CCTV, as a capable guardian, may help to reduce crime
- **Detection** CCTV cameras capture images of offences taking place. In some cases this may lead to punishment and the removal of the offenders' ability to offend (either due to incarceration, or increased monitoring and supervision)...⁵

¹ pp7-8

² Martin Gill and Angela Spriggs, *Assessing the impact of CCTV*, Home Office research study 292, February 2005, pp1-2

³ Home Office, *National CCTV Strategy*, October 2007, pp40-1

⁴ This has been stated in response to a number of parliamentary questions, for example, HC Deb 8 January 2007 c128W

⁵ NACRO, *To CCTV or not to CCTV?*, May 2002, p2

The report went on to claim that many evaluations of the effectiveness of CCTV had been methodologically unsatisfactory for the following reasons:

- inadequate pre and post CCTV time periods in which data were collected
- no account taken of seasonal variations
- no control areas for comparison
- little discussion of displacement or diffusion of benefits
- the size of the sample not being specified
- lack of independent evaluation⁶

Since NACRO's report, a number of lengthy, and sometimes complex, studies have looked at the impact of CCTV on crime. Details of some of the main reports are given below, with brief summaries.

2 Research

2.1 Campbell Collaboration

The Campbell Collaboration is an international research network that, according to its website, "produces systematic reviews of the effects of social interventions".⁷ In December 2008 it published a detailed review examining research from around the world in an attempt to assess the impact of CCTV on crime.⁸ The synopsis states:

Closed circuit television (CCTV) surveillance cameras serve many functions and are used in both public and private settings. The prevention of personal and property crime is among the primary objectives in public space, which is the main focus of this review...Results of this review indicate that CCTV has a modest but significant desirable effect on crime, is most effective in reducing crime in car parks, is most effective when targeted at vehicle crimes (largely a function of the successful car park schemes), and is more effective in reducing crime in the United Kingdom than in other countries. These results lend support for the continued use of CCTV to prevent crime in public space, but suggest that it be more narrowly targeted than its present use would indicate. Future CCTV schemes should employ high-quality evaluation designs with long follow-up periods.⁹

The Campbell Collaboration study has been referred to in a number of parliamentary questions¹⁰ and also generated press coverage, including:

- Tom Whitehead, "[CCTV only effective at cutting car crime](#)", *Daily Telegraph*, 18 May 2009
- Alan Travis, "[CCTV schemes in city and town centres have little effect on crime, says report](#)", *Guardian*, 18 May 2009

⁶ Ibid, p5

⁷ [Campbell Collaboration website](#)

⁸ Campbell Systematic reviews, *Effects of Closed Circuit Television Surveillance on Crime*, December 2008

⁹ Ibid, p2

¹⁰ For example, HC Deb 20 April 2009 c158W

2.2 Swedish National Council for Crime Prevention

In 2007 the Swedish National Council for Crime Prevention published a review of the impact of CCTV on crime prevention.¹¹ The summary noted that the “mechanisms by which CCTV may prevent crime are numerous”. It continued:

CCTV may deter potential offenders because of their increased subjective probability of detection. Also, CCTV may increase the true probability of detection, may increase pedestrian usage of places and hence further increase the subjective probability, may encourage potential victims to take security precautions, and may direct police and security personnel to intervene to prevent crime...Another possibility is that CCTV could signal improvements in the area and hence increase community pride, community cohesion, and informal social control.

Studies were included in this systematic review if CCTV was the main intervention, if there was an outcome measure of crime, if there was at least one experimental area and one comparable control area, if there were before and after measures of crime, and if the total number of crimes in each area before the intervention was at least 20. (Any study with less than 20 crimes before would have insufficient statistical power to detect changes in crime.)

Four search strategies were employed to locate studies meeting the criteria for inclusion: searches of electronic bibliographic databases, searches of literature reviews on the effectiveness of CCTV on crime, searches of bibliographies of CCTV reports, and contacts with leading researchers. Forty-four studies met the inclusion criteria.

The results suggest that CCTV caused a small (16%) but significant decrease in crime in experimental areas compared with comparable control areas. However, this overall result was largely driven by the effectiveness of CCTV schemes in car parks, which caused a 51% decrease in crime. Schemes in most other settings had small and nonsignificant effects on crime: a 7% decrease in city and town centers and in public housing. Public transport schemes had greater effects (a 23% decrease overall), but these were still non-significant. Schemes evaluated in the U.K. were more effective than schemes evaluated in other countries, but this effectiveness was largely driven by the studies in the car parks.

CCTV schemes in car parks could have been the most effective for a variety of reasons. First, in all the schemes CCTV was combined with other interventions such as improved lighting, fencing, and security personnel. Second, camera coverage was high, and this factor is related to effectiveness. Third, vehicle crimes were targeted, and it may be that such crimes are easier to detect than violent crimes for example.

Overall, it might be concluded that CCTV reduces crime to some degree. In light of the marginally successful results, future CCTV schemes should be carefully implemented in different settings and should employ high quality evaluation designs with long follow-up periods (pages 7-8).

2.3 Home Office studies

A number of Home Office research studies have looked at CCTV, including:

- Martin Gill et al, *The impact of CCTV fourteen case studies*, Online report, 2005

¹¹ Brandon C. Welsh David P. Farrington, *Closed-Circuit Television Surveillance and Crime Prevention A Systematic Review*, Report prepared for The Swedish National Council for Crime Prevention, 2007

This outlines the main findings from fourteen CCTV systems, evaluated as part of the national evaluation of CCTV [the 2005 report listed below]. It concluded that:

Overall, the impact of CCTV has been variable...it is important to remember that the characteristics of areas and the crime problems generated in them varies considerably, and the suitability of CCTV will depend, at the very least, on the nature of those problems, the presence of other measures, and the commitment and skills of management and staff to making CCTV work. The belief that CCTV alone can counter complex social problems is unrealistic in the extreme. At best CCTV can work alongside other measures to generate some changes, but it is no easy panacea, and there is a lot still to be learnt about how to use it to best effect (page 36)

Other studies include:

- Martin Gill and Angela Spriggs, *Assessing the impact of CCTV*, February 2005
- Brandon C. Welsh and David P. Farrington, *Crime prevention effects of closed circuit television: a systematic review*, August 2002

2.4 Lords Constitution Committee report

In February 2009 the House of Lords Select Committee on the Constitution published a report, *Surveillance: citizens and the state*. The use of CCTV for law enforcement and public safety was discussed in chapter three; public opinion towards CCTV was considered in chapter 8; and paragraphs 213-9 considered how to regulate CCTV use.

The Committee recommended that:

- the Home Office commission an independent appraisal of the existing research evidence on the effectiveness of CCTV in preventing, detecting and investigating crime (para 82)
- the Government should propose a statutory regime for the use of CCTV by both the public and private sectors, introduce codes of practice that are legally binding on all CCTV schemes and establish a system of complaints and remedies. This system should be overseen by the Office of Surveillance Commissioners in conjunction with the Information Commissioner's Office (para 219)

In its *analysis* of the then Government's response, the Committee commented:

We are disappointed that the Government have not accepted our call for a statutory regime for CCTV... Although we acknowledge that some steps are being taken within the framework of the National CCTV Strategy to improve the governance and operation of CCTV, we remain convinced that accountability and responsiveness to public concerns and complaints require a statutory regime for governing the Strategy, oversight by Commissioners, and the establishment of the promised national body (para 20).