

TO CCTV OR NOT TO CCTV? THAT IS THE QUESTION!

By Gina P. Haynes

Whether or not to install closed circuit television (CCTV) is not a question Shakespeare would have asked, but it is certainly a question that warrants consideration today. Anyone who has been or fears being a victim of crime needs to seriously look at whether CCTV is an option worth using. Knowing that a set of eyes are watching your children, your building, your business or even your home while you are absent can give a person not only a sense of security, but peace of mind. That's something worth paying for, or is it? Maybe we should look at what is really involved.

CCTV is a growing international phenomenon. Cameras are so popular that TV stations are buying raw footage to create shows and documentaries. Courts and news media are using what is caught on tape to prove or disprove a case and to solicit public interest. Not having CCTV almost gives a person or business the reputation of being outdated and negligent. But what exactly is CCTV? In its simplest form, CCTV consists of a video camera, a monitor, and a recorder. Complex, multi camera systems allow images to be viewed sequentially, simultaneously, or on several monitors at once, depending on the system. The systems can record in black and white or color, and camera positions can be either fixed or varied by remote control to focus on activity in different locations. Zoom lenses allow either a broad view of the monitored area or selected close-ups. In addition, the advances in technology enable CCTV cameras to be smaller, to use night vision and

to transmit real time images over the internet.¹ In the pages that follow, you will get a glimpse into a country that embraced this technology, along with the consequences that followed.

The country considered the world leader in CCTV use is Great Britain. In a country of 60 million, cameras have seemingly taken over, with one camera for every 15 people.² It is estimated that the average Briton is likely to be photographed by 300 separate cameras during the course of a day. More than four million cameras observe all aspects of life, from downtown shopping areas, transport systems, commercial zones, banks, restaurants and bars, to residential areas and even churches. Almost every block in every city center is monitored. Virtually everywhere one might travel in Britain, cameras are there. In the eyes of many, CCTV has come to be seen as a panacea for crime control in Great Britain. Apparently, all that's needed to “magic away” crime is the installation of a CCTV system. But how did it all begin? How did Britons get to be the most watched people on earth?

CCTV IN THE UNITED KINGDOM

It has been suggested that Britain's use of CCTV proliferated after Irish Republican Army's (IRA) bombings in the early 1990's but, truth be told, it was more likely the Government's efforts to address crime in the early nineties that began the push. In 1991, the “Morgan Committee” was established to investigate some of the difficulties that had emerged in the local co-ordination of crime prevention. Although the Committee's report did not specifically state that cameras were to be used, they were certainly not against

¹ “What is Closed-Circuit Television?” Available at http://www.securitygateway.com/page.asp?c=facts_cctv.

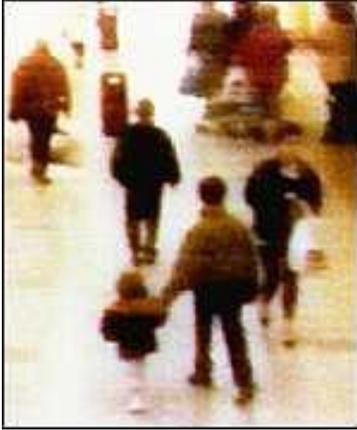
² Encyclopedia of facts. Available at <http://www.en.wikipedia.org/wiki/England>.

their use.³ The people though, were not won over by the government in support of cameras. It was a shocking homicide that won their support.

In 1993, a homicide occurred that gave national recognition to the value of surveillance cameras. James Bulger, a two-year old male, went missing while in a shopping mall with his mother. After initial inquiries, police started looking for a man with long hair in a ponytail. It was not until surveillance cameras inside the mall showed the two-year old being led away by two boys who looked to be between ten and twelve years old, that the police refocused their attention. Although the image was too fuzzy for the boys to be identified, neighbors recognized them from the camera images and called police. The boys were picked up shortly after. The ten-year old boys were both convicted for torturing and murdering the little two-year old. Much of the credit for solving the case was given to CCTV, hence the community's buy-in to the advantages of security cameras.

Nobody seemed to give any thought though to the fact that the cameras had been installed as a crime prevention measure, but clearly, here was a crime that had not been prevented. The crime was solved though, and in only a matter of days, so credit needs to be given to the cameras in their use as an investigative tool. Not the first time or the last that cameras would assist Great Britain in their use as an investigative tool.

³ Home Office. "Safer Communities: The Local Delivery of Crime Prevention Through The Partnership Approach". Home Office Standing Conference on Crime Prevention. 1991.



Bulger being led away by Venables and Thompson, recorded on shopping center CCTV

Solving the high profile ‘Bulger’ case fueled the Government’s obsession with the perceived magical qualities of CCTV. The former Home Secretary of Britain, Michael Howard, in an introduction to a Home Office publication on CCTV argued, "I am absolutely convinced that CCTV has a major part to play in helping to detect and reduce crimes and to convict criminals."⁴ This resolve was strengthened in 1997, when the newly elected Labour Party pledged to implement a series of recommendations from the Morgan Report, stating, “We will place a new responsibility on local authorities to develop statutory partnerships to help prevent crime.”⁵ This put pressure on local councils to take action, but budgets were tight. The solution came the following year in 1998 when the Home Office announced a 170 million pound (\$340 million) CCTV initiative for England and Wales. The initiative provided local partnerships with the capital cost to deploy CCTV cameras in areas with significant crime problems. One drawback was the partnerships had to meet the maintenance and staffing costs, an insignificant detail considering the biggest outlay, between \$60,000 and \$14 million

⁴ A Practical Guide for Crime Prevention for Local Partnerships. London: Home Office paper. 1993: p.3.

⁵ Labour Party Manifesto. 1997: p.23.

(depending on the size of the city), was being met by the Government. The increasing pressure to expand crime prevention using CCTV, gave police departments no choice but to buy into a shift in crime control that moved away from both tradition and themselves.

The problem of crime prevention may have been solved, but new problems were emerging. The biggest problem was the ongoing operational costs, which were substantial. Budget concerns prohibited the police from taking over the full manning of the systems in the UK, as the cost of a police officer is almost three times that of a camera operator. The police, nevertheless, are fully committed to exploiting the full benefits of CCTV schemes.⁶ This is not surprising, as the systems have been shown to be beneficial in assisting police in their work. But, just how effective are the systems?

A study in 1995, by the Home Office Police Research group, looked at the effectiveness of CCTV systems in three large English town centers; Birmingham, King's Lynn and Newcastle.⁷ Among the key findings were:

- 1 One of the most important benefits of CCTV is personnel efficiency. Cameras are able to view multiple areas at one time, eliminating the need for numerous officers to patrol those same areas. Also, CCTV systems can help discover incidents as they occur. This information can be used to either coordinate an effective and appropriate response or to conserve resources by aiding in a determination that no response is necessary at all.

⁶ <http://www.cctvision.com>

⁷ Ben Brown, *CCTV in Town Centres: Three Case Studies*, Police Research Group Crime Detection and Prevention Series, Paper 68, 1995.

- 2 CCTV videotapes can be very beneficial. Not only can they lead to prompt identification of a perpetrator, they can also provide clues that can aid in an investigation.
- 3 The analysis of crime data shows that, at least in the short term, the presence of closed-circuit cameras can have a deterrent effect on a variety of offenses, especially crimes against property. For example, in the section of Newcastle covered by CCTV, burglaries fell by 56%, criminal damage by 34% and non-motor vehicle theft by 11%, in a fifteen-month period.

In the interest of increased public safety, the police, armed with this data, developed a strong desire to use CCTV. Other industries have also chosen to exploit the benefits of CCTV, the media being one. At times it is to the public's advantage, such as covering the disappearance of the 'Bulger' boy. Other times it is for entertainment value, as in the reality TV show, "Big Brother." What hasn't been exploited or even documented are statistics showing the number of crimes prevented, solved, arrests made and successful convictions as a result of CCTV use. If such statistics are being compiled, they are not readily available. What is available is data from various reports that are done from time to time.

A May 2002 report put out by Nacro (an organization that gives reviews of current research into the effectiveness of CCTV), suggests that the sharpest decreases in crime occurred when the cameras were being installed and public consciousness of them was particularly high. The report ultimately concluded that although "the extent of CCTV coverage and the Government's funding of new systems has increased dramatically over

the last decade, there is very little substantive research evidence to suggest that CCTV works...which suggests that it is not always as successful at reducing crime as it is claimed to be.”⁸

A more recent report out of Great Britain, a Home Office research study (White Paper on statistics), released in February 2005, concluded that CCTV systems do not cut crime or make people feel safer. Criminologists examined 14 different CCTV schemes and only one, covering parking lots, was shown to reduce crime. The study also listed five factors that influence the operation of CCTV; “management” being one of them, yet only 5 project managers out of 13 had expertise in CCTV. Is it any wonder those systems were not effective? The other factors; scheme objectives, density, camera coverage and positioning, technical characteristics and operation of the control room, were also seen as having flaws that either hindered or prevented the systems from being a success. Professor Gill, from Leicester University, who led the study stated, “Cameras are a powerful tool, but not a sure-fire technical answer.”⁹

Although research lends itself to the failures rather than the successes, this is not the case when presented by companies that sell or install the cameras. These companies all give the same “hype” encouraging installation and instilling in the buyer a sense of security in making their purchase. I could find no unbiased accounts or statistics from any of the private companies. What I did find was a 1996 survey of CCTV suppliers revealing that over 50 percent of all CCTV surveillance equipment sales were to industrial and

⁸ Community Safety Practice Briefing, May 2002. Available at <http://www.nacro.org.uk/data/briefings/nacro-2002062800-csps.pdf>.

⁹ Martin Gill & Angela Spriggs, *Assessing The Impact of CCTV*. Home Office Research Study 292. February 2005. Available at www.homeoffice.gov.uk/rds/pdfs05/hors292.pdf.

commercial clients, and that number has done nothing but rise since that time.¹⁰ So it would appear their hype is working and now, with the recent publicity of CCTV's success in identifying the London bombers from July '05, this trend will only continue.

USE OF CCTV IN OTHER PLACES AND INDUSTRIES

It isn't only Great Britain that believes cameras can solve the crime problems; here in California CCTV is also making news. The California Department of Transportation (CalTrans) has video cameras, which monitor and regulate traffic flow on many of the state's major freeways. In 1993, after a series of crimes including two murders, cameras were installed in Balboa Park, San Diego. According to Penny Scott, Balboa Park's district manager, crime decreased in almost every category in the nine months following the systems' installation.¹¹ Although I am sure the park district keeps statistics, I could find nothing recently published that addressed any continued success with the cameras.

In 1995, CCTV systems were installed in Los Angeles and Sacramento malls. Today, the Arden Fair Mall in Sacramento has 19 cameras monitored constantly during business hours. Although the system has captured a large number of crimes from shoplifting to an assault on an officer, it does have its drawbacks. There must be good lighting and good placement of the cameras, there has to be secure storage space for the tapes and the tapes tend to lose their integrity over time. These problems will be solved in the near future when the mall converts to a digital system, thanks to a vulnerability grant awarded by the Department of Homeland Security. When asked what the drawback was to the digital

¹⁰ <http://www.library.ca.gov/CRB/97/05/crb97.html>

¹¹ Penny Scott, Balboa Park District Manager, Regarding the successful park district CCTV surveillance system, "CCTV For Public Safety," 1996 report, Security Industrial Association, Page 38, Sept. 1996.

system, the security manager stated, “the cost!”¹²

The cost of CCTV is expensive, but that hasn’t stopped the trend in California from spreading. The following highlight other uses of CCTV:

- In 2004 security cameras at San Francisco’s landmark Transamerica Pyramid building observed a “Middle Eastern man about 30 –40 years old” who appeared to be photographing and sketching the building. Police and Federal agents have issued a bulletin seeking this man for questioning.
- In Los Angeles, the city council voted unanimously to require cyber cafes to install CCTV in an effort to deter truants and gang members.
- The Fresno Yosemite International Airport tested a facial recognition system, snapping a series of photographs of passengers and instantly comparing points of human bone structure with mug shots of terrorists in computer databases. Previous tests of other facial recognition software found it to be unreliable, but experts are working to refine their screening methods.
- Not to be outdone, the County of Los Angeles Fire Department (Lifeguard Division) in partnership with the Department of Beaches and Harbors and the University of Southern California have created a network of cameras surveying 72 miles of Pacific coastline. The cameras send images to lifeguard monitors and transmit them to the Web, where the public can check weather, crowd and parking conditions. Other trained eyes can watch vandals, litterbugs, endangered swimmers (and bikini clad beachgoers!)

¹² Steve Reed, Security Manager for Arden Fair Mall. Personal interview by author on August 8th, 2005.

SMILE, YOU'RE ON CAMERA AND IT MAY BE CANDID!

Few Americans are conscious of being watched, yet typical Americans are starting their day being filmed passing through the lobby of their apartment building or by being recorded walking down the street by security cams operated by their neighbors. They drive to work under the aim of several traffic and red-light cameras. They are observed entering their work buildings, using the ATM, parking, shopping, buying gas and even attending sporting events. These are only the public cameras, which do not include the unrestricted authority employers have to monitor on-the-job performance.¹³ The installation of CCTV systems is easy to justify. The merits of each camera make sense, but when you realize numerous cameras are being installed at an increasing rate, shouldn't we have extremely low crime, at least in the areas where the cameras have been fitted? If this is not the case, then we need to look at why, and what the pros and cons are of implementing CCTV?

THE PROS AND CONS OF CCTV

CCTV does have some technical imperfections. Systems that are cheaply made have very little value, therefore, cost can be an issue. Cameras can be vandalized or disabled and standard cameras do not capture images well under poor lighting conditions, although newer technology can compensate for this. CCTV also works best in areas with open and plain layouts. So, complex areas and layouts make a high degree of camera coverage difficult to obtain. Other imperfections are those of a human kind. When cameras are used for surveillance, fatigue, both physical and mental, can affect the

¹³ Vicki Haddock, San Francisco Chronicle, October 17th, 2004. Available at www.sfgate.com.

performance of staff watching the monitors. Lastly, some critics insist that cameras cause displacement and mainly record minor offenses such as public urination, graffiti and vandalism.

Evidence suggests, however, that also recorded is valuable intelligence, as evidenced in the United Kingdom when suicide bombers were captured on CCTV arriving in London and entering the stations. The growth of CCTV installations leads us to believe there is a general consensus that their presence deters crime. In addition, no one has yet been able to prove definitively that the use of cameras in one area displaces crime to neighboring areas.¹⁴

However, CCTV cameras are not popular with everyone and there are numerous websites that provide information on how to disable and permanently damage the cameras. Some websites, such as the “Guide to Closed Circuit Television Destruction”¹⁵ are so informative, they even include a training program to assist in getting you fit enough to climb camera poles and handle the terrain. Because of such information, crime prevention strategies need to be considered. Technology installed to prevent crime has to be protected! Is the answer to install more cameras to watch the existing cameras? If so, who then will watch those cameras, how far will this madness extend?

CHALLENGES IN IMPLEMENTATION

Before installing CCTV, it is imperative to understand the challenges likely to be faced with implementation. Previously, the challenge was with the human eye, which was

¹⁴ NIJ journal, issue no. 249: CCTV: Constant Cameras Track Violators. P.17-18.

¹⁵ “Guide to Closed Circuit Television Destruction”. Available at <http://www.rtmark.com/cctv>.

needed to evaluate the images. Constant monitoring became costly, time consuming, and tiring for the observer; it also constituted a high risk for human error. Now, with the second generation of cameras, the systems are computer-linked and are able to evaluate their own video images.

The human factor in surveillance caused concerns such as data swamping (operator couldn't handle the volume of data coming in), boredom, voyeurism and profiling. These issues were solved by the enhanced capabilities of the new cameras. Unfortunately, the most current cameras have also generated concerns, particularly the expansion of the surveillance and its intrusiveness. The new extensive capabilities of cameras have caused the public to once again become distrustful and resentful of the camera systems. One concerned person is Barry Hugill of Liberty, a civil liberties and human rights group based in London, who states, "There are privacy concerns...CCTV is spying, it's monitoring your every move."¹⁶

Community mistrust is a concern. In order to answer community questions and provide accurate information on how the systems will be monitored, research is vital. Bear in mind, the adoption of a computer-enhanced CCTV surveillance system should not be an automatic response to a security problem, and their deployment should not be decided simply on availability of technology.¹⁷ The key criteria to use when evaluating potential implementation of CCTV systems should include the following, which are paramount to successful outcomes:

¹⁶ Mark Rice-Oxley. Big Brother in Britain: Does More Surveillance Work? Christian Science Monitor. February 6th, 2004. Available at <http://www.csmonitor.com/2004/0206/p07s02-woeu.html>.

¹⁷ Ray, Surette. Policing: An International Journal of Police Strategies and Management. Emerald Group Publishing Ltd. Jan 2005, Vol. 28, no.1. pp. 152-1730.

- crime statistics
- layout and demographics of the area
- if the system can be shared
- input and support from the community.

Those in America with concerns regarding cameras are the American Civil Liberties Union (ACLU), who argued against CCTV being installed in the District of Columbia. In their argument, they cited Representative Constance Morella who expressed concern that “the pendulum between security and privacy is beginning to swing too far in one direction. These surveillance programs are advancing without the appropriate and necessary public debate about their consequences.”¹⁸ The people have a right to be included, if not, they are left to make their own assumptions. In the meantime, the nation will most likely be monitoring what is occurring in Chicago, where an elaborate network of over two thousand cameras is being installed.

THE CHICAGO EXPERIMENT

Expected to be in place by the spring of 2006, Chicago’s \$5.1 million CCTV project will be funded through a Federal Homeland Security Grant. The system will not be continuously monitored, but software would be used to pick up “out-of-the-ordinary” activity on the video images. A staff member in the City’s Office of Emergency Management would be alerted if suspicious behavior is detected. That staff member could then notify the entity best suited to handle the observed activity. The bulk of the cameras are apparently already in use at O’Hare International Airport, on the city’s transit

¹⁸ Stephen Block. ACLU Testimony on Surveillance System Before DC City Council. February 25th, 2002. Available at <http://www.aclu.org/news>.

lines, in public housing, parks and schools, all in an effort to curb violent crime.¹⁹

THE TREND CONTINUES IN THE UNITED KINGDOM

The trends in Great Britain continue, they haven't stopped at CCTV. Other cameras in the form of speed cameras, red light cameras, license plate recognition cameras and drivecam cameras are also increasing in numbers. But, millions of cameras were not enough to prevent the bombings that London suffered on July 7th, 2005. Terrorists, aware of the cameras, were still able to plant and activate four bombs at four different locations. Although not instrumental enough to prevent the attack, the pervasive use of cameras was instrumental in providing information leading to the identity of those responsible.

British authorities are obviously focusing their attention on finding those responsible for the bombings, not on why the cameras failed to prevent the bombings in the first place. But, authorities need only to look at their own Home Office White Paper (as referenced earlier) to see that the underground camera system was obviously deficient in one of the five factors needed for successful operation.

IN CONCLUSION

Proof that CCTV will not stop terrorists should be a wake up call to all who are considering installing camera systems. Although relieved that CCTV helped to capture those responsible for the London bombings, it is clear that many believe the cameras were installed as a means of preventing a terrorist attack. So, does the failure to prevent an attack mean the system failed? Keep in mind, it is not the choice of camera system

¹⁹ Tara Burghart, *Chicago's Mayor Outlines Elaborate Camera Network for City*. Associated Press, September 10th, 2004. Available at <http://www.policeone.com>.

that is the dilemma, but the choice of people to plan, implement, manage and operate such systems. They ensure the success of the system, not the technology.

George Orwell, in his book “1984,” envisioned a disturbing future where people were watched by their Government every minute of every day. Great Britain is not quite the fascist state that George Orwell created, but it is starting to bear an uncanny resemblance.



This photograph was taken in Greenwich, on the outskirts of London in June of this year (2005).²⁰ Is this the future that George Orwell envisioned?

²⁰ Photograph taken by the author in London, England. June, 2005.

Fortunately, America is still in a position to make a choice. How we proceed from here will impact not only our perception of crime and safety, but also our basic perception of privacy and freedom. The extent to which we sacrifice our autonomy for our safety is yet to be seen, but should be seriously considered. So, the question 'To CCTV or not to CCTV?' should not be left to Shakespearians, with outdated views, but to those who have done their research and have a realistic approach as to what the future should look like. In the meantime, smile, you may be on camera!