

Good Practice Description 2003 - Government Office South East

Vehicle crime reduction through enhanced CCTV, Slough Trading Estate

Overview

The Slough Trading Estate project, implemented through the Estate's own Business Watch organisation over a number of years, had a wide focus and very general crime reduction and community safety objectives. The overall aim through a number of initiatives was to increase real and perceived security on the Estate for customers and employees in order to raise quality of life and boost trade. An additional aim was to build the capacity of the Estate to reduce crime by developing the ability of the occupiers to protect themselves both individually and collectively. The aspect covered here is a more limited intervention, the installation of a new and extended **digital CCTV system with full-time monitoring, which supported tracking, identification and arrest of offenders**. The **objective** reported on was the reduction of **theft from motor vehicles**. Theft of vehicles and bicycles, burglary, theft from a person, criminal damage and anti-social behaviour were also addressed but due to limitations of data and rarity of some of these offences, did not directly feature in the evaluation.

Interventions involved in the project:

Type	Method	Principle	Involved in implementation
Existing	1. Proactive police unit	Reassurance, Excluding/Deterrence	Proactive Police Unit
	2. Analogue CCTV system	Surveillance, Deterrence	Business Watch Co-ordinator, Reliance Security
New	3. Digital CCTV infrastructure and full time monitoring	Deterrence and discouragement, Restricting resources for offending, Surveillance, Empowering Preventers	Business Watch Co-ordinator, Reliance Security, Proactive Police Unit
	4. Monitoring of alarm systems linked to CCTV viewing suite	Deterrence	Business Watch Co-ordinator, Reliance security, Tenants
	5. Closing off a through route linking STE to the adjacent housing estates	Excluding/Deflecting offenders from a crime situation	Business Watch Co-ordinator, Slough Estates

Involvement

Working in **partnership** on the project were on-site security staff, proactive police unit, business occupiers and the Business Watch team. The police, security team and CCTV section co-operated to gather information on prolific and potential offenders operating on the Slough Trading Estate. The CCTV operators along with the Business Watch co-ordinator also worked with security staff and proactive police unit to detect and track offenders' locations on the Estate. Information concerning these locations was relayed to either security staff or proactive police team, to either move the offenders off the Estate or to arrest them where appropriate. **Mobilisation** of the occupiers was maintained through the BW co-ordinator visiting the businesses and through quarterly newsletters (the content covered changes in offending on the Estate, good news stories and achievable self-protection measures against crime).

Impact

Analysis based on recorded crime on Slough Trading Estate (excluding retail park) showed a total fall in theft from vehicles on STE from the pre to post implementation phases of 37%. When background falls in the rest of Slough were filtered out the gross reduction in theft from vehicles on STE was 24% (118

offences prevented over the 22-month implementation phase). Scrutiny of month-to-month trends suggested this might be a little generous so a conservative estimate of **20%** may be more valid.

Project description – the 5Is

1. Intelligence

General context

Slough is a large developing urban area to the west of London close to Heathrow Airport. It comprises fourteen wards and is a mixture of commercial, residential and industrial land usage. According to the Census 2001, the population of Slough is around 120,000 of which just under a third (30%) are from ethnic minority backgrounds (of these Indians and Pakistanis make up 14% and 12% respectively). Unemployment within Slough accounts for around 4.4 per cent of the working age population, noticeably lower than the national average (5.1%).

Slough Trading Estate is one of the largest commercial estates in Europe under single ownership. It covers around 200 Hectare of space for business. There are currently over 400 companies operating on the Estate and the number of employees of those businesses is around 20,000.

The Slough Trading Estate (STE) has existed since the early 1920s and has recently expanded both in size and diversity of industries/businesses located there. Slough Trading Estate falls within Farnham ward of Slough, which has a moderately high level of deprivation. Adjacent to the Trading Estate are three wards which come within the top 20% most deprived wards in England and Wales. Within these three wards a low level of income further fuels problems.

Evidence of the crime problem – sources of information and analysis

Information collected to guide the project was based on recorded crime data on STE supplied by Slough Police BCU, supplemented by qualitative and anecdotal evidence provided by Business Watch staff from STE itself.

The crime problem that the project aimed to tackle

The recorded crime data prior to the project suggested that theft from vehicles offences were elevated for the Estate. There were 702 offences¹ for the 12 months up to August 2001, immediately prior to the implementation (see Figure 2 in the impact section). It is difficult to compare risks on different trading estates, but this level was felt locally to be a problem deserving action.

Offenders

It was noted that a feature of offending on the Estate – both vehicle related crimes and other offences – was that a few prolific offenders accounted for the majority of offences.

Modus Operandi

One type of offending behaviour noted, which came to light following installation, involved offenders who cruised around in cars on the lookout for soft targets, open and/or unattended buildings and car boots with removable items of perceived worth on view. Offenders preferred to attack unlocked cars left whilst the driver had entered a nearby building; some had also stolen from locked car boots having glimpsed something worth taking whilst the boot was open.

Vulnerable models of cars were targeted for thefts from vehicles on STE, specifically Peugeot 406s. This car apparently had a vulnerable boot locking mechanism – which could be opened with a sharp blow via a solid implement to the top of the lock.

¹ Data excludes the retail park in 2001; if the retail park was included this would be estimated at around 960 offences.

Wider crime problems

Other offences causing problems on STE included thefts of vehicles, criminal damage to buildings and burglary. The Business Watch project has been successful in tackling these problems, with the result that there has been a marked reduction in all types of reported crime (although this was not the subject of the present formal evaluation).

One of the neighbouring housing estates already mentioned had recently demonstrated growth in anti-social behaviour and general criminal activity.

Previous analysis of recorded crime reports in Thames Valley Police Force area as a whole, conducted between 1998 to 2002 (Hedge, 2003²), showed that for theft (also including personal robbery in this analysis), Slough was third highest, with 10,326 recorded crimes of which over half (5,921) were thefts from vehicles. The main three items which had been stolen from vehicles in Slough were “other documents”, audio equipment and computer equipment. “Other documents” related to the high volume of thefts of passports; this was attributed to close proximity to Heathrow. As in STE itself, computer equipment stolen from cars mainly consisted of laptops, of which 1,452 were taken in the 4 year period of analysis.

Significant consequences of the crime problem

The consequences of the pattern of crime in STE were variously experienced by customers, businesses, employees and occupiers. Perceived safety was a significant issue. Those employed by the businesses on the Estate were more reticent about walking around it after dark, perceiving the chance of being a victim of street crime to be higher at that time. People employed on STE were reluctant to park their cars in certain locations, which was inconvenient, a disincentive to work there and an inhibitor of trade. The theft of vehicles and of items from cars had a wider impact on business and personal insurance premia, and other costs and inconveniences.

Significant consequences for further offending

There were specific car parks where a high level of vehicle crime led to under-use, resulting in lack of public surveillance perhaps allowing further offending to proliferate. In one case the car park had a capacity of between 50-60 cars but was hardly ever used as it was close to a through route coming directly off one of the adjacent housing estates. This enabled offenders to get into the car park, commit the offence and leave the Estate all within a short time period.

Immediate causes³ of the crime problem

Crime preventers

- Vehicle owners/drivers were not present to guard property (CCTV footage revealed offenders exploiting even brief moments when cars were unattended).

Wider environment

- Layout of buildings and landscape (especially trees in the summer) obstructed camera views and natural surveillance.
- Layout of roads and alleys provided easy access to employees and offenders alike. According to the Business Watch co-ordinator, the area to the north and west was exposed to potential offenders coming straight off the neighbouring estates in a “rat run”.

Target enclosures

² Hedge, J. (2003) Stealing from cars – A study of theft from motor vehicles in the Thames Valley (available at <http://www.thamesvalleypartnership.org.uk/stealingfromcars.pdf>)

³ Causes are described using the Conjunction of Criminal Opportunity (CCO)– www.crimereduction.gov.uk/learningzone/cco.htm. Those judged particularly relevant to this crime problem and its prevention have been emphasised. Where possible these relevant causes are supported by evidence; where such evidence is missing, and the causes are relevant to the interventions, conjectures are identified.

- Vehicles (*as enclosures*) had varying levels of security – from hardened locks to unlocked doors. Particular models had vulnerable boot locks, which offenders exploited with a range of MOs.

Target property

- Highly visible items on display in cars and those sighted by offenders in enclosed sections of the car were targeted ('hot products' such as laptops were particularly sought).

Offender presence

- A number of convicted offenders lived close to Slough Trading Estate, within housing estates located in wards rating high on the indices of multiple deprivation. Evidence of those individuals committing crimes came from a period of systematic monitoring of cameras and analysis of recorded crime. This evidence led to the implementation of Intervention 5 (***See Intervention 5 description below***)

Anticipation of risk, effort and reward

- Offenders may have perceived a low risk of being detected and apprehended as a result of the existing, limited CCTV cameras (see paper on this by Gill & Loveday, 2003⁴)

Resources for committing crime

- Time is a major resource for committing crime. The capacity of user/occupiers of STE to act as preventers by detecting and swiftly reacting to crime, especially the more rapidly executed types in evidence on the Estate, seemed limited. Offenders exploited the vulnerabilities of vehicles (particularly their boot locks) by employing a range of MOs.

Readiness to offend (motivation/emotion)

- Deprivation in the adjacent housing estates may have led to motivation to steal from cars although evidence for this was circumstantial. Excitement involved in committing offences on the Estate and avoiding detection may also have contributed to offending on STE.

2. Intervention

Existing interventions

The current interventions were grafted onto pre-established measures over the 10 year period before the digital CCTV implementation. These actions had been initiated by the STE Business Watch, and the police along with the co-operation of 300 members representing the businesses on Slough Trading Estate.

Intervention 1: A uniformed police unit was established by Slough BCU in 1994 located in the Business Watch office in the centre of the Slough Trading Estate. The unit consisted of a sergeant and 6 constables, with a remit to understand and respond to tenants' security concerns and to this end to raise the tenants' awareness of their existence and use of their services. In 1999 this unit was replaced by a proactive police unit, working in plain clothes from a dedicated office next to the Business Watch office. In practice, as the project unfolded, this unit came to focus on drugs rather than vehicle crime.

Intervention 2: A small battery of 13 pan-tilt-zoom and fixed analogue **CCTV** cameras were installed in 1999/2000 covering the central parade of shops in STE. This measure did not provide Estate wide CCTV coverage, but was apparently very successful in eliminating crime in that area (although subject to this formal evaluation).. Surveillance of CCTV cameras was not full time until the later interventions were implemented. A number of arrests had been made using these cameras. It was as a result of this intervention, that a case was made to the Slough Estates Board to introduce the digital system across the Estate.

⁴ Gill, M. & Loveday, K (2003) What do offenders think about CCTV? *Crime Prevention and Community Safety: An International Journal*, Volume 5, No. 3, pp17-25.

Intervention 3: Digital CCTV infrastructure and full time monitoring

Method: *Digital CCTV and full time monitoring*

Principles: *Deterrence and discouragement, Restricting resources for offending, Surveillance, Empowering preventers. The system served as a multiplier of existing response capability – no additional response resources came with the package*

Main details of method

40 cameras were installed, able to view the surrounding area in a 360 degree angle. They covered a wide area dispersed at regular intervals across the Estate. Digital features meant they provided better quality pictures especially at night, which enabled easier identification of offenders and the recording of high resolution evidence. The infrastructure of the CCTV monitoring suite also facilitated the tracking of offenders throughout the estate, with the ability to change cameras at the flick of a switch and at the same time to review any live footage recorded. The suite also functioned as a central point for monitoring the tenants' alarms.

Where CCTV cameras were sited, they were accompanied by highly visible signs explaining that cameras were watching the area and stating the data protection clause. The cameras themselves were hidden behind smoky glass domes (see www.vicon-cctv.com/UK/main-frame.html for examples of the CCTV cameras installed on STE).

Intervention principle 3.1 – Deterrence

The warning notices were of course intended to deter offenders. The smoky domes may have produced an additional deterrence effect, in that the offender was unable to see whether the camera was pointing at them. It certainly made obvious anti-surveillance tactics harder – offenders could no longer spot, and avoid, the gaze of visible camera lenses.

Where the CCTV detected, tracked and eventually led to the arrest and conviction of individual offenders, this probably deterred those offenders and others from future crime in the areas covered by CCTV cameras.

Intervention principles 3.2-3.4 – Restricting resources for offending; Discouragement; Empowering preventers

One of the main benefits of the CCTV cameras coupled with full-time surveillance is that (building on deterrence) it reduced the **time** available for the offender to commit an offence and escape undetected or before a response call could be triggered. It therefore also restricted the **area** they could offend in, given that they needed sufficient time to exit the Estate without being detected and/or detained by either the police or security. The location of the CCTV cameras also allowed surveillance with zoom function to track offenders up to a quarter of a mile outside the Estate. Hence there was a sizeable geographical coverage of the cameras, which allowed for tracking of offenders throughout the Estate. Where offenders were aware of the presence of CCTV cameras, it possibly deflected or restricted the locations available for offending without detection. A consequence of restricted time and area of safe operation was **reduced average reward** for offenders, ie discouragement.

As mentioned briefly in the previous paragraphs, the CCTV functioned as a tracking device. This was useful in informing the preventers through mobile telephone contact with the security staff and police officers about the offenders' actions, location and movement throughout the STE, consequently enabling the mobile security/pro-active police officers to react accordingly. In this function, the CCTV served as much as a **multiplier** of the prior interventions (such as police and security patrols) as it did as an intervention in its own right.

CCTV had a wider use in **empowering preventers** through **collection of information on offenders** for future use. For example, Business Watch STE had adopted a scheme of describing offenders based on their clothes, as it was found that offenders rather carelessly committed offences using the same clothing on separate occasions. CCTV stills were compiled to aid police in future investigation and targeting of prolific offenders and their vehicles (some of which were used in other cases). Finally, evidence of offending captured by the CCTV cameras was collated into tapes and held for a reasonable period in order to provide evidence to the police. The tapes were used by the police in the process of post-arrest of offenders. Police declared that the offender had been identified on the CCTV, by playing the footage of the offender committing the offence to the offender in the presence of the defendant's lawyer.

Intervention 4: Central monitoring of private business alarm systems

Method: *Full time monitoring of alarm systems linked by radio to Business Watch*

Principles: *Deterrence – primarily of burglary, but described here for possible effects on car crime*

Intervention principle 4.1 – Deterrence

An additional piece of hardware was installed by around 60 companies on STE, which linked the localised security breach alarm with the central CCTV control centre. This allowed the Business Watch team on STE to monitor businesses remotely, knowing within 5 seconds those premises had been breached by offenders. The system was also linked up to the CCTV viewing platform. When the alarm is triggered it switches the recorder onto real time and the cameras are trained on the vicinity of the alarm. Information on the offenders is subsequently reported to the mobile security officers via radio link and the pro-active police (or regular police depending on availability) are also alerted and kept informed of the movements of the offender. From the current focus on vehicle crime reduction, this monitoring facility may have deterred offenders purely through their perception that 'something had been done to tighten security' on the Estate. No information is available on its main intended impact on commercial burglary.

Intervention 5: Closing off a through route linking STE to the adjacent housing estates

Method: *Closing off a through route onto STE using a gating system*

Principles: *Excluding/Deflecting offenders from a crime situation*

Intervention principle 5.1 – Excluding/Deflecting offenders from a crime situation

Business Watch and Slough Estates (land-owners of STE) were able to close off a piece of wasteland used as a through route (although not a public right of way) coming directly off the neighbouring housing estate. This had been used by offenders quickly returning to the estate after committing offences – hence minimising their chance of detection and arrest whilst carrying stolen property. This intervention had been endorsed by the local M.P.

There were plans to gate off other sections of through routes on to the Estate to the north west of STE, but consent to close a public footpath was not forthcoming from Slough Borough Council.

Offenders' countermoves and reactions

One of the main risks of CCTV implementation is possible displacement of offending. Within the Slough Trading Estate the siting of the new CCTV equipment had placed cameras at strategic positions to greatly increase coverage. No coverage could be exhaustive, however, as trees, buildings and street furniture inevitably obscured some angles. Although some offences were therefore out of view of the cameras, the offender could nevertheless be tracked if the offence was directly reported to Business Watch. The

improved monitoring facilities that came with the new CCTV system made tracking easier of offenders' moves and, especially, countermoves such as evasion attempts.

The principal improvements to the CCTV monitoring suite were:

- improved quality of picture (for both day and night operation)
- an automatic searching process allowing ease of switching from cameras and searching through footage and,
- increasing the spot monitors so that vulnerable areas were expanded to full size pictures which increased the chance of the monitors spotting an incident.

The offenders had also adopted baseball caps and hoods to avoid detection from cameras above them. In a counter-countermove this was picked up by those reviewing the camera footage as suspicious behaviour and noted as being particularly out-of-place behaviour where the temperatures in the summer were reaching in excess of 30°C.

3. Implementation

The following section looks at how the methods and principles of the project were converted into actual practice on the ground.

Objectives

As said, the specific objectives considered here⁵ were the reduction of **theft from motor vehicles and theft of vehicles and bicycles**, albeit in a context of more general crime reduction and increased safety

Converting plans into action on the ground

The Business Watch Co-ordinator developed a specification for the CCTV system and went through the rest of the procurement process. Criteria with which the Business Watch Co-ordinator selected the most appropriate system were:

- a) quality of picture (on both day and night mode)
- b) ease of use by monitoring staff
- c) ease of installation
- d) back up service provided
- e) range of cameras

Targeting of the implementation

Offenders – General offending population (Primary) and known identified offenders (Tertiary)

⁵ In the Business Watch's own terms (as set out in their brochure) the main objective was to enable businesses to group together under one partnership to provide surveillance and communication about security issues in the estate.

Other objectives included:

- Reduction of crime on the Slough Trading Estate through joint working with business stakeholders and police services.
- Reducing the levels of fear of crime held by stakeholders within the estate.
- The promotion of awareness of security measures and issues within the stakeholders to ensure responsibility for security is shared across the Estate.
- Provision of a service that is both reactive and answerable to the businesses it supports
- Providing independent incomes.

Crime preventers – Established Reliance security staff, Slough pro-active police team and Business Watch team at STE (Tertiary); Business Watch members (Primary)

Location – The Project attempted to tackle offending both throughout the whole of the Estate (Primary) and areas most targeted by offenders (Secondary)

Strategic and tactical co-ordination and monitoring of performance

There were essentially four levels of co-ordination which Business Watch at Slough were involved in, some general-purpose, others dedicated to vehicle crime: Board meetings, subgroup meetings (burglary and vehicle crime groups) and the Business Watch members meeting; and the ongoing liaison between Reliance Security and the Business Watch Co-ordinator.

Every quarter there was a Board meeting, attended by representatives of small and large companies from STE, a representative from the Chambers of Commerce and the local Thames Valley police attend. In these meetings progress is reviewed and targets to be completed by the Business Watch Co-ordinator are set. There is an annual appraisal of targets, to check whether the project has been achieving them, based primarily on the collected recorded crime statistics.

The motor vehicle subgroup meeting covering the whole borough is held every 4 to 6 weeks involving representatives from the local Thames Valley Police, the local council, the fire brigade and other related agencies within the community. The meeting allowed the various agencies to discuss the current practical side of crime reduction such as property marking, making older people aware, and the use of crime stoppers. It was also a chance to pass on various emergent offence types and MOs, and prolific offenders within each of the agencies' areas.

Business Watch members' meetings are held every 5 weeks between the Business Watch Co-ordinator at STE, the Reliance Security Team and three to four Business Watch member representative tenants; the local Thames Valley police were also involved with the meetings where time was sufficient for this. At the meetings recorded crime on the Estate was discussed amongst other topics (e.g. specific vehicles the police were keen to gather intelligence on). This meeting also helped co-ordinate the deployment strategy for the Reliance security team, and provided editorial steer for newsletters.

At the tactical end of the scale, Reliance Security 'overnight' team provide information every morning which is added to other information with which the Business Watch co-ordinator compiles into daily briefing notes. The briefing notes includes information on amongst other things, suspicious vehicles, criminal damage, premises left unprotected, and burglaries. The notes are vital in creating continuity of information exchange when CCTV monitors and patrol security staff changed over at the beginning and end of shifts.

In one example of tactical co-ordination, Reliance Security were alerted (through observation and analysis of police data) to the rise in thefts specifically involving laptops. Procedures were initiated involving security staff escorting employees and their laptops to their cars during darkness, which immediately had the desired effect.

Inputs into the project

The **running costs** including maintenance, operation and wages of the Monitoring Staff amount to around £130,000 per year. This includes the rental costs of the fibre optic cabling. An annual service contract is in place to cover maintenance and two full services per annum. The cost of the annual contract is currently £1600 p.a. Spare cameras are held by the Business Watch co-ordinator which can be used in the event of a breakdown. In total the cost of servicing the cameras for 2003 was in the region of £6000, which includes the maintenance contract. These costs are met by a service charge levied on the occupiers, currently 2.5p per square foot and are expected to reduce in 2004..

All the Capital costs for the CCTV digital cameras, including installation and fibre, were met by Slough Estates. The cost of each camera was between £8,000-£8,500 fully operational. A total estimation of the costs of implementation of the CCTV system to date is approximately £416,000. It was also estimated that with the intended further installation of cameras in the spring of next this figure will rise to just over half a million. It is anticipated that a further £95,000 will be required to complete the installation in the spring of 2005.

Human resource inputs included the particular skills and familiarity with CCTV and crime reduction supplied to the project from the Business Watch Co-ordinator who had gained experience on these issues in his former job as police officer. As a result, the Business Watch Co-ordinator was able to advise on the specification of the CCTV system and supervise every aspect of the installation. National research on CCTV has already stressed the importance of expert knowledge required for optimising CCTV crime reduction interventions (Scarman Centre National CCTV Evaluation Team, 2003)⁶ From the perspective of the wider Business Watch project on STE, the Co-ordinator supplied experience and security procurement skills to advise and assist individual businesses. Specific areas of knowledge required by CCTV monitoring staff which were mentioned as being beneficial by the Business Watch Co-ordinator were an understanding of computers (as the monitoring equipment was heavily IT based) and the ability to support others through passing on knowledge of the system and of targeting/surveillance strategies.

- The Business Watch STE Office (including CCTV viewing suite) comprised one full time co-ordinating manager (Business Watch), two CCTV operators (Reliance Security) and security staff deployment manager (Reliance).
- 4 mobile security units (“Patrol Net”) with associated security staff (of which one vehicle remains permanently on site)

Outputs achieved

- 24 hour/7 day CCTV surveillance and response capacity covering an extensive section of the Slough Trading Estate. Monitoring of the system by 2 operators took place between 12:00pm and 8pm work days; at all other times the system was monitored by at least one person.
- Monitoring of the private alarm systems of participating business – in the case of this project 60 out of 450 businesses had currently adopted the system. Business Watch did not charge for the monitoring of this alarm system, but it was down to the business themselves to fund and install the alarm monitoring hardware which transmitted a signal to the central monitoring system in the CCTV monitoring suite.
- Approximately 50 to 100 tapes of footage were handed over to the police every year, each one representing an incident or set of incidents.

Risks in implementation

One possibility, of which the planners of the CCTV system were aware, was that under Data Protection legislation any person suspecting that they had been caught on camera and recorded, has the right, for a small fee, to ask for a tape copy of the relevant footage. There was concern that this could lead to demand which greatly outstripped the capacity to meet or fund it (because the faces of *other* people captured in the same footage would have to be obscured) – but so far this has not materialised.

⁶ Scarman Centre National CCTV Evaluation Team (2003) National evaluation of CCTV: early findings on scheme implementation – effective practice guide. London: Home Office (see <http://www.homeoffice.gov.uk/rds/pdfs2/dpr7.pdf>)

Plans for expansion

From discussion with the co-ordinator it transpired that there were plans to fill in the current gaps in coverage with further 10 CCTV surveyor domes being installed by April 2004, with a plans to bring in another 10 cameras after that to complete the coverage. It was also hoped that with additional funding the project would be able to upgrade the older static/PTZ black and white cameras that were installed prior to the current funding stream. They had also examined the possibility of installing automatic number plate recognition (ANPR) technology, which would help boost the effectiveness of searches for suspicious/stolen vehicles on the Estate. The Business Watch Co-ordinator felt that the success of any ANPR would relate to the flow of information between the Police and the Business Watch team, which at this point in time had been somewhat limited.

The Slough Estates Board have already been advised of the projected costs to complete the installation, with £95,000 being provided in 2004 and a further £95,000 earmarked for 2005.

4. Involvement

Partnership

The main organisations involved in this project were:

Business Watch

- Involved in sending out Business Watch newsletters to associated parties (Reliance Security, police and Business Watch members).
- Liaised with Slough Police on prolific offenders and anti-social youths.
- Collected information (observational and video footage) about offenders and offending on the Estate.
- Advertised the scheme to potential members.

Reliance Security

- Patrolled Slough Trading Estate, including surveillance and response to incidents.
- Collected information about offenders and involved in the weekly/daily discussions with Slough Police and the Business Watch team (STE) to share knowledge about offenders and refining deployment strategies
- 24 hour monitoring of the systems and central contact point for reporting offending.

Slough Police – “Pro-active” Team

- The team had a station based on the Slough Trading Estate. The team was “pro-active” in that it made itself known to the occupiers of the Trading Estate and aimed to increase their own awareness of Businesses’ needs. Officers deployed on the Estate worked undercover using plain clothes policing.
- Pro-active police team patrolled Slough primarily targeting drug offenders.
- Some information on status of prolific offenders’ position in the criminal justice system was shared with the security and CCTV team on STE. This was highlighted as one area where it was hoped that the protocol for sharing such information could be vastly improved.
- The Business Watch team on STE were given the mobile phone numbers of the proactive police officers, so that they could link directly with them, requesting immediate assistance where an incident had been detected.

Slough Trading Estate Occupiers –Business Watch Members

- Networking was maintained through membership and newsletters
- There was some joint-working between Business Watch team (STE) and security staff based in private companies.

Mobilisation of occupiers to be actively involved in crime reduction measures*The crime reduction tasks implemented by the occupiers*

There were two crime reduction tasks carried out in the implementation phase:

- To implement specific **crime reduction interventions** eg attend to their own security, conduct surveillance and report suspicious sightings etc; and
- To **support professional crime reduction** by supplying subscription funds.

Location of crime preventers

- The business occupiers were considered key players for the obvious reasons of presence on the ground, motivation and responsibility for protection of their own premises and (latent) collective self-interest in security.

Alerting, motivating and empowering the crime preventers

- A general awareness campaign was run, alerting tenants of STE, which aimed to highlight the presence of the control room and Business Watch team and the security measures that were currently in place.
- A quarterly newsletter was sent out to the members of Business Watch. Information in the newsletters covered facts about specific types of offence experienced on the Estate; emerging crime issues that had been highlighted through data analysis and observation; modifications to the security systems; and knowledge about crime reduction measures. It also informed the members how to work effectively with the Business Watch Team to help reduce offending on the Estate through surveillance, target hardening and reporting of incidents.

5. Impact

An independent impact evaluation of limited scope was conducted by the Home Office for this project description, as described below.

Impact evaluation design

A simple retrospective impact evaluation was done, based on police recorded crime data covering theft from vehicles. This was a non-equivalent control design, using three concentric areas and two time phases. The areas in this study were Slough Trading Estate (the site of implementation), the rest of Slough and the rest of Thames Valley Police Force Area (the areas of comparison).

The **time phases** were Phase 0 (January 2000-August 2001, 20 months, before main action was taken), and Phase 1 (September 2001-June 2003, 22 months, during installation of digital cameras and full-time monitoring).

Data was also available on **thefts of vehicles**. However, monthly numbers of these offences on the Estate were not large enough to be statistically certain of distinguishing between real change and background fluctuations.

Impact evaluation results

Figure 1 shows theft from vehicle offences in the three study areas using an index of a three-month moving average to smooth out spikes.

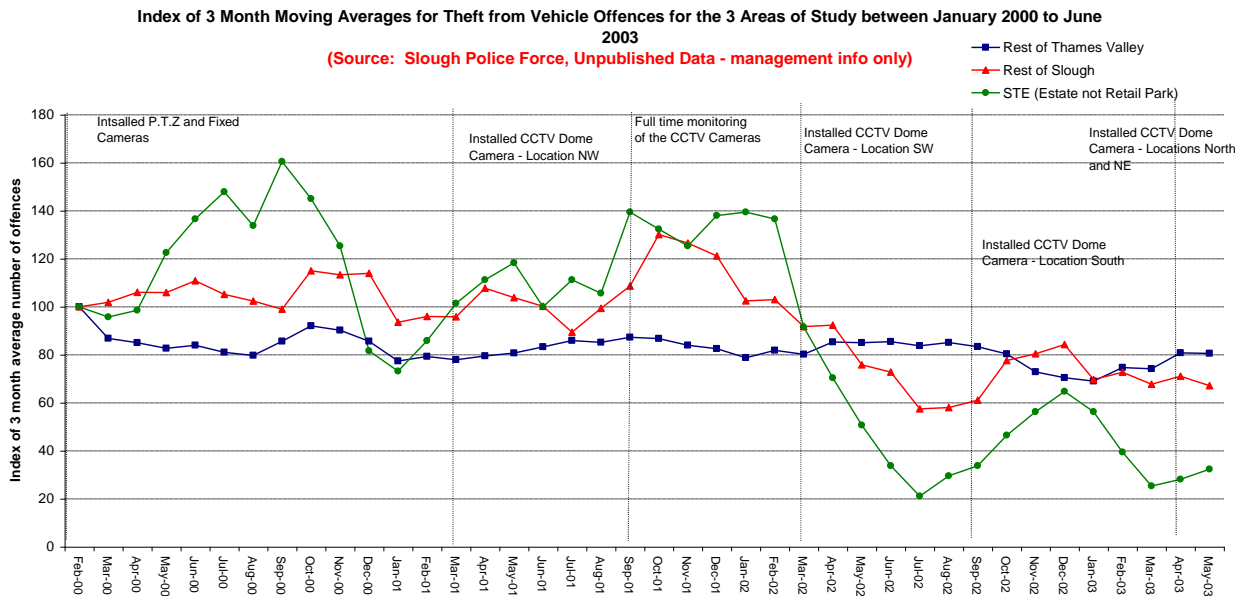
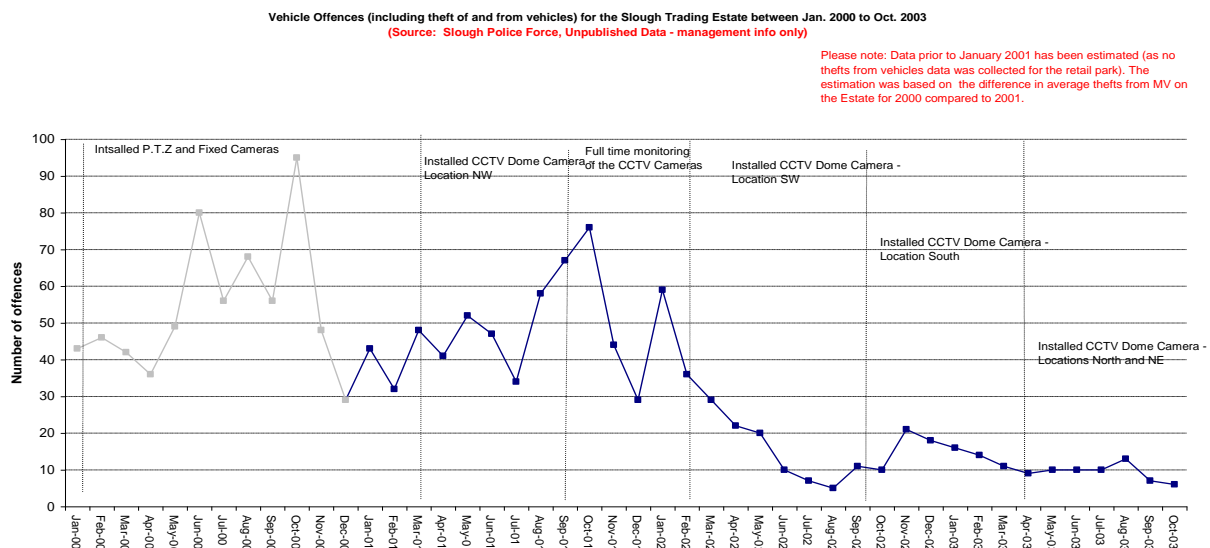


Figure 2. The number of vehicle crime offences (including theft of and from vehicles) per month on STE (with estimated data for 2000)



The rest of Thames Valley shows a very gentle decline in theft from cars over the study period (a 6% fall from Phase 0 to Phase 1). The rest of Slough, and Slough Trading Estate itself *both* dip after the action in the Trading Estate began. (The fall in the rest of Slough was about 17% from Phase 0 to Phase 1.) In addition to this common fall, however, the car theft in the Trading Estate showed a marked step down from about March 2002. (The total fall from Phase 0 to Phase 1 in the Trading Estate was 37%.) How can this pattern be interpreted?

Focusing first on the **Trading Estate** itself, it seems clear that there was an independent drop in vehicle crime, associated with the action. How was this drop achieved, and how did the intervention work? One **intermediate outcome** which gives some illumination was that 25 **arrests** were made on the Slough Trading Estate. It was not known how many of these were clearly down to the CCTV initiative, but it was judged that a significant proportion were. Following implementation, offenders were certainly less able to make off before the police arrived; and the Business Watch co-ordinator described the prominent role CCTV was now taking in identifying offenders on the Estate, in addition to the subsequent role in arresting and convicting them.

It is less clear what happened in the rest of Slough. The shallower post-implementation dip observed there relative to the rest of Thames Valley could have indicated a Slough-wide fall which was *incidental* to the action in Slough Trading Estate. In this case, the estimate of the reduction in crime in the Trading Estate that can be attributed to the action would be lower. Alternatively the dip may have been evidence for some diffusion (or at least extension) of benefits from the Trading Estate to the rest of Slough. This second alternative could be a result of the arrests made on the Trading Estate with the assistance of the CCTV, which could have incapacitated a specific set of offenders working over a wider area; and/or deterred offenders more generally. In this case, the estimate of attributed reduction in crime would be higher. In the event the first alternative (incidental background fall) was judged more likely, since there had been much police effort dedicated to targeting vehicle crime in Slough as a whole in line with the Government PSA1 target of reducing vehicle crime by 30 per cent.

Quantitative estimates of impact nonetheless remain imprecise, and it is better to identify a range of values. With the first, conservative, alternative above, filtering out the common background changes in Slough produced a gross estimate (ignoring possible diffusion or displacement) of **118 thefts from vehicles in the Trading Estate prevented over the 20-month implementation phase**. This amounted to a 24% reduction relative to the level of crime expected on the basis of the changes in the rest of Slough.⁷ But there are grounds for further caution. The figures for 2000 show a strong upward fluctuation prior to the installation of the cameras. The independent activity of the police on the Trading Estate may have also had some impact on the general reduction. As a result of these factors it was felt prudent to slice off an additional 4%, leaving a final, highly conservative estimate of a **20% reduction**.

The second, less likely, alternative gives a rather generous upper estimate of impact. If the fall in the rest of Slough relative to the rest of Thames Valley is attributed to the diffusion of benefits from the action in STE there is an estimated reduction of **993 thefts from vehicles in the Trading Estate and the rest of Slough prevented over the 20-month implementation phase**. This equates to a net reduction relative to expectation of 13% across Slough as a whole.

No survey evidence is available on reassurance and wider benefits of this action but the Business Watch co-ordinator mentioned that those working on Slough Trading Estate felt secure, as a result of the CCTV installation and monitoring.

Sustainability

Sustainability of implementation

The sustainability of implementation depends on continued funding from businesses on the Estate. This in turn relied on maintaining their interest and perceptions of the effectiveness and usefulness of the project. An attempt to renew this interest was made by distributing newsletters across the Estate (as described under Involvement). Informal indications were that renewal was in fact quite high, with around 50% of the businesses on STE being subscribed members. Loss of members resulted primarily from businesses relocating somewhere external to STE.

The capital funding for the entire project came from Slough Estate (the company responsible for renting property on the STE.) They remain committed to funding the remainder of the project, and funding from any other source is unlikely to be forthcoming.

⁷ Comparing these figures to the locally reported percentage reduction of 80% in thefts from cars the differences can be ascribed to two things:

- the different time periods of comparison (local analysis used totals for year 2001 compared with 2002), and
- the fact that local analysis did not filter out the background reductions in vehicle crime (either from rest of Thames Valley or from the rest of Slough).

Sustainability of impact

It is difficult to at this point to gauge the sustainability of impact of the intervention method itself as there has not been a long enough post implementation phase.

Replicability of the method

The conditions, some or all of which are required for a replication of this initiative elsewhere are as follows:

- Large commercial land use – with businesses covering a large area, where vehicle crime and commercial theft have become a problem.
- Trading estates built on land close to estates of high deprivation and hence high risk of imported crime.
- Trading estates where commercial occupiers are willing to pay a modest amount for added security.
- Procurement of a Business Watch Co-ordinator who has experience of designing against crime, technical knowledge of CCTV and good communication skills.
- Local police force who work proactively with commercial business.
- Conducive environments for CCTV – open spaces to facilitate monitoring, e.g. car parks, as opposed to highly ornamental “park” business environments.
- Backing of local council to aid in planning permissions.
- A close relationship and information sharing between the CCTV monitoring staff and the security team.
- Where there is a need to collect high resolution recorded evidence of offenders, for use in the conviction of persistent offenders.

Authorship

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