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Intelligence-led vehicle crime reduction: an evaluation of Operation Gallant

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Home Office Online Report 47/04

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Executive summary

Introduction

This study provides an evaluation of an intelligence-led vehicle crime reduction project implemented in the West Surrey Basic Command Unit (BCU) in early 2003. The project, codenamed Operation Gallant, was funded from a grant by the Home Office Police Standards Unit and was designed to replicate Operation Igneous - a much larger project undertaken by Kent County Constabulary.

Methodology

A range of methods were employed to evaluate Operation Gallant, including:

- interviews with the project team;
- interviews with a sample of officers in the BCU at two points in time;
- a postal survey of 3,000 owners of vehicles at risk of vehicle crime in West Surrey, receiving a 25 per cent response;
- observation at crime prevention roadshows;
- observation at morning briefing sessions;
- collection of cost-effectiveness data; and
- analysis of crime figures.

Description of Operation Gallant

Operation Gallant was an intelligence-led vehicle crime reduction project run for three months in the BCU. Vehicle crime patterns were analysed on an on-going basis and these generated local interventions, based on a menu of tactics predominantly developed by Operation Igneous.

There were a number of contextual factors that particularly facilitated the operation. These included:

- *the tasking and co-ordination process*, which directed resources towards identified crime problems on a daily and, more strategically, fortnightly basis;
- *commitment from the BCU management* to devote additional resources towards vehicle crime (beyond the funding provided by the Police Standards Unit), rather than towards other local problems, such as domestic burglary;
- *the vehicle crime analyst*, whose sole purpose was to analyse and research vehicle crime patterns in the area; and
- *the dedicated operational team*, that ensured the work got done.

The Appendix provides a checklist of factors that would appear to assist operations of this kind.

Although a range of tactics was deployed, most of the effort was focused on the use of direct mail to target the owners of high-risk vehicles with crime prevention advice and a programme of prolific offender targeting in the area. These interventions were underpinned by a media campaign that included advertisements in local newspapers, press releases and coverage on radio and on the force website. This media campaign was designed to inform local residents about how Surrey Police were tackling vehicle crime. This media coverage may have had a diffusion of benefit to other areas as it was not necessarily restricted to the residents of West Surrey.

The police perspective

The initiative took time to build up momentum among police officers, although this was largely due to the short lead-in time available. Once up and running, the operation generated a great deal of activity from officers across the BCU. Although many of the activities might be considered routine, the operation allowed these to be directed in a more focused manner.

In general, the operation received a favourable response from officers that had been involved, although it was recognised that this was resource-intensive and only made possible with additional funding for equipment and overtime.

The vehicle owner perspective

A direct mail approach involved crime prevention advice being sent to the owners of five models of vehicle deemed to be at high-risk of vehicle crime in West Surrey. This involved contacting 4,726 vehicle owners. A postal survey of 3,000 of these (receiving a 25% response) found that two-thirds of those recalling that they received the letter had not previously been aware that their vehicle was more at risk than others in West Surrey.

Six out of ten owners of high-risk models took at least one additional security measure following the letter / crime prevention pack. This shows that the direct mailing approach may help to improve crime prevention activity among those most at risk.

Impact of Operation Gallant

Between February and April 2003, thefts of vehicles declined by 17 per cent across the BCU area (while there was almost no change in East Surrey or in the force as a whole) compared to the same period in 2002.

For vehicle crime as a whole, the area covered by Operation Gallant witnessed a reduction of approximately seven per cent in West Surrey (between February and April 2003 compared to the same period the previous year) While greater than the reduction in the force as a whole (-0.1 %), it was not as great as the reduction witnessed in East Surrey (the comparison area).¹ There was some evidence of an anticipatory benefit, with the first reductions coinciding with the commencement of the planning process in November 2002. This also coincided with a police operation targeted at vehicle thieves that provided a foundation upon which Operation Gallant was built.

Reductions in West Surrey's vehicle crime extended beyond on the life of the evaluation, with a 20 per cent reduction in vehicle crime overall witnessed between May and July 2003 (compared to the previous year), although no comparative data was obtained.

It remains unclear which of the interventions might have brought about the reduction. Neither the crime reduction advice provided to owners of high-risk models, nor the offender targeting activity could be shown to have brought about the reduction in thefts of vehicles, although this could be a measurement issue resulting from the evaluation methodology.

¹ The effect may be under-estimated due to the impact of publicity that was available to residents in other parts of Surrey. This could have helped to reduce vehicle crime in the areas used for comparison, therefore reducing the gap between West Surrey and other areas. Within the scope of the evaluation, it was not possible to test this hypothesis.

Cost-effectiveness

Operation Gallant cost approximately £185,000 to implement, of which £50,000 was funded through a Home Office Police Standards Unit grant. Based purely on the implementation period of the operation (February to April 2003), the benefits (in terms of total costs of prevented vehicle crime, including criminal justice system costs) totalled £158,400. Therefore, every £1 saved in terms of vehicle crime prevented, cost £1.17 to achieve. However, it is important to note that if a longer post implementation period were allowed, a positive cost-benefit ratio may be generated.

Conclusions

Operation Gallant indicates that a reduction in thefts of vehicles can be achieved by implementing an intelligence-led approach to directing local interventions. However, this can be a resource-intensive approach (depending on the interventions employed) requiring the activity of officers from across a BCU. At present, it is unclear how much local intervention would be required to achieve similar results elsewhere.

1. Introduction

Background to the study

In 2000, the Home Office funded Kent County Constabulary to undertake an intelligence-led vehicle crime reduction initiative, under the auspices of the Crime Reduction Programme's Targeted Policing Initiative. This funding focused on the North Kent Basic Command Unit (BCU), which experienced the highest level of vehicle crime in the county. The project, codenamed Operation Igneous, was provided with £865,000 to undertake a range of vehicle crime interventions over two years. Operation Igneous was reported to have been successful in reducing vehicle crime in the BCU by 14 per cent.² As a result of the innovative approaches used by the Operation Igneous team (see chapter 2) and the results achieved, considerable interest was generated among other police forces, keen to replicate the methods and results. While an internal evaluation was undertaken by the project team, Operation Igneous received no external, independent evaluation and this posed a problem in attributing the decline experienced in North Kent's vehicle crime to the activities of the operational team.

In January 2003, the Home Office Police Standards Unit (PSU) funded Surrey Police to replicate Operation Igneous in the West Surrey BCU. West Surrey BCU was chosen for the location of this replication primarily because it had a well developed intelligence system and operated within the structure of the National Intelligence Model (NCIS, 2000). PSU provided £50,000 to implement the Operation Igneous methodology over three months. Codenamed Operation Gallant, West Surrey implemented the interventions between February and April 2003. The original intention was to fund a project that focused on thefts from vehicles. However, in the event, Operation Gallant targeted vehicle crime in general.

Comparison between Operation Igneous and Operation Gallant

It is important to note from the outset that there were a number of significant differences between Operation Igneous and Operation Gallant. While the interventions that were implemented were relatively similar, the contexts in which they were implemented differed. Firstly, North Kent had a much higher rate of vehicle crime than West Surrey (20 offences per 1,000 head of population compared to eight per 1,000 in West Surrey³). Secondly, West Surrey had a much shorter time period over which to implement the initiative. Thirdly, the overall level of funding was much lower for Operation Gallant in West Surrey. Fourthly, the implementation of Operation Gallant relied on activity by officers across the BCU, while the original Operation Igneous mostly involved activity by a dedicated unit of officers funded by the initiative, although it was later rolled out to BCUs across Kent County Constabulary.

The apparent success of Operation Gallant (reported in chapter 5) not only shows what can be achieved within a short time period, but also provides a model that is less resource-intensive than Operation Igneous and potentially more conducive to replication by other BCUs nationally.

Methodology

The evaluation of Operation Gallant involved a range of different methods in order to gain as detailed an understanding of the operation and its conditions for replication as possible:

- Interviews with the project team were undertaken to understand how the operation was implemented and to identify potential areas for improvement.

² This figure is based on an article in the Insurance Times on 13th June 2002 (see www.car-crime.com/operation_igneous1.htm)

³ Figures taken from Simmons *et al.* (2002) and based on thefts of and from vehicles combined for the year to March 2002.

- Interviews were conducted with a sample of 14 West Surrey officers from different disciplines (including CID, Targeted Patrol Team, and Borough Teams) and at different ranks (including PC, Sergeant and Inspector level). These officers were interviewed at both the beginning and at the end of the operation⁴ to gain an understanding of the issues associated with the set-up phase and to determine the extent to which Operation Gallant represented a different way of policing.
- A postal survey was conducted on a sample of 3,000 owners of high-risk vehicles who had received crime prevention advice from Surrey Police. This explored whether they recalled receiving advice and whether they had taken any preventative action. The survey received 752 replies, giving a response rate of 25 per cent.
- Observation was undertaken at three crime prevention roadshows run by West Surrey police officers. These provided an indication of the success of this approach in raising crime prevention awareness.
- Observation was undertaken at two morning briefings for police officers to determine how vehicle crime-related intelligence was disseminated to officers.
- Analysis was undertaken of available crime data supplied by Surrey Police to measure the effectiveness of the operation in reducing vehicle crime. The analysis focused on changes in thefts of and from vehicles in the West Surrey area. Comparisons were made with a neighbouring BCU, East Surrey, which had a similar socio-demographic profile to West Surrey. Comparisons were also made with the Surrey Police area as a whole.
- Analysis was undertaken of available cost and resource data to provide an indication of the operation's cost-effectiveness.

Outline of report

This report is divided into six chapters:

- Chapter 2 describes Operation Gallant in more detail, including the context in which it operated and a description of the interventions that were implemented.
- Chapter 3 examines the police views of the operation.
- Chapter 4 reports on the findings of the survey of owners of high-risk vehicles.
- Chapter 5 explores the extent to which Operation Gallant was associated with a reduction in vehicle crime.
- Chapter 6 examines the cost-effectiveness of the operation, while chapter 7 provides the conclusions from this study.

⁴ During the post implementation interviews, the researchers were unable to contact two of the original sample, so 12 interviews were completed.

2. Description of Operation Gallant

Introduction

This chapter examines the way in which Operation Gallant was implemented within West Surrey. This includes a description of the context within which the operation was implemented, before moving on to discuss the interventions that were adopted.

The context of West Surrey

West Surrey is one of four Basic Command Units (BCUs) in the Surrey Police area. It covers an area of 240 square miles (covering 40% of Surrey) with a population of 245,000. Divided into two boroughs, Guildford and Waverley, it accounts for 23 per cent of the total population of Surrey⁵. Surrey is a prosperous county with low levels of deprivation. Indeed, all boroughs in the county are well within the bottom quartile of the Index of Multiple Deprivation.⁶

The area has a relatively low rate of crime. The BCU is in the bottom quartile nationally for both thefts of and thefts from vehicles. For the year to March 2003, West Surrey had a rate of vehicle crime of nine offences per 1,000 head of population, compared to a national rate of 19 per 1,000.

Approach to policing in West Surrey

Within the context of this study, it is important to understand a number of components of policing in West Surrey that influenced the way the operation was undertaken:

- *Borough policing teams* (one in each borough) operate from the two main police stations in the area – Guildford and Farnham. Policing is centralised on these locations, rather than being devolved to smaller units (e.g. sectors). These teams provide the generic policing functions of the division.
- *Targeted Patrol Teams* (TPT) provide the immediate response service across the entire division. Between emergency calls, they can be tasked to undertake specific actions.
- *Neighbourhood Specialist Officers* (NSOs) provide a community beat policing function and are assigned to work in small local areas.
- *A BCU centralised Intelligence Unit* created reports on a daily basis about the current crime trends and offenders considered to be associated with the crime.
- *Vehicle crime analyst* was already employed in the Intelligence Unit, whose sole responsibility was to gather, analyse and report on vehicle crime patterns. The benefit of this was that the analyst understood the uses and limitations of data associated with vehicle crime. It also helped to prevent the analyst from being diverted towards analysing other types of crime that might be considered more important locally (such as domestic burglary). One of the key aspects of Operation Gallant was the analysis of intelligence in order to highlight long-term patterns of vehicle crime and to act upon emerging trends. The vehicle crime analyst was able to conduct analysis on a daily basis and feed this into the daily tasking and co-ordination process.

⁵ Based on 2001 Census of Population Small Area Statistics.

⁶ The Index of Multiple Deprivation gives each ward a score based on levels of income, employment, health and disability, education / skills / training, housing and geographical access to services. These scores can be ranked to give a hierarchy of most deprived to least deprived wards. This index is currently used widely for resource allocation by government departments. For further information see www.odpm.gov.uk

- A *tasking and co-ordination process* was used by Surrey Police as part of its implementation of the National Intelligence Model. On a daily basis, the Intelligence Unit would provide a report on the latest trends associated with key crime types (including vehicle crime). This was used in a PowerPoint presentation given in the morning briefing to police officers. In addition to the tactical decision made at the daily tasking and co-ordination meeting, there was also a fortnightly tasking and co-ordination meeting that would establish the tactical policing objectives for the forthcoming two weeks. This daily and fortnightly process was considered essential for maintaining direction and momentum on Operation Gallant.

Each of these functions played an important role in the implementation of Operation Gallant. It should also be noted that other, specialist units (Strategic Road Unit, Intelligence Development Team etc.) also played a key role.

The set-up phase

The set-up phase for Operation Gallant was extremely short. An initial meetings took place in late November 2002 and the operation was launched two months later. This rapid development of the operation allowed insufficient time to promote the objectives of the operation among management prior to its launch. This meant that it was initially slow to gain momentum among those tasked with implementing aspects of Operation Gallant.

In contrast, those responsible for Operation Igneous spent five months analysing data and establishing a plan before the project was launched. From discussions with the project manager, it was felt that three to four months would have been the ideal planning period for an operation of this kind.

Project team

A small project team, consisting of the project manager (at Detective Inspector level), two crime reduction advisors, a vehicle crime analyst and a press officer, was formed for the operation. This team worked on Operation Gallant in addition to their existing workloads. Meetings were held with the team on a weekly basis, which allowed progress to be monitored closely. Following each meeting, team members would be tasked with a series of actions to progress and to report back on.

Analysis of vehicle crime

During December 2002 and January 2003, a range of analyses were undertaken by the vehicle crime analyst to inform the strategic direction of the project. These included identifying:

- locations (hotspots, streets, car parks, postcodes, wards etc.) of vehicle crime;
- sites where vehicles were dumped;
- times of offences;
- prolific vehicle crime offenders;
- areas where prolific offenders were identified as offending;
- models of vehicles targeted for vehicle crime; and
- type of property stolen in theft from vehicle offences.

This analysis was facilitated by the fact that the vehicle crime analyst had developed a spreadsheet of all vehicle crime offences, which he updated on a daily basis and 'cleaned' to ensure its accuracy.

During the course of the operation, the analyst developed a number of problem profiles, which identified emerging patterns of crime. These included, for example, vehicle crime occurring in

beauty spot car parks and the theft of badges from cars. These were disseminated to local officers to act upon.

While Kent's Operation Igneous had developed an Early Warning System to identify automatically when vehicle crime was increasing, this was felt unnecessary in West Surrey, as the relatively low level of vehicle crime meant that all incidents could be monitored by the dedicated vehicle crime analyst. However, West Surrey did have a monthly threshold target for vehicle crime, that the BCU was expected to keep within. This was used as a management tool for identifying potential problem areas that needed to be addressed.

Tactics deployed by Operation Gallant

During the course of Operation Gallant, a range of tactics was deployed. Table 2.1 shows the tactics deployed in West Surrey and compares these to the original Operation Igneous tactics.

Table 2.1: Tactics deployed by Operation Gallant and Operation Igneous

| Tactic | Operation Igneous | Operation Gallant |
|--|-------------------|-------------------|
| Publicity | Yes | Yes |
| Police National Computer searches and letter drops | Yes | Yes |
| Crime prevention methods | Yes | Yes |
| Offender profiling | Yes | Yes |
| Automatic Number Plate Recognition | Yes | Yes |
| Agency liaison | Yes | Yes |
| Investigation model and investigators' guide | Yes | Yes |
| Prolific offender targeting | No | Yes |
| Visits to salvage yards | No | Yes |
| Site surveys | Yes | No |
| Tracking devices | Yes | No |
| Displayed property campaigns | Yes | No |
| Profiling dump sites | Yes | No |

As Table 2.1 demonstrates, Operation Gallant included many of the tactics used in Operation Igneous, although there were several that were not included and two that were specific to Gallant. The following paragraphs provide further details of the tactics that were used.

Publicity (Igneous and Gallant)

Raising the profile of Operation Gallant was felt to be a key aspect of the project. During the course of the operation, internal communication proved important for raising awareness of the operation and its objectives, as well reporting on successes.

External publicity included the production of posters and leaflets that were widely distributed. It also included a media strategy that involved a series of news stories released to local papers over the course of the operation and resulted in at least nine articles in local newspapers reporting on the work of the operation. The force website was also used to promote the operation. Publicising police activity in this way has been shown to be more effective than simply broadcasting crime prevention messages. For example, Sallybanks (2001) found that publicity provided an extra crime reduction boost when allied with a sting vehicle operation. Similarly, Laycock (1992) found that property marking was only effective when run in conjunction with a local publicity campaign.

It should be noted that there is the potential for diffusion of benefit to other areas as a result of publicity, as found by Sallybanks (2001). This may have resulted in lower levels of vehicle crime in other part of the force area that were used as the basis for comparison. While this was not possible to confirm, it means the observed impact on vehicle crime (examined in

chapter 5) could be an under-estimate (due to the fact that the area used as a comparison was also influenced by the publicity intervention).

Police National Computer searches and letter drops (Igneous and Gallant)

The initial crime analysis identified five models of vehicle that were consistently most frequently associated with vehicle crime (thefts of and from combined) in West Surrey over the last five years. Given the difficulty in obtaining local vehicle parc data with which to calculate theft rates, this analysis was based on actual numbers of offences per model. The models concerned were Ford Escorts, Ford Fiestas, Ford Transits, Vauxhall Astras and Vauxhalls Novas.⁷ Using the Vehicle Online Descriptive Search (VODS) facility on the Police National Computer,⁸ the owners of pre-1996 models of these vehicles, who lived in the West Surrey Police area were identified. Vehicles registered before 1996 were selected because these were particularly at risk, partly due to poor manufacturer-fitted security.⁹ This is a pattern that has also been observed nationally (Brown and Thomas, 2003). As a result of this VODS selection, a database of 4,726 address records was created.

A personalised letter was then posted to each of the vehicle owners. This letter included crime prevention advice (the Home Office Steer Clear of Car Crime booklet), a 'Don't Bother' dash-board kit¹⁰ to prevent thefts from vehicles, a secure tax disk holder and a property marking kit. The letter also invited recipients to attend one of a series of vehicle crime prevention roadshows (see crime prevention methods), where they could buy discounted security devices. Chapter 4 reports on the success of this approach.

This tactic was also used by the Operation Igneous team, but differed somewhat in approach. Operation Igneous used the VODS searches and letter drops on a more routine basis to highlight emerging trends. For example, if the Early Warning System showed an emerging problem in a particular area (street, estate etc.) they would contact the owners to raise their awareness of the immediate threat. Operation Igneous also differed in that it was not linked with a programme of crime prevention roadshows. In an interview with the Operation Igneous project manager, it was reported that this approach to raising awareness had proven successful in changing the behaviour of drivers.

Crime prevention methods (Igneous and Gallant)

As well as including crime prevention advice in the letters to owners of high-risk vehicles, 15 vehicle crime prevention roadshows were held around West Surrey. These were publicised through the letters to owners, through newspaper advertisements and through leafleting by Neighbourhood Watch Co-ordinators. Indeed, one Co-ordinator delivered 500 leaflets in the area to promote the roadshows. The roadshows also sold at a discounted rate Thatcham / Sold Secure¹¹ – approved vehicle security devices. These were manufacturer 'seconds' that had damaged paintwork. A total of 116 such devices were sold during the operation. The roadshows also distributed car-sitter alarms to owners of high-risk vehicles. These alarms involved a small passive infrared detector that sat in the car and a portable receiver / alarm

⁷ On a national scale, the Home Office Car Theft Index (2002) shows that pre-1996 Ford Escorts, Ford Fiestas, Vauxhall Astras and Vauxhalls Novas are generally classed as 'Most at Risk'. Similarly, Brown and Saliba (1998) found that older Ford Transits were at high-risk.

⁸ VODS is a search facility that allows specified types of vehicles (those meeting the required search parameters) to be selected from the PNC. These can be used for subsequent analysis and investigation.

⁹ Electronic immobilisation was increasingly installed on new cars from 1995 onwards. Since October 1998, all new cars have been required to have an electronic immobiliser under a European Union Directive.

¹⁰ This was a card that could be left on display in the car to indicate to potential offenders that all valuable items had been removed from the vehicle.

¹¹ Thatcham (or the motor insurance accident repair research centre) are a non profit making organisation specialise in vehicle security testing. Sold secure test and provide professional and accurate advice regarding effective security products to Commercial Customers, the Insurance Industry, the Home Office, the Police and the Public.

that sounded when movement was detected in the car. Fifty-one of these alarms were distributed as part of the operation.

Offender profiling (Igneous and Gallant)

Given the relatively low number of vehicle crime offences occurring in West Surrey (compared to national levels), offender profiling took the form of examining the modus operandi (MO) of each individual offence and identifying known offenders who used a similar approach. In this way, offences would be linked with offenders on an on-going basis. Operation Igneous developed a more systematic approach to profiling through analysis of offence and offender records with a view to giving a probability that an offence was associated with an offender. In practice this proved problematic due to the quality of the MO data typically collected. In both Gallant and Igneous, analysis of MOs proved useful for presenting offenders with lists of similar offences they could ask the court to be taken into consideration at the time of sentence.

Automatic Number Plate Recognition (Igneous and Gallant)

Automatic Number Plate Recognition (ANPR) was used on several occasions in West Surrey as part of Operation Gallant. On one occasion, this resulted in an individual being arrested for a positive breath test and a deception offence. On another occasion, ANPR was deployed for 48 hours but developed a fault and, while being fixed, three stolen vehicles passed through the system without setting off the alarm. This was only discovered once the system had been fixed.

Agency liaison (Igneous and Gallant)

Both operations undertook a great deal of liaison in the course of developing their approach. In Operation Gallant, this included contact with the Crown Prosecution Service, courts and Youth Offending Team. This ensured that all relevant agencies were aware of the prolific offender targeting that was being undertaken by the operation. In Operation Igneous, commercial enterprises were also consulted, including manufacturers, the Association of British Insurers and Thatcham to name but a few. The contacts were viewed as helpful for drawing on expertise in key areas and for helping to shape the operation.

Investigation model and investigators' guide (Igneous and Gallant)

The Operation Igneous team took the view that temporary vehicle theft was being addressed through manufacturer-fitted electronic immobilisation and would naturally decline over time. The focus for investigation was therefore on professional theft and fraud. Officers were trained in how to check the identity of vehicles and how to identify stolen and rung vehicles. An improved crime reporting process was introduced for reports of thefts of vehicles, consisting of 52 questions asked of those reporting a theft. This provided sufficient information to identify potential risk factors associated with the reported theft that would help to determine the likelihood that a claim was fraudulent and therefore require further investigation. While Operation Gallant did not take this kind of approach to addressing investigation, an investigation tasking sheet was produced, which outlined how vehicle crime offences were to be approached during the life of the operation. This set out the tactics to be deployed, particularly in relation to offender targeting.

Prolific offender targeting (Gallant only)

Prolific offender targeting formed the major part of the work undertaken as part of Operation Gallant. The crime analysis identified a list of ten individuals that were known to be currently active in vehicle crime in the area. The names and photos of these ten offenders were displayed on a daily basis on the briefing presentation. Officers were tasked with gathering

intelligence on these individuals and with focusing additional attention on them. Examples of the action taken with these individuals included:

- using the Targeted Patrol Team (TPT) to locate and gather intelligence / stop and search / make arrests on specific offenders when not responding to a call;
- conducting additional patrolling in identified hotspot areas;
- deploying covert surveillance;
- bailing suspects in custody only once a case has been reviewed by a Detective Inspector;¹² and
- raising awareness among the courts, probation and the Youth Offending Team regarding the status of these individuals.

A 'K9' vehicle was also deployed for the operation. This was an immediate response vehicle that had a dog cage installed and which was driven by an advanced driver. This meant that a dog and its handler could be dispatched during a pursuit with a vehicle crime offender in order to assist with the arrest, once the vehicle was stopped.

Visits to motor salvage yards (Gallant only)

Under the Vehicles (Crime) Act 2001 operators of motor salvage yards are required to pass a "fit and proper" test, register with their local authority and maintain records of the vehicles they have obtained and from whom they have obtained them. Furthermore, the police have the powers to inspect the vehicles and their records. Five motor salvage yards were identified as being registered with the local authority in the West Surrey Police area. Visits were made to two of these with a view to examining their records. In practice this yielded little of value, partly because those examined were not dealing directly with the public (where the sale of stolen vehicles might be more prevalent). The fact that these yards were registered with the local authority may also have meant they were more likely to be law abiding than might non-registered (and therefore illegal) yards have been.

Site surveys (Igneous only)

As part of Operation Igneous, site surveys of locations with high levels of vehicle crime were undertaken to gain an understanding of what might be causing the problem and where relevant, to recommend situational crime prevention measures that could be taken to alleviate the problem. This tactic was considered in Operation Gallant, but the areas identified (e.g. 'city centre') were felt too generic to lend themselves to site surveys. Furthermore, site surveys were already conducted as required under the auspices of the local crime and disorder reduction partnership.

Tracking devices (Igneous only)

Tracking devices fitted in vehicles at risk of theft were considered in West Surrey but never deployed due to the fact that clear patterns of theft of particular models in particular areas did not materialise. From discussions with the Operation Igneous project manager, there were problems in deploying tracking devices in North Kent too. While patterns of car theft could be identified, there was reported to be a general unwillingness among members of the public to have the police fit tracking devices to their vehicles. There would appear to have been concerns that the police could act as 'Big Brother' by routinely tracking the movements of individuals in their vehicles.

¹² Although this was part of the implementation of the 'Narrowing the Justice Gap' reforms, it was specifically applied to these individuals.

Displayed property campaigns (Igneous only)

Operation Igneous targeted areas known to have a problem with thefts from vehicles (e.g. country park car parks) and would place stickers on the windscreens of all vehicles parked there. Read from the outside, all stickers looked identical. Read from inside the car, there were two different messages. For those that had left property on display, the message would be to alert them of the fact. For those that had not left property on display the message was 'well done'. This was not specifically part of Operation Gallant as such campaigns were already being implemented in the area.

Profiling dump-sites (Igneous only)

Operation Igneous examined 'dump-sites' (locations from which vehicles are recovered) for stolen vehicles to gain a better understanding of why those locations were chosen. This helped to develop situational crime prevention measures in those locations. This fed into other approaches that were being developed at the same time, including Operation Cubit – concerned with the rapid removal of abandoned vehicles.

Comparison between tactics deployed by Igneous and Gallant

The preceding description highlights the multi-faceted nature of the operations. Both Gallant and Igneous employed an intelligence-led approach that generated actions via targeted tactics. Although Operation Gallant involved a variety of tactics, most of the resources were devoted to two areas – crime prevention (via direct mailing owners of high-risk vehicles, publicity and roadshows) and prolific offender targeting. The fact that the latter was not specifically a part of the Operation Igneous approach means that the tactics employed by Operation Gallant differ, although the intelligence-led approach lies at the core of both.

3. The police perspective

Introduction

As part of the evaluation, a sample of 15 officers in the BCU were interviewed in the early stages of Operation Gallant to gain an understanding of their awareness and views of the operation. These officers were interviewed again at the end of the operation and this provided an opportunity to see how views had developed and to document the types of activities in which officers had been involved.

The launch of Operation Gallant

At the start of the operation, the Detective Inspector managing the project undertook a series of briefings to inform officers of the nature and scope of the work to be undertaken. Given the speed with which the operation was put together, there was little opportunity to brief line managers in advance, which meant that all received the briefings at the same time. This meant that line managers were not necessarily able to answer questions asked by officers about the nature of the operation.

There was also some confusion in the early stages about how Operation Gallant was different from other prolific offender targeting exercises that had recently been undertaken. Operation Bugle was implemented in January 2003 to target prolific vehicle offenders and it was unclear how Operation Gallant differed from Operation Bugle. In practice, Operation Bugle became the prolific offender targeting aspect of Operation Gallant (the latter being wider in scope).

Further confusion was caused by the fact that the Tasking and Co-ordination process had made domestic burglary a priority at the end of January. This meant that officers were initially unclear how much attention to pay to vehicle crime as opposed to domestic burglary. This was subsequently clarified through the Tasking and Co-ordination process with a recognition that priority should be paid to vehicle crime for the duration of the Home Office funded project.

As a result of the way in which Operation Gallant was launched, it initially took some time to build up momentum. However, by the time of the follow-up interviews, held during May and June 2003, all officers interviewed recalled Operation Gallant and all had played some part in the initiative. Most officers commented upon the crime prevention roadshows and the targeting of 'nominals' and hotspot areas. Additional developments since the first round of interviews (e.g. the use of the 'K9' dog vehicle) were also mentioned, and nearly all officers mentioned that increased intelligence supply and distribution had been the main element of the operation.

Activities undertaken by officers

Obviously, the activities undertaken by officers were dependent on their role in the organisation. The TPT officers all reported being heavily involved in the targeted and high visibility patrols. These involved targeting hotspot areas and beauty spot areas, as well as targeting known offenders. The borough officers reported similar activities, including "*... proactive patrols, targeting the prolific offenders and hotspots, where crime was worst.*"

The targeted patrols were informed by the intelligence briefings, that were updated daily and given to each duty. These briefings gave the officers information about known current offenders, their associates, vehicles they were thought to be using and any details regarding arrests that had been made of those targeted. These briefings were felt to have been very important. Officers stated that they provided up-to-date, relevant and useful information. This information was felt to be "*...sufficient to target [...the offenders...] - any more would have been too much...*". This sentiment was a recurring theme, with officers commenting that they

could “...only take so much information in...”. This highlights the importance of keeping the information provided in briefings to a necessary minimum.

In addition to the targeted patrols, a specific offender targeting operation was undertaken within hotspot areas for ten days during the period. Hotspot areas were chosen based on the available intelligence, ‘spotters’ in unmarked vehicles were tasked with going to these areas to gather intelligence and identify at-risk vehicles, or suspicious behaviour of known offenders. The marked vehicles and the ‘K9’ unit would then be directed by this intelligence and be highly focused towards the offenders.

There was also a degree of community policing undertaken by Neighbourhood Support Officers (NSOs) as part of the operation. This primarily involved raising public awareness about Operation Gallant and its objectives. NSOs would identify older, ‘at-risk’, vehicles and speak to their owners about the risks, as well as providing crime prevention advice. In addition, some of the NSOs were involved in the roadshows, primarily run by the Crime Reduction Advisors. During the roadshows they were available to give advice on vehicle security and to hand out free security measures (such as secure tax discs and property marking kits).

In addition, there was a range of other activities undertaken (including visits to scrap yards and use of ANPR), although the bulk of the work undertaken by officers consisted of the activities described above. This serves to highlight the fact that Operation Gallant involved the efforts of officers from across the BCU and not just that of a dedicated team.

How did Operation Gallant differ from routine policing activity?

One of the issues examined by the evaluation was whether the activities of Operation Gallant were any different to what would have happened anyway. The general feeling among those interviewed was that the resources provided by Operation Gallant offered the opportunity to undertake activities that would otherwise have been limited. For example, on the crime prevention side, roadshows were planned, but the funding allowed for a more extensive programme of events and more equipment could be purchased. Additional patrols and dedicated operations were also funded on overtime by the project.

Finding the time

One of the main concerns of officers was that it was simply too difficult to fit in the work required under Operation Gallant. For example, some TPT and borough officers reported having difficulties in finding the time to target the areas and offenders identified in the briefings during their daily routine. This was due to being short-staffed so that the specific activities with which they were tasked were “...done as and when – on down time, between jobs...”. The NSOs reported similar experiences, with the expectation that they would promote and attend the crime prevention roadshows. In a similar vein, the Crime Reduction Advisors reported that their commitment to the operation had “...detracted from normal service...” with some activities having to be sacrificed to allow time to be dedicated to the operation. Several officers commented that much of the operational work had to be completed on overtime and as chapter 6 shows, a considerable proportion of the budget was devoted to overtime. With additional time for planning, it may have been possible to avoid some of these timing issues.

A focused approach

A major benefit of Operation Gallant was the focus it gave to the work of officers. The intelligence provided in the briefings and the tasking associated with this served to direct and target the patrols, giving officers a better understanding of hotspots and offenders. As one officer noted, “...it gave us a focus rather than aimless driving around”.

The briefings themselves were also praised by officers of different ranks, with comments such as “...*the briefings we had before tended to be a bit wishy-washy, but these were really focused...*”. While many of the activities undertaken were part of the routine activity of police officers, the manner in which they were packaged (i.e. within a focused intelligence and tasking framework) and resourced (i.e. additional funding available for overtime and equipment), helped to focus the effort on vehicle crime.

Summing up the police perspective

Operation Gallant took time to build up momentum among police officers, although this was largely due to the short lead-in time available. Once up and running, the operation generated a great deal of activity from officers across the BCU. Although many of the activities might be considered routine, the operation allowed these to be directed in a more focused manner.

In general, the operation received a favourable response from officers who had been involved, although it was recognised that this was resource-intensive. This funding need not necessarily have come from external sources, however. With additional time for planning, a bid for resources could have been made to the fortnightly Tasking and Co-ordination meeting.

4. The vehicle owner perspective

Introduction

Previous research has shown that security measures taken by vehicle owners can reduce theft risks. For example, Brown and Billing (1996) found that, on average, theft risks were lower among vehicles using accredited vehicle security devices than were vehicles in general. Similarly, the retro-fitting of electronic immobilisers has been shown to be effective (see MM Starrs Pty Ltd, 2002). Operation Gallant included a direct-mail approach to contacting the owners of high-risk vehicles in West Surrey with the purpose of improving security awareness. A vehicle crime prevention pack was sent to the owners of the five models of vehicle most often stolen in the area. In order to explore the effectiveness of the crime prevention advice targeted towards the owners of high-risk vehicles, a postal survey was conducted with a sample of those who received the original letter. Questionnaires were sent to 3,000 addresses that had been previously contacted by Surrey Police and responses were received from 752 (25%).¹³ This was viewed as an acceptable response rate for a postal survey of this kind.

The vehicle crime prevention pack

Overall, 599 (80%) recalled receiving the Operation Gallant vehicle crime prevention pack from Surrey Police. One of the purposes of the pack was to raise owners' awareness of the risks of vehicle crime faced by targeted models. Of those recalling that they received a letter / crime prevention pack, 393 (67%)¹⁴ stated that they had not previously been aware that their vehicle was more at risk of being broken into or stolen than other models in the area. This shows that the approach may have raised awareness of the risks among many of those particularly vulnerable to vehicle crime in West Surrey.

The vehicle crime prevention pack contained a number of items, including the Home Office booklet, Steer Clear of Car Crime, a 'Don't Bother' dashboard kit, a secure tax disc holder and a property marking kit. Table 4.1 shows that two-thirds of recipients reported reading the booklet, while over a third stated they used the secure tax disc holder. Only one in five claimed to have used the property marking kit supplied.

Table 4.1: Use made of items included in vehicle crime prevention pack by those recalling that they received the pack (N=599)

| Item | Number | Percent |
|----------------------------------|--------|---------|
| Steer Clear of Car Crime booklet | 404 | 67% |
| Secure tax disc holder | 222 | 37% |
| 'Don't Bother' dashboard kit | 136 | 23% |
| Property marking kit | 123 | 21% |

Crime prevention roadshows

During the course of Operation Gallant, crime prevention roadshows were run by Surrey Police in 13 locations around West Surrey, selected to include the highest vehicle crime areas. Various types of location were used, including car parks, village halls, a school hall and on the street outside police offices. It should be noted that these events were open to all residents in the local community and not just the owners of high-risk vehicles. However, the

¹³ In addition to these questionnaires, there were 29 questionnaires that were returned uncompleted, mostly due to the fact that the PNC records were inaccurate. Reasons included the vehicle having been sold on, or the registered keeper having moved.

¹⁴ There were nine missing responses to this question.

results presented here focus solely on those receiving a crime prevention letter and who subsequently attended a roadshow.

Those attending events generally reported finding them of benefit. Of the 32 (4%) respondents reporting that they attended the roadshows, 14 (44%) found the information provided by the police officers of 'great use',¹⁵ while 17 (53%) found it of 'some use'. Only one individual stated the roadshow was of 'no use'. Furthermore, 31 (97%) stated that they would recommend attending a roadshow to others, while one stated that they were 'not sure'. This general satisfaction with the roadshows supports the observations made by researchers at two roadshow events.

Security measures taken by vehicle owners

Measures taken following attendance at a roadshow

Table 4.2 shows the security measures taken by the 32 respondents who reported attending a roadshow event. This shows that 21 (66%) of those responding stated that they had bought an Autolok security device and most (19) stated that they were using it (although two were not using it on the models targeted). Other security methods were adopted in smaller numbers. For example, eight (25%) reported using a tamper-proof tax disc holder, while three (9%) had their windows etched and another three reported using an infrared car alarm. Given the small numbers, caution should be taken in interpreting these findings.

Table 4.2: Security taken and used by respondents following attendance at a roadshow event (N=32)

| Form of security | Take up of security | | Usage of security | |
|------------------------------|---------------------|---------|-------------------|---------|
| | Number | Percent | Number | Percent |
| Autolock security device | 21 | 66 | 19 | 59 |
| Tamper-proof tax disc holder | 14 | 44 | 8 | 25 |
| Window etching | 13 | 41 | 3 | 9 |
| Property marking | 8 | 25 | 4 | 13 |
| Infrared car alarm | 3 | 9 | 3 | 9 |

Measures taken by those who recalled receiving a vehicle crime prevention pack

Overall, 354 (59%) of those who recalled receiving a crime prevention pack reported improving the security on their vehicle in some way. By contrast, only five (4%) of the 112 respondents that didn't recall receiving a crime prevention pack made improvements to their vehicle security¹⁶. This level of activity is relatively high for an approach that provides crime prevention advice with the expectation that action will be taken by the recipient. Traditional approaches to disseminating crime prevention advice have been less successful. Evaluations of vehicle crime prevention publicity employing newspapers, radio and television, have generally shown little or no change in security behaviour (see Burrows and Heal, 1980; Riley, 1980).¹⁷

Improvements in security by those who recalled receiving a vehicle crime prevention pack took many forms. In addition to the measures outlined in Tables 4.1 and 4.2:

¹⁵ Respondents were given the options 'of great use', 'of some use', 'of little use', 'of no use'.

¹⁶ The difference in security improvements between those who recalled receiving and those who did not recall receiving a crime prevention pack was statistically significant (chi square = 143.2, d.f.=2, p<0.001).

¹⁷ However, it is important to note that these studies examined security behaviour by checking whether car doors were locked on a sample of parked cars before and after publicity. By contrast, the Operation Gallant survey involved self-reported change in behaviour, which may have over-estimated the effect.

- 47 (8%) reported now using mechanical security devices;
- 42 (7%) reported being more conscious about removing or hiding valuable items on display in their car;
- 16 (3%) reported being more likely to lock their vehicle; and
- 11 (2%) stated they were more likely to park in what they perceived to be safer locations.

Interestingly, there were also nine (2%) respondents who deliberately changed their car for another model once they realised the risk of theft, effectively shifting the risk to others.

Those that attended a roadshow were more likely to report improvements in security than were those who did not (80% compared to 59%).¹⁸ However, those attending a roadshow may have generally had a higher propensity to take crime prevention measures than others. Indeed, 22 (88%) of the 25 who attended a roadshow and subsequently improved their vehicle security had previously taken other security measures. In this sense, the roadshows were 'preaching to the converted'.

Summing up the vehicle owner perspective

A direct mailing approach that targets owners of high-risk vehicles with crime prevention advice would appear to be an effective method of disseminating information. Most recalled receiving the information from Surrey Police and this raised awareness of the risk of vehicle crime among two-thirds of owners.

Six out of ten owners of high-risk models took at least one additional security measure following the letter / crime prevention pack. This shows that the direct mailing approach would appear to improve crime prevention activity among those most at risk. If the survey findings were extrapolated to all Ford Escorts, Ford Fiestas, Ford Transits, Vauxhall Astras and Vauxhall Novas in the West Surrey police area, one would conclude that security has been improved in some way¹⁹ on 2,231 (47%)²⁰ of the 4,726 target vehicles in West Surrey.²¹

¹⁸ This difference was statistically significant (chi square = 4.6, d.f.=1, p=0.032).

¹⁹ It is important to note that the level of security improvements varies considerably, from moderate interventions, such as use of tamper proof tax discs, to more extensive approaches, such as installation of electronic immobilisers.

²⁰ 4,726 target vehicles x 0.8 (proportion receiving letter) x 0.56 (proportion receiving letter that made improvements) = 2,231 vehicles with improved security.

²¹ This, of course, assumes that the security behaviour of non-respondents mirrors that of the survey respondents. However, there is no way to validate this assumption and could mean that this figure is an over-estimate.

5. Did it work?

Introduction

This chapter explores the extent to which Operation Gallant was successful in reducing vehicle crime in the West Surrey police area. The following pages examine the change in the BCU area as a whole and explores the extent to which the main interventions deployed in the area may have been responsible.

Overall impact

Examining vehicle crime overall, Table 5.1 shows that between Feb to April 2003 there was a seven per cent (6.6%) reduction in the West Surrey area compared to the same period the year before (Feb – April 2002). However, East Surrey²² experienced an 18 per cent (17.5%) reduction over the same period. As Figure 5.1 shows, vehicle crime in East Surrey was more volatile than in West Surrey, experiencing greater fluctuations (both upward and downward) than either West Surrey or the force as a whole. Vehicle crime in Surrey Police as a whole remained unchanged over this period.²³ Figure 5.1 also shows that between February and April 2003, West Surrey experienced a downward trend in vehicle crime, compared to upward / static trends in East Surrey and the force as a whole. This downward trend may provide evidence that Operation Gallant was having an impact on vehicle crime overall.

Table 5.1: Change in vehicle crime²⁴ pre and post implementation of Operation Gallant

| Time period | West Surrey | | East Surrey | | Entire force | |
|-------------------------|-------------|-------------|-------------|--------------|--------------|----------|
| | Number | % change | Number | % change | Number | % change |
| Feb to Apr 01 (pre) | 482 | | 635 | | 2509 | |
| Feb to Apr 02 (pre) | 514 | 14.7 | 785 | 23.6 | 2482 | -1.1 |
| Feb to Apr 03 (post) | 480 | -6.6 | 648 | -17.5 | 2479 | -0.1 |

As Figure 5.1 shows, the reduction in West Surrey would appear to have begun prior to the commencement of Operation Gallant. Vehicle crime peaked in August 2002 with 133 offences, followed by a steady decline. Comparing a rolling three months with the same three months the previous year, however, shows that the first decline was witnessed between November 2002 and January 2003 – prior to the operation. As Figure 5.2 shows, vehicle crime declined by ten per cent, compared with the same three months in the previous year. Furthermore, the largest decline occurred in December to February, with a 15 per cent reduction. These reductions probably reflect the fact that Operation Bugle, targeted at prolific vehicle crime offenders was undertaken during this period, prior to the commencement of the initiative and this provided a foundation upon which Operation Gallant was built. Given the fact that the first reduction coincides with the commencement of the planning process for Operation Gallant, this may also reflect an anticipatory effect in which the very act of planning and talking about an operation leads to a decline (see Smith *et al.* 2001).

²² East Surrey BCU was chosen for comparison because it has a similar profile to West Surrey. Three of the four CDRPs in East Surrey are in the same 'family' as the two in West Surrey. Furthermore, both West Surrey and East Surrey are in the same BCU 'family'.

²³ The effect may be under-estimated due to the impact of publicity that was available to residents in other parts of Surrey. This could have helped to reduce vehicle crime in the areas used for comparison, therefore reducing the gap between West Surrey and other areas. Within the scope of the evaluation, it was not possible to test this hypothesis.

²⁴ Vehicle crime is defined as thefts from and theft of vehicles, in line with the Home Office definition used for the national target.

Figure 5.1: Trend in vehicle crime in West Surrey, East Surrey and Surrey Police as a whole indexed on January 2001 (with 3-point moving average)²⁵

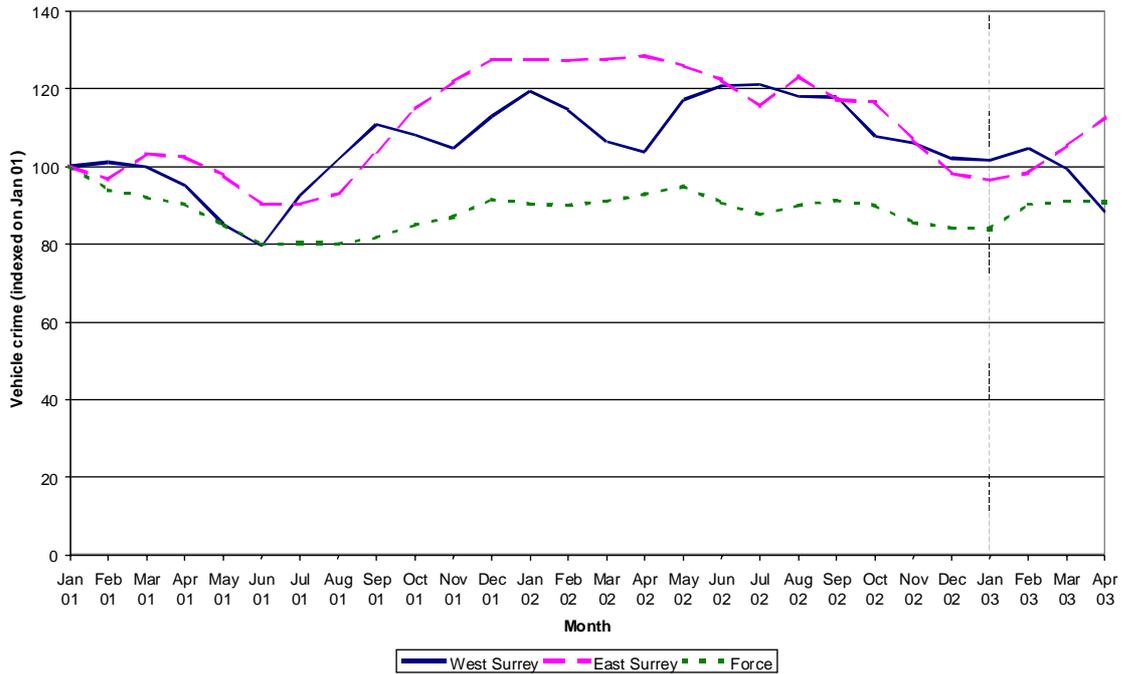
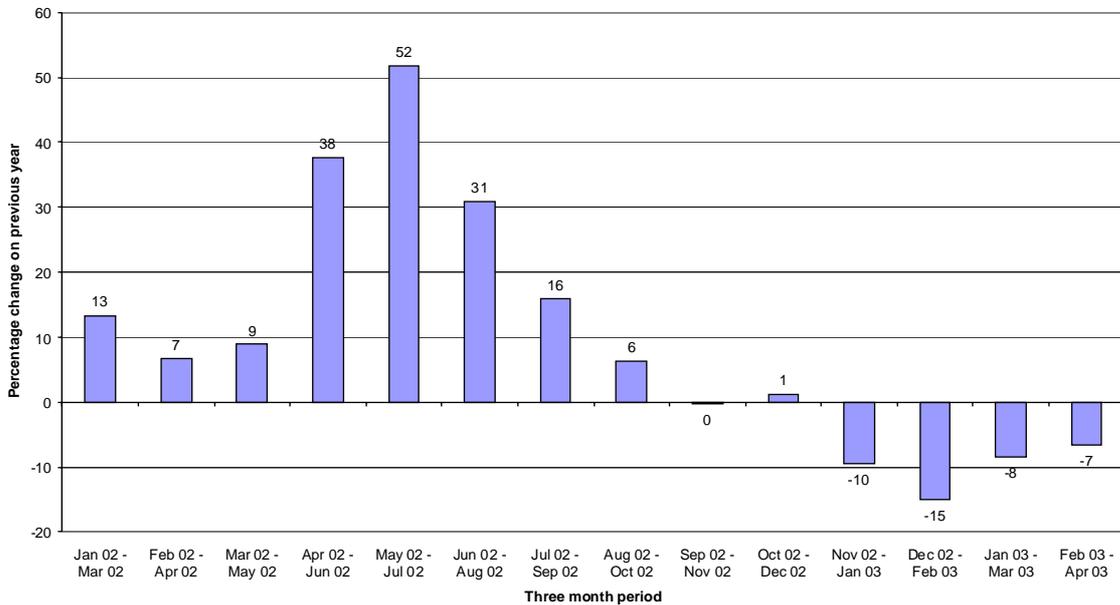


Figure 5.2: Percentage change in vehicle crime in rolling three-month period compared to same three months in the previous year in West Surrey



²⁵ The first and last months are the actual indexed figures, rather than moving averages.

Impact on thefts of vehicles

In addition to the analysis of vehicle crime overall, the pattern of theft of vehicles in the West Surrey area was examined. Table 5.2 shows that, across the BCU area, thefts of vehicles fell by more than vehicle crime overall, with a 17 per cent reduction. By contrast, East Surrey and Surrey Police as a whole showed no change in their levels of thefts of vehicles.

Table 5.2: Change in thefts of vehicles pre and post implementation of Operation Gallant

| Time period | West Surrey | | East Surrey | | Entire force | |
|----------------------|-------------|----------|-------------|----------|--------------|----------|
| | Number | % change | Number | % change | Number | % change |
| Feb to Apr 01 (pre) | 179 | | 188 | | 776 | |
| Feb to Apr 02 (pre) | 198 | 10.6 | 221 | 17.6 | 763 | -1.7 |
| Feb to Apr 03 (post) | 165 | -16.7 | 219 | -0.9 | 764 | 0.1 |

Impact on thefts from vehicles

Analysis of thefts from vehicles showed a quite different picture to that for thefts of vehicles. As Table 5.3 shows, thefts from vehicles remained unchanged following the implementation of Operation Gallant in West Surrey. While this follows the pattern in the force as a whole, East Surrey witnessed a decline by almost a quarter over this period. However, this reduction in East Surrey followed an increase of similar magnitude in the year before, suggesting that thefts from vehicles were more vulnerable to wide variations.

Table 5.3: Change in thefts from vehicles pre and post implementation of Operation Gallant

| | West Surrey | | East Surrey | | Entire force | |
|----------------------|-------------|----------|-------------|----------|--------------|----------|
| | Number | % change | Number | % change | Number | % change |
| Feb to Apr 01 (pre) | 303 | | 447 | | 1733 | |
| Feb to Apr 02 (pre) | 316 | 4.3 | 564 | 26.2 | 1719 | -0.8 |
| Feb to Apr 03 (post) | 315 | -0.3 | 429 | -23.9 | 1715 | -0.2 |

Examining the findings overall, it appears that Operation Gallant may have had an impact on thefts of vehicles, but not on thefts from vehicles across West Surrey. Furthermore, the reduction in vehicle crime as a whole was not as great as that witnessed in East Surrey.

It should, however, be noted that the crime reduction effects extended beyond the life of the evaluation. Figures subsequently obtained from West Surrey for the period from May to July 2003 showed that reductions in vehicle crime accelerated. Vehicle crime overall in West Surrey declined by 20 per cent compared to the same period the year before, while thefts of vehicles declined by 32 per cent and thefts from vehicles by 12 per cent. As these occurred following the evaluation, it was not possible to obtain comparisons from other areas to determine whether these were more or less than might be expected. Therefore, the remainder of the analysis concentrates on the period from February to April during which the operation was implemented.

As crime prevention advice and prolific offender targeting were the major components of the operation, further work was undertaken to examine the impact of these interventions.

Impact of crime prevention advice

As outlined in chapter 4, crime prevention advice sent to the owners of high-risk models in West Surrey resulted in a relatively high degree of crime prevention activity by those concerned. Here we examine whether this was translated into a reduction in vehicle crime.

Regardless of the actual level of vehicle crime, one would expect to see the *share* of vehicle crime associated with the top five models to decline following the distribution of crime prevention advice. Analysis was therefore undertaken to examine the proportion of vehicle crime accounted for by the five models targeted, both before and after the intervention. This focused on vehicles registered in 1995 and earlier, based on the vehicle registration number.²⁶

Table 5.4: Proportion of thefts of / thefts from offences in West Surrey accounted for by targeted / other models: February to April 2002 – February to April 2003

| | February to April 2002 | | | | February to April 2003 | | | |
|----------------------|------------------------|---------|--------------|---------|------------------------|---------|--------------|---------|
| | Targeted models | | Other models | | Targeted models | | Other models | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Thefts of vehicles | 64 | 39 | 101 | 61 | 49 | 42 | 67 | 58 |
| Thefts from vehicles | 47 | 28 | 123 | 72 | 37 | 26 | 106 | 74 |
| Total vehicle crime | 111 | 33 | 224 | 67 | 86 | 33 | 173 | 67 |

Table 5.4 shows that, where vehicle crime overall was concerned, the proportion accounted for by the five models targeted remained static at 33 per cent in February to April 2002 and in February to April 2003. It is important to note that these findings reflect relative change, rather than absolute changes. Indeed, Table 5.4 demonstrates that there was a 23 per cent reduction in total vehicle crime involving the targeted models. However, this was matched by a similar reduction in vehicle crime involving other models. Therefore, while vehicle crime involving targeted models declined, the reduction was not as concentrated as anticipated.

The share of thefts of vehicles attributed to targeted models showed a slight increase (from 39% to 42%), while thefts from vehicles showed a slight decline (from 28% to 26%). In neither case were the differences statistically significant.²⁷

These findings suggest that the distribution of crime prevention advice to high-risk vehicles in West Surrey in this particular operation had no significant effect on the overall levels of vehicle crime experienced by those models. However, it is important to note that this is not necessarily an indication that if it was replicated elsewhere that the results would be the same. Indeed, as discussed, West Surrey and the conditions in which operation Gallant was carried out were fairly unique in two ways. Firstly, the timescale in which the change was examined in this study was relatively short (three months). Analysis of vehicle crime associated with high-risk models over a longer period may have produced more statistically significant results. Second is the fact that the area has a relatively low rate of crime. The BCU is in the bottom quartile nationally for both thefts of and thefts from vehicles and it is these low crime rates that may have had a masking effect on the potential success of the operation.

There is also some evidence that publicity can work when it is designed to increase the perceived risk of detection among offenders (Sallybanks, 2001 and Bowers and Johnson, 2003; Barthe, 2004 (unpublished at present), although this relies on a different mechanism of change (offender deterrence) than that employed by Operation Gallant's direct mail approach, which was designed to raise potential victim awareness. This is important and

²⁶ The year of registration (based on the vehicle registration number) was identified on 945 (95%) of vehicle crime records for February to April 2002 and for February to April 2003.

²⁷ For thefts of vehicles, chi square=0.210, d.f.=1, p=0.647. For thefts from vehicles, chi square = 0.050, d.f.=1, p=0.822.

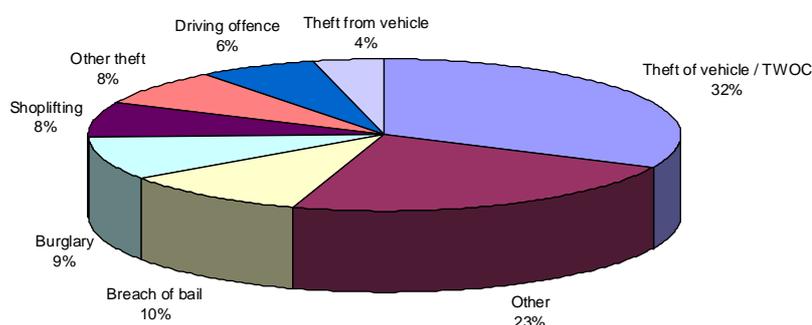
could be used to further the tactical options available if a Gallant-style operation was to be replicated in other police BCUs.

Impact of prolific offender targeting

As part of the prolific offender targeting, 17 individuals were identified for police attention. These were identified on the basis of known vehicle crime offending during 2002 and on the basis of intelligence that showed who was currently active. A 'top-ten' list of offenders was initially devised and as offenders were remanded in custody, new members replaced these on the list. These 17 individuals had committed a considerable number of offences. Police data showed they had been charged or convicted with a total of 254 offences, dating back as far as 1995 (although 70 (28%) offences were committed in 2002). The types of offence committed included theft of vehicle / TWOC (28%), shoplifting (12%), violence against the person (11%), criminal damage (9%), other theft / handling (7%), burglary (6%), driving offences (6%) and other offences (20%). These figures show that, while those targeted committed vehicle crime offences more than any other, they were by no means specialists.

During the course of Operation Gallant, the 17 targeted offenders were arrested a total of 75 times for 78 offences (three arrests involved more than one offence). On average, each offender was arrested four times over the 12-week period. Figure 5.3 shows the types of offences for which offenders were arrested, with thefts of vehicles / TWOCs accounting for a third of arrests, followed by bail breaches. Other forms of acquisitive property crime were also common, with a quarter of arrests for burglary, shoplifting and other thefts combined.

Figure 5.3: Offences for which prolific offenders were arrested during Operation Gallant (N=78)



Charges were brought in 36 (48%) cases and bailed, pending further inquiries in one case. In the remaining 38 (51%) cases, no further action was taken. The increased attention on the 17 individuals did not necessarily lead to an increase in detected vehicle crime offences across the BCU. For example, where thefts of vehicles / TWOCs were concerned, the proportion of offences detected was 12 per cent in February to April 2002 and 14 per cent in February to April 2003. This difference was not statistically significant.²⁸

Examining the impact of arresting prolific offenders

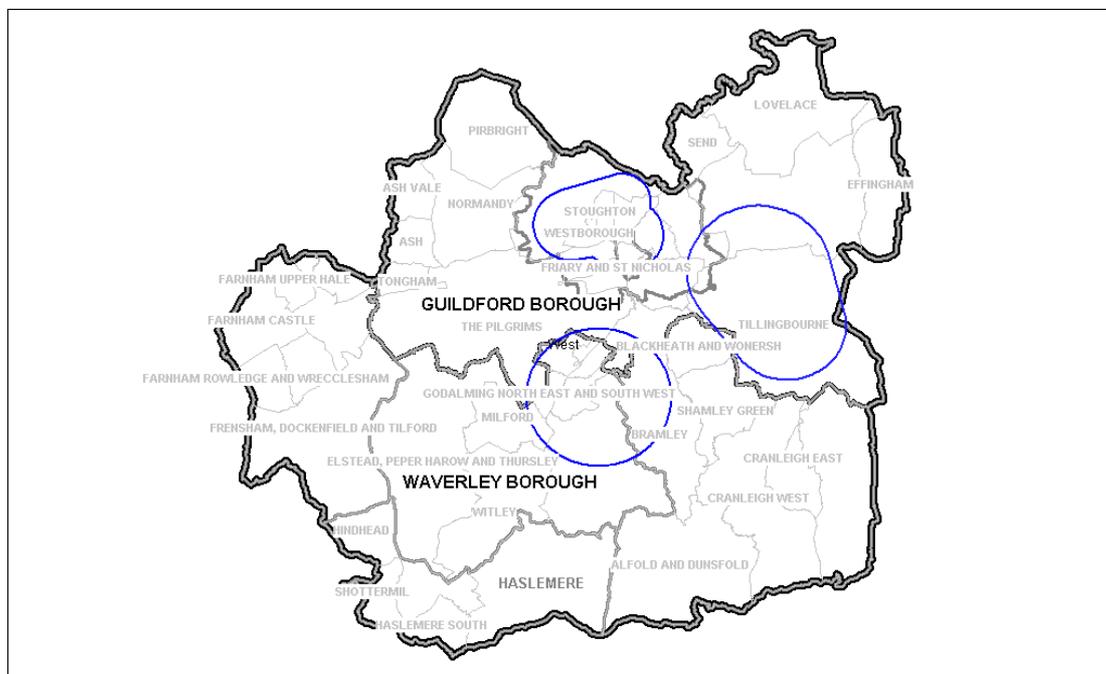
To assess the impact of the prolific offender targeting, the areas where the targeted offenders were known to offend were first identified. The hypothesis developed for this work was that one should expect to see a steeper decline in vehicle crime in the areas where offenders are known to operate, compared to other parts of the BCU area. During the course of the operation, 17 prolific offenders were targeted.²⁹ For each individual, the vehicle crime

²⁸ Chi Square =0.261, d.f.=1, p=0.609

²⁹ There were ten individuals on the list at any one time. As one was remanded in custody, another would be added to the list.

offences they were known to have committed during 2002 were mapped using the force GIS. An ellipse was then drawn around the offences (excluding the outliers). In most cases, offences were closely clustered geographically. The 17 ellipses were then overlaid and this created three distinct clusters of offences, as shown in Figure 5.4. These 'hunting patches' accounted for 72 per cent of the 104 offences³⁰ committed by the 17 prolific offenders.

Figure 5.4: Location of prolific offender hunting patches in West Surrey



Analysis was then undertaken to examine the change in crime rates in the hunting patches and elsewhere in the BCU area. Table 5.5 shows that the trend in thefts of vehicles does not conform to the hypothesis. There was no change in the hunting patch areas, while there was a 31 per cent reduction in thefts of vehicles elsewhere. This runs counter to what one would have expected. These individuals were committing a relatively large number of thefts of vehicle offences in the 'hunting-patch' areas³¹ and the prolific offender targeting seems largely to have focused on thefts of vehicles (as indicated by Figure 5.3). Yet no reduction was observed in the area where it was anticipated.

By contrast, Table 5.6 shows that thefts from vehicles exhibited a quite different pattern. In the hunting patch areas, thefts from vehicles declined by 16 per cent, compared to a 12 per cent increase in the rest of the BCU area. The findings paint a confusing picture. Given the fact that prolific offender targeting does not appear to have been focused on thefts from vehicles and that the 17 offenders were known to have committed relatively few thefts from vehicles in the hunting patch area,³² one cannot reliably attribute the reduction to action taken against these individuals.

However, some clarification is needed which may go some way to explain the limited success that targeting prolific offender had in reducing vehicle crime in the target area. Whilst 17 offenders were arrested throughout the course of the operation, the reality was that most of the offenders were at liberty for most of the time. In fact the actual number of offending days

³⁰ The 104 offences include those that the 17 offenders were suspected of committing as well as those with which they were charged.

³¹ 57 (70%) of the 81 thefts of offences associated with the group were committed in the hunting patch areas.

³² 23 thefts from vehicles were known to have been committed by the group in 2002, of which 18 (78%) were known to have occurred in the hunting patch areas. This suggests that thefts from vehicles was not a major preoccupation of this group, although it should be noted that this type of crime suffers from low reporting and detection rates.

available when looked at over all offenders over the period studied showed that there were not that many less that would otherwise been available had the arrests not been made. This in effect could be described as 'theory failure'. The theory behind offender targeting is that you can detect, arrest, charge, remand and sentence to custody those involved in vehicle crime thereby reducing the number of offenders at liberty to offend. However, given the relative seriousness attached to vehicle crime, remanding offenders for these offences is relatively unlikely. In fact this research showed that police often failed at the first hurdle. Simply extolling police officers to target offenders is not enough – it needs to be backed by consideration of how best to obtain robust evidence to sustain custody and eventually a conviction.

It was also felt that, as with crime prevention advice aimed at high-risk vehicle owners, the evaluation period in relation to prolific offending was also insufficient. It is suggested that increasing the period evaluation to six months may have provided a more meaningful time-frame in which the effects (positive or negative) could be understood.

Table 5.5: Change in thefts of vehicles pre and post implementation of Operation Gallant in hunting patch and non-hunting patch areas

| Time period | West Surrey | | Hunting patches | | Non-hunting patches | |
|----------------------|-------------|----------|-----------------|----------|---------------------|----------|
| | Number | % change | Number | % change | Number | % change |
| Feb to Apr 01 (pre) | 179 | | 100 | | 79 | |
| Feb to Apr 02 (pre) | 198 | 10.6 | 90 | -10.0 | 108 | 36.7 |
| Feb to Apr 03 (post) | 165 | -16.7 | 90 | 0.0 | 75 | -30.6 |

Table 5.6: Change in thefts from vehicles pre and post implementation of Operation Gallant in hunting patch and non-hunting patch areas

| Time period | West Surrey | | Hunting patches | | Non-hunting patches | |
|----------------------|-------------|----------|-----------------|----------|---------------------|----------|
| | Number | % change | Number | % change | Number | % change |
| Feb to Apr 01 (pre) | 303 | | 124 | | 179 | |
| Feb to Apr 02 (pre) | 316 | 4.3 | 137 | 10.5 | 179 | 0.0 |
| Feb to Apr 03 (post) | 315 | -0.3 | 115 | -16.1 | 200 | 11.7 |

Summing up the impact of Operation Gallant

The analysis of impact suggests that Operation Gallant resulted in a 17 per cent reduction in thefts of vehicles and little change in thefts from vehicles. Vehicle crime overall fell by approximately seven per cent. While the decline in vehicle crime was greater than the reduction in the force as a whole, it was not a great as the reduction witnessed in East Surrey (mainly due to the large decline in thefts from vehicles in East Surrey).

In attempting to explain the reductions in vehicle crime, further analysis was undertaken of the impact of crime prevention advice targeted towards the owners of high-risk vehicles and of the impact of prolific offender targeting. Neither analysis proved satisfactory although some reasons are offered as to why this was found to be the case.

Where the crime prevention advice was concerned, there was a reduction in both thefts of and thefts from vehicles associated with high-risk models, but this was matched by a similar reduction associated with other models.

Analysis of impact associated with prolific offender targeting found there was a reduction in thefts from vehicles, but no reduction in thefts of vehicles in the areas where offenders were known to be active. These findings run counter to what might have been expected, given the

previous offending behaviour associated with the 17 targeted individuals and given the overall reduction in thefts of vehicles in West Surrey.

These results suggest that Operation Gallant may have been successful in reducing thefts of vehicles in West Surrey, but it remains unclear what brought this about. This will partly have been due to methodological shortcomings in the evaluation. For example, a longer time period in the analysis of vehicle crime associated with high-risk models may have produced different results, while analysis of the impact of other types of intervention may have shed light on what brought about the impact. However, the lack of explanation also reflects our limited knowledge about how crime reduction initiatives work – especially those involving simultaneous, multiple interventions.

6. Cost-effectiveness

Introduction

This chapter explores how much Operation Gallant cost and assesses the extent to which this was a cost-effective use of resources. This is based on a mix of financial data provided by Surrey Police and on analysis of time sheets completed by officers in West Surrey. The time sheets were not thought to be a complete record of the time spent on Operation Gallant, according to the local project manager. Therefore, the figures presented here may be an underestimate of the true costs.

What was the money spent on?

The Home Office Police Standards Unit provided West Surrey with £50,000 to undertake Operation Gallant. Table 6.1 provides a breakdown of how the Home Office grant was spent. The operation overspent on this, largely due to the overtime undertaken in April, which amounted to over £9,000. The overspend was paid for by the BCU. The next largest items of expenditure were the security devices, consisting of the car-sitter alarms and the steering locks. These steering locks generated an income totalling £2,900, which can be subtracted from the total expenditure.

Table 6.1: Breakdown of expenditure of PSU grant

| Item | Amount | Per cent |
|-------------------|-------------------|-----------------|
| Overtime | £33,454.99 | 52.0 |
| Security devices | £10,993.40 | 17.1 |
| Property marking | £9,410.00 | 14.6 |
| Publicity | £6,982.76 | 10.8 |
| Postage | £1,151.10 | 1.8 |
| UV light key fobs | £795.00 | 1.2 |
| Dog cage | £438.30 | 0.7 |
| Other | £350.50 | 0.5 |
| Stationery | £341.88 | 0.5 |
| Vehicle hire | £278.57 | 0.4 |
| Don't Bother kits | £180.00 | 0.3 |
| Total | £64,376.50 | 100.0 |

Total costs

The figures in Table 6.1 show the additional expenditure associated with running the operation. This excludes 'levered-in' resources in terms of mainstream officer time devoted to the operation. Time sheets maintained by officers working on Operation Gallant showed that a total of 4,575 hours were devoted to the operation over the course of the three months. Local salary costs were used to calculate the cost of the time devoted to Operation Gallant and an additional weighting was added to account for overheads. This produced a total staff cost of £156,906. If one adds the non-staff time elements from Table 6.1 (minus the revenue from sales of security devices), this results in a total cost of implementing Operation Gallant of just under £185,000.

Cost-benefit analysis

According to Brand and Price (2000), the estimated average cost to society of a theft of a vehicle was £4,800. Operation Gallant reduced thefts of vehicles by 17 per cent in West Surrey and this equated to 33 fewer stolen vehicles.³³ Using the Brand and Price (2000) estimate, this suggests that the value of the prevented thefts was £158,400.

On this basis, Operation Gallant resulted in a net loss in terms of cost-benefits. Indeed, every £1 saved in terms of crime reduction results, cost £1.17 in police effort to achieve. These figures are based on the immediate results of the operation on vehicle crime. Given the focus on prolific offenders (who are seldom specialists) there may also have been an impact on other property offences, such as burglary and shoplifting. These were outside the scope of the current study. Much of the effect on vehicle crime is likely to have been short term, given the focus on offender targeting. However, it is possible that the direct mailing of crime prevention advice may take longer to show effect than the three months examined in this study. As there are no recurring costs beyond those already expended, any continued improvement in thefts of vehicles associated with targeted models would improve the cost-benefit ratio. Therefore, the figures presented here might be considered a worst-case scenario.

Summing up the cost-benefit analysis

When police time is factored into the cost of operational activity, it invariably shows higher costs than might have been anticipated. In the case of Operation Gallant, the total cost was estimated to be £185,000. During the life of the operation, this was more than was saved in terms of vehicle crime prevented, although analysis over the longer term might generate more positive results. It is worth noting that, with a longer lead-in time, staff costs could have been reduced by eliminating the need for overtime, or by deploying non-police personnel, such as local authority staff. This could have resulted in a positive cost-benefit equation.

³³ These figures ignore any anticipatory benefit that may have occurred prior to the onset of the operation (see Figure 5.2). This is because the mechanism by which this benefit was brought about is unclear and means that one cannot be certain it was a function of Operation Gallant, rather than other underlying factors.

7. Conclusions

Introduction

This report has provided an evaluation of the effectiveness of Operation Gallant undertaken in the West Surrey BCU area. This operation was intended to replicate the approach undertaken by Operation Igneous in Kent. This was only a partial replication, given the differences in context (size of problem, timescales and budgets) and interventions employed. That being said, Operation Gallant lived up to the spirit of the intelligence-led vehicle crime reduction approach and developed a number of data-driven interventions.

Building blocks for success

From examining the way Operation Gallant was implemented, it was clear that there were a number of critical success factors. These included:

- *the tasking and co-ordination process*, which directed resources towards identified crime problems on a daily and, more strategically, fortnightly basis;
- *commitment from the BCU management* to devote resources towards vehicle crime, rather than towards other local problems, such as domestic burglary;
- *the vehicle crime analyst*, whose sole purpose was to analyse and research vehicle crime patterns in the area; and
- *the dedicated operational team*, that ensured the work got done.

Success of the interventions

Although Operation Gallant undertook a wide range of activity, much of this fell into two key areas of work – crime prevention direct mail and prolific offender targeting.

Crime prevention direct mail

The direct mailing of potential vehicle crime victims was an innovative approach adopted from Operation Igneous. However, given the time constraints on Operation Gallant there were operational differences, in that the direct mail approach in Kent focused more upon short-term emerging trends, rather than on generic levels of risk.

The take-up of crime prevention advice provided through the direct mail approach was very high, compared with more traditional crime prevention publicity, although this did not feed through to reductions in crime during the life of the project. However, this may have been a measurement issue, resolved with a longer post implementation follow-up.

Prolific offender targeting

Seventeen prolific vehicle crime offenders (identified from intelligence) were targeted during the operation and, between them, were arrested a total of 75 times. However, it did not prove possible to attribute the reductions in vehicle crime observed in West Surrey directly to the targeting of prolific offenders.

Impact of Operation Gallant

Overall, Operation Gallant was associated with a seven per cent reduction in vehicle crime in the West Surrey Police area. While this was an improvement on the force figures, East Surrey BCU (used as a comparison site) experienced an 18 per cent reduction overall, although it should be noted that the reduction in East Surrey followed an increase of similar magnitude in the previous year.

The main impact of Operation Gallant was on thefts of vehicles, which declined by 17 per cent during the period, while remaining unchanged in East Surrey and in the force as a whole.

Cost-effectiveness

Operation Gallant was estimated to have cost £185,000, with most of the expenditure related to the amount of police time devoted to the initiative. During the life of the operation, this was not particularly cost-effective, as each £1 saved in terms of crime prevented, cost £1.17 to generate. However, if crime reduction results are observed over the longer term, this could generate a positive cost-benefit ratio.

Concluding remarks

Operation Gallant shows that a reduction in thefts of vehicles can be achieved by implementing an intelligence-led approach to directing local interventions. However, this can be a resource-intensive approach (depending on the interventions employed) requiring the activity of officers from across a BCU, although the extent of additional resources required may be reduced with additional planning. This suggests that, if replicated elsewhere, close attention should be paid to the interventions employed and the relative costs associated with their implementation.

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Appendix

Checklist of factors affecting success of initiative

From analysis of Operation Gallant, there would appear to be a number of factors that influenced the success of the initiative. These can be divided into organisational *factors* that influence the way the local BCU is organised and managed and *implementation factors* that influence the way the initiative itself is organised and managed.

Organisational factors

- ✓ Commitment from the BCU management to devote resources towards vehicle crime, rather than towards other local problems, such as domestic burglary.
- ✓ A performance management ethos that places an emphasis on measurement of outcomes.
- ✓ A BCU centralised Intelligence Unit that can generate reports on a daily basis about the current crime trends and offenders considered to be associated with the crime.
- ✓ A tasking and co-ordination process to manage the direction of an operation on a regular basis.
- ✓ Vehicle crime analyst to produce regular reports on current vehicle crime patterns and trends.
- ✓ Data systems that collect appropriate data and which an analyst can properly interrogate.

Implementation factors

- ✓ A detailed analysis of the local vehicle crime problem upon which to develop suitable interventions.
- ✓ Selection of interventions that are known to 'work'.
- ✓ A project manager, whose time is ring-fenced for the duration of the operation, to oversee the initiative.
- ✓ Sufficient time to plan the initiative in detail.
- ✓ A small implementation team that meets on a regular basis to ensure delegated tasks are completed.
- ✓ Sufficient resources to purchase necessary equipment (such as crime prevention materials).
- ✓ 'Buy-in' from operational staff tasked with implementing specific interventions.

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