



The Tilley Award

*"In Search of Evidence -
An integrated and strategic approach
to reducing burglary"*

Pages

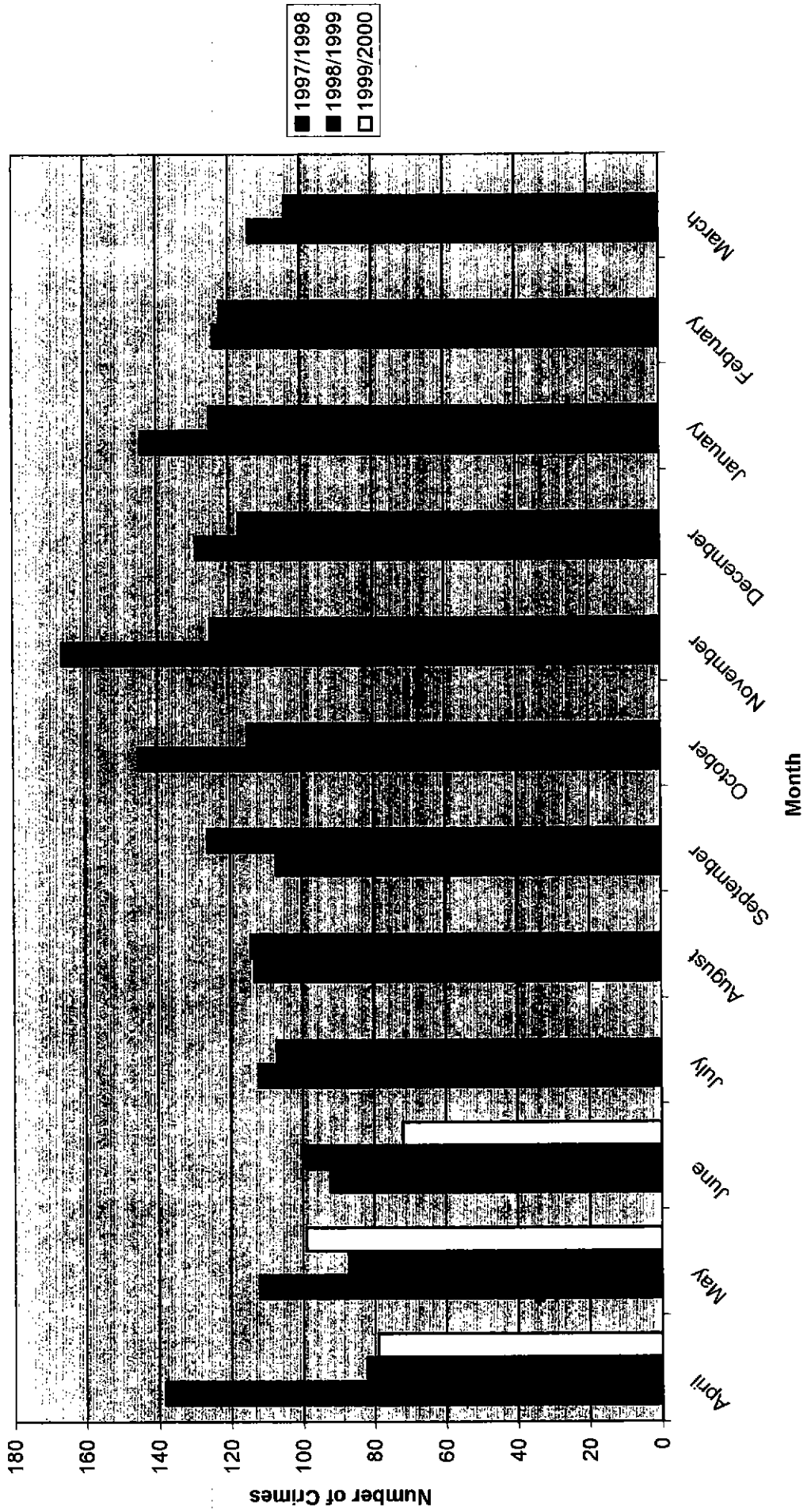
Project Report — 22

Abstract

Appendices

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Burglary Dwelling on M1 O.C.U. 1997/1998 - 1999/2000



Beat 37 Hillfields Burglary Reduction

<u>Areas</u>	<u>Factors</u>	<u>Project cost</u>	<u>WMP overheads</u>	<u>Totals</u>
<u>People</u>				
Katie Oram	1 day per week @ £179.76 per day	13,450		13,450
Derek Bunyan	£179.76 x 52 weeks	19,100		19,100
DCI Sawers	3 days per month @ £145.12 per day		9,347	9,347
Helen Skelton	£145.12 x 13 months		5,659	5,659
Karen Smallman	1 day per week @ £80.56 per day		4,189	4,189
Keith Barnett	1 day per week (Borne by Forensic Science Services)			
Rachel Jackson	2.5 days per week @ £61.12 per days		7,946	7,946
PC Williams	£152.80 x 52 weeks		10,383	10,383
John Nicholson	2 days per week @ £99.84 per day			
	£199.68 x 52 weeks		14,788	14,788
	2.5 days per week @ £113.76 per day			
	£284.40 x 52 weeks			
<u>Non Staff Costs</u>				
Vehicle Hire (Scene Assessor)		3,500		3,500
Drugs Arrest Referral		2,000		19,333
Computer & Printer (Cleveland Software)		1,200	11,333	1,200
Scenes of Crime Submission / Forensic Science Costs		15,000		15,000
Crime Prevention Hardware		6,250		6,250
		<u>60,500</u>	<u>63,645</u>	<u>124,145</u>

Coventry Arrest Referral: Initial Findings

Age Profile: n = 65

	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	Unknown	%
Male	15	7	8	8	6	1	0	70
Female	5	3	4	2	4	0	2	30
%	31	15	18	15	16	2	4	100

Drug of Choice: n = 65

Heroin	Crack	Cannabis	Amphetamines	Solvents	Cocaine	
44	8	5	4	3	1	
68	12	8	6	4	2	%

Referral Outcome: n = 71

	Number	%
Total of clients seen	71	
Clients previously unknown to CDT	36	51
Clients referred out of Coventry	6	8
Clients dealt with as a one-off	24	34
Clients referred to CDT	41	58
Clients attending 1 st CDT appointment	18	44
Clients attending later	7	17
Total of clients attending	25	61



ABSTRACT

TITLE - **In Search of Evidence;**

THE NATURE OF THE PROBLEM - This abstract introduces a burglary reduction project that is attached, together with related Appendices. It sets out how the issue of domestic burglary is **being** tackled **on** the **territorial** command area **of** West Midlands Police known as M1 OCU.

Some sections of the report were originally conceived as a proposal under Stage Two of the Burglary Reduction Programme seeking Strategic Development Project (SDP) status to further support a strategic approach.

EVIDENCE USED TO DEFINE THE PROBLEM – **The command unit contains several** areas that suffer in excess of twice of the national average of domestic burglary (viz.: 54 burglaries per 1000 population). Statistical data is represented in graph form in the list of Appendices.

The paper uses the 'SARA' model to signpost the development of the strategy that reflects a "problem orientated approach". It acknowledges the crime analysis process as being a

" key step in the sequence of activities aimed at *conceiving, implementing and evaluating measures to prevent crime.*"

(Crime Prevention Unit Paper 10 - Getting the Best Out of Crime Analysis - Paul Ekblom Home Office 1988)

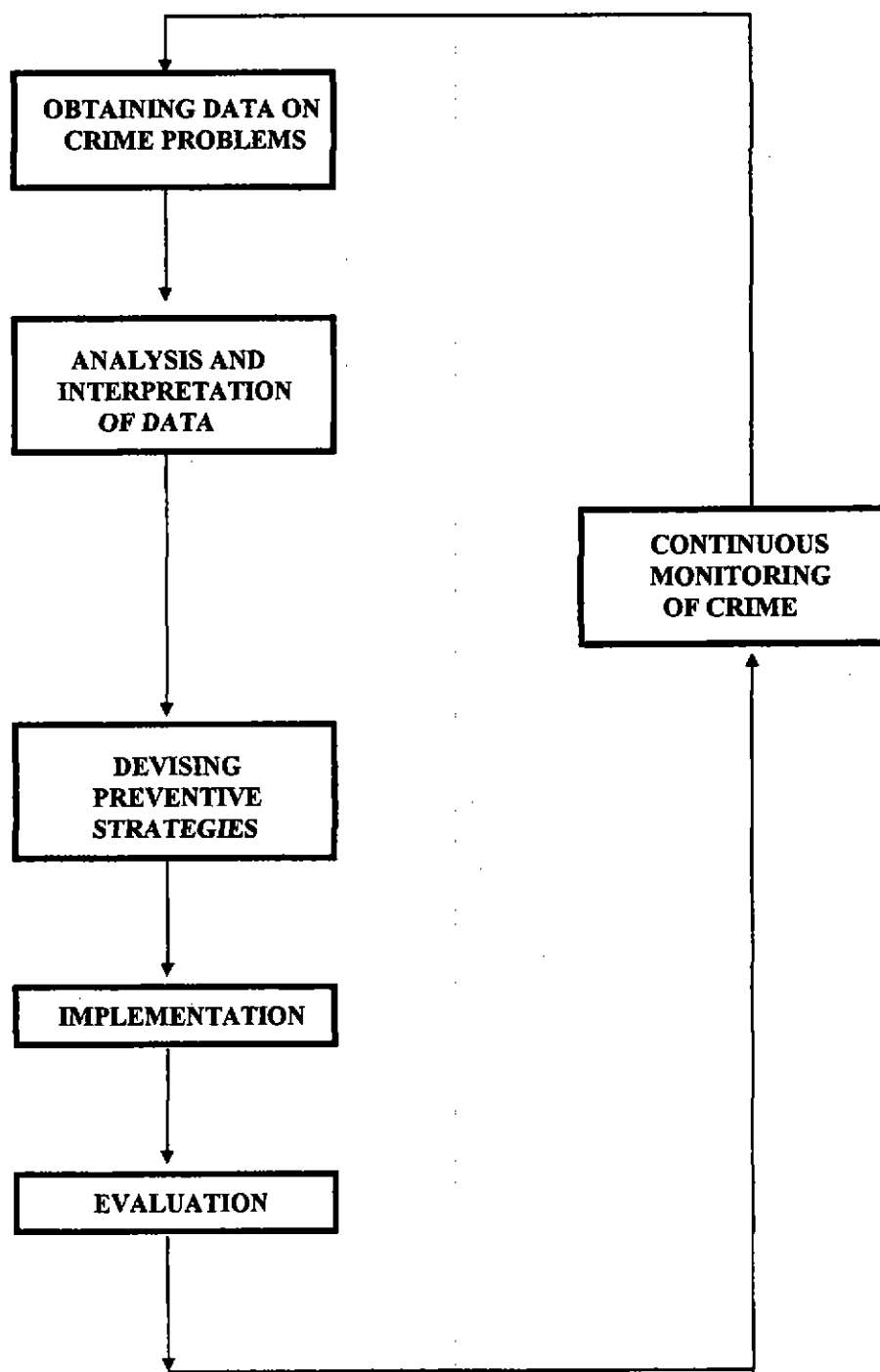
Brief description of the response to the problem – M1 OCU **deployed** the concept of a dedicated Scene Assessor in 1997. This coincided with improved **performance** both in terms of quality to victims, and also in targeting preventative and reactive resources towards burglary locations and victims.

Subsequently, a new investigative approach, the Cleveland System using Offender Profiling techniques, appeared to offer potential as a complimentary means of analysing the incidence of burglary.

A pre-cursor study of enhanced data collection, enabling us to pilot these new techniques offered the opportunity to integrate them within a model of sector policing in partnership with statutory partners and communities within the command unit.

Figure 1 overleaf sets out each "key step" (Bid) adopted under the "response".

Figure 1. The Preventive Process



Adapted from Crime Prevention Unit: Paper 10 - Getting the Best Out of Crime Analysis - Ekblom Home Office 1998

The impact of the response and how this was measured— The report sets out how the response will be measured. The approach is still being developed but, in relation to the SDP Project itself, Home Office consultants will formally evaluate this.

[400 words]

Although recorded levels of domestic burglary throughout England and Wales have reduced by 29% over the past four years, there were as many domestic burglaries in 1997 as twenty years previously.

Home Office estimates that Burglary accounted for a significant proportion of crime generally estimated to have cost the UK economy £51 billion during 1998. Furthermore, the total value of UK household insurance claims resulting from burglary currently runs at £513 million pounds. Overall, burglary has significant social and economic costs and as such, reducing its occurrence is a top priority for the West Midlands Police.

High rates of crime have been a feature of certain residential communities. The distribution of this risk has been very disparate. For example over one third of all property crime victims will probably be found within one fifth of the communities within England and Wales.

Research suggests that two types of high crime communities exist. These are areas of concentrated poverty and areas with pockets of social inequality. The command unit, MI OCU, in Coventry is an area comprising features of both.

Burglary is recorded within the Coventry Crime and Disorder Audit as the crime most feared by people and is the highest category of reported crime across the city. Using the British Crime Survey equation¹, the average cost of household burglary is calculated at over three million pounds to the citizens of Coventry. Additionally, repairs to 'social housing' and other properties following a burglary consume a significant proportion of available budgets².

Furthermore, the average cost of a Police Officer attending the burglary scene is £21.00. This figure represents initial attendance only; the cost rises significantly where the investigation process is protracted or followed by court proceedings.

MI Operational Command Unit (OCU) is centrally located in Coventry within West Midlands Police and contains three residential sectors where domestic burglary is a particular problem. The area with the most significant problem is Beat 37 in the Hillfields Sector, sustaining 16% of the total burglaries of people's homes committed on the command area.

Local partnerships between the Police, Coventry City Council and other agencies have taken the form of Area Coordination. "Sector Policing" has been developed in West Midlands that aims to deliver service and accountability locally in order to improve the quality of life for Coventry residents. One example of this has seen the development of a

¹ Net loss + (volume of property + value of property damaged + loss of earnings + other costs) less recovered property and insurance payments

² Estimated costs of supplying:
New front door £378.96
A rear door £421.69
- A Mortice Lock £ 39.49

Data supplied by Coventry Crime and Disorder Audit 1999

Concierge System, based on Easterhouse in Glasgow which has seen substantial investment in refurbishment, additional security staff and high quality CCTV installation around a high rise flats complex in the Hillfields district. This area has long been associated with a variety of crime and disorder issues. Whilst improving the daily lives of residents, an emerging outcome of this has been the issue of displacement; of acquisitive crime from the flats complexes onto the adjacent areas.

Drugs misuse, as a contributing and significant 'driver for the commission of burglary, continues to establish itself. A strategic assessment of drug issues affecting West Midlands identified the most common substances to be heroin, amphetamine and cannabis. 50% of the identified volume crime hotspots are the same areas identified as sites of drug dealing markets and locations for drugs use. It is apparent that stolen goods are becoming tradable commodities; some burglars are exchanging stolen items directly for drugs, not cash.

Interviews with offenders confirm the link with drugs. Recent studies³ conservatively estimate that approximately 50% of arrestees reported using drugs within the previous 12 months. Furthermore, they believe that their drug use and criminal activities were connected.

³ Home Office Research Study 183 - Drugs and Crime: *the results of research on drug testing and interviewing arrestees* = Home Office 1998

Recent intelligence would suggest that the main substances of abuse within Coventry are heroin and crack cocaine. Overall, these trends suggest that if the burglary problem is to be tackled effectively, the illicit drugs issue cannot be ignored. A case study will further illustrate this link. (See page 22)

It is recognised that

"any attempt to tackle the problem of unsafe communities requires an analysis of the causes of such problems and some notion of what might work in addressing them and why. It is not possible to identify single solutions that work in most settings... What are needed are intelligence processes that identify problems and define remedies and methods of local evaluation."

(Safety in Numbers - Promoting Community Safety - Audit Commission 1999).

Repeat Victims

It is acknowledged that domestic burglary can occur at any time, on any day and throughout any week of the year. The offence is disturbing, often incorporating the theft of property in addition to trespass and, for many, long-lasting traumatic effects. A victim (person, place) is more likely to be victimised again than someone or somewhere that has not been victimised. Where 'repeat victimisation' occurs, it is likely to happen very

quickly, consequently the "high risk" period declines over a period of time. However, there are certain trends that can be identified, as with any type of offence that may occur on the M1 OCU.

Pilot Study data

The burglary trends documented below are initial results of a twelve-week pre-cursor, pilot study of domestic burglary on the M1 OCU in Coventry. The following are key features for further analysis:

- - 92% of properties targeted do not have alarms
 - 55% of offences were committed during darkness
 - 45% of offences were committed during daylight
 - 76% of properties had public access to the rear
 - 29% of properties have enclosed rear boundaries
 - 59% of offences committed involved illegal entry at the rear of the property
 - Forensic scene examination reveals that 52% of offences were committed using a sharp instrument
- 43 victims were repeat victims from a total of 193 burglaries on Burglary SDP Project area, Beat 37, between **1.4.98-31.3.99**

Coventry Crime and Disorder Reduction Strategy devised by police, City Council and local partners, have developed, *inter alia*, two strategic objectives that provide further contextualisation for a problem-solving approach to burglary. They are:-

- 1. To reduce the level of Burglary by 5% per annum ⁴**
- 2. To have no more than 10% Repeat Victims of domestic burglary per annum**

Against this framework, Figure 2, below sets out a starting point.

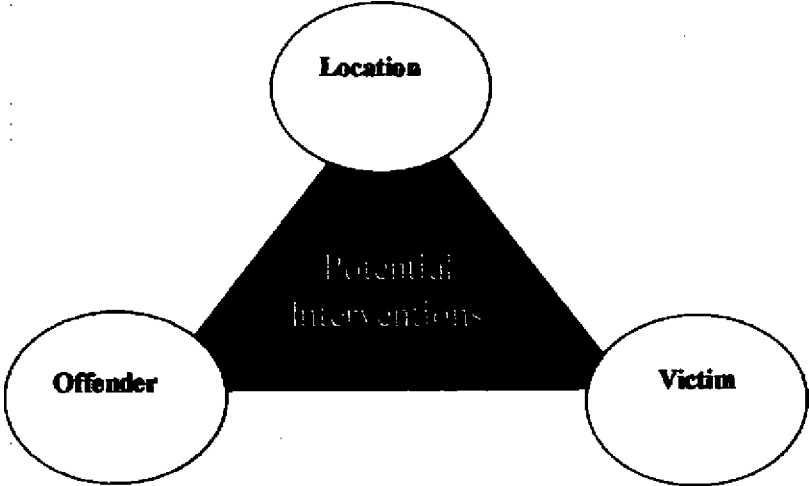


Figure 2 — Problem-solving triangle; potential interventions

Obtaining Detailed information

Data has been collected from West Midlands Police Crime and Incident Systems. However, the type of data available from the conventional Crime Report often hindered rather than contributed to, the analytical process. Existing records have therefore proved to be inadequate. Accordingly in order to support the concept of a preventive process, additional data is being collected.

The means of additional data capture has been the use of a questionnaire developed by Cleveland Constabulary in an attempt to provide a burglary analysis decision support system. The questionnaire is being used to collect data, following up the initial burglary report. It draws upon crime scene behaviour and characteristics using a total of 88 variables. The process of "analysis" is, therefore, a continuous one.

(See also P;fii ..)

Analysis and Interpretation of the Data

There are two main components of crime analysis. The first draws upon the assumption that burglaries are not totally unique, isolated and random events. Rather that they can be combined into sets sharing common features. In such a way distinct patterns may be determined. These may emerge as clusters of time, place, types of property or victims.

⁴ Force target locally agreed in Coventry. However, having been awarded Strategic Development Project (SDP) focusing on concentrated and integrated activities on one beat, we

Once identified the patterns may be targeted by appropriate preventative measures.

The second considers the patterns of offending and seeks out the wider implications and issues. In such a way the general trends may be identified. For example, in the Hillfields sector of M1 OCU a "hot-spot" was identified at Singer Hall, owned by Coventry University and occupied by students as a hall of residence. A crime prevention survey established a susceptibility to offenders 'climbing' the drainpipes to enter the building. An action plan now involves 'anti-climb' devices and the development of CCTV protection.

STRATEGIC FORMS OF ANALYSIS:

- **Crime Pattern Analysis** has attempted to form a picture of the nature and scale of crime in a particular area. The size of the area, or the type and number of crimes examined, varies. Descriptive, or inferential statistics are used for analysis, which may be supplemented by qualitative material.
- **General Profile Analysis** is being used to identify typical characteristics of perpetrators of certain crimes. There is no set method for this general profile analysis, which tends to involve the combination of judicial information with information from 'human sciences, experience, and common sense, in order to arrive at useful principles for police practice'. This type of analysis may focus not only on the offender, but also on the likely victim.
- **Crime Control Methods Analysis** techniques are being used to learn from the experience gained with techniques and tactics used during previous police actions to

would hope to achieve a 30% reduction within this specified area by March 2000.

establish their future usefulness. For example, a continuing emphasis seeks to develop Neighbourhood Watch. Regular meetings are convened in the Tile Hill sector to reassure recent victims (in, say the previous month). The focus of these meetings is upon reassurance, community vigilance (e.g. "cocoon watch") and the establishment of new NW schemes. In the Coundon sector, 'Contact Patrol' techniques concentrate on regular personal visits by local sector officers to Scheme Coordinators.

OPERATIONAL FORMS OF ANALYSIS:

- + **Case Analysis** attempts to establish the course of events immediately before, during, and after, a serious offence. This involves charting a chronology of a relevant individual's activities (offender, victim or witness). The evolution of the chart, particularly the existence of any areas of confusion or uncertainty, indicates areas for further analysis.
- **Comparative Case Analysis** seeks to detect similarities between crimes that point to the same perpetrator or groups of perpetrators.
- **Offender Group Analysis** aims to provide all available information on contacts between certain individuals contained on police records, and connect this to their possible involvement in criminal activities. In this type of analysis a number of diagrammatic techniques have been used; relational diagrams, event charts, activity charts and flow charts for money and goods.
- **Specific Profile Analysis** which involves constructing a hypothetical picture of the perpetrator of a crime on the basis of data from the scene of the crime, witnesses' statements and other available information. This type of analysis is perhaps more

commonly known by the term 'Offender Profiling' and forms a central plank of the preventative strategy.

- **Investigations Analysis** involves the study and evaluation of activities that are undertaken within the context of an investigation, with the aim of rounding off that investigation and of identifying courses of action that have not been pursued (Minnebo, 1992 (1)). Examples of this technique have included looking again at burglary scenes where 'fingerprint lifts' failed to reveal the identity of the offender; the quality of the 'lifts' resulted in insufficient detail to identify by fingerprint evidence. A number of these cases are now being exposed to "super-sensitive DNA" which may produce a DNA profile of the offender from the sweat secreted in the fingerprint impression.

Scanning and **analysis** have laid the foundations of *problem definition*. In turn, a number of objectives have been developed specifically to shape the **response** to the problem before an **assessment** can be made of effectiveness.

1. Devising Preventive Strategies

Why. ...The purpose of carrying out the crime analysis process has been the development of preventive measures that are appropriate. The use of **situational** and **community** crime prevention methodologies have formed the basis for these and the following, having been shown to be effective in reducing crime⁵, are where further work will be concentrated.

- Targeting repeat offenders
- Targeting repeat victims
- Police patrols directed at 'hot spots'

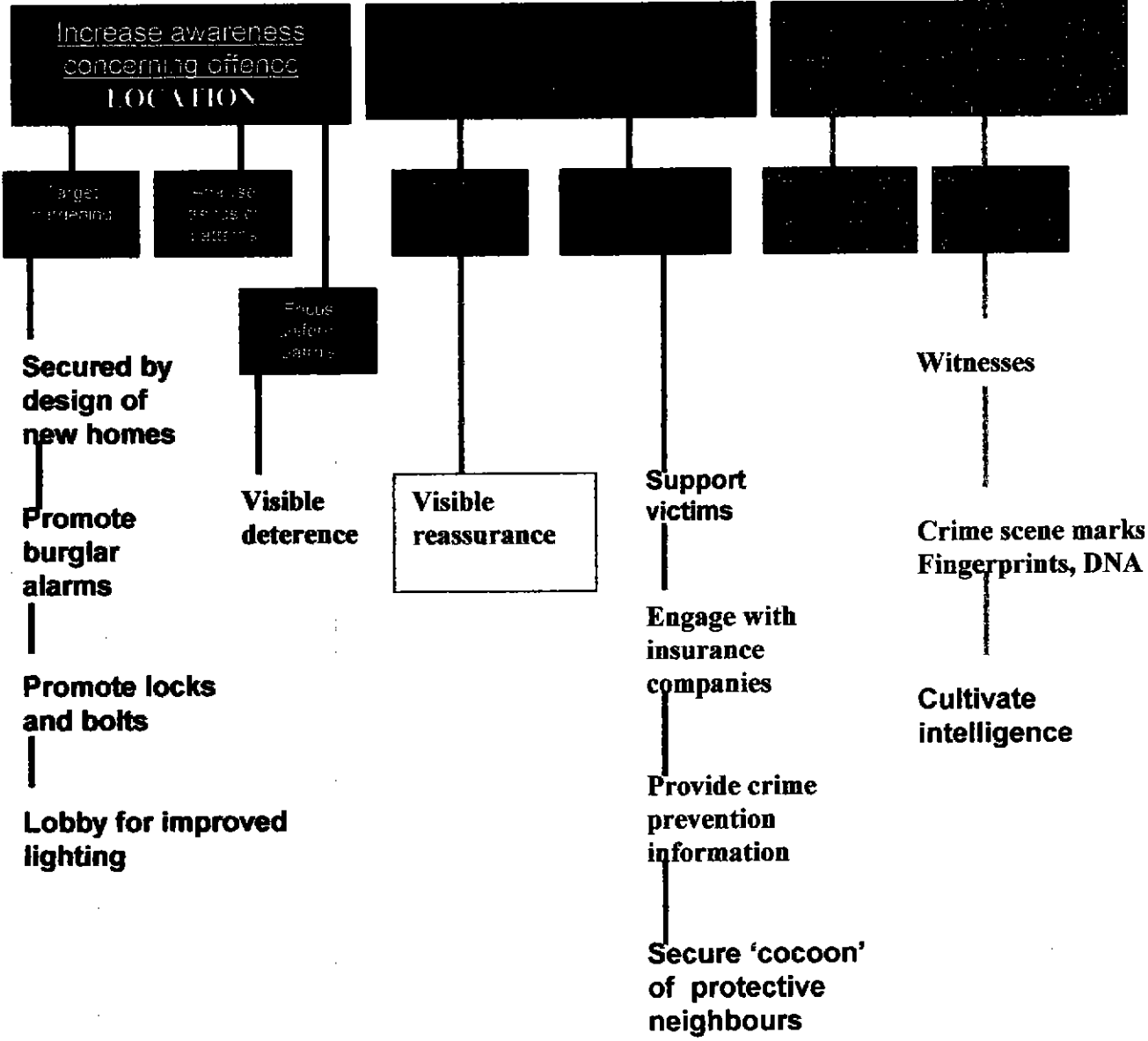
Crime prevention is an ongoing, evolving and iterative process. Therefore, specific findings resulting from analysis, feed the development of a preventive strategy.

Accordingly, the strategy is being modified and monitored as part of an ongoing process.

How. is described overleaf, in Figure 3.

⁵ Home Office Research Study 187 - Reducing Offending: an assessment of research evidence on ways of dealing with offending behaviour = Home Office 1998

Reduce levels of recorded burglary



**Figure 3 - Devising Preventative Strategies
A Hierarchy of Objectives**

The activities in support of the objectives concerning 'Location' are rooted in the local partnerships developed between sector policing, Area Coordination and others (e.g. Coventry & Warwickshire Community Safety Scheme).

2. To enhance the quality of information collected to support analysis;

Why; The current West Midlands Police recorded crime processes are not always the most effective for analysis purposes. An inadequate information base leads to the results of analysis being incomplete. However, there are a number of differing approaches that have been adopted in order to discover whether an enhanced quality of information can improve analysis.

Research suggests that special data collection exercises which have the desired effect can be implemented as an alternative routine process. A specialised data collection exercise can involve "an experimental extension of existing recording procedures" (Ekblom, 1988). The initial purpose of Crime Reports was merely to document the crime and thus not designed with analysis in mind.

How; The information collated from the Cleveland burglary proforma is geared towards analysis and involves a more accurate summary of the offence. Research from various different disciplines (i.e. social sciences) concerned with offender profiling have discovered the importance of information regarding the victim, offender and location and these factors underpin the problem-solving triangle. The pilot project previously referred

to ran between January -- April 1999. The data set of two hundred and fifty domestic burglary scenes is now being evaluated (See also Objectives 3 & 4)

3. To identify the most effective coding framework procedure to support crime analysis;

Why; The analysis process involves simplifying the data in preparation for analysis.

However, data should not be reduced to such an extent that the uniqueness of the offences is eliminated. The framework for coding involves conversion of data from one perhaps complex form into another more simplistic form. This process involves the creation of categories from variables that have been generated from the raw data.

How; it is intended to produce an effective coding framework using the Cleveland System. Currently, the Cleveland System involves the conversion of the raw material from the 'proforma' into workable variables when input into the computer. An evaluation of the coding framework will identify whether it is a reliable in an operational environment, or whether it needs improvement.

4. To identify the effectiveness of the Cleveland System for the burglary problem on MI;

Why; The Cleveland System, involving a Burglary Dwelling Behavioural Analysis Database, is a new innovative system developed to improve the analysis functions regarding domestic burglary. The system appears to have the potential to link similar

crimes together, identify suspects or simply identify the occurrence of a piece of behaviour resulting in preventative measures being defined.

The robustness, reliability and validity of the system is not yet apparent as there is currently no published literature. Therefore, a process of evaluation will ascertain the effectiveness of the system and whether some form of adaptation is required in order to make it an effective system for the West Midlands Police.

How; The Cleveland System will be subjected to rigorous testing regarding its validity and reliability. Through *the use of* statistical analysis (e.g. *Factor Analysis* and *Linear Regression*) the profiling concepts will be put under scrutiny in order to discover whether such classifications are beneficial or detrimental to analysis. Also, it should be possible to identify to what extent the system links similar crimes and identify suspects.

5. To enhance the contribution of Forensics to the reduction of burglary;

Why; The development of DNA and other scientific techniques make the recovery of evidence from the crime scene paramount. It is believed that correct utilisation of information regarding forensics would greatly enhance analysis and provide the evidential basis for potential patterns within the data, and provide the lead towards detections.

How; Testing the link between intelligence and forensics in one database may enable correct utilisation of better quality information for analysis; more effective intelligence is key to enhancing the proactive role of the police. A co-ordinated multi-agency and

s partnership approach has defined strategies for burglary and crime reduction strategies, as shown in Figure 3, ante).

Databases currently exist for fingerprints, DNA, SICAR and tool marks. The effective use of these resources and forensic analysis will enable links to be made between offenders and **scenes or, alternatively, of scenes-to-scenes links.**

6. *Reduce the probability of repeat victimisation among those who have had their house burgled;*

Why; As previously mentioned in the Scanning section, the concept of 'repeat victims' is a vital one. Using data gathered in respect of the area subject of an Home Office SDP bid, it was established that from a total of 193 burglaries on Beat 37 between 1.4.98-31.3.99, there were 43 'repeats'.

How; The role of the Scene Assessor devotes time and care towards the victim point of the triangle. It includes the following:

- To provide a quality service through time with, and care of, the victim.
- To deliver practical advice and a pre-prepared package of crime prevention material, including the West Midlands Police "Know your Home" booklet.
- To assess the scene in order to preserve physical evidence, effectively targeting scenes of crime specialists towards 'productive' scenes.
- To carry out door to door enquiries and instigate "Cocoon Protection" of the victim to prevent 'repeat victimisation'
- To identify 'real time' crime patterns for subsequent computer analysis, specialist crime prevention, Neighbourhood Watch co-ordination, and patrol deployment strategies

(See also hierarchy of objectives, Figure 3, and Crime Control Methods of Analysis, ante)

Even though fear of crime is high, a repeat victim of crime will be more susceptible to adopting preventative measures. Therefore, by targeting repeat victims with advice on crime prevention methods such as home security surveys and issuing property marking pens and stickers should lead to a decline in the repeat victim rate. Data already gathered during the 'pilot' has shown that 92% of houses targeted for burglary did not have alarms fitted, making them more attractive to a burglar. A partnership approach is being developed for the provision of such alarms at much reduced prices,

Whilst involving a repeat visit to the burglary scene, the Scene Assessor completes the 'proforma' and gathers additional information whilst imparting practical advice concerning crime prevention. A dedicated member of civilian staff has performed this role during the pilot study and, effectively, restores the concept of Scene Assessment from a previous working model. 'Customized training' was provided to this member of staff by the collaborative efforts of Forensic Science Service and West Midlands Police; Scenes of Crime Department and the Senior Force Analyst.

Additionally, the role of **MI** Crime Prevention Officer is to maintain liaison, networks and meetings between City Council Area Co-ordination Community Safety Officers and communities. The Coventry and Warwickshire Community Safety Scheme is actually based locally in Hillfields area of Coventry. Additionally, they adopt an 'open door' policy offering a fully confidential advice service.

The evaluation process is a vital component, without which it is not possible to determine:

- The impact upon domestic burglary levels
- Whether the approach is a valid one
- Which, if any changes/modification need to be adopted.

A formal process to assess and evaluate the objectives is being finalised and will rely on performance measurement techniques. These will focus on identifying and measuring:

- Changes in crime rates
- The potential for side effects (e.g. 'displacement' issues)
- Cost effectiveness

Additionally, Home Office consultants will evaluate the approach. The "Sector Policing" Model will underscore regular meetings of both steering and user groups and will provide on-going assessment and adjustments.



The problem-solving triangle has been used to develop a model reducing burglary.

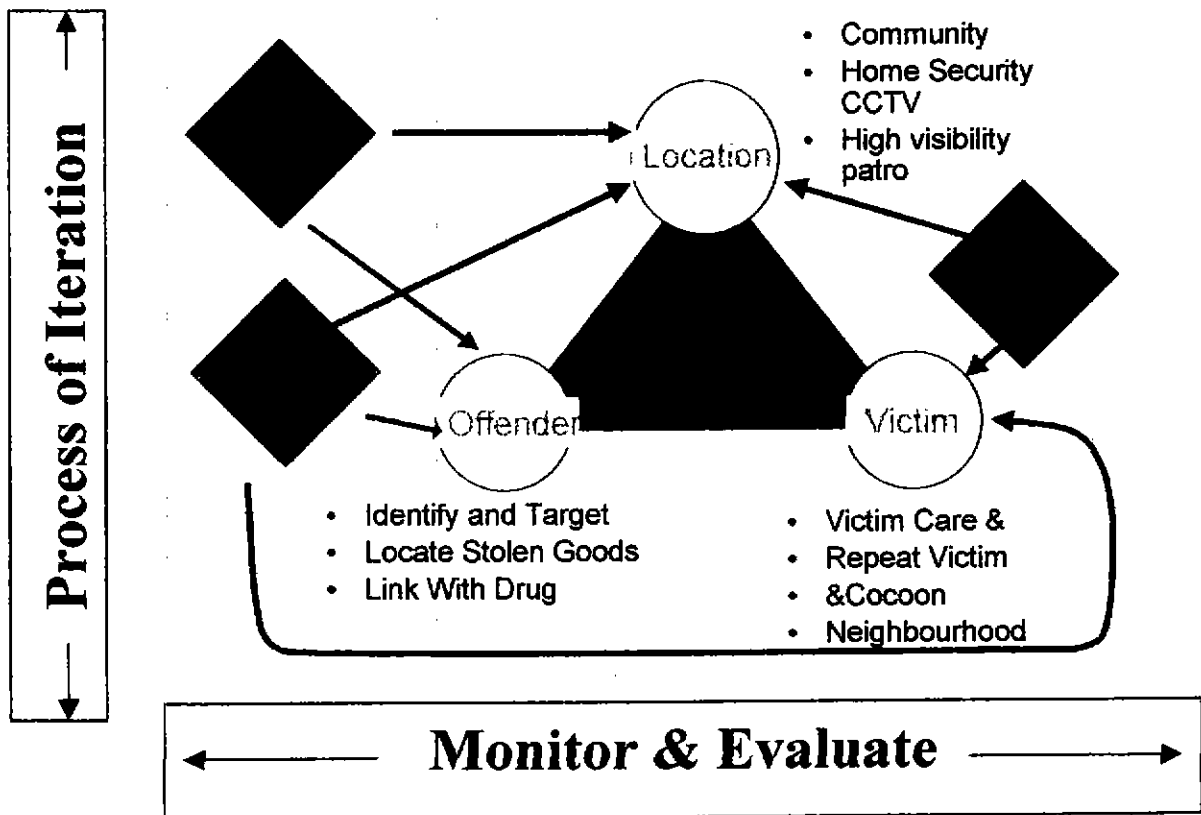


Figure 4 – Model of Problem-solving approach to burglary

Within the model there is the recognition that:-

"Tackling burglary effectively requires an integrated, strategic approach that acknowledges that reaction to the last offence is proaction to the next. Any shift towards more proactive policing should incorporate an increased emphasis on crime prevention". (The PRG Burglary Manual - Home Office Police Research Group 1996)

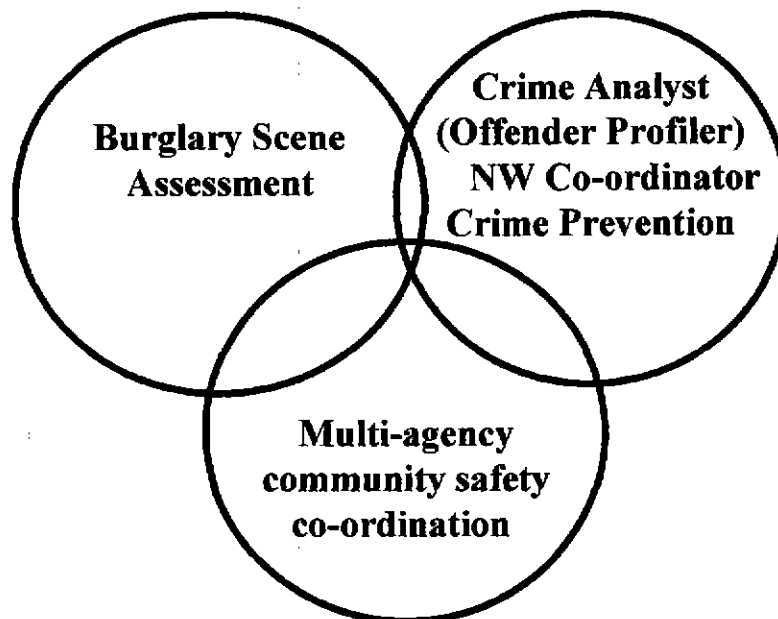


Figure 5 – Model of Integrated and Strategic Approach

"Joined up" Crime Prevention Strategies"

Coventry Drugs Action Team (DAT) have developed a 'Drugs Arrest Referral Scheme' at M1 OCU, whereby a Drugs Worker is on hand at the Custody Suite to provide information and 'gateway' referral to drugs and health agencies. The data collected by the Drugs Worker, containing number of arrestees with drug misuse, the type of drug and numbers of those using the service, will evaluate the effects of this parallel strategy in conjunction with the Burglary data collection. See Summary of Drugs Arrest Referral data in Appendices.

It has been documented that "the implementation of preventive measures requires a great deal of commitment, coordination and perseverance".

(*Crime Prevention Unit Paper 10 - Getting the Best Out of Crime Analysis - Ekblom - Home Office, 1988*)

However, crime analysis and crime reduction/prevention are not new tasks or concepts for the MI OCU. The approach outlined offers opportunities for preventive measures to be devised, improved and assessed within a new and evolving framework.

Fundamental to this approach of crime prevention/reduction is a firm commitment towards ongoing cost/benefits analysis both in economic and social terms. For example,

it is not forgotten that for every £1 invested in burglary reduction, a minimum of £1.80 may be saved⁶.

CASE STUDY

FROM BURGLARY TO MURDER

On Saturday 8 August 1998 in the early hours of the morning, Amelia Rennie, a frail old lady was brutally murdered whilst in her bed at home.

The offender, Matthew Garlick forced entry into her downstairs flat through the rear bathroom window. He searched the property for money, entered the victim's bedroom and because she woke up, he brutally attacked her about the head with the tyre lever he had used to gain entry:

Garlick was arrested after a nearby burglary dwelling at his parents' house was subsequently linked to the offence at Amelia Rennie's flat, by Detectives recognising the fact that the two properties had been entered in an identical manner, using a tool which had left marks on both windows forced:

Forensic analysis subsequently proved the same tyre lever had been used and footwear imprints found at the scenes matched the offender's. .

The offender was a young white male with a heroin addiction, who later admitted, and was identified as, being responsible for a dozen burglary dwelling offences of a similar nature, using the tyre lever to gain entry.'

This case study emphasises the value of Scenes of Crime and Forensic Analysis, awareness of the drugs issues and psychological aspects of targeting, that offender profiling techniques may be capable of predicting.

The difference between burglary and murder is often small and impulsive.

[3,900 words]

⁶ Estimated costs and benefits obtained in situational prevention studies - Reducing Offending: an assessment of research evidence on ways of dealing with offending behaviour - A Research and Statistics Directorate Report - Home Office 1998