Research on the effectiveness of Police practice in reducing residential burglary Report 3

Literature Review: Police Practice in Reducing Residential Burglary

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Surveys of Household Burglary part one (2002): Four Police Areas and national data

T	compared, Dr Sue Triggs, Ministry of Justice, 2005.
Report 2:	Surveys of Household Burglary part two: Four Police Areas compared between 2002 and 2004, Dr Sue Triggs, Ministry of Justice, 2005.
Report 3:	Literature review: Police practice in reducing residential burglary, Dr Sally Harvey, Ministry of Justice, 2005.
Report 4:	Case study of the Manurewa Police Area, Karen Johns, Ministry of Justice, 2005.
Report 5:	Case study of the Rotorua Police Area, Tanya Segessenmann and Karen Johns, Ministry of Justice, 2005.
Report 6:	Case study of the Lower Hutt Police Area, Alison Chetwin and Helena Barwick, Ministry of Justice, 2005.
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Report 10:	Overview: Research on the effectiveness of Police practice in reducing residential burglary, Alison Chetwin, Ministry of Justice, 2005.

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Report 1:

Foreword

Burglary is a problem that considerably affects many New Zealand households. From victimisation surveys we know that it can have a profound effect on victims and that householders are concerned about it. Burglary is also costly both to government and to the New Zealand public. Reducing burglary is a key priority in government's Crime Reduction Strategy and an important outcome for the justice sector.

Although recorded burglary rates show a declining trend since the late 1990s, there is considerable room to achieve further reductions. The extensive research published here helps us understand what strategies might be effective in which contexts, as well as the reasons why they are effective. The research has revealed a wealth of practical and workable strategies and initiatives that can be shared from one Police Area to another.

The research project is the result of a highly productive collaboration between the Ministry of Justice and New Zealand Police. We are grateful for the substantial funding support for the project provided by the Cross Departmental Research Pool (CDRP) administered by the Foundation for Research, Science and Technology. In the spirit of the CDRP, it has been an excellent example of cross-departmental research on a subject of high priority to government.

The real commitment of the New Zealand Police to reducing crime is evident throughout the ten reports of the Burglary Reduction Research Programme. This substantial series of reports is published to be used in part or in its entirety by front-line Police, as well as managers, advisers and policy makers, all of whom play a variety of roles in the wider justice sector in the effort to reduce burglary.

Belinda Clark Secretary for Justice

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Abbreviations

BCS British Crime Survey

CAPS Chicago Alternative Policing Strategy

CCTV Closed-circuit television

CPTED Crime prevention through environmental design

CSE Crime Scene Examiners FGC Family Group Conference MRA Market Reduction Approach

NAFIS National Automated Fingerprint Identification System

NIM National Intelligence Model

NZNSCV New Zealand National Survey of Crime Victims

OCR Operation and crime review
POP Problem-oriented policing
RBI Reducing Burglary Initiative
RISE Reintegrative Shaming Experience

SARA Scanning-Analysis-Response-Assessment

SBD Secured by design SSU Scientific Support Unit

Executive summary

This literature review summarises the findings of international studies of what works in police practice to reduce residential burglary, drawing largely on the outcomes of research in the UK, the US and Australia.

Residential burglary is one of the most common crimes, of great concern to the general public as reflected in crime victim surveys, and regarded as a major problem by police forces studied in the literature. Internationally there has been an increasing adoption of proactive policing with considerable research effort aimed at evaluating the effectiveness of crime prevention approaches. As part of this evaluative effort, the question 'what works?' has been applied to initiatives to reduce residential burglary.

International research has established:

- the increased frequency of burglary in particular locations ('hot' spots)
- the increased risk of burglary for certain types of households (for example, those in rented accommodation, low-income households, or those who have recently been burgled—'hot' victims)
- the targeting of particular types of items ('hot' property)
- the high rates of property offending by a small group of prolific burglars ('hot' offenders).

These findings provide the basis for targeted burglary reduction strategies in an approach known as situational crime prevention. This involves analysing crime problems with a view to reducing opportunities for offending through location-focused, victim-focused, property-focused or offender-focused interventions.

The literature contains strong evidence of the effectiveness of burglary reduction strategies targeting 'hot' locations, 'hot' victims, and 'hot' offenders and supports initiatives targeting 'hot' property.

Location-focused interventions

Interventions for reducing burglary at the level of location are aimed at reducing the opportunities for burglary by increasing guardianship of the area, by reducing the likelihood that offenders will locate suitable targets and by increasing the effort and risks for potential offenders.

Research shows that where police have focused their attention on a burglary 'hot' spot
they have been able to make significant reductions in the local burglary rate.

- Crime prevention through environmental design (CPTED) has contributed to the success
 of location-focused burglary reduction initiatives. Changes to environmental and building
 design, for example by improving street lighting or fencing, reduce the opportunities to
 offend. Careful housing design has been shown to significantly reduce the incidence of
 recorded crime on both new build and refurbished housing estates in the UK.
- The effectiveness of community policing approaches to reducing crime is less certain, in part because the range of initiatives labeled 'community policing' is very diverse and includes community patrols, local storefront offices and community meetings. Experience in Chicago suggests that a community policing approach can involve residents in high-crime areas in effective crime prevention initiatives in ways that Neighbourhood Watch fails to do.

Victim-focused interventions

Interventions for reducing burglary at the level of the targets, or victims, of burglary include those aimed at: target hardening properties likely to be selected as targets by making entry for potential offenders more difficult and more risky; increasing perceived guardianship of houses; and decreasing opportunities to offend.

- The research literature provides strong evidence that encouraging victims and the public to take simple security actions, such as locking, lighting and liaising with neighbours, is likely to reduce risk of burglary.
- Target hardening programmes aim to prevent burglary by improving the security of households identified as likely burglary targets. Recently burgled households are often the focus of these programmes, but this approach may also include other vulnerable types of households (for example, new residents, solo parents, young people and students, or those living in rental accommodation). Although improved security is effective, target hardening programmes alone may not reduce the overall burglary rate in an area. This can be achieved only if at-risk households can be accurately identified and appropriate measures to decrease their vulnerability can be delivered. Situational approaches may be required in addition to improved security measures.
- The contribution of Neighbourhood Watch schemes to reducing the burglary rate is uncertain. Given the broad range of activities of the groups, the variation in implementation and diversity of neighbourhoods, it has proven difficult to evaluate Neighbourhood Watch as a 'standard package'. Studies show that groups are difficult to initiate and maintain in areas with high crime rates and are most frequently established with the widest participation in relatively affluent areas with already low crime rates.
- Provision of initial victim support by the police giving security advice or assessments does
 much to reduce fear and increase feelings of safety following burglary. Prompt referral to
 victim assistance services ensures support for those who require further assistance to
 restore their sense of security. Interviews with burglary victims show that their
 satisfaction or dissatisfaction with police responses is shaped more by police servicerelated and attitude-related issues than by case outcome-related issues. The weakest area
 for victims is a lack of information on case progress.

Property-focused interventions

Property-focused strategies aim to interrupt the market for stolen goods, increase the probability of detecting those distributing stolen goods, and make stolen items more easily identifiable by property marking and recording serial numbers.

- Coordinated strategies to interrupt markets are recent developments in burglary
 prevention initiatives internationally and market reduction trials have been promising.
 This research shows that these strategies are highly dependent on intensive intelligence
 gathering and analysis to map the local property markets accurately. Overall the evidence
 suggests that liaison with second-hand dealers and mapping of property markets are
 worthwhile components of comprehensive burglary reduction strategies.
- Property marking has been shown to have a limited deterrent effect and the chances of marked property being recovered are very slight, in part because of the very limited uptake of this practice.

Offender-focused interventions

Offender-focused interventions aim to prevent 'motivated offenders' from reaching 'suitable targets'. These include actions that make it harder to offend and increase the risks for offenders, for example through the more traditional policing approaches of enforcement, detection and incapacitation. Offender-focused interventions also include programmes aimed at decreasing the motivation to offend among both those who are already offending and those who are at risk of becoming offenders. However, the implementation of effective strategies to reduce to the pool of motivated offenders is one of the most challenging areas for burglary prevention initiatives.

- Targeting known offenders has been an effective component strategy in a number of successful burglary-reduction initiatives.
- Evaluations of the effectiveness of bail curfews, and of enforcing them, were not found in the international literature.
- The way young people are dealt with by police processing and other criminal justice procedures impacts on the likelihood of future offending.
- There are a number of contributory risk factors to youth offending, established through rigorous research. Reference to these can assist in identifying those young people who come to police attention who may go on to become persistent offenders.
- Specifically targeted programmes to reach at-risk youth and their families can cost-effectively reduce criminality.
- Arrest seems to have little positive impact on reducing youth reoffending, and can actually increase youth offending. Cautions can be effective deterrents for first offenders.

- Conferencing processes based on restorative justice principles can lead to a modest reduction in reoffending when compared with court-based processing, particularly where offenders express remorse and perceive that they have been fairly treated.
- Research strongly suggests that all criminal justice processes are more effective at reducing reoffending when combined with appropriate rehabilitative interventions.
- Offender treatment programmes can reduce the likelihood of future reoffending and the principles of effective programmes for both young and adult offenders are wellestablished by research.

Police organisation

The broad conclusion on policing effectiveness is that police have made a significant impact on crime where they have adopted locally relevant tactics within a strategic framework tailored to the crime problem being addressed and to the local conditions. This requires local crime audits, good intelligence systems, strategic management of burglary prevention initiatives, monitoring of performance, and the ability to respond creatively to a constantly changing crime picture.

- Effective crime reduction strategies focusing on targeting 'hot' offenders, 'hot' victims and 'hot' spots rely heavily on the use of intelligence and crime analysis to identify *who* and *where* these targets are. Using intelligence well requires organisational structures that bring key decision-makers together to consider and use intelligence products to formulate and action effective crime reduction strategies.
- Problem-oriented policing (POP) is effective where it has been well implemented. It is a
 demanding approach that requires an in-depth understanding of all the factors that have
 brought offenders and victims together before the development and implementation of
 specifically tailored responses. These responses may involve other partner agencies and
 go beyond traditional offender- and offence-focused policing practices. The approach
 also requires rigorous assessment, evaluation and learning from what worked and why.
- Many of the initiatives that have positively impacted on the burglary rate have employed special squads focused on burglary or on particular aspects of a strategy targeting volume crime. There are arguments for and against the formation of specialised burglary squads.
- The success of burglary investigations is determined by the quality of investigative actions taken by the first officers on the scene, by the timing and management of forensics staff involvement, and by effective screening and allocation of cases for further investigative action. Investigative processes are highly complex with a number of interdependent processes that are facilitated by establishing systematic routines for each process where possible.
- Fingerprinting and DNA matching technology have yet to be rigorously evaluated in terms of their effectiveness in identifying burglary offenders. However, there is evidence that forensic tools offer gains in the resolution of burglary offences where samples can be obtained and matched, and where the identification evidence is available rapidly to the investigators.

Burglary reduction strategies

The crime prevention programmes that have most effectively reduced burglary have been those that have taken a problem-solving approach and initiated comprehensive multi-component strategies to deal with burglary both in the short term by targeting 'hot' offenders and 'hot' spots and protecting 'hot' victims, and in the long term by introducing burglary prevention measures to medium- to high-risk communities, often working in partnerships with other local agencies and community groups. Programmes with focused medium- to high-intensity interventions have given better outcomes than programmes where burglary prevention resources have been distributed more widely.

Crackdown and consolidation strategies appear to give longer-lasting results. In these strategies the gains from targeted policing of 'hot' spots and 'hot' offenders have been effectively consolidated by following up with longer-term burglary prevention interventions that effectively reduce the number of opportunities for offending in an area. Longer-term burglary prevention measures to reduce opportunity include area-wide environmental (CPTED) interventions and community action to protect vulnerable households, approaches that have proved more difficult to evaluate rigorously but where the weight of evidence supports their contribution to crime prevention.

Burglary prevention requires effective partnerships with other agencies and brings the challenge of establishing robust, trusting and open-minded multi-agency groups that meet routinely and are committed to collaborative action. Working out of collaborative partnerships is demanding and requires effective coordination, planning and project management, as well as committed organisational support and resourcing.

In summary

Proactive problem-solving policing works effectively to *reduce* residential burglary. *Preventing* residential burglary, however, requires a proactive problem-solving approach with committed wider community and local agency participation.

1 Introduction

This literature review summarises the findings of international studies of what works in police practice to reduce residential burglary, drawing largely on the outcomes of research in the UK, the US and Australia. Policing no longer focuses solely on the traditional reactive approach of enforcing laws, detecting crimes, and prosecuting offenders. Internationally there has been an increasing adoption of proactive policing and a considerable research effort aimed at evaluating the effectiveness of these crime prevention approaches. The question 'what works?' has been applied to burglary reduction initiatives as part of this evaluative effort.

This review begins with a brief summary of research into burglary, who is at risk and who does it, followed by an introduction to current theories of criminal offending and crime prevention. Together these inform current understandings of the possible points of intervention to reduce and prevent the occurrence of residential burglary—the locations or areas at risk of burglary, the burglary targets or victims, the property that gets burgled and the offenders themselves. Research evidence of the effectiveness of actions aimed at each of these points of intervention is then presented, followed by research into various approaches to police force organisation and resourcing. The review then considers some burglary reduction strategies that have applied multiple interventions, often in multi-agency partnership approaches, and some of the learning that has come out of these initiatives.

1.1 Burglary Research

Residential burglary is one of the most common crimes, of great concern to the general public as reflected in crime victim surveys, and regarded as a major problem by police forces studied in the literature.

Burglary occupies an important position in the spectrum of crime. As the statistics reveal, it is sufficiently common to touch many individuals and households yet it is also sufficiently serious to affect victims both financially and emotionally. (Tarling and Davison 2000—quoted in Mawby 2001, 15).

In New Zealand in 2004 burglary represented 14% of all recorded offences, and two-thirds of these were residential burglaries. Nationally, this was a rate of 90 burglaries per 10,000 population, but there was considerable variation in the residential burglary rate across different Police Districts, ranging from 34 per 10,000 population in Tasman to 120 per 10,000 in Counties/Manukau (New Zealand Police 2001). Crime victims' surveys show that fear of being burgled ranks high amongst people's concerns, and many think that burglary is a specific problem in their area (Morris et al. 2003).

1.1.1 Who gets burgled?

There is considerable information about who gets burgled derived from reported crime statistics, crime victim surveys, and studies with victims of burglary. Incidents of burglary are not randomly distributed; some areas and certain types of household are at greater risk.

The concentration of risk into particular locations is well-documented and researched. The overall household burglary rate in England and Wales in 2003–2004 was 3.2%, but 5.3% of households in inner city areas had been burgled in the last year compared to 1.9% of households in rural areas (Dodd et al. 2004). Ratcliffe (2001) showed that 25 Canberra suburbs out of just over 120 accounted for half of the residential burglaries reported to the police in 1999–2000. The 2001 New Zealand National Survey of Crime Victims (NZNSCV) found that 6% of households had experienced at least one burglary in the previous year and that those living in the main urban centres and in the Upper North Island were slightly more at risk of burglary than other New Zealanders (Morris et al. 2003). Twenty percent of the burgled households were victims of repeat burglaries and this 20% accounted for almost 40% of the offences disclosed in the survey.

Analysis of the regular British Crime Survey (BCS) reported that less than 1% of households in England and Wales accounted for 42% of all burglaries in 1999 (Budd 2001). This analysis, using 1996–2000 BCS data, compared burglary rates for households living in different types of areas. This work showed that, for example, areas with concentrations of Council flats with very high unemployment and many single residents had an elevated 23.2 incidents per 100 households as compared to the national average of 7.5 incidents per 100 households. Areas with multi-occupied terraced housing in multi-ethnic areas had 23.0 incidents per 100 households and residential areas of students and young professionals in academic centres had 19.7 incidents per 100 households. These findings link with multivariate analysis of the BCS data indicating that elevated risks of burglary are associated with particular factors indicating a 'type of household', factors such as:

- age
- household composition (with sole parents particularly at risk)
- employment status (with students and the unemployed at highest risk)
- income (with those on lowest income at highest risk and a slightly elevated risk for those on above average incomes)
- tenure type (owner-occupiers have a lower risk than those renting from either the public or private market).

Risk also varies by housing type, with detached housing at more risk than semi-detached housing, and blocks of flats at lesser risk of burglary.

High-risk locations can therefore be understood as being areas where households with many of these risk indicators are clustered together. For example, those with low incomes, the unemployed or sole parents are more likely to live in rental accommodation, and rented properties are less likely to have adequate security measures installed than owner-occupied properties.

The 2001 NZNSCV reveals a similar pattern of household risk to that described above (Morris et al. 2003). In an analysis of the 6% of households burgled in the previous year, those living with flatmates, those living with extended family and solo parents were more likely to be burgled than other groups (e.g. couples with children and those living on their own). Students and those living on benefits were burgled more frequently than other income groups. Owner-occupied residences were at less risk of burglary than rental accommodation, and those renting privately or from Housing New Zealand were at greater risk than those renting from local authority councils. Pacific peoples seemed to be most at risk.

The risk of becoming a victim of burglary therefore varies considerably, not only by area but also by household characteristics.

1.1.2 Who burgles?

Who burgles and why are reported less confidently. This caution results partly from the concern that, with only 10–15% of reported burglaries solved, the burglars identified for interviews may be atypical and more representative of the unsuccessful ones. Research on burglars has mostly used offenders on probation or in prison as the sample base, and often does not include juvenile offenders, although it is known that burglary is typically committed by young males. And offender research has tended to consider offenders in general, rather than focus on those committing a specific type of offence such as burglary or property crimes.

However, as a generalisation from the following random selection of studies, burglary offenders are frequently young, male, unemployed and living in subsidised housing. Many are regular, and sometimes prolific, property offenders. Many are substance abusers or users.

- In a study of the criminal careers of New Zealand burglars, an estimated 5% of the population cohort studied had a burglary conviction. Of this group of burglary offenders:
 - 44% had one conviction
 - 36% had 2–5 burglary convictions
 - 10% had 6-10
 - 9% were prolific burglary offenders with more than 10 convictions (Triggs 2000).

The peak age for burglary convictions was 15. Prolific offenders were more likely to:

- be male and of Maori ethnicity
- start their offending younger and have longer criminal careers
- have higher rates of offending (number of charges per year)
- have more convictions for offences other than burglary.

While persistent burglary offenders had convictions for other offences, these tended to be for other property offences such as theft, vehicle conversion and receiving stolen goods.

• As part of the Kirkholt project (Forrester et al. 1988), 76 offenders who were convicted of residential burglary in the project area in the first six months of 1986 were interviewed. Most were male (95%), rented council accommodation (95%) and were unemployed (70%). The modal age band for the group was 21–25, with seven juveniles in the sample. Of the group interviewed, 15 (nearly 20%) claimed to have committed fifty or more burglaries up to the time of their present conviction.

• Cromwell, Olson and Avary (1991) interviewed 30 active burglars in a Texas metropolitan area who were recruited by snowball sampling initially from 3 informers identified though local criminal justice agencies. Members of this group were, by definition, active and committing at least two burglaries per month. Their sample was 90% male, ranging from 16 to 43 with a mean age of 25; all were drug users.

- A group of 232 burglary offenders was apprehended in Canberra during the four months of Operation Anchorage in 2001:
 - 82% were male
 - 33%were under 17
 - 63% were aged between 16–29 (age range from 10 to 53)
 - 55% had substance abuse issues
 - 73% were unemployed
 - 49% lived in government housing (Makkai et al. 2004).

Most of the group had other charges on their records, with an average of 27 charges per offender, and 60% of these charges were for property offences.

Inasmuch as there is a 'typical burglar', there is also the suggestion that there is a degree of specialisation in a particular type of crime; burglary offenders tend to commit other property crimes—burglaries, shoplifting, or theft from cars (Triggs 2000; Mawby 2001). Those apprehended during Operation Anchorage had primarily committed property offences, but were also occasionally charged with violence-, drug- and traffic-related offences (Makkai et al. 2004). Only 15% had solely been charged with a property offence and for many their first arrest was during Anchorage, suggesting that they were in the early stages of their criminal careers.

Recent research by Schneider (2003) interviewing property offenders found that 88% of them were also shoplifting regularly to earn extra money and to obtain goods that they were not able to obtain through burglary. This research questions the notion that shoplifting is a relatively harmless crime of young people who will not persist in their offending, and shows that prolific and persistent burglars may also engage in shoplifting during their criminal careers.

Burglaries are committed primarily for financial gain, although it has been reported that some first offending occurs out of boredom and influenced by friends (Cromwell, Olson and Avary 1991; Wright and Decker 1994; Mawby 2001; Palmer, Holmes and Hollin 2002; Hearnden and Magill 2004). The money is used to fund a lifestyle that tends to include drug use, but may also be used to cover general living expenses, debts and, in some cases, gambling. The 'income' from burglary can be considerable: a 1998 NSW offender study reported a median income of \$2000 a week, with 80% spending some or all of the money on drugs, and a median expenditure of \$900 per week by drug users on drugs (Stevenson and Forsythe 1998).

There has been some debate about the association between drug use and burglary, even though one of the major disposal routes for stolen goods has been found to be to exchange goods for drugs (Cromwell, Olson and Avary 1991; Wright and Decker 1994; Stevenson and Forsythe 1998; Mawby 2001; Palmer, Holmes and Hollin 2002; Hearnden and Magill 2004). Offender interviews in the US and the UK have found that most of those who were now burgling to buy drugs had committed their first burglary before they became regular drug

users, but as their offending generated more income, more was spent on drugs (Cromwell, Olson and Avary 1991; Hearnden and Magill 2004). In the NSW study, only 7% of adults and 12% of the juvenile sample did not use drugs (Stevenson and Forsythe 1998). There is therefore a well-established link between burglary and drug use—but not all burglars 'do drugs', although the likelihood increases with the rate of offending, and certainly not all drug users are burglars.

Studies have noted that burglary tends to be a local crime (for example, the Kirkholt study, Forrester et al. 1988) so that residential areas with higher burglary rates tend to be areas where burglars live. A comparison of area burglary rates and the occurrence of burglars' home addresses in Plymouth revealed a highly significant association between the two (Rengert and Wasilchick 2000—cited in Mawby 2001). Interviews with 82 residential burglars in southern England found that many of this group committed burglaries closer to home based on:

- the advantage of knowing an area (and not being conspicuously out of place)
- the need to obtain money quickly for drugs
- the practical consideration of not walking too far with heavy objects (Hearnden and Magill 2004).

The locations selected for offending appear to be areas where the burglar is comfortable and knows how to not stand out as a stranger, where they know their way around and can easily read the environmental cues they use to target particular properties within the chosen area. Burglars target particular properties based on a number of factors, which include:

- their familiarity with the area and the target property
- whether the place appears to be unoccupied
- how readily the house can be seen by neighbours or passers-by
- how easy it appears to be to get into
- their assessment of the likely gains.

A number of researchers have studied burglars' decision-making processes and concluded that offenders use a variety of cues to assess the balance of opportunity, risk and rewards (e.g. Cromwell, Olson and Avary 1991; Wright and Decker 1994; Stevenson and Forsythe 1998; Macintyre 2001; Palmer, Holmes and Hollin 2002; Hearnden and Magill 2004).

Hearnden and Magill (2004) found that the most significant cue in the decision to burgle a particular property was the belief that there were goods inside worth taking; convenient entry and exit routes, the absence of alarms and CCTV, evidence that residents were out and the knowledge of a ready market for the goods also typically rated as of some importance in the decision. In recent Australian research, Macintyre (2001) found that any one of the following cues acted as strongly deterrent in case studies of burglar decision-making:

- the presence of a dog
- signs of occupancy (such as lights, TV or radio, or the presence of a car in the driveway)

- the visible presence of a good alarm system
- people in the street.

However, if offenders had first noted one or two cues of 'attractiveness', and particularly if they had inside information that a house was a lucrative target, they were much less likely to be daunted by any of the above cues. Older and more experienced burglars were much less easily deterred.

It appears that burglars build their own search templates based on the outcomes and learning from previous offending and on the types of opportunity presented by their local area (Cromwell, Olson and Avary 1991). They become skilled at reading particular types of locations and, within those areas, familiar with particular types of houses and opportunities. Wright and Decker's US study (1994) also found that burglars developed search templates, patterns developed through experience, which they followed to quickly go through a residence to locate the maximum goods of interest in the least time. Burglars in their sample tended to go through the master bedroom first, looking in dressers, in bedside tables and under the mattress for money, jewelry or guns; they would then search the kitchen for cash or jewelry in jars, fridge and freezer; search the bathroom for drugs or cash; and leave the bulkier electronic goods in living areas for last.

The particularities of individual offending can become the 'habits' of an offender, a preferred style of burglary that becomes their recognisable modus operandi.

1.2 Understanding the offence—theories of offending

In addition to learning about burglary from the patterns of who gets burgled and who burgles, the offence can be explored in terms of theories of criminal offending.

Offenders and their targets usually come into contact as a result of daily activities. Routine activity theory (Cohen and Felson 1979—cited in Hough and Tilley 1998; Felson 1994—cited in Hough and Tilley 1998) suggests that three elements must come together in time and space for an offence to occur—a suitable target, a likely or motivated offender, and the absence of a suitable guardian either protecting the target or 'handling' (discouraging) the offender. Routine activity theory explains the relationship between where offenders live and where they commit their crimes. A property is most likely to be burgled either because the offender(s) have taken note of it as a possible target worth returning to as they travel by on their daily business, or because the offender(s) take advantage of an opportunity that presents itself in the moment. Cromwell, Olson and Avary (1991) found that burgled properties were more likely to be located close to schools, businesses, bus stops, traffic lights and main roads, and concluded that the ease with which burglars could observe and assess the properties as they went about their day-to-day activities made these particular properties more vulnerable. What burglars are assessing are the cues of what Cromwell, Olson and Avary (1991) termed accessibility, surveillability and occupancy—checking for suitable targets with an absence of suitable guardians, in terms of routine activity theory.

The weighing of opportunity with risks and benefits is described by *rational choice theory* (Cornish and Clarke 1986—cited in Hough and Tilley 1998). Rational choice theory focuses

on the decision-making processes of potential offenders. It assumes that offending is purposive behaviour designed to benefit the offender and is based on assessment of the risks and benefits. This theory suggests that burglars' decision-making is considered, rather than opportunistic, albeit constrained by time limits and the availability of limited information about the potential rewards and risks of breaking into a particular property.

Overall, research findings support the assumption of a more limited rationality, with burglars seeking satisfactory targets rather than perfect ones. In visits to their actual burglary sites with burglars in their sample group, Cromwell, Olson and Avary (1991) found that the sites did not congruently match the offender's initial interview descriptions of how they chose a suitable target. These authors suggest that there is an element of rational reconstruction in offenders' descriptions of their decision-making in interviews, and that the reality is more opportunistic than these hypothetical accounts suggest.

Trickett, Osborn and Ellingworth (1995), in their modeling of property victimisation, showed that target selection is probably determined first by area characteristics and then by the nature of the individual household within that area. (As an oversimplification, the more affluent in poorer areas suffer property crime particularly heavily.) Their study also highlights the high property risks of those who move and are new residents in an area. The findings of Bernasco and Luykx (2003) in their study of the occurrence of residential burglaries in The Hague also suggest that accessibility (familiarity with an area and the distance offenders must travel to reach it) is an important criterion for burglars in choosing their target areas. This work indicates that offenders also take into account variations in the attractiveness of more distant neighbourhoods (value of the goods that can be stolen) and variations in opportunity (likelihood of successfully completing the offence).

1.3 Approaches to crime prevention

Research has shown that opportunity is crucial in producing many patterns of criminal behaviour, and that altering opportunity can substantially prevent offending (Felson and Clarke 1998). This approach, known as *situational crime prevention*, systematically analyses crime problems with a view to reducing opportunities for offending and 'designing out' crime by:

- making it (seem) harder to offend (harden targets, make them less accessible)
- increasing the (perceived) risks of offending (increase surveillance and the likelihood of being identified)
- decreasing the rewards (mark property, making it more difficult to sell)
- removing the excuses or motivation for offending (truancy programmes, offender treatment, restorative justice—reinforce the rules for potential offenders).

Another conceptually useful scheme is described by Hough and Tilley (1998), who distinguish between *crime prevention* and *criminality prevention*. In this model, crime prevention consists of enforcement measures aimed at offenders (deterrence and incapacitation) and situational measures that reduce opportunities to offend (improving guardianship, security and design). Criminality prevention involves community or social development approaches intended to block the development of criminal motivations, and offender rehabilitation programmes.

Applying these crime prevention approaches to the problem of residential burglary has generated a number of possible interventions, the *what* to do. More challenging are the questions of *where* and *when* to resource and apply these strategies. Police resourcing is limited and is expected to be applied in ways that give demonstrable results—usually in that most easily understood and measurable of outcomes, falling burglary rates. Police resources must also be applied in ways that are demonstrably effective and fairly distributed.

As noted above, certain areas and particular types of houses have a higher risk of being burgled—they are 'hot' locations. There is also now substantial evidence showing that there are repeat, or 'hot', victims—they are burgled repeatedly, often by the same offender. Burglary offenders are amongst the least likely to be apprehended and, when they are, are often found to be prolific 'hot' offenders responsible for many other property crimes.

Applied to the crime of burglary, a strategy of preventing repeat victimisation, particularly in 'hot' locations, can provide the *where* and the *when* for applying situational crime prevention interventions.

The next sections provide a brief overview of the research establishing 'hot' locations, 'hot' victims and 'hot' offenders.

1.3.1 Crime 'hot' spots

Crime is not randomly distributed through all locations; spatial studies of criminal activities show that certain locations experience crime more frequently than others.

Some locations have higher burglary rates and (probably) a higher number of offenders living in the area. It is likely that closer analysis will reveal that within these areas are 'hot' spots, smaller areas of frequent offending which account for much of the elevated risk. 'Hot' spots are small areas that have statistically significant high levels of crime relative to surrounding areas. Sherman, Gartin and Buerger (1989) spatially analysed all police calls for service in Minneapolis over one year and showed that relatively few 'hot' spots produced the most calls to police, with 50% of the calls coming from just 3% of the places in the city; all robberies occurred at 2.2% of places, rapes at 1.2% of places and thefts at 2.7% of places. These findings led them to conclude that crime is rare and geographically very concentrated. And they went as far as suggesting that specific places, as opposed to neighbourhoods or particular groupings of people, may be criminogenic. In other words, the environment or location itself provides opportunities that bring offenders together with poorly guarded targets. 'Hot' spots have been found to relate in predictable ways to features in social and physical environments—for example, hot spots of violence occurring near licensed premises.

Townsley, Homel and Chaseling (2000) studied the spatial distribution of burglary in the Brisbane suburb of Beenleigh based on police calls for service and found several burglary 'hot' spots. These 'hot' spots could have either represented many burglaries happening close together in a small geographical area with few repeats (high prevalence, low concentration) or a few repeatedly victimised properties (low prevalence, high concentration). In Beenleigh, this study found that 32% of the incidents within the 'hot' spots were repeat burglaries of the same property, so some spots are 'hot' because of repeat victimisation. Other spots were found to be 'hot' because of the characteristics of the locality and were environmentally

explained by the presence of paths giving immediate access to the rear of properties, by poor lighting of paths and lanes, and by a large amount of poorly maintained public space which made surveillance of property difficult.

These are just two of the many studies researching 'hot' spots using spatial and temporal analysis. This work is making significant contributions to developing and refining the capability to accurately map 'hot' spots to inform crime reduction and prevention strategies.

Residential burglary can be analysed temporally as well as spatially, showing the increased probability of offences occurring at certain times of the day or week, or 'hot' times (e.g. Ratcliffe 2001). Analysis of police data for the Australian Capital Territory (ACT), showed that the highest probability of residential burglaries was between 8am and 6pm over the period when most people were at work or out on other business. A similar analysis showed that residential burglary levels were lower over the weekend.

1.3.2 Repeat offenders

Burglars, when apprehended, are frequently found to be prolific offenders, and the presence of just one active offender can make a sizeable contribution to the burglary rate of an area. In New Zealand research examining the criminal careers of burglars, Triggs (2000) found that those with more than 20 burglary convictions averaged 4.6 convictions per year over criminal careers that averaged 23.9 years with an estimated 2249 days spent in prison. In the group of 'free world' burglars interviewed by Wright and Decker (1994), 54% had committed more than 50 burglaries, with about 7% doing more than 50 burglaries per year. The burglars who had never been arrested averaged twice the number of burglaries of those who had been arrested.

Areas with high burglary rates tend to be areas where known burglars live and, surprisingly, where many commit their offences. A comparison of area burglary rates and the locations of home addresses for arrested burglars in 1993–1994 for Plymouth revealed a highly significant association between the two, even with the low detection rates for burglary (Rengert and Wasilchick 2000—cited in Mawby 2001).

Other research has also suggested that the local burglary problem being addressed was largely due to the activity of local offenders (Forrester et al. 1988). As part of initial research to establish the well-known Kirkholt project, all those convicted and sentenced for burglary in the Rochdale division over a six-month period were interviewed. Out of the 76 offenders interviewed, 85% had committed offences within five miles of home and 77% walked to these addresses. Bennett and Durie (1999) report similar findings from their evaluation of a multi-agency strategy to reduce residential burglary in Cambridge. Using evidence from detected offences, analysis found that 69% of offences committed in an area selected because of its heightened burglary rate (two wards) were committed by offenders who lived in those two wards. Interviews with offenders (28) showed that most of them committed most of their offences less than a mile from home.

1.3.3 Repeat burglary victims

The extent of repeat victimisation is shown by survey statistics. For example, the NZNSCV2001 found that 20% of households burgled in the previous year were victims of repeat burglaries, accounting for almost 40% of the offences disclosed, and that 6% of households had been burgled three or more times (Morris et al. 2003). These figures are similar to those revealed by the BCS, which showed that, in 1999, 20% of all households burgled in England and Wales had experienced more than one burglary during the previous 12 months and 7% had been burgled three or more times; so less than 1% of households in England and Wales accounted for 42% of all burglaries in 1999 (Budd 2001).

Therefore, one of the best predictors of the risk of future burglary is whether a household has been burgled in the recent past, and preventing this repeat victimisation could have a dramatic impact on the burglary rate.

A repeat burglary frequently occurs very soon after the first incident, with the greatest risk of repeats occurring within the first few weeks. Polvi et al. (1991) studied burglaries reported to the Canadian police and found that the likelihood of a repeat burglary within the first month is 12 times the expected rate. Half of the repeats in the first month happened within the first seven days. The likelihood of repeat burglary was found to decline to just twice the expected burglary rate by six months. These findings have been replicated and confirmed by other researchers in the UK (e.g. Forrester et al. 1990), in the US (e.g. Robinson 1998), and in Australia (e.g. Townsley, Homel and Chaseling 2000).

Many research studies have demonstrated the efficacy of rapidly focusing resources on preventing repeat burglaries. For example, a burglary reduction project in Huddersfield concentrating on those individuals already victimised showed a 30% decrease in burglary (and 20% decrease in overall car crime) (Anderson, Chenery and Pease 1995; Chenery, Holt and Pease 1997). Forrester et al. (1988) describe actions taken to eliminate repeat burglaries on Kirkholt housing estate. These actions included target hardening for burglary victims and near neighbours¹, who formed a 'cocoon watch' around burgled residences, and resulted in a 75% decrease in overall burglary levels over three years. (For detailed reviews of repeat victimisation studies, see Farrell and Pease 1993 and Pease 1998; for the implications of repeat victimisation for the policing of communities, see Chenery, Henshaw and Pease 2002.)

Repeat burglaries may be explained by *event dependency*, which is a direct causal link to a previous event (Townsley, Homel and Chaseling 2000). The same offender returns because they now have 'inside information': they have identified an easy way in, know times when the house is unoccupied, and, probably most important, know what desirable goods are available Repeats are also explicable in terms of *risk heterogeneity*, where the risk factors that make a property an easy target attract different offenders over time. For example, the design of a house, the surrounding environment, or the positioning of a house in relation to the street or to other housing may contribute to its vulnerability to repeat burglaries.

Recent studies indicate that a victimisation pattern of near repeats or 'infectious burglaries' can occur (Townsley, Homel and Chaseling 2003). This analysis shows that, when a burglary

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¹ For more information about target hardening, see Section 3.1.

has occurred in an area of high housing homogeneity, other houses in the street as well as neighbours became more likely burglary targets. This suggests that once a burglar has successfully burgled one house in an area where much of the housing stock is very similar, they have a 'working knowledge' that can be used to target other houses of the same design (often built by the same development company with the same batch of materials). This pattern of near repeats is much less apparent, and much less likely, in areas of high housing diversity.

1.4 Creating burglary reduction strategies

The research establishing the increased frequency of burglary in particular locations, the high rates of property offending by a small group of prolific burglars and the increased risk of repeat events for those who have already been burgled has provided the basis of targeted burglary reduction strategies. Directing situational crime prevention measures to reduce the opportunities to offend (Felson and Clarke 1998) to high-risk locations, to high-risk households and at-high-risk offenders integrates the questions of *when* and *where* with the *what to do.*

A focus for burglary reduction strategies has been the prevention of repeat victimisation. Pease (1998) summarised the outcomes of the extensive UK research into reoccurring crimes (not just burglary) as showing that:

- victimisation is the best single predictor of further victimisation
- when victimisation recurs it tends to do so quickly
- high crime rates and 'hot' spots are as they are primarily because of rates of repeat victimisation
- the same offenders tend to return and reoffend, and those who repeatedly victimise the same target tend to be more established in criminal careers than those who do not.

For these reasons, preventing repeat victimisation is regarded both as a policing strategy that inherently directs police attention to higher-crime areas and persistent offenders and as an effective crime prevention strategy for allocating resources to protect the most vulnerable groups and to those areas which most need it (Chenery, Henshaw and Pease 2002; Morgan 2002). Such an approach has the advantage of providing crime prevention resources on the basis of an easily recognised need without the potential social divisiveness of directing crime prevention resources to particular social groups, such as solo parents or students.

Repeat victimisation is seen as such an important phenomenon, significant across many types of crime, that UK policing introduced a staged series of performance measures from 1995 to 1999 to encourage and support police action to operationalise reducing repeat victimisation as a crime reduction strategy (Farrell et al. 2000). These measures ranged from demonstrating the capability to identify repeat victims, to devising and implementing locally relevant strategies to reduce repeat victimisation offences, and setting targets for reduction.

Rapidly focusing prevention resources on repeat victims can reduce crime across a whole community where it is known that repeat victimisation is a key contributor to the community

burglary rate. However, the burglary problem may stem from the presence of prolific offenders or from environmental characteristics of the location that create opportunities to burgle; and therefore an effective crime prevention strategy would apply interventions targeted to 'hot' offenders or 'hot' locations as well as to preventing repeat burglaries.

Table 1 presents an outline illustrating a range of possible burglary reduction interventions grouped according to their intended target and by their mechanism of crime prevention.

1.4.1 Evaluations of effectiveness of interventions

Evidence for the effectiveness of a range of burglary reduction interventions follows in Sections 2, 3, 4 and 5, arranged by their focus on location, victims, property or offenders.

The material presented draws on two recent meta-evaluations which have assessed the strength of the research evidence supporting an array of possible crime prevention interventions.

The first of these is the 1997 *Preventing Crime: What Works, What Doesn't, What's Promising* report to the US Congress (Sherman et al. 1997). This work brings together the results of many formal, statistically-based evaluations of initiatives aimed at reducing crime and ranks successful strategies according to the rigour of the methodology which was applied in their evaluation.

The second is the UK Home Office report *Reducing Offending* (Goldblatt and Lewis, 1998), commissioned by the UK Government to assess, from the available research evidence, the comparative effectiveness and cost-effectiveness of different methods of reducing crime. In particular, this report draws on Jordan's work from the Goldblatt and Lewis chapter on effective policing strategies (Jordan, 1998). In assessing effective strategies, Jordan draws on the work of Sherman et al. (1997) supported by the weight of evidence from the broader UK studies designed as in-depth evaluations of comprehensive strategies. While many of these studies do not generate rigorous statistical evidence, the weight of evidence from their collective results is accepted as indicating whether a strategy is worth pursuing. Outcomes and evidence from more recent studies have been included where possible.

Each intervention is best viewed as one possible 'tool' to be incorporated into a broader, multicomponent strategy. Much of the research evidence for the effectiveness of a specific intervention has arisen from evaluations of multicomponent strategies for burglary reduction. It is therefore not possible to isolate the impact of each specific tactic alone.

A brief overview of some comprehensive burglary reduction strategies and their achievements is included in the one of the final parts of this review.

Table 1: An illustrative classification of burglary reduction interventions

TARGETS	Victim	Offender	Location
	Previous victims and those living nearby	Prolific offenders	Crime hot spots
	Students/young people	Drug users	High burglary rate areas
	Single parents	At-risk youth	Areas with high physical disorder
Crime Prevention	New residents	•	Areas with high transient populations
Mechanism	Older people (distraction burglary)		
	Residents in high burglary areas		
Increase in effort	Upgrade security—locks/bolts	Incapacitation (swifter justice)	Environmental improvements to restrict
	Rapid repairs/strengthen frames	Targeting known offenders	access
Making it (seem) harder	Crime prevention advice/security	Publicity	Secure By Design Housing
· ·	awareness	Reducing truancy	Crime prevention through environmental
	Thorny/prickly bushes etc.	Supervision/diversion	design applied to public spaces
	Improved perimeter fencing	Improved bail enforcement/stricter bail	
		conditions	
Increase in risk	Signs of occupancy (lights on timers etc.)	Improved detection/conviction rates	CCTV
	Noisy dogs	Stiffer sentences/tagging	Lighting
Making it (seem) more	Alarms—visible and audible	Crime pattern analysis/intelligence linking	Improve natural surveillance
risky	Internal CCTV	Forensics	Wardens/patrols/watch schemes
•	Crimestoppers	Sting operations/stop and search	Encouraging neighbours to watch out for
	Trackers	Surveillance/informants	and report suspicious activity
	External sensor-activated lighting	Publicity	High-visibility policing/'hot' spot patrols
Reduction in anticipated	Property marking/registration	Market reduction strategies	Market reduction strategies
reward	Property removal (e.g. vacation storage)	Publicity	Liaison with second-hand dealers and
	Use a safe	•	other possible outlets
Making it less rewarding	'Smart' products		-
Removal of	Shutting and locking doors/windows	Restorative justice	Recreation facilities
excuses/motivation		Diversion	Regeneration of communities
		Education/training	Increasing community participation in
Making it unacceptable	Public education on the social and	Employment	crime prevention
-	personal costs of buying stolen goods	Drug treatment	
		Availability/price of drugs	
		Parenting improvements	

2 Location-focused interventions

The range of possible interventions for reducing burglary at the level of location are aimed at reducing opportunity by increasing guardianship of the area, reducing the likelihood that offenders will locate suitable targets and increasing the effort and risks for potential offenders. This might be done, for example, through:

- an increased police presence or people watching the streets
- the development of the community's capacity to discourage offending
- environmental changes to reduce the vulnerability of the area.

These interventions include policing responses, but also include situational crime prevention responses that are initiated by residents, councils and communities responding to and designing against burglary. Although these approaches can be applied to preventing crime in any area, 'hot' locations and in particular 'hot' spots, because of their disproportionately high levels of crime and their higher rates of repeat victimisation, are considered to be the most appropriate locations for crime prevention projects.

2.1 Directed patrolling

Directed patrolling is an intervention based on the premise that the more precisely patrols focus on 'hot' spots and 'hot' times of criminal activity, the less crime there will be at those places and times. This is rated as an effective approach to reducing crime by Sherman et al. (1997) in their review of what works. The scientifically robust evidence for this comes from evaluations of the effectiveness of 'hot' spot patrols in reducing street crime, outdoor crime and crime on subways. These studies indicated that the time for police to be at a 'hot' spot to maximise their effect was about 15 minutes. Jordan (1998) also stated the effectiveness of police patrols directed at 'hot' spots based on the US studies. He noted, however, that the level of police presence in some of the studies was quite large, approaching 'saturation policing', and cautioned that directed patrolling at this level would need to be used with care to avoid provoking negative reactions in the community.

Directed 'hot' spot patrolling has been incorporated as part of effective burglary reduction initiatives (e.g. Queensland Criminal Justice Commission 2001; Chenery et al. 1997; Ratcliffe 2001). However, an evaluation of the impact of directed patrolling as a stand-alone strategy for reducing residential burglary is not available in the published literature.

The Break and Enter Project (Queensland Criminal Justice Commission 2001; Henderson 2002) offered a three-tiered graduated approach to burglary reduction across the suburb of Beenleigh, with the third-level response focused on 'hot' spots with a 'hot'-spot-wide approach that included increased police patrolling, particularly around victimised addresses, as

well as target hardening of houses within the 'hot' spot and encouraging 'cocoon' watch by neighbours. (The first two levels of response focused on preventing repeat victimisation within Beenleigh by giving target hardening advice and support). These 'hot' spot interventions reduced offending, although apparently only temporarily, with no displacement of burglary into surrounds. All residences (victims and non-victims) in the 'hot' spot area were offered free home security assessments and supported with property marking; and specialised burglary-prevention training was offered through door knocks and letter box drops by police (and volunteers). These more resource-intense interventions were carried out over the period of one month, amounting to a substantial increase in the police presence in the 'hot' spots. The evaluators identified the difficulties in getting local residents involved in the project. These 'hot' spots were in areas of socioeconomic disadvantage and high mobility, and many residents had limited social attachment to the area. These 'hot' spots also have a long history of police attention and therefore residents had a high degree of cynicism about police efforts to improve the situation.

The Huddersfield 'Biting Back' project successfully reduced burglaries by 30% over 18 months (Chenery et al. 1997; Anderson, Chenery and Pease 1995). In this project, directed patrolling was one component at the higher levels of a graduated response to repeat victimisation delivered on the basis of prior victimisation (dubbed the 'Olympic' model). The initial 'bronze' response to those burgled provided crime prevention advice and target hardening and established cocoon watch. Minimum twice-weekly police watch formed part of the 'silver' response and daily police patrols were part of the 'gold' response. Higher-level security measures were also introduced.

Directed patrolling was one of the strategies employed by Operation Anchorage in Canberra, ACT 2001 (Ratcliffe 2001; Makkai et al. 2004). This operation achieved a substantial decrease in burglary offending with a calculated 2445 offences prevented, with a longer-term impact on the burglary rate for 10 months after the four-month operation ceased. The focus was on incapacitating recidivist offenders, but initially the teams were directed by intelligence analysis to the most problematic areas and the most active offenders. This intensive operation was a dedicated burglary reduction initiative with four teams of 10–12 investigators supported by intelligence analysts, surveillance teams and other operational support, such as traffic police. Support strategies included use of traffic police for stops and random breath tests in high-burglary areas, with profiles of targeted offenders circulated to all staff.

Operation Anchorage is perhaps better described as a crackdown rather than as an example of preventative directed patrolling. Although most frequently targeted at offenders, crackdowns that focus on behaviours associated with burglary can help reduce burglary along with the incidence of other crimes. Intensive field interviews, aggressive patrol, traffic enforcement, drink driving enforcement and street-level drug enforcement have all been shown to help reduce burglaries in studies reviewed by Scott (2003).

Sherman's comments on the deterrent effect of crackdowns also apply to high-visibility directed patrols. He suggests that:

The key to making crackdowns work is to keep them short and unpredictable. Long-term police crackdowns all show a 'decay' in their deterrent effects over time. Short-term crackdowns, in contrast, show a free bonus of 'residual deterrence' after the crackdown stops, while potential

offenders slowly figure out that the cops have left. Random rotation of high police visibility across different short-term targets can accumulate free crime-prevention bonuses and get the most value out of police visibility. Even if displacement to other hot spots occurs, the unpredictable increases in police presence at any hot spot may create generally higher deterrent effects from the same number of police officers (Sherman 2002 388–389).

Random or non-directed patrols are ineffective in reducing crime (Sherman et al. 1997; Jordan 1998). Random patrolling can only be expected to have extremely limited deterrent, detection or enforcement effects, as the following calculation illustrates: based on the patrol capacity in Los Angeles County at the time of estimation, full deployment of police resources into patrolling would have given premises in the county half a minute of protection in every 24-hour period; doubling police numbers would have given one whole minute of protection (Felson 1994—cited in Prenzler and Townsley 1998).

2.2 Community policing

The evidence on the effectiveness of community policing is mixed, in part because the range of initiatives labeled 'community policing' is very diverse in both intention and practice. Community policing can range from community bike and foot patrols to local storefront offices and community meetings. These activities are intended to increase the quality and quantity of police–community interactions, to increase the flow of intelligence from the community and of crime-related information to the public, and to increase police legitimacy. Sherman et al. (1997) present evidence that these initiatives are ineffective as crime prevention strategies. Jordan (1998) classes these types of activities as 'community policing without clear focus'.

The following more focused approaches to community policing are seen as 'promising and worth pursuing' (Sherman et al. 1997; Jordan 1998), but at the time of the what works review there was insufficient evidence to prove their effectiveness as policing strategies to reduce or prevent crime.

2.2.1 Improving police legitimacy in the community

Effort put into reducing fear and suspicion of the police, and into treating people (including offenders) fairly and with respect:

- positively affects the degree of cooperation the police receive from the community and people's willingness to obey the law
- lowers the perceived level of serious crime
- reduces recidivism in domestic violence (Tyler 1990—cited in Sherman et al. 1997; Skogan 1990—cited in Sherman et al. 1997).

The greatest perceived reduction in serious crime in Chicago was in those areas where surveys showed that the police were considered 'most responsive' to residents' concerns (Skogan et al. 1996—cited in Sherman et al. 1997).

Public reassurance has 'risen up the policy agenda in recent years' and 'reassurance policing' has become a primary objective in the UK National Policing Plan 2003–2006. A recent Home Office study reviewed international policing interventions aimed at reassuring the public (Dalgleish and Myhill 2004). The review focused on those interventions which were shown by evaluations to effectively improve 'perceived police effectiveness' and increase 'feelings and perceptions of safety', with no mention in the review of their impact on crime rates or as crime prevention interventions. Perceived police effectiveness was increased by interventions improving police visibility and familiarity, with community policing, community engagement and increased levels of foot patrols successful to varying degrees. Community feelings and perceptions of safety were improved by:

- increased foot patrols
- visible and familiar officers
- community policing
- police accessibility
- improving residential security.

2.2.2 Community meetings to involve community participation in priority-setting

Sherman et al. (1997) and Jordan (1998) conclude that research on this approach to involving the community in crime prevention is not rigorous enough to endorse it, but report that experience in Chicago suggests that this approach can involve residents in high-crime areas in ways that Neighbourhood Watch fails to do.

Skogan and Frydl (2003) suggest that *Community Policing* is one of the most important innovations in policing over the last few decades. They are referring to community policing 'Chicago style', which has attracted much international interest. CAPS was initiated in five police beats in 1993, and then expanded city-wide. Crime levels dropped in Chicago from 1991 to 2002—property crime by 36% (residential burglaries 46%) and violent crime by 49% (Skogan et al. 2004). CAPS has been implemented citywide, so there are no comparison areas within the city. In other large American cities crime rates also declined significantly over the time period 1991–2002 and, in a comparison across a range of crimes, Chicago led or matched the reductions achieved for all crimes except homicides.

CAPS is a long-term ongoing commitment to community policing which, at the time the most recent evaluation report was written in 2003, had been going for more than 10 years. CAPS is based on public involvement achieved through:

- community meetings and partnerships with local groups
- shared problem-solving
- agency partnerships to involve other agencies in crime prevention
- a policing organisational structure that delegates responsibility for crime prevention to both district commanders and individual officers.

Teams of officers now have relatively long-term assignments in each of the city's 279 police beats. They are expected to spend most of their time responding to calls and working on prevention projects in their assigned area; to enable them to do so, rapid response units are assigned excess or low-priority calls. The entire Department has been trained in a five-step problem-solving process, and problem-solving efforts of beat officers are supported by a coordinated system for delivering city services. A commitment to community involvement is reflected in (monthly) beat meetings and district advisory committees (Skogan et al. 2004, 1).

The most recent evaluation report (Skogan et al. 2004) scored CAPS highly for its multiagency partnerships and for the police agency reorganisation to better support community policing. It assigned a slightly lower 'grade' to recent community involvement efforts through beat meetings and larger area coordinating meetings and indicated that the strategy is not immune to the ongoing challenges of maintaining the vitality of community-based action. CAPS got the lowest 'grade' for problem-solving, and the report noted that over time the effectiveness of beat meetings in setting problem-solving agendas for the community had declined. Refresher training was suggested for both police and 'resident activists', training which could also provide an opportunity to re-engage the community in active partnerships.

Skogan et al. (2004) report considerable change in the economic and demographic profiles of the city over the life of CAPS, which they suggest could explain 28% of the variance in crime decline from 1991. However they may seek to explain this, there is a larger question in the background about the extent to which this change in profile is a 'natural' evolution that would have occurred without CAPS and how much of the change is directly attributable to the community development aspects of coordinated multi- agency involvement and the building of social capital through the CAPS process itself. Active community participation is encouraged by the activities involved in community policing Chicago style.

Community-oriented policing emphasises the key role that residents and community organisations play in crime prevention and the maintenance of neighbourhood integrity, indicating the importance of social capital. Martin (2002) tested the significance of a range of socio-economic variables as predictors of the residential burglary rate in Detroit neighbourhoods. It was found that the age composition of an area was the primary determinant, but factors that indicated concentrated poverty and a lack of social capital were also significant. This study shows that neighbourhoods with active community organisations and politically active residents are better able to control crime in their area. (The strong positive correlation between the percentage of the population under 18 and the burglary rate suggests that residential burglary is in large part a youth problem, in Detroit at least.)

Both Sherman et al. (1997) and Jordan (1998) include restorative justice, or community accountability conferencing, as one of the promising community policing strategies. These approaches are considered under offender-focused interventions in this literature review.

2.3 Crime Prevention through Environmental Design (CPTED)/ Secured By Design (SBD)

CPTED and SBD are situational crime reduction approaches applied at the location level and are based on reducing the opportunities to offend by changes and improvements to environmental and building design:

- through improved physical security
- through improved natural informal surveillance
- by designs that clearly define private and public spaces, which inhibits the likelihood of 'outsiders' traveling through and becoming familiar with an area
- by maintaining an area in good order to portray an image to offenders that crime will be noticed.

These approaches have contributed to the success of burglary reduction initiatives such as the UK Reducing Burglary Initiatives (RBI) projects in Fordbridge, Sollihull, where burglary was reduced by 12% (Home Office 2003b), in Yew Tree, Sandwell (36% burglary reduction, Home Office 2003c) and in Stirchley, Birmingham (46% burglary reduction, Home Office 2003d). The Fordbridge project improved street lighting, installed alley-gates, and fitted electronic entry systems in multi-dwelling properties; the Yew Tree project made environmental improvements following architectural surveys of 'hot' spots; and the Stirchley project made improvements to fencing and installed alley-gates.

The recognition that certain opportunistic crimes, such as domestic burglary, can be reduced by careful housing design stimulated the UK police-led SBD initiative. This program encourages the construction industry to adopt effective crime prevention measures in home and estate design in the UK. Armitage (2000) evaluated a West Yorkshire SBD award scheme and showed that the incidence of recorded crime on both new build and refurbished SBD housing estates was considerably lower than that on non-SBD counterparts, with 26% fewer crime events per dwelling in the SBD sample. The prevalence of burglary in the SBD sample was half of that in the non-SBD sample, with no evidence to suggest that the burglary reductions resulted in increases in other likely offences. Residents in SBD estates reported lower levels of fear of crime.

Urban residential design and maintenance does affect both offender and police perceptions of the safety of an area and expectations of crime and deviancy occurring there. In a recent study by Cozens, Hillier and Prescott (2001), a group of convicted burglars and a group of police rated ten photographs of five different common UK housing designs with well-maintained and poorly maintained versions in terms of their vulnerability to crime and the crime and deviancy expected in the area. Multidwelling units, particularly high-rise buildings, were seen by both groups as significantly more criminogenic and fear-inducing than detached or semi-detached housing. The poorly maintained versions of any design were rated significantly more criminogenic and more vulnerable to crime than the well-maintained version of each design. However, burglars rated three of the detached or semi-detached housing styles (the least vulnerable designs) as more likely burglary targets, while the police sample rated these as not particularly prone to burglary.

CPTED is the application of crime prevention principles, not just to housing, but also to the design and refurbishing of public spaces. These principles are being incorporated into urban planning guidelines, for example in Dandenong, Australia (City of Greater Dandenong 1997). Dandenong's 'Safe Design' guidelines arose out of the *Safer Communities Program* and are guidelines for developers and planners to incorporate increased natural surveillance and target hardening into buildings and environment to lessen opportunities for crime. The guidelines were promoted through workshops for developers, planners, architects and staff; and through consultation, evaluation and formulation of a Council Urban Design strategy.

As Fleissner and Heinzelmann (1996) point out, CPTED and a problem-solving approach to community policing are part of comprehensive community crime prevention strategies that involve police, residents and agencies in close cooperation. CPTED emphasises the systematic analysis of crime in a particular location and can directly support community policing by providing crime prevention strategies with appropriate changes to the environment to deter offending tailored to solve specific problems.

3 Victim-focused interventions

The range of possible interventions for reducing burglary at the level of the targets, or victims, of burglary includes those aimed at making properties less likely to be selected as suitable targets by:

- increasing perceived guardianship of houses
- making entry for potential offenders more difficult and more risky
- decreasing opportunities to offend.

Focusing burglary reduction interventions on 'hot' victims concentrates on those individuals with an elevated risk of future burglary and, with the short-term nature of probable repeats, presents a way of focusing resources both temporally and spatially. It is a strategy that brings together victim support and crime prevention (Pease 1998). Interventions that are aimed at supporting and reassuring those who have become victims of burglary are included in this section.

3.1 Target hardening

Target hardening programmes aim to prevent burglary by 'hardening' or improving the security of households that are identified as likely burglary targets. A target hardening strategy is therefore generally based on identifying those who are at risk of burglary and making it more difficult for their properties to be broken into. Recently burgled households are often the focus of target hardening strategies, but this approach may also include other vulnerable types of households (e.g. new residents, solo parents, young people and students, or those living in rental accommodation).

Target hardening is a term used (rather loosely in the literature) for a spectrum of interventions that may include providing crime prevention advice (often in printed form), conducting security assessments, encouraging or providing the installation of new door or window security upgrades, replacing weak door and/or window framing, installing security lighting, and even, at the high end of graded responses to repeated burglary, the temporary installation of silent alarms linked to security or of CCTV.

In their review, Sherman et al. (1997) conclude that improving security by improving locks and barriers on windows and doors (target hardening) appears to reduce burglaries, but that the effectiveness of this approach is unknown until more rigorous evaluations are available to enable definitive conclusions.

Good security 'works' to reduce the risk of burglary. In New Zealand, the NZNSCV 2001 revealed that 22% of those burgled had no security measures and 24% of the burglaries

reported involved entry through insecure or open entry points (Morris et al. 2003). The effectiveness of security measures is also demonstrated by 1998 BCS data used to compare the level of security in homes at the time of burglary with that in place at homes that were not burgled, taking account of other burglary risk factors such as location (Budd 1999). This evidence shows that basic security devices such as deadlocks and window locks are effective in reducing the risk of burglary, and that burglar alarms, security lights or window grilles are even more effective. The BCS analysis revealed that 15% of households without security measures were burgled in 1997, compared with 4% of those with basic security devices and 3% of those with higher-level security. Levels of security differed considerably for different types of household, and were lower in those most at risk of repeat victimisation:

- young households
- single-parent households
- households in public or private rental accommodation
- households on low incomes or unemployed.

Analysis of BCS data has also examined patterns in how burglars gained entry to homes (Budd 2001, 1999). Door locks were forced in 20% of incidents; door panels broken in 12%; window locks forced in 14% and a window broken in 10% of incidents. Access was gained through an open door in 21% or open window in 6% of incidents, indicating that burglaries can be reduced by making forced entry through doors and windows more difficult by target hardening, and by encouraging households to ensure that they actually use locks on doors and windows.

Target hardening programmes have been a central part of a number of successful burglary reduction initiatives in England and Wales. For example, burglaries were reduced by 59% in a public housing area in Birmingham (Tilley and Webb 1994) and by 19% in Huddersfield in a project that used a graded response depending on the number of prior burglaries (Anderson, Chenery and Pease 1995). Recently, examples of RBI projects where target hardening was been just one part of the range of interventions implemented have achieved reductions of 37% in the Rochdale project, 12% in Fordbridge and 39% in Yew Tree (Home Office 2003a, 2003b, 2003c).

These results are not achieved by all programmes that incorporate target hardening as an intervention. This is not surprising when statements from offenders who admit to repeat burglaries are considered (Palmer, Holmes and Hollin 2002). Once access had been successfully gained to a property, offenders interviewed in this Leicestershire study were confident of being able to return, even with changes to basic security. However, these offenders indicated that they would probably be deterred from repeating a burglary if:

- they knew the occupants
- they knew that someone was at home
- advanced security measures such as window bars, intruder and silent alarms or house CCTV had been installed.

While security measures do reduce the risk of burglary in the first instance, this study indicates that adding basic security measures alone may be insufficient to prevent repeat burglaries.

Target hardening programmes alone may not reduce the overall burglary rate in an area. This can be achieved only if at-risk households can be identified and target hardening measures that accurately decrease their vulnerability can be delivered. Home security measures are just one way of increasing guardianship, and are not necessarily obvious from the street. It makes sense to assess what makes a particular property vulnerable to burglary in terms of the guardianship aspects of occupancy, surveillance and accessibility and to make any target hardening measures noticeable. Situational approaches may be required in addition to improved security measures.

In the Australian demonstration projects in Adelaide and Beenleigh the focus was on providing security assessments and target hardening advice to repeat victims (Henderson 2002). The Adelaide programme was modestly effective in reducing repeat victimisation but had no impact on the overall burglary rate. In Beenleigh, where target hardening was part of a graduated response from police, along with more focused activity in 'hot' spots within the area, the overall programme was effective in reducing repeat victimisation by 15% and achieved a short-term reduction of the burglary rate within the one 'hot' spot.

Target hardening programmes that rely solely on repeat victimisation as a service delivery trigger to offer installation of security devices may have limited uptake in some areas. In Beenleigh, over 13% of repeat victims did not increase their security because they felt they already had most of the relevant measures in place (Henderson 2002). In a recent ACT project, it was also found that very few burglary victims took up the security review offered (Holder, Makkai and Payne 2004). Follow-up surveys found that most of those recently burgled had already taken preventive action to protect their properties. Residents were highly motivated to improve security immediately after a burglary and appreciated the good security assessments and advice given by the first attending officer.

Successful target hardening projects have responded promptly to all burgled households providing security assessments and advice to prevent repeat burglaries. Some of these projects have also included:

- subsidised or free security upgrades for low-income and high-risk households
- a package of graded responses to increase guardianship and to support residents, providing more security for repeatedly victimised properties.

3.2 Neighbourhood Watch/Neighbourhood Support

The Neighbourhood Watch initiatives were started as a way of increasing surveillance in local communities to support police enforcement activities, with public-spirited members of the community asked to watch out for suspicious circumstances and report them. Neighbourhood Watch and Neighbourhood Support has grown rapidly and has become a widely-adopted approach to community-based crime prevention which is well-supported by the public and police alike in many countries. These groups have become a way in which a

community may increase guardianship cues to deter offenders—through watching out for each other's residences, providing occupancy indicators for those on holiday (e.g. by emptying mailboxes and putting away rubbish bins), providing security advice and support to area residents, and putting up signs and stickers indicating the presence of Neighbourhood Watch and Neighbourhood Support groups can be involved in a diverse set of activities which may affect crime rates, particularly burglary and motor vehicle crime, and may also reduce fear of crime, improve police—public contacts and police—public relations, and contribute to community cohesion. This diversity makes Neighbourhood Watch and Neighbourhood Support an initiative which is almost impossible to evaluate, particularly since it has been implemented (or in some cases partially implemented) in widely varying communities where any possible impact on crime and crime rates will also be variable (Laycock and Tilley 1995).

Sherman et al. (1997) reviewed the studies available and concluded that there is no scientific evidence showing the effectiveness of Neighbourhood Watch and Neighbourhood Support in preventing crime, saying that 'the oldest and best-known community policing program, Neighbourhood Watch, is ineffective at preventing crime' (Sherman et al. 1997, 8-25). Jordan (1998) reports that Neighbourhood Watch and Neighbourhood Support schemes are ineffective at involving local communities in policing.

There have been a number of attempts to evaluate Neighbourhood Watch and Neighbourhood Support schemes, but given the broad range of activities of the groups, the variation in implementation and the diversity of contexts, it has proven difficult to evaluate Neighbourhood Watch and Neighbourhood Support as a 'standard package'. In a literature review aimed at identifying the factors associated with the successful establishment, continuation, operation and practices of Neighbourhood Watch and Neighbourhood Support schemes, Brown (1992) concluded that there were few, if any, studies with rigorous methodology and that reports were inconclusive about the effectiveness of schemes, with:

- low numbers of crimes reported
- low participation rates, with schemes existing in name only
- no indication that Neighbourhood Watch and Neighbourhood Support groups
 - effectively reduced fear of crime
 - increased community spirit
 - improved relations with police.

Overall, residents in areas with Neighbourhood Watch and Neighbourhood Support showed little change in the behaviours of neighbourhood surveillance, reporting to police, completing home security surveys or marking their property.

Studies show that Neighbourhood Watch and Neighbourhood Support groups are most frequently established and have widest participation in relatively affluent areas with low crime rates, and are less frequent and more difficult to initiate and maintain in areas with high crime rates. Analysis of Neighbourhood Watch and Neighbourhood Support questions included in the 1992 BCS shows that:

• over 71% of the schemes are in low-risk areas (covering 60% of UK households)

- 18% are in medium-risk areas (25% of households)
- 10% are in high-risk areas, covering 13% of households
- membership increased in all areas from 1988 to 1992, but was greatest in low-risk areas (Mayhew and Dodds 1994—cited in Laycock and Tilley 1995).

Even where Neighbourhood Watch and Neighbourhood Support is established, ongoing involvement is hard to sustain; after an initial burst of activity there tends to be little ongoing programme maintenance, with few meetings and low levels of participation in activities (evaluations from New Zealand—Hammond, 1990; UK—Bennett 1990; Ireland—McKeown and Brosnan 1998).

Police and scheme coordinators tend to be enthusiastic supporters of Neighbourhood Watch and Neighbourhood Support and endorse these community groups as an avenue of getting crime prevention and security advice to residents. In the low- to medium-crime-risk areas where the groups are relatively easily established, Neighbourhood Watch and Neighbourhood Support sanctions local crime alertness and increases the likelihood that community members will communicate concerns to each other and the police, and can signal this to potential offenders through the display of signs and window stickers. In high-crime areas, residents are less welcoming of the involvement of police and local authorities for a range of reasons which include the fear of retaliation and the likelihood of knowing the offenders. Laycock and Tilley (1995) propose a strategic framework for the differential implementation of Neighbourhood Watch and Neighbourhood Support groups according to an area's crime risk. This strategic framework is reproduced in Table 2. This strategic approach is based on assessing the likely level of uptake by residents and the crime risk of the area, and recognises the necessity of putting more police resources into higher-burglary-risk areas.

Laycock and Tilley (1995) recommend using the likelihood of repeat victimisation to establish small Neighbourhood Watch and Neighbourhood Support groups in high-risk areas. These small schemes resemble the concept of cocoon watches implemented as part of the successful Kirkholt project, which reduced burglaries by 75% over three years (Forrester et al. 1988, Forrester et al. 1990). Here 'cocoons' were formed around repeat victims by the residents immediately around a burgled dwelling, who were asked to look out and report any suspicious activity. 'Cocoon' participants were also provided with security upgrading to deal with their own heightened risk following a burglary in the immediate neighbourhood.

This cocoon watch approach has since been adopted in other burglary reduction projects. For example, in the Beenleigh, Adelaide and Canberra schemes it became part of 'security advice' to notify neighbours immediately after a burglary and ask them to be on heightened alert, as much for their own security as to reassure and prevent repeat burglaries (Queensland Criminal Justice Commission 2001; South Australian Crime Prevention Unit 2002; Henderson 2002; Holder, Makkai and Payne 2004). It is a more immediate response than initiating Neighbourhood Watch and Neighbourhood Support schemes. In the Beenleigh 'hot' spot scheme, which reduced repeat burglaries by 15%, it was the patrol officer's responsibility to advise near neighbours of a burglary either by direct contact or by leaving a card (Queensland Criminal Justice Commission 2001). In the Adelaide scheme, victims were asked to contact neighbours themselves or agree to the volunteer making the contact (South Australian Crime Prevention Unit 2002). Neighbours were spoken to and provided with an information kit in

84% of cases. As a result, just under half (49%) of the victims surveyed reported having increased contact with their neighbours following the burglary, providing a weak form of 'cocoon' watch.

Table 2: Policing and Neighbourhood Watch—a strategic framework (Laycock and Tilley 1995)

	т шеу 1993)		
Crime level	Strategic objective	Characteristics	Level of police involvement
Low-crime areas	 Keep crime rate low Maintain public confidence Guard against vigilantes Maintain good police– public relations Reduce fear of crime 	 Run by community Capable of self-funding Respond rapidly should the need arise Emphasis on partnership with police Minimal involvement of other agencies Neighbourhood Watch signs displayed 	 Support on request Encourage volunteers 'Standard pack' Neighbourhood Watch Request help from community when need arises
Medium- crime areas	 Reduce crime rate Maintain and extend crime-free value system Increase informal social control Monitor and respond to minor nuisance and incivilities Improve police-public relations Reduce fear of crime 	 Reinforce characteristics of low-crime areas Fund-raising events and modest subscription Other agencies involved, e.g. local authority High-profile activity with tenants' associations and community groups Able to deal promptly with vandalism and incivility 	 Engage other agencies Provide crime data Actively encourage schemes in 'hot' spots Respond promptly to emerging crime problems Active contribution for police crime prevention specialists
High-crime areas	 Local authority housing Reduce crime Increase community control Widen and deepen public confidence in police Decrease tolerance of crime/incivilities Reduce fear of crime 	 Multi-agency support Strong community coordinators with local support groups in place Small schemes (cocoon watches) Active support for victims/witnesses Active involvement of young people in crime control 	 Actively encourage schemes 'Tailor-made' schemes to reflect local circumstances Immediate feedback on successes Engage other agencies Rapid response policy on intimidation Provide detailed crime data Architectural liaison officer works with local authority
	 Gentrified areas Reduce crime Increase public confidence Maintain attractiveness of inner city to high-income groups Reduce fear of crime 	 Self-financing Small schemes Neighbourhood Watch signs displayed Good police-public communications Rapid response Encourage residents to help each other to reduce risks Encourage installation of alarms 	 Actively encourage schemes Domestic security surveys offered Detailed crime data provided

3.3 Victim support

Burglary touches many individuals and households, and is sufficiently serious that it may affect victims emotionally as well as financially. Victim support is central to the strategy of preventing repeat burglaries, which the literature recognises as one of the effective approaches in reducing burglary. The range of support offered to victims may include:

- the provision of crime prevention information (often in leaflet form and possibly delivered by post)
- security advice
- security audits
- installation of security hardware
- property marking advice and/or kits
- initiation of contact with neighbours
- referral to Victim Support Services.

Some of these may be offered to burglary victims by police as part of their standard response or as part of a specific project. In other projects volunteers have been involved in the victim assistance aspect of the initial response to burglary incidents.

Burglary incidents reported to police are more likely to be those rated by the victim as more serious (Budd 1999) and are therefore more likely to be burglaries where victim assistance is required. Three-quarters of the more serious incidents of burglary revealed in the 1998 BCS had been reported.

Mawby (2001), in a chapter giving an overview of victim assistance programmes, reviews the extent to which services offered to victims met their needs. In the UK, information extracted from the 1998 BCS (Maguire and Kynch 2000—cited in Mawby 2001) suggested that those victims in most need were those most likely to receive support. Fifteen percent of those who described themselves as very much affected by a crime had some form of contact with Victim Support, compared to 4% of those describing themselves as not at all affected. In terms of the types of assistance victims felt they needed, 'getting information from the police' and 'advice on security' were the two most common responses (30% of those surveyed), followed by 'someone to talk to/moral support' (23%). Those who had had contact with Victim Support were very positive, with 50% describing it as very helpful and 20% helpful, especially where their contact with the service was face-to-face.

The ACT Burglary Victim Response project (Holder, Makkai and Payne 2004) found that burglary victims were extremely likely to act on the crime prevention advice offered by attending police and made substantial changes to their home security and to their routines in response to the burglary. However, most of them did not access the victim support services offered because they did not feel that they required this service.

A NSW Safer Cities burglary reduction project expanded the services offered by police to victims of burglary to include security assessments at all burgled residences and to provide

crime prevention information packages through victim support services (Taplin et al. 2001). Follow-up interviews showed that most residents had acted on the security advice received and were significantly more satisfied by the police response to their burglary than residents in comparison sites. As a result of this project it was recommended that these services become a routine part of the police standard response to burglary.

The interviews with New Zealand burglary victims for the New Zealand evaluation show that their satisfaction or dissatisfaction with police responses is shaped by service-related and police attitude-related issues, and to some extent by outcome-related issues (Baker and Gray 2005b). Victims were most satisfied when they felt the police had responded appropriately, and particularly appreciated being taken seriously and treated courteously. The weakest area for victims was the lack of information they received on case progress.

Police provision of initial victim support in the form of security advice or assessments fits well with the concept of 'reassurance policing', mentioned in Section 2.2, Community policing, and does much to reduce fear and increase feelings of safety following burglary. Prompt referral to victim assistance services ensures support for those who require further assistance to restore their sense of security.

3.4 Single-staffed cars/role of first attending officer

The conduct of the officer attending a reported burglary has been shown to be the key factor in the outcome of the case, both in detecting the burglary and in providing quality of service to victims (Coupe and Griffiths 1996). The thoroughness of the attending officer in assessing and preserving evidence at the scene for Scene of Crime Officer (SOCO) examination, interviewing victims and neighbours, and preparing the offence report, provides the detail that determines further processing of the case. The majority of burglaries in Coupe and Griffith's sample were not solved, principally due to insufficient evidence for further investigations. However, this study found that victim satisfaction with police performance did not depend solely on whether the case was solved. Victim satisfaction with police services, even if the case was not resolved and no goods were recovered, was higher when:

- the initial response was prompt
- the officer(s) paid attention to reassuring the victim
- victims were kept informed about progress.

The findings are supported by those of a study examining the management of burglary investigations in three UK police forces (Gill et al. 1996). Police judged their success by arrests; however, for a significant number of second investigators success was hampered by their lack of confidence in the thoroughness of the initial investigation. Victims tended to comment on the quality of service they had received and the level of attention their burglary had received, rather than relating success with arrests and the recovery of stolen goods. In terms of victim satisfaction, police staff underestimated their own effectiveness.

Australian research in ACT has shown that attending officers are key providers of crime prevention information and advice to victims of burglary, who listened to and usually acted

on the advice given (Holder, Makkai and Payne 2004). Other Australian police forces have improved their response to burglary victims by including crime prevention advice and security assessments (Taplin et al. 2001; Queensland Criminal Justice Commission 2001).

4 Property-focused interventions

'Hot' property interventions are those intended to reduce the anticipated rewards of burglary and to increase the risks of handling 'hot' property. Property-focused strategies aim to:

- interrupt the supply and demand chains of the market
- increase the probability of detecting those distributing stolen goods
- make stolen items more easily identifiable by property marking and recording serial numbers.

If the avenues for disposing of 'hot' property have become more risky for all involved and there is no demand for the goods, then the potential gains for burglars are greatly limited. Since most burglaries are committed to obtain money, not goods for personal use, burglars must solve the problem of how to dispose of stolen goods. In fact, Sutton, Johnston and Lockwood (1998) found that those offenders who failed to sell what they had stolen in their first two or three burglaries generally gave up stealing, and their research suggested that stolen goods markets are fuelled more by thieves offering goods for sale than by proactive demand from dealers and consumers.

4.1 Targeting property markets

Strategies targeting markets in stolen goods are relatively recent developments and evaluations of the effectiveness of these approaches to preventing property crimes (with the exception of property marking) are not included in Sherman et al. (1997) or in Jordan (1998).

The *market reduction approach* (MRA) is a strategy for targeting stolen property markets based in part on initial work by Sutton, Johnston and Lockwood (1998), who identified five points at which markets could be disrupted:

- from burglars to commercial outlets (pawnshops, second-hand dealers)
- from commercial outlets to their customers
- from burglars to the general public (hawking in public places to strangers)
- from burglars to their social networks (friends, family, acquaintances)
- from burglars to residential professional fences.

Based on their earlier research, Sutton, Johnston and Lockwood (2001) elaborate MRA and put forward a strategic, systematic problem-solving approach to extend police crime data analysis with focused research to obtain up-to-date information about local stolen goods markets. This includes extensive information gathering: questioning victims, offenders, shop-

keepers, dealers, and informants as well as encouraging members of the public to pass on information directly and indirectly through avenues for anonymous crime reporting. They recommend a multi-agency approach to strategise, implement and monitor outcomes, involving, for example, the local authorities responsible for regulating trading, planning, housing and benefits.

MRA also draws on a study by Kock, Kemp and Rix (1996), who analysed the market for stolen electrical goods in East Anglia, focusing on the distribution network as a business network and looking for key points and strategies to disrupt it. Their main recommendations, put forward as Operation Circuit Breaker, were to:

- actively promote property marking
- focus more attention on known handlers of stolen goods to disrupt their relationships with burglars
- discourage public involvement in the market by distributing publicity warning that receiving is a serious offence and buying suspect goods indirectly makes burglary of their own homes more likely.

A recent overview of MRA outlines the elements of this approach as:

- identifying 'hot' products
- target hardening (as in making property easier to trace by property marking measures)
- addressing the handlers who distribute and purchase stolen goods
- using public education campaigns to create greater understanding of the risks and consequences of being part of the market (Australian Institute of Criminology 2005).

4.1.1 Identifying 'hot' products

An understanding of the type of property that gets stolen most frequently and how burglars turn 'hot' property into whatever meets their needs is the basis of any market reduction strategy.

Data on what is most commonly stolen can be gathered from police reports, insurance claims and interviews with offenders. The most frequent items reported as stolen to the ACT police in 1999–2000 were jewellery, clothing, mobile phones, CD/DVD/videos and players, and computers (Nelson, Collins and Gant 2002). In Sydney between January 1990 and December 1992 the item most frequently reported stolen was the video recorder, followed by TVs and power tools (Jochelson 1995). However, this report also shows that the number of TVs, VCRs and stereos stolen actually decreased over this time period, with an increase in the number of CD players stolen, illustrating the change in 'hot' products over time. Note that Jochelson's list does not include mobile phones or computers, which were 'newer' products in 1995, owned by fewer people, more complicated to use and less attractive to thieves.

An item's attractiveness is determined by the ease of resale and the money to be made from it, and a small number of 'hot' products account for a large proportion of the items stolen. Clarke (1999) memorably summarises 'hot' products as those that are CRAVED:

1 7

Concealable, Removable, Available, Valuable, Enjoyable and Disposable. Clarke (1999) discusses the changes in a product's 'attractiveness' that happen over time—through the stages of innovation, growth, mass market and saturation—suggesting that products in their growth and mass market stages are especially 'hot'. In the initial 'innovation' phase, use is generally more complicated and limited to early adopters, and by the later 'saturation' stage products are widely owned and relatively inexpensive, reducing the potential market. These insights suggest that the next 'hot' product is predictable and that anti-theft considerations should be part of smart product development (Clarke 1999).

4.1.2 Target hardening

Marking property and recording unique identifiers (serial numbers, engraved codes, or other markings) is suggested as one way of making goods less desirable in the market for stolen property. Another approach to property target hardening is the development of 'smart goods' with security features such as unique markers, security coding, and password or PIN protection that make the items usable only by owners. These measures are discussed further in Section 4.4, Property marking.

4.1.3 Addressing handlers

A key to being able to address who is 'handling' stolen property is to identify the dimensions of the market in any particular area. Most jurisdictions have legislation regulating second-hand shops and pawnbrokers, which are commonly assumed to be regular avenues of selling on 'hot' property (see Section 4.3, Liaison with second-hand dealers, for further discussion). However, information from interviews with offenders indicates that these outlets form only one avenue in a diverse stolen goods market which may involve a range of other businesses, drug dealers and, more informally, the social networks of the offenders (Cromwell, Olson and Avary 1991; Wright and Decker 1994; Stevenson and Forsythe 1998; Nelson, Collins and Gant 2002).

Offender studies indicate some consistency in the avenues used to pass on stolen goods. In a survey of 250 imprisoned burglars in NSW, it was found that:

- 70% had traded for drugs
- 63% had sold or given goods to family, friends and acquaintances
- 62% had sold goods to fences
- 51% had sold goods to 'legitimate' businesses (jewellers, wreckers and mechanics, tradespeople, local corner stores)
- 49% had sold goods to pawn or second-hand shops
- 30% had sold goods to strangers in public places
- just 2% had sold goods through garage sales (Stevenson and Forsythe 1998).

There are comparable reports from Nelson, Collins and Gant (2002), whose study included interviews with 46 offenders in the ACT:

- 52% exchanged stolen goods for drugs
- 50% sold stolen goods to businesses
- 40% sold stolen goods to friends, family, acquaintances
- 30% sold stolen goods to strangers
- 54% had stolen to order.

Similar avenues are used in the US. Wright and Decker (1994), in their interviews with 'active burglars' in St Louis, Missouri, found that property was disposed of as quickly as possible (preferably immediately and with least possible risk) by dealing with known people and usually by accepting only a small fraction of real value. Pawn shops, drug dealers, and friends, family and acquaintances were again the most frequently used avenues of disposal for this group. Knowing a professional fence was regarded, in this group, as the mark of a more experienced 'professional' burglar.

Rapidly disposing of stolen goods (often within an hour of committing the burglary) and dealing only with people known to them were common strategies of avoiding detection in the study with NSW offenders (Stevenson and Forsythe 1998). Many of this group (77%) had 'stolen to order', and 31% did so most of the time. Selling to strangers, for example in bars, was done infrequently, but it was among the methods used by prolific offenders and therefore a potential way of targeting high-offending burglars.

The contribution of the 'general public' to creating a market for stolen goods is considerable. Cromwell, Olson and Avary (1991) found that non-professional receivers accounted for 60–70% of the market for stolen property in Texas. Allen (2000) found that 5% of the NSW population had been offered stolen goods in the last year, and two-thirds of those had been offered goods on more than one occasion. 'Hot' property was more likely to be offered to men than to women, and to younger people. The results of the 1994 BCS revealed that 11% of people in England and Wales had been offered stolen goods in the previous year, 11% admitted to buying stolen goods in the last five years and 70% thought that some of their neighbours possessed stolen items (Sutton et al. 1998). In the US, Cromwell and McElrath (1994—cited in Allen 2000) found that 36% of respondents had been offered stolen goods at some point in their lifetime and 13% had bought them.

In interviews with 26 informants who had been convicted of a burglary in New Zealand (Baker and Gray 2005a), and who were rather reluctant to reveal much detail, by far the most common method of disposing of stolen goods was through contacts of some kind:

- 27% of the group had sold to second-hand shops
- 23% of the group had sold to drug dealers
- 19% of the group had sold to friends.

4.1.4 Public education campaigns

The surprising extent of the involvement of the general public in stolen goods markets revealed by the studies cited above supports the suggestion that, in the long term, burglary reduction initiatives could be supported by creating a better understanding of the outcomes of complicity in the crime through public education campaigns.

It appears that, although some people buy stolen goods unwittingly, many people who do purchase stolen goods do so in the knowledge that they may have been stolen, and choose not to ask questions about their origin. Cromwell, Olson and Avary (1991) located and interviewed both professional and non-professional receivers, a group which included schoolteachers, social workers, plumbers, small business operators, attorneys, systems analysts, college professors and students. These non-professional receivers rationalised buying goods that they knew could have been stolen as 'good business' or justified it with 'if I don't buy it someone else will'.

The main factors which Henry (1976) found to influence people's decision to purchase stolen goods were:

- the low price
- the ambiguous language used to make the status of the goods unknown
- an individual's personal level of honesty or dishonesty
- the peer pressure involved in being a member of a network where goods are distributed
- the belief that if the goods were stolen it would be from a business which can afford the loss, or a wealthy and insured household, so the crime would be 'victimless'.

These are moral and ethical issues, and are open to influence in long-term public education and publicity strategies which emphasise the personal and legal risks of being a receiver and buying stolen goods.

In 2001, the West Mercia Constabulary implemented an MRA to disrupt stolen property markets and launched this initiative as the well-publicised 'We Don't Buy Crime' campaign (Schneider 2003). This included an extensive media campaign that focused on educating the public about the social and economic costs of the stolen goods trade. An education package was developed to teach students about the consequences of buying stolen goods to 'get a bargain'. This recent campaign has reportedly achieved significant results, although it has not been formally evaluated and the impact of the publicity is unreported.

Two recent MRA trials also included extensive publicity campaigns to engage the public, both to request information about local stolen property markets and to educate about the costs of purchasing stolen goods (Hale et al. 2004). These campaigns appear to have had minimal impact on public responses and, as the report suggests, it is unrealistic to expect that single local projects can cost-effectively change social attitudes and behaviours.

4.2 Trials of the market reduction approach

MRA was trialed in two local policing initiatives in the UK in 1999–2002 to test the strategic framework put forward by Sutton, Johnston and Lockwood (1998) and Sutton, Schneider and Hetherington (2001) for targeting stolen goods markets (Hale et al. 2004). These projects were evaluated after 57 and 66 months. The quantitative results are reported as disappointing in that neither project area demonstrated any impact on burglary figures, but qualitatively the project achievements were promising in terms of what was learnt about the intelligence gathering and analysis process required to map property markets, about the nature of the local stolen property markets, and about multi-agency cooperation.

The evaluation overview stressed that MRA is an intelligence-led strategy and highlights the importance of analysing local markets using multiple sources of information from the local community, including offenders. The preparatory phase of mapping the local market included:

- identifying the nature of local burglary
- investigating the disposal routes
- determining the potential points of most effective intervention.

This was a large undertaking and one project, staffed by a police intelligence officer and an experienced academic researcher, needed nearly 16 months to get sufficient understanding of local markets to be able to develop appropriate intervention strategies. Intelligence on 'handling' was found to be more difficult to gather than for many other crimes, in part because it is not seen as a serious crime by the public, and in part because offenders were reluctant to reveal to police the 'handlers' their success depends on.

MRA also made considerable and challenging demands on all levels of the organisational arrangements of the local police forces and their partner agencies. Liaising with second-hand dealers and encouraging the recordkeeping required was easier to establish than the parallel project with pub-owners. Here police efforts to interrupt distribution impacted on pub trade, surveillance was difficult, and there was little business incentive for publicans to participate, giving police little leverage.

Both projects used PR firms and mounted costly publicity campaigns to inform the public of the costs of buying stolen goods. However, this publicity seemed to have little impact on public behaviour and the report concluded this was not a cost-effective approach at local project level. Property marking kits were sent to every household in one project area to encourage resident participation, and to publicise the project. The up-take of property marking was low, largely because it is not regarded as a deterrent to burglary or as a means of property being returned. Given the established link with drug markets, one project attempted to incorporate a drug treatment element, but this ran into a range of practical problems associated with treating local offenders in a nationally-based prison system.

Many property arrests were made in the project areas—240 arrests in one project and 140 in the other—but many of these arrests were for burglary or theft rather than for 'handling' as

was intended in the project design. However, as projects became more successful they were targeting 'higher-level' criminals and making fewer but 'quality' arrests.

The report concludes:

There have been a considerable number and range of promising interventions. If, inevitably, the projects have encountered problems and obstacles, this is the price of ambitious and imaginative objectives. (Hale et al. 2004, 14)

4.3 Liaison with second-hand dealers

Second-hand shops and pawnbrokers are one avenue of selling on 'hot' property and most jurisdictions have legislation which regulates and allows police oversight of this trade. Interview studies indicate that these outlets are used by up to 50% of offenders (Cromwell, Olson and Avary 1991; Wright and Decker 1994; Stevenson and Forsythe 1998; Nelson, Collins and Gant 2002), although in New Zealand these outlets may account for a smaller proportion of the stolen goods market (Baker and Gray 2005a).

Liaison with second-hand traders was seen as a productive aspect of the UK MRA initiatives targeting stolen goods markets and resulted in 35 charges for theft (Hale et al. 2004). Two years into the projects, information from intelligence gathering indicated that offenders were very aware of the projects and had stopped using second-hand shops to dispose of stolen property. The projects relied on voluntary registration and record-keeping of all transactions (transaction registers supplied by police) with records of the goods and the seller. One project supplied cameras for photos of the seller with the goods. Initially liaison with secondhand traders to encourage registration and compliance was part of patrolling responsibilities, but later it became part of the role of a dedicated unit of two officers for one project and in the other was carried out by technical assistants. Feedback from traders indicated that many genuinely supported the initiatives and appreciated the consistent contact with police but not the increased bureaucracy and paperwork. Trading Standards staff on the local councils also found the increased liaison with police useful.

Analysis by Fass and Francis (2004) indicated that pawnbrokers in Dallas have a relatively minor role in recycling stolen goods, but that the volume and value of these goods is larger than proposed by earlier US studies. The Fass and Francis research analysed pawn data for Dallas, Texas, for a six-year period and revealed a small number of high-frequency pawners (2.7% of pawners trading 30 or more times). Members of this group of frequent pawners were found to be 2–3 times more likely to have an arrest record for property offences. Unsurprisingly, the goods pawned include a similar range of items to those frequently stolen items—the same characteristics that make them targets of choice make them good pawn items. The authors calculated the probable size of the pawn trade and the possible contribution of stolen goods to this trade. Their 'guesstimate' suggests that although as much as 25% of the pawn industry's gross income could come from stolen goods, this would only represent approximately 2–2.5% of all goods stolen.

Fass and Francis (2004) put forward the view that deliberately disrupting the pawn markets as a crime reduction strategy is unlikely to be effective. 'Hot' goods remain invisible in the daily

exchanges of second-hand items between sellers and buyers, and the authors suggest that much remains to be established before a market disruption strategy could have an impact. Many brokers were already using measures to reduce the likelihood of buying stolen goods—CCTV, photos, registers, etc.—with little effect. Their suggested strategy is to focus on the pawnshops as sources of information about people and the items being offered for sale, and for the identification and apprehension of thieves. This would require efficient means to track transactions and transactors in pawnshops, better staffing of police property squads and prompt processing of information from all aspects of the market.

4.3.1 Legislation

New New Zealand legislation governing pawnbrokers and second-hand dealers came into effect on 1 April 2005. Key changes in the legislation were the introduction of a five-year license with stringent licensing and certification conditions, and the requirement that dealers maintain a register that records the name and address details, verified by photo ID, of anyone they have purchased goods from.

This new legislation contains some of the recommendations Packer (1997) put forward in a comparison of Australian (all states and territories plus federal), New Zealand pre-2005 and some international (state of California, city of Calgary, city of Vancouver) legislation governing the pawn and second-hand goods industries.

The following were identified as critical legislative components:

- licensing for all dealers (dealing from premises, markets, garage sales, etc.) to include a check of criminal records and financial status
- record-keeping for effective monitoring, specifying format of records, time for retention, and frequency of providing records to the police (computer-based recommended)
- verifying of ID of the seller or pledger with presentation of photo ID showing full name, current address, and date of birth
- providing guidelines for managing suspected stolen goods, specifying the action to be taken, such as the retention of goods and requirements to contact police
- specifying the conditions for police access to the premises, goods and records
- specifying the minimum time to retain goods unchanged before sale, to allow checks and prevent dismantling, disguising, and moving
- providing guidelines for the sale of unredeemed pawned goods, to ensure that this is not a source of considerable profit to pawnshops (require sale at public auction as soon as possible after expiry of redemption time for best price, with the profits to go to the pledger).

Packer (1997) also recommended that legislation governing the second-hand trade be clear about its primary focus. Legislation may be intended to regulate dealers, to facilitate the recovery of stolen goods, or to apprehend offenders: it will not be able to serve all of these intentions equally well (e.g. stringent ID and ownership validation may drive trade in stolen goods to other avenues).

4.4 Property marking

Property marking is frequently suggested as one of the ways in which the public can help protect themselves by making their property less attractive to burglars and by enabling police to recover and return their property. It is seen as an important part of comprehensive market reduction strategies. Property marking schemes encourage:

- engraving items
- using marking pens with ink that shows up under UV lights
- photographing items which cannot be marked easily (e.g. jewellery)
- keeping a property register which records the serial numbers and distinguishing features
 of any property likely to be targeted.

Houses containing items marked in this way may also have window stickers advertising that their property is marked.

The two evaluations considered by Sherman et al. (1997) were contradictory, and they conclude that the effectiveness of property marking in reducing burglary is uncertain. The successful Welsh demonstration project, which achieved a 38% reduction in burglary, was established in an area containing three villages of about 700 households each (Laycock 1985). The scheme had a very high take-up rate (greater than 70%) and was highly publicised across the area, with window stickers displayed by most participants. For the 21 offences reported by police following scheme launch, no goods were recovered; only two stolen TVs and two stolen stereos were actually marked, and the property markings played no role in detection of the offences. Although the study concluded that there was a deterrent effect from property marking, it is also highly likely that it was the very effective scheme publicity which deterred local burglars. The unsuccessful Canadian evaluation of property marking found an increased burglary rate over the 18 months following the intervention programme (Gabor 1981—cited in Sherman et al. 1997).

Property marking has been a component of many other burglary reduction schemes and promoted with property marking kits and advice provided through victim support services, Neighbourhood Watch schemes and other antiburglary publicity (e.g. Kirkholt—Forrester et al. 1990; Beenleigh—Queensland Criminal Justice Commission 2001; the Yew Tree and Stirchley RBI projects—Home Office 2003c, 2003d). Evaluations have concluded that this has not been an effective intervention, with low uptake by residents and with very few marked items ever recovered.

For property marking to become an effective burglary reduction strategy, broader participation would be required—for example, from the public, police, manufacturers and the insurance industry. Stolen goods can rarely be identified as stolen because:

- most items do not have unique identifiers (serial numbers, engraved codes, markers)
- most households do not mark and record identifiers
- most households do not report losses to the police

• keeping up-to-date police records for reference and circulation is a huge job with the high volume of goods stolen each year.

Technological advances offer the possibility of developing 'smart goods', designing in antitheft features such as unique markers, security coding, and password or PIN protection that make the items usable only by owners. The insurance industry, which could be seen as offering a disincentive to recording property identifiers for the frequently stolen electronic equipment when a claim offers owners the opportunity to update to the latest models, could offer incentives to clients who have recorded and reported identifying details for stolen items.

5 Offender-focused interventions

There are a range of possible interventions to prevent 'motivated offenders' from reaching 'suitable targets'. These include actions that make it harder to offend and increase the risks for offenders, for example through the more traditional policing approaches of enforcement and incapacitation, as well as increase the likelihood of detection. There are also a number of programmes aimed at decreasing the motivation to offend, both in the group of those who are already offending and those who are at risk of becoming offenders.

5.1 Targeting repeat offenders

'Hot' offenders contribute to creating 'hot' locations and 'hot' victims. This has been well established by research described in earlier sections of this review.

Targeting repeat offenders is endorsed as an effective policing strategy by both Sherman et al. (1997) and Jordan (1998). Sherman et al. (1997) present the evidence from evaluations of policing strategies aimed at increasing the incarceration rate of the targeted offenders, which show that proactive, police-initiated arrests focusing on high-risk offenders can lower the rate of serious crime. With the exception of targeting drug markets where strategy evaluations show inconsistent outcomes, there appear to be substantial results from focusing scarce arrest resources on high-risk people, places, offences and times.

Targeting known offenders has been used in a number of successful burglary-reduction initiatives, often as one aspect of multicomponent strategies. Projects that have used this approach include the Boggart Hill project in West Yorkshire, which achieved a 60% decrease in burglaries (Farrell, Chenery and Pease 1998), and the projects in Yew Tree (47%) and Stockport (40%) initiated as part of the RBI (Home Office 2003c, 2003e). Recent burglary reduction operations in Canberra which focused on targeting known offenders achieved significant drops in the incidence of burglary (Ratcliffe 2001), and in NSW this approach reduced burglary by 10% (Chilvers and Weatherburn 2001a, 2001b). These initiatives are described in more detail below.

Focusing resources for a limited period upon an identified crime problem is often referred to as a crackdown. Sherman (1990) analysed a range of police crackdowns in the US and noted the frequent existence of a residual crime prevention benefit, with deterrent effects lasting beyond the crackdown itself, although they can decay quite rapidly. He suggests that these findings of initial decay and residual deterrence indicate that crackdowns might be more effective if they are limited in duration and rotated across targets. Chilvers and Weatherburn (2001a, 2001b) urge caution in strategies employing crackdowns. In some social groups, for example the Aboriginal and Torres Strait Islander communities in Australia, there are suggested links between repeated imprisonment, entrenched unemployment and recidivism. A strategy of targeting repeat offenders may increase or contribute to their long-term

unemployment and therefore increase the depth of their involvement in and reliance on crime.

The successful antiburglary project in the Boggart Hill police beat area in West Yorkshire, which resulted in a 60% decrease in burglaries in the area, employed a two-stage strategy which initially targeted repeat offenders in a crackdown on known prolific local burglars, followed by target hardening measures to protect those most at risk of repeat victimisation (Farrell, Chenery and Pease 1998). Local offenders were included in the crackdown if their profile showed that they:

- had a prior record for burglary
- were prolific and would account for a disproportionate number of burglaries
- were currently at large
- were suspected to be currently active.

These profiles were constructed by drawing on police and criminal justice system records plus the local knowledge of the community beat constable and sergeant. During 1995 the 14 most prolific known burglars were identified, targeted and arrested. This targeting approach did not involve extra staffing, but focused the policing activities of the community beat constable and sergeant on burglary and the known burglars in the area. The initial phase of the project reduced burglaries in the area through incapacitation and by generating a deterrent effect on others who learned of the crackdown.

The Boggart Hill project is presented as innovative in following the initial crackdown on known offenders in the area with a consolidation phase in which the police worked together with other agencies, including the Council and Housing Services, to provide target hardening and security advice to those at risk of repeat victimisation. A multi-agency antiburglary panel met to discuss and initiate the consolidation strategies. Neighbouring areas appeared to benefit from this strategy with a smaller drop in burglary rates, and there did not appear to be a spatial displacement effect. Farrell, Chenery and Pease (1998) suggest that this crackdown and consolidation strategy could be further developed to extend the benefits of an initial crackdown and lessen the rate of decay of its effect in achieving lower crime rates. A new crackdown could be initiated for a short intense period, informed by crime analysis, if the burglary rate begins to creep up when offenders are released from prison and/or new offenders begin to emerge.

Two of the published case studies from the Home Office RBI-funded projects are initiatives where targeting known offenders formed a key part of the intervention strategies. Both used the approach of an initial police crackdown on known offenders followed by a consolidation phase involving a range of other burglary reduction initiatives. The Yew Tree, Sandwell project achieved a 47% net reduction in burglary in the area using an initial police crackdown followed by broader community-based consolidation activities which included property marking, target hardening, environmental improvements and youth diversion initiatives (Home Office 2003c). The Stockport project achieved a 40% net reduction in burglaries through an initial police crackdown on local prolific offenders (surveillance, arrests and incapacitation) which resulted in 17 arrests, 10 addresses searched, and £100,000 worth of stolen property recovered (Home Office 2003e). This was followed by target hardening of

vulnerable properties (selected from new and repeat victims, the elderly, single parents, renters and residents new to the area). The project also had an extensive media component with publicity through newsletters (delivered to the area by carefully selected offenders on Probation's Community Service orders), a TV documentary on the project's activities, and websites.

There are several recent Australian reports of operations which have reduced burglary rates by targeting repeat offenders.

In NSW, police resources were particularly focused on 'hot' offenders, as well as on 'hot' times and places, over a two-year period following changes in policing strategy from the introduction of Operation and Crime Review (OCR) panels, a local version of the New York COMPSTAT process (Chilvers and Weatherburn 2001a, 2001b). This approach resulted in substantial drops in crime rates, including a 10% reduction in residential burglaries. Local criminal investigation teams targeted offenders in their areas with three or more convictions or with an outstanding first instance warrant, and/or those who were thought by intelligence analysis to be criminally active. In the two years following the introduction of the OCR strategy, the number of offenders with prior convictions up before NSW courts rose by 30% per year (and the prison population rose by 13%). In their analysis, the reduction in crime rates following this strategy is attributable to policing rather than extraneous variables (unemployment, economic activity, etc.). The strategy of targeting repeat offenders produced only a temporary suppression of property crimes, with the property crime rate increasing again over the two years to 2001.

Three police operations to reduce burglary by focusing on repeat offenders and 'hot' spots were initiated in Canberra in response to a sudden increase in the number of residential burglaries in the late 1990s (Ratcliffe 2001, 2002; Makkai et al. 2004). (At the same time there have been a range of burglary research initiatives in Canberra which included research into:

- repeat victimisation
- target hardening of vulnerable households
- a burglary victims' response project
- stolen property markets
- corrective programs for repeat property offenders [Holder, Makkai and Payne 2004]).

The first of these police actions, Operation Chronicle, targeted burglary offenders over a three-and-a-half-week period at the end of 1999 and the burglary rate fell sharply but rose again to pre-operation level within a few weeks. The second, Operation Dilute, ran for two months in 2000 and employed a varying number of officers, with impact on burglary rate visible for about three months post-operation (Harman 2001). The third was Operation Anchorage, which ran over four months in 2001.

Operation Anchorage had a statistically significant impact on burglary levels (from published graphs it appears to be on the order of 50%), with the level of reported burglaries remaining low for some months before the benefits decayed and the level returned to what it had been before Anchorage after 45 weeks (Makkai et al. 2004; Ratcliffe 2001, 2002). It is estimated

that 2445 offences were prevented in the post-operation period. Operation Anchorage was planned on the basis of the two earlier evidence-based operations (Makkai et al. 2004; Ratcliffe 2001, 2002). Extensive resources (about 10% of available officers) were put into identifying and locating repeat offenders, followed by assertive prosecution and removal of offenders from the community to minimise the scope for reoffending. Initial successes were achieved by teams directed by intelligence to the most active offenders and the high-burglary areas. The operation itself affected practically all areas of ACT policing, including patrols and specialist investigative areas along with a wide range of support, intelligence and forensics personnel. Support strategies included random breath testing in 'hot' locations by police supplied with profiles of targeted offenders.

Anchorage successfully targeted 'hot' offenders and had a deterrent effect (Makkai et al. 2004). Analysis of the criminal histories of those arrested for property offences during the first half of 2001 showed that:

- 77% of those arrested had at least one recorded prior offence
- these repeat offenders had an average of eight offending episodes
- 18% of offenders had 15 or more prior offending episodes.

The offending rate of 'hot' offenders decreased post-Anchorage, strongly suggesting the operation had a deterrent effect on Canberra burglars. An analysis of offender data was undertaken to investigate the possible effect of incarceration on recidivism in this time, in terms of delaying the next offence. Records made it difficult to track the effects of changes to the Bail Act and also to track particular offenders through to sentencing outcomes. However, there was a significant negative correlation between the average number of weekly incapacitation days (both remand and prison) and the weekly burglary rate—as one goes up the other goes down. The data were strong enough to conclude that a non-trivial amount of property crime was prevented by the targeting and incapacitation of repeat property crime offenders, with a deterrent effect generated by:

- the increased likelihood of detection
- a reduction in crime opportunities due to the increased police action around 'hot' spots
- the increased surveillance of recidivist property offenders in the community.

Intensive targeting operations, such as those in NSW and ACT described above, can also be resource intensive. Operation Anchorage was developed with extensive liaison with government, and a heavy commitment to research, policy development and resource planning (Ratcliffe 2001). It also directly impacted on police patrolling resources, with staff at one stage of Operation Anchorage having to take time out to process all the arrests and keep up with the paperwork. Chilvers and Weatherburn (2001a, 2001b) report the flow-on effects of state-wide targeted arrests of offenders in both courts and prisons in NSW.

5.2 Curfews

Police enforcement of curfews imposed as part of the bail conditions for alleged burglary offenders is undertaken to deter reoffending while on bail. In some jurisdictions, when judges sentence people convicted of burglary offences they do not consider offences they committed while on bail in determining the sentence and offenders may regard bail as a 'risk-free opportunity for burglary'. Bail laws in New Zealand, Australia, Canada, parts of the US and the UK appear to allow the imposition of a curfew as part of the bail conditions imposed on an (alleged) offender. (A Google search on 'curfew as part of bail conditions' yielded documents from US, Canada, UK, Australia and New Zealand jurisdictions).

The effectiveness of bail curfews, and of enforcing them, does not appear to have been evaluated in published literature.

Enforcing bail conditions by monitoring the compliance of burglary offenders was one of the activities undertaken as part of Operation Bumblebee by Area One of the Metropolitan Police Force (Stockdale and Gresham 1995). When an offender was bailed by the court, the Crown Prosecution Service was asked to seek a curfew to cover the time period of the offence, and a condition of residence. The burglary teams then visited offenders to ensure compliance with bail conditions. Operation Bumblebee was a Met-wide approach that effectively reduced the burglary rate (by 15%) by implementing a strategy based on the formation of dedicated burglary squads combined with the targeting of burglary across a range of police operations.

Regarding bail as criminogenic, the Boggart Hill project sought to restrict prolific offenders by seeking remand in custody, instead of on bail (Farrell, Chenery and Pease 1998). Remand in custody was regarded as a key element in deterring one offender described in a case study. Many offenders were known to be particularly active in committing crimes while remanded on bail awaiting trial. In the UK offences committed while on bail are not usually considered at trial, so this can make bail criminogenic and act as a reward for offending during this time (Morgan 1992; Burrows et al. 1994—Home Office research—cited in Farrell, Chenery and Pease. 1998)

Imposing general youth curfews to reduce crime is not effective, and is a highly contentious strategy that can be seen as discriminatory, illegal and in contravention of human rights provisions. Sherman et al. (1997) briefly discuss curfews as a popular crime prevention practice aimed at separating victims and offenders, but find no evidence supporting the effectiveness of curfews in reducing crime.

Males and Macaillair (1999) analysed arrest, reported crime and mortality data from jurisdictions throughout California for 1980–1997. They found that enforcement, even vigorous enforcement, of curfews and other juvenile status laws had no beneficial effect on crime, youth crime or youth safety and that those cities and counties with zero or near-zero enforcement were just as safe (or unsafe) from crime and had similar rates of juvenile violent deaths.

A 1995 article in Te Rangitahi, the New Zealand Youth Justice Newsletter, raises concerns about the legality of curfews imposed as a strategy to deal with high rates of juvenile offending in terms of the New Zealand Bill of Rights and the UN Convention on the Rights

of the Child, and points out how unthinkable it would be to impose a curfew on men, who make up a significantly higher proportion of offenders (Te Rangitahi 1995).

Simpson and Simpson (1993) examine the imposition of youth curfews, and question the supposed benefits of reduced juvenile crime, protection of young people and increased opportunities for parental influence. They conclude that the assumptions behind curfews:

- raise human rights issues and are discriminatory in assuming that home is a safe place for all young people
- contain cultural biases
- do not address the structural social inequalities that disadvantage particular groups.

However, Simpson and Simpson distinguish between general curfews imposed on a whole population and specific curfews imposed to restrict the movement of selected individuals who have (or are alleged to have) offended, for example as part of bail conditions.

5.3 Youth crime prevention

Dysfunction in any one of the areas in which young people develop—family, peers, school, and community as well as individual—can lead to offending (McLaren 2000) and therefore all of these areas are possible sites for youth crime prevention initiatives.

The number of young people involved in at-risk behaviour is quite high, as shown by a study into the incidence of three risk factors:

- substance abuse
- antisocial behaviour
- delinquency and school failure (Dryfoos—quoted in McLaren 2000, 20).

In a group of 14–17 year olds, 30% were categorised as high or very high risk, 35% were medium risk and involved in at least one or two high-risk behaviours but not as intensely as their high-risk peers, and a further 20% were involved in risky behaviours but to an extent unlikely to jeopardize their futures.

Most of the research reviewed in McLaren's investigation of what works to reduce offending by young people focuses on working with offenders and not on broader youth crime prevention initiatives, where it is more difficult to show a direct impact on crime and to establish the cost effectiveness of programmes in terms of crime reduction. Persistent young offenders and their families show a range of problems that may include:

- substance abuse
- criminal behaviour
- accommodation difficulties

- poverty
- unemployment
- mental health problems
- violence
- neglect and abuse
- poor education (McLaren 2000).

Early intervention programmes to address any of the range of factors that lead to these problems for young people and their families may have youth crime prevention benefits. However, many of these interventions are beyond the scope of police practice.

Specifically targeted programs for disadvantaged early childhood, middle childhood and adolescent non-offenders can cost-effectively reduce crime levels (Aos et al. 2001). The programmes producing these outcomes include:

- long-term home visits to high-risk mothers with infants through a Nurse Home Visitor programme
- enhanced pre-school education and childcare services with parent support and training
- multifaceted programmes focusing on children, parenting and teachers in high-crime areas
- multicomponent assistance to disadvantaged pupils
- somewhat less successfully, long-term intensive residential work skills programmes for atrisk youth.

This Washington State Institute of Public Policy study considers programmes that have been evaluated rigorously and longitudinally to determine whether subsequent criminality is affected by programme participation, and covers non-offender or general programmes as well as those aimed at juvenile and adult offenders (Aos et al. 2001). There are many programmes that do not produce these results, or which have not been evaluated with sufficient rigour to demonstrate these crime reduction outcomes. However, the programmes outlined above demonstrate that cost-effective interventions with at-risk youth are feasible.

Poor school performance and persistent truancy have been linked with delinquency, drug use and criminal behaviour (Farrington 1996—cited in Holden and Lloyd 2004). Although the specifics of what works in the school environment to reduce crime, delinquency, and substance abuse are outside the scope of this review, schools are regarded as an ideal site for crime prevention strategies, with access to young people throughout their developmental years and with the potential to involve family and community.

Truancy can be an indicator of future criminality (Stouthamer and Loeber 1988—cited in White et al. 2001; Devlin 1995—cited in White et al. 2001). Failure to attend school limits opportunities to learn and may (further) involve a young person in a delinquent subculture with an avoidance of responsibility and lack of respect for achievement. Lipsey (1992—cited in McLaren 2000) found that participation in school is more strongly linked to changing delinquent behaviour than to school achievement or change in psychological measures, and

on this basis regards increasing the participation of young people in schooling as a key part of reducing their antisocial behaviour and offending. Although the relationship between truancy and crime is complex, if schools can reduce truancy, indirect effects on crime may occur (Graham and Bowling 1995—cited in White et al. 2001).

The UK Crime Reduction Programme, launched in April 1999, included programmes working with families, children and schools to prevent young people becoming the offenders of the future and funded research and evaluation of the role that education can play in preventing offending by young people (Holden and Lloyd 2004). One outcome of this research was the finding that attendance monitoring and management systems combined with responses to absences which included first-day calling, in-school attendance officers and police truancy sweeps resulted in improved attendance and fewer exclusions from school.

In California, a collaborative and non-punitive truancy recovery programme, set up as a partnership between police and the schools in the area, was one component of a multifaceted and multi-agency strategy to address increasing violence in communities within one police district (White et al. 2001). Police returned suspected truants found on the streets during school hours to a Student Welfare and Attendance office, where staff:

- sought contact with parents
- established accountability
- returned students to in-school programmes rather than out-of-school suspensions.

This study found that the police truancy sweeps successfully identified a group that included a large number of seriously at-risk youth. Many had prior contacts with police (for a variety of reasons), although only a small number (7%) had a formal arrest record. This group increasingly came to police attention, and 14% were formally arrested in the following year. This group of truants had records of poor school attendance, and were disruptive and not achieving when at school.

The academic and attendance records of a random sample of truancy recovery program participants showed that most continued to struggle in school; however, improvements were greatest amongst those who had been performing most poorly. The authors conclude that, to be effective, programs that identify at-risk youth must draw on substantial educational, social, justice, and community resources to adequately address the needs of these youth,. This study cites a review of truancy programs (Garry 1996—cited in White et al. 2001) in suggesting that successful truancy programmes involve parents and hold them responsible for their child's behaviour, and also provide intensive monitoring, counseling and other services that focus on strengthening the family.

There is a lack of evidence for the effectiveness of police involvement in proactive youth programmes, such as recreation programmes, in terms of youth crime reduction (Sherman et al. 1997). Police recreation activities with juveniles and truancy programs remain largely unevaluated. There has been one rigorous evaluation in the UK where Heal and Laycock (1987—cited in Jordan 1998) found no effect on crime after considerable police input to a summer programme which covered about 25,000 children.

Rigorously establishing the effectiveness of police participation in youth crime prevention initiatives is challenging, as is the evaluation of any community programme. Sherman et al. (1997) specifically note the absence of large-sample randomised controlled trials which focused on the community programmes and measured outcomes in terms of serious crime. There are, however, many promising approaches to community crime prevention, and Sherman et al. (1997) indicate that the prospects for community-based crime prevention may be better than the evaluation record suggests.

5.4 Offender treatment

Targeting known 'hot' offenders has been shown to be an effective policing strategy to reduce burglary. It is a strategy that is thought to work largely by relying on the criminal justice system to incapacitate offenders through community-based or custodial sentences, although it may also have a deterrent effect on offenders' criminal activity around the time of an offender-targeting campaign (e.g. Ratcliffe 2001). Essentially this strategy is of time-limited effect—offenders will eventually be free in the community again—and sentencing alone appears to have little effect on reducing reoffending. In the studies they examined, Sherman et al. (1997) found no convincing evidence that increasing the arrest rates for a particular crime will reduce the overall level of offending for that crime. This section briefly reviews studies of the effectiveness of offender treatment as a strategy to reduce the size of the pool of potential burglary offenders by reducing the likelihood of reoffending.

The effectiveness of offender treatment extends well beyond the scope of a literature review focusing on police practice in reducing residential burglary and into the domain of criminal justice interventions and of rehabilitation programmes, where there is a vast body of literature. However, this review seeks answers to four questions.

- Does the way young people are dealt with by police processing and other criminal justice procedures have any impact on the likelihood of future offending?
- Is there any way to identify those who may become persistent offenders?
- What is known from research about the impact on reoffending of the different 'processing' options when an offender is caught—from cautioning and diversion to sentencing, both custodial and community?
- Can offender treatment programmes reduce the likelihood of future offending? If so, what are the characteristics of effective programmes?

5.4.1 Policing

The effects of policing on crime are complex and police treatment of offenders can impact both positively and negatively on the likelihood of an offender reoffending. There is evidence that fair and responsive treatment by police is associated with increases in obedience to the law (Sherman et al. 1997). McLaren's review (2000) concludes that respectful, fair treatment of young people by police and youth justice personnel can make a positive difference to reoffending outcomes and that processing is particularly effective if it does not shame the young person or their family but encourages them to feel remorse for their offending. It has been found that formally charging young offenders can be criminogenic and actually lead to

further offending (Klein 1986 —cited in Sherman et al. 1997; Huizinga and Esbensen 1992—cited in Sherman et al. 1997).

5.4.2 Offender typology

Burglary is an offence largely committed by young offenders (e.g. Triggs 2000; Makkai et al. 2004), some of whom go on to become prolific property offenders—a group that represents about 20% of the young offenders who come into contact with police (Triggs 2000; Scott 1999—cited in McLaren 2000). Youth offending in New Zealand follows a similar pattern to juvenile offending elsewhere, in that a very small proportion of each generation is responsible for most of the offending (McLaren 2000). In New Zealand, three-quarters of young people never offend; and of the one-quarter of young people who do offend, most only do so once or twice. However, about 5% of young people (20% of young offenders) commit large numbers of crimes over a long period of time. Scott (1999—cited in McLaren 2000) found that 3% of New Zealand boys and 1% of New Zealand girls are 'lifecourse persistent offenders' responsible for half of their generation's offending. Clearly, early identification of this small percentage who become persistent young offenders and effective intervention to deflect them from criminal careers is desirable. The other 80% of young offenders tend to stop offending after minimal intervention, and cautioning by police or a court appearance may be sufficient to deter their further involvement in crime (McLaren 2000).

5.4.3 Risk factors

The known factors in recidivism in Australia reviewed by Makkai et al. (2004) include:

- the age of the offender, with younger offenders having a greater likelihood of reoffending (one study found that the chance of reoffending reduced by approximately 5% with each additional year of age)
- the type of offence, with those convicted of property crimes being two and a half times more likely to be rearrested
- the age at the time of first offending
- previous criminal history, the strongest predictor of rearrest.

All of these factors help identify the group of persistent offenders who require effective interventions—but this group will already have come to police attention. However, a second group of risk factors reflects aspects of the individual young person and their environment, and these are factors that are open to intervention. (See also the discussion on youth crime prevention in Section 5.3.) These include:

- substance abuse
- a history of aggressiveness
- poor self-management (impulsive, daring, doesn't think before acting)
- being a problem child at home and school
- being a victim of bullying.

Other risk factors include:

• family factors, such as neglect or abuse, poor parent-child relationships, and parental criminality

- school factors, such as truancy, school failure and little attachment to school
- peer-related factors, such as low popularity, mixing with antisocial peers, or delinquent siblings
- neighbourhood factors, such as:
 - poor living conditions
 - frequent changes of home
 - community disorder
 - extreme poverty.

All or any of these factors flag the risk of becoming a persistent offender.

5.4.4 Cautions

When an offender is caught, successive UK reconviction studies indicate that cautions administered by police were associated with low reconviction rates if confined to first-time offenders. This Home Office research (1994) showed that 85% of those given cautions were not reconvicted within two years and 72% had not been reconvicted after five years. Of the group who were reconvicted within five years, 75% had received previous cautions or convictions. For young offenders the reconviction rates were no higher following a caution than after formal processing.

5.4.5 Diversion

Diversion from formal justice systems following an arrest is widely used internationally, and diversion schemes are aimed at limiting the degree of an offender's involvement in the criminal justice system (McLaren 2000). This can happen at a number of points in the criminal justice system—before a charge is laid or before a court appearance, as with police diversion schemes, or after a court appearance but before conviction and sentencing. Diversion includes a very diverse range of programmes and approaches which may include restorative justice conferencing. In terms of effectiveness, diversion has been shown to have a moderate effect on reducing reoffending of 19.4% (Redondo et al. 1997—cited in McLaren 2000), although no detail is given on the type of programme or offenders. American meta-analyses (Aos et al. 2001) establish that diversion is generally no better or worse than normal court processing in reducing crime, even when accompanied by social services for the offender such as counseling, education or training. The exception was when the diversion programme used cognitive behavioural approaches such as behavioural contracting, which produced lower rates of reoffending. An earlier meta-analysis of diversion studies found that 'service-oriented' diversion was effective and had a positive impact on recidivism rates if it:

- was more intensive with high-risk offenders
- actively addressed identified risk factors

used cognitive-behavioural approaches

 was delivered in ways the offender responds to (Andrews et al. 1990—cited in McLaren 2000).

Unsurprisingly, these findings mirror the approaches found to be effective for custodial or community-based offender treatment programmes.

5.4.6 Family Group Conferences

A New Zealand study of Family Group Conference (FGC) outcomes found them to be no worse than court processing, pointing out that the group of young people going through FGCs in New Zealand are serious or persistent offenders who are likely to reoffend at a high rate (Morris and Maxwell 1998—cited in McLaren 2000). Recidivism was less likely when a young person expressed remorse during or after the FGC, agreed with the outcomes, and was not shamed by the process (Maxwell and Morris 2001—cited in Luke and Lind 2002). NSW research into the effectiveness of youth conferencing found a moderate reduction of 15–20% in reoffending after conferencing, in comparison to court processing, across different offence types regardless of gender, criminal history, age or Aboriginality (Luke and Lind 2002). (See Section 5.5, Restorative justice).

5.4.7 Sentencing

Reconviction studies also indicate that there is little difference in the range of custodial and community-based sentencing options in terms of their impact on reoffending, and that the differences in rates of reoffending correlate much more strongly with the age and criminal history of the offender than with the sentence they have received (Kershaw and Renshaw 1997—cited in Goldblatt and Lewis 1998). A meta-analysis by Lipsey (1992—cited in McLaren 2000) showed that release on probation has an 11% positive impact on reoffending. Reviewing studies such as these, McLaren (2000) concludes that overall, community-based sentences have more potential to reduce reoffending than custodial sentences. The effectiveness of a sentence appears to be dependent on the effectiveness of any associated intervention programme to reduce reoffending. These programmes can be delivered in either a community or a custodial setting, and extensive research and evaluation has established the principles which underlie the most effective of these programmes for juvenile and adult offenders.

5.4.8 Intervention programmes

Recent and rigorous research has identified the more powerful causes of reoffending, which have become the key areas addressed in effective young offender treatment interventions (McLaren 2000). The major risk factors for 'adolescent-limited' offenders, and therefore key targets for intervention, are (in order):

- mixing with antisocial peers
- substance abuse
- poor parental monitoring and parent-child relationships

poor performance and attendance at school.

For persistent offenders, the priority areas for intervention are to:

- improve social ties
- reduce contact with antisocial peers
- improve parental monitoring and parental relationships with the young person
- improve school/vocational involvement and performance.

McLaren's review (2000) summarises research studies which show that the most effective approach to changing these risk factors is to address more than one of the risk factors in a young person's life at once with a variety of techniques and to act through more than one domain in their world (family, school/work, peers and community). The most effective interventions used cognitive-behavioural approaches, teaching and modeling new skills and attitudes with opportunities to practice in the real world and with positive consequences for using them. These approaches include behavioural contracts, identification and challenging of irrational thinking, and various techniques for learning to think of consequences before acting. Interventions must target the specific risk factors that lead each young person to offend. The research also shows that effective interventions stem from the quality of the relationships established with young people by programme staff able to relate to young people easily while setting and enforcing clear rules, and holding young offenders accountable for their actions and their learning. However, interventions that focus on 'getting tough' by trying to scare or punish young offenders out of crime (Scared Straight-type programmes) are not effective.

The American study of the comparative costs and benefits of programmes to reduce criminal behaviour (Aos et al. 2001) found that there are certain juvenile offender programmes that are very cost-effective in reducing offending. These programmes all draw on the principles outlined by McLaren's (2000) review. These programmes were all delivered in diversionary youth justice settings rather than in prison.

The adult offender community-based and in-custody programmes that have been evaluated and shown to be effective in reducing future offending:

- are also skill-based
- improve offender problem-solving
- use behavioural techniques to reinforce improved behaviour (Goldblatt and Lewis 1998).

For example, cognitive behavioural programmes delivered non-selectively to a broad range of offenders were shown to achieve a reconviction rate that was about 15% lower than the reconviction rate reported for similar offenders who did not attend such programmes. Large reductions in recidivism (approximately 20% lower than controls) have been found for programmes following these effectiveness principles. Programmes which also included training in social skills show most positive results with both juvenile and adult offenders

The American study found that drug treatment programmes for adult offenders work to lower recidivism rates, although the reduction in recidivism rates is generally less than 10% (Aos et al. 2001). Nonetheless, these programmes are cost-effective because they are apparently not expensive to run. Given the involvement of burglary offenders with drugs, this is an important issue for burglary offender treatment programmes. Youth drug treatment programmes were not mentioned in this study—a neglected area of research or a neglected area in programme provision?

5.4.9 Summary

In answer to the questions posed at the beginning of this section:

- The way in which young people are dealt with by police processing and other criminal justice procedures does have an impact on the likelihood of future offending.
- There are a number of contributory risk factors to youth offending, established through rigorous research. Reference to these can assist in identifying those young people who come to police attention who may go on to become persistent offenders.
- Arrest seems to have little positive impact on reducing reoffending, and can actually
 increase youth offending. Cautions can be effective deterrents for first offenders. Youth
 conferencing has been shown to have a moderate effect on recidivism. There is little
 difference in the range of custodial and community-based sentencing options in terms of
 their impact on reoffending. However, research strongly suggests that all criminal justice
 processes are more effective at reducing reoffending when combined with appropriate
 rehabilitative interventions.
- Offender treatment programmes can reduce the likelihood of future reoffending and the principles of effective programmes for both young and adult offenders are wellestablished by research.

5.5 Restorative justice

Conferencing processes based on restorative justice principles can lead to a modest reduction in reoffending when compared with court-based processing, particularly where the offender expresses remorse and perceives that they have been fairly treated. Restorative justice aims to:

- provide an opportunity for victims to have a voice and for offenders to take responsibility for their offending
- improve participants' experience with the criminal justice system
- reduce reoffending (Miers et al. 2001; Daly and Hayes 2001).

Both Sherman et al. (1997) and Jordan (1998) include restorative justice as a 'promising' intervention, and one that may result in greater respect for the police and 'justice'. Although the effectiveness of restorative justice conferencing for different types of offences and offender groups has yet to be definitively established, it appears to be less effective in reducing recidivism for burglary and fraud offenders, and for younger offenders. However, it

is regarded as less stigmatising than court-based processing and therefore more appropriate for young and first-time offenders.

New Zealand is recognised as a leader in the field of restorative justice and other jurisdictions have introduced similar approaches. There is a growing body of research focusing on victim and offender perceptions of the fairness and outcomes of the conferencing process and on the effect of restorative justice on reoffending. Luke and Lind (2002) provide a useful overview of the international research. Although many of these studies identify some reduction in the rates of reoffending in comparison to court processing, there are design and methodological problems in establishing comparable groups with a similar likelihood of reoffending.

A recent New Zealand court-referred restorative justice pilot programme has built on the youth justice system's FGC and community-based programmes (Crime and Justice Research Centre 2005). Evaluation of this pilot has found that restorative justice can more than adequately respond to the human and emotional costs of offending for some victims, and has the potential to increase offenders' involvement in dealing with their offending. The evaluation also found a small but statistically significant reduction in reoffending at the one-year follow-up period, with the reconviction rate for conferenced offenders (32%) being lower than the average rate for the ten matched comparison groups (36%). However, this reduction in the rate of reconviction was not observed across all types of offenders relative to their comparison groups. For example, a significantly lower reconviction rate was observed for violent offenders, traffic offenders (driving causing death or injury) and groups of offenders aged 25–29 or 30–39 years, but not for burglary and fraud offenders, or offenders aged less than 20 years.

A significant Australian study of restorative justice, the long term Reintegrative Shaming Experiment (RISE), randomly assigned eligible cases to court or conferencing to ensure equivalency of both known and unknown variables (Sherman, Strang and Woods 2000). When comparing conferencing with court processing the most recent data published shows:

- no difference in repeat offending by juvenile property offenders or shoplifters
- a substantial decrease in offending by violent offenders under 30 (decrease of 38 crimes per 100 offenders per year)
- a small increase in offending by drink drivers (six crimes per 100 offenders per year).

Offenders consistently experience the RISE conferencing process as being fairer than court processing.

Recent research on youth conferencing in NSW found a 15–20% reduction in recidivism at two to three years after conferencing, in comparison to those who went to court (Luke and Lind 2002). This reduction is larger than those commonly reported and the authors suggest that the larger sample sizes and longer follow-up times of their study (27–39 months) enabled them to detect the relatively small differences in reoffending. This reduction was found across different offence types, including burglary, regardless of gender, criminal history, age or Aboriginality.

Studies of the characteristics of youth justice conferencing indicate that reoffending is less frequent where the young person expresses remorse during or after the conference and agrees with the outcomes (Hayes and Daly 2003; Maxwell and Morris 2001—cited in Luke and Lind 2002). Reconviction is more likely if victims are not present and if the offender fails to apologise for their actions. This study finds outcomes from conferencing to be no worse than for court processing, pointing out that the group of young people going through FGCs in New Zealand are serious or persistent offenders who are likely to reoffend at a high rate (Morris and Maxwell 1998—cited in McLaren 2000).

All of these studies focus on the recidivism outcomes of conferencing or what has happened during the conference, but do not appear to examine any post-conferencing differences that may also account for offender rehabilitation or recidivism. For example, there appears to be little investigation of differences in the ways in which offenders made restorative amends and of differences in the extent of offender compliance with conferencing agreements. In a Queensland pilot of conferencing, outcomes other than a verbal apology, such as direct restitution, occurred in just 25% of cases (Hayes, Prenzler and Wortley 1998). Follow-up on conference agreements was identified as an area of concern in the evaluation of the New Zealand court-referred pilot programme (Crime and Justice Research Centre 2005).

6 Police organisation

As outlined in the previous sections, there is strong evidence in the literature of the effectiveness of burglary reduction strategies targeting 'hot' offenders, 'hot' victims, and 'hot' locations and supporting initiatives targeting 'hot' property. This section draws together research on the ways in which police forces have organised their resources to enable them to employ these strategies effectively.

The broad conclusion on policing effectiveness drawn by Jordan (1998) from the UK research is that police have made a significant impact on crime where they have adopted locally relevant tactics within a strategic framework tailored to the problem being addressed and to the local conditions. This requires local crime audits, good intelligence systems, proper strategic management, monitoring of performance, and the ability to respond creatively to a constantly changing crime picture.

6.1 Increasing police numbers

A popular response to rising crime rates is to call for more police, assuming a direct relationship between police numbers and crime prevention—the more police the less crime. Robinson et al. (1989—cited in Sherman et al. 1997) concluded that changes in police numbers or resources have little impact on crime, based on a review of the available research. However, Sherman et al. (1997) suggest that adding extra police to cities warrants further research. This conclusion is qualified by the statement that:

Additional police may prevent crime depending on how well they are focused on specific objectives, tasks, places, times and people...The connection of policing to risk factors is the most powerful conclusion from three decades of research (Sherman et al. 1997, 8-1).

Marvel and Moody (1996—cited in Sherman et al. 1997), in a study with a strong research design, analysed 20 years of information for 56 large US cities and 49 states and found that increases in police numbers lead to a decrease in crime in the following year. Several of the weaker studies reviewed by Sherman et al. (1997) were based on the increase in crime observed with the sudden and dramatic reduction of police during police strikes in Denmark, Montreal, Boston, Liverpool, and Helsinki. These studies assessed the impact of increased police numbers on overall crime rates, and give no information about the deployment of police officers.

6.2 Reducing response times

Research has shown that rapid responses to in-progress burglaries enable police to catch burglars more often (Blake and Coupe 2001) and are more successful where police arrive in

less than five minutes, and respond with more than one patrol (Coupe and Griffiths 1996). In general, rapid responses are effective if initiated as differentiated responses that depend on the specific nature of each call.

In their study into how the police investigate and solve residential burglary, Coupe and Griffiths (1996) found that only 6% of the burglaries in their sample were solved through primary means and almost half of these resolutions (43%) were due to catching the burglars in the act. In 77% of incidents where burglars were caught 'on the job' police had arrived in five minutes or less. However, on average, responses to the in-progress alert had taken 30 minutes.

A subsequent study supports these results by showing that responding to alerts of burglaries in progress more quickly, preferably within three minutes, and responding to in progress alerts in greater numbers, including one-officer patrols, enabled police to catch burglars more often (Blake and Coupe 2001). There was almost twice the success rate when police arrived within four minutes of the alert (15.3%) in comparison with six minutes (8.2%), and no arrests after 10 minutes. The arrest rate was also associated with the number of patrols responding, with a much greater success rate when more patrols responded, although only the first three patrols arriving made successful arrests—first patrols accounted for 81% of catches, second patrols for 15% and third patrols for 5%. Blake and Coupe's analysis also shows that one-officer patrols 'appear to be no worse than two-officer patrols at catching burglars red-handed' (Blake and Coupe 2001, 394), despite differences in vehicle power and routine deployment. The number of arrests was greater when the burglary was reported when the offender was spotted entering property rather than leaving.

6.3 Handling of investigations

The studies reviewed below come to the following conclusions about the elements of effective investigations, acknowledging that investigative processes tend to be highly complex with a number of interdependent processes. The success of burglary investigations is determined by:

- the quality of investigative actions by the first officers on the scene
- the timing and management of forensics staff involvement
- effective screening and allocation of cases for further investigative action.

Each of these is facilitated by:

- establishing systematic routines for:
 - initial scene investigations
 - screening and allocation of cases
 - prompt data entry, briefings and interagency communications
- encouraging simple informed action in addition to the sophisticated analyses
- maintaining the flexibility to respond to opportunities as they arise.

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Improved management of the overall process of investigating and prosecuting crimes offers gains in the resolution of offences where identification evidence is available rapidly.

In the 6% of burglaries solved by primary detections in Coupe and Griffith's study (1996), most detections were attributable to the activities carried out by the first officers on the scene: 43% by catching offenders at or near the scene and 34% from evidence obtained from witnesses at the crime scene (who were able to name the suspect, give a detailed description or provide the information about the offender's vehicle). Subsequent CID investigation (including surveillance and stop-checks) accounted for no more than 10% of detections; forensic evidence for 6%. Most primary detections (80%) occurred within 10 days of a burglary. Coupe and Griffith conclude that the majority of burglaries will not be solved and many burglars will never be caught, principally due to insufficient evidence on which to base investigations. Their study identified the following ways of improving detection rates:

- first attending officers should interview more neighbours at the scene, in addition to the victim
- attending officers for identify those crime scenes most likely to yield forensic evidence and selectively request SOCO attendance
- improve screening of cases for further investigation by CID—to screen in all cases with a 'definite' or 'possible' suspect for active investigation
- screen out all cases with no, or insufficient, evidence
- the role of CID should focus on following up the evidence collected by first officers and on proactive work, rather than in revisiting the scene.

(An important corollary is that those first on the scene are trained in collecting meticulous crime scene information, including full details of modus operandi.)

These recommendations are very like those put forward by Eck (1992) 13 years earlier. He commented that patrol officers and detectives alike rely too heavily on victims, who seldom provide the information leading to arrest, and make too little use of other potential sources of information:

- witnesses canvassed in the neighbourhood
- other police staff
- police records of fingerprint, mug shots and stolen property registers set up to be easily scanned
- informants.

Out of an examination of factors affecting the effectiveness of police investigation of burglary and auto crime and the allocation of crime for further investigation, Gill et al. (1996) also found that the initial police response was the most significant factor in getting results. All other investigators depend on the quality of information and evidence from these initial enquiries, and first attending officers needed sufficient time to undertake thorough investigations with proper care and attention to generate comprehensive crime reports. Witnesses provided good information and Gill et al. recommend that first investigators do

more to locate them, and not neglect house-to-house enquiries. They also emphasised that the actions of *everyone* in contact with crime reports influenced the case outcomes, with important information gathering opportunities missed by personnel receiving communications from the public, particularly on switchboard. This study also found that the role of 'crime desk' positions was not fully appreciated. The most effective of such arrangements included and used crime pattern analysis, intelligence development officers and others who investigated crime without attending the scene.

The key lesson from research by Williams (2004) is that there are significant gains to be made from reviewing the management of Crime Scene Examiners (CSEs) and their organisational positioning to integrate CSEs into the whole investigative process. His study looked at the approaches taken by a sample of UK police forces to manage forensics in investigation processes and concluded that better results are achieved if forensics staff are involved as expert collaborators in the whole investigative process rather than as technical assistants. The factors influencing performance included the organisational positioning of Scientific Support Unit (SSU) and the arrangements for deployment and line management of CSEs. These higher-performing SSUs contributed to post-identification investigations and the development of divisional priorities and initiatives. SSU managers were more involved in decision-making and were able to exercise greater control over tasks undertaken by CSEs, and to ensure the professional supervision and management of CSEs by SSU specialist staff.

These findings are supported by a study of the way in which a sample of UK forces managed investigative processes following the introduction of the rapid fingerprint ID service provided by the National Automated Fingerprint Identification System (NAFIS) (Morgan Harris Burrows 2004). This study found that essentially no changes had been made to the other processes of investigation to capitalise on the speed of possible fingerprint identification. There was a lack of overall coordination of scene visits, use of NAFIS, gathering of other evidence, interviewing of suspects, and the preparation of case for prosecution; and no feedback to fingerprinting bureaus.

Recognising the crucial role of the investigative process in solving burglary, Jacobson, Maitland and Hough (2003) undertook an exploration of the investigative process to develop general principles for effective investigation. The key finding was that the effectiveness of investigative processes, which tend to be highly complex and multi-layered with a number of 'reactive' and 'proactive' interdependent processes, was facilitated by:

- establishing systematic routines for:
 - initial scene investigations
 - screening and allocation of cases
 - prompt data entry, briefings and interagency communications
- encouraging simple informed investigative actions that can be done promptly in addition to the sophisticated analyses
- maintaining and enabling the flexibility of officers to respond to opportunities as they arise in the course of investigations.

6.4 Using forensic science—fingerprints and DNA

Fingerprinting and DNA matching technology have yet to be rigorously evaluated in terms of their effectiveness in identifying burglary offenders. From the few studies there are it is difficult to establish the extent to which these approaches have contributed to improving the rate of detections. However, any approach that increases the likelihood of detection in burglary cases must be considered useful given the low rates of detection. In New Zealand over the year 2004, 17% of residential burglaries were resolved (New Zealand Police, 2005). The residential burglary detection rates for England and Wales were 14% for 2002–2003 and 15% for 2003–2004 (Dodd et al. 2004). (Changes in the UK 'counting rules' prevent a direct comparison with earlier figures to establish any effect of forensics on detections.)

This review considers four reports that suggest the usefulness of these forensic tools in investigating burglary, where samples can be obtained and matched.

Operation VENDAS in NSW used forensic science to successfully target volume crime offenders, reducing break and enter offences over a seven-month period by 42% in one area and 31% in another (Spence 2003). This was achieved by maximising SOCO's visits to crime scenes, fast-tracking fingerprint and DNA sample processing, managing the flow of information following positive IDs and prioritising investigations focused on arresting the offenders. The operation arrested recidivist offenders, with 83% of those identified by forensic evidence in one area having prior property charges.

There are considerable variations amongst UK police forces in the extent to which forensic evidence is recovered from residential burglary scenes and the extent to which forensic evidence is converted into detections (Williams 2004). The range for examining dwelling burglaries was 59–89% for the seven forces studied, with fingerprints recovered from 21–44% and DNA from 2–9%. The success for converting this forensic evidence into detections ranged from 4% to 10% of scenes for fingerprint identifications and from 2% to 5% of scenes for DNA matches.

In a Home Office review of the use of fingerprint evidence in 'volume' crimes (burglary and motor vehicle crime), Morgan Harris Burrows (2004) found that in the cases where fingerprints were found, 38% of the cases resulted in a conviction or caution, 6% were charged but had not been to court in the 10-month study period, 5% were found not guilty, 14% were cases where further action had been delayed, 19% were still being investigated or could not be traced and 4% had been transferred to another jurisdiction. In 15% of cases the prints were those of someone who had legitimate access.

In earlier research into how police investigate and solve residential burglary, Coupe and Griffiths (1996) found that 6% of the burglaries studied were solved by primary detections, with forensic evidence contributing to solving 17% of these cases; it was the main factor in 6% of the cases and provided supporting evidence in a further 11%. SOCOs had visited 90% of all burglary sites.

Burglary offenders have an awareness of the capabilities of forensic investigation and, for some, this has meant taking a more cautious approach to burglary (Hearnden and Magill 2004). In the recent small offender study carried out for this New Zealand evaluation, Baker

and Gray (2005a) found that 60% of their informants were confident of avoiding detection using a range of strategies which included covering hands to avoid leaving fingerprints. Strategies to avoid leaving material for potential DNA matching were not mentioned.

6.5 Intelligence

Effective crime reduction strategies focusing on targeting 'hot' offenders, 'hot' victims and 'hot' spots rely on the capacity to analyse and identify *who* and *where* these targets are: the arena of intelligence and crime analysis.

Intelligence refers to a structure, a process and a product. As a structure, intelligence refers to the intelligence unit with its staff, resources, methods, skills, and organisational structure (both within the unit and within the police force).

As a process, intelligence refers to the continuous cycle of data collection, collation, analysis, dissemination and feedback.

As a product, intelligence refers to both the reports produced (from long-term area-wide assessments, to profiling a particular crime problem identifying suspects and recommending tactics intelligence, prevention and enforcement, to offender profiling) and to the presentation of information to 'decision-makers' who will act on the basis of the intelligence they receive (Ratcliffe 2003).

Ratcliffe extends the clarity of 'taking apart' intelligence with his triangular *Three 'I'* representation of the role of intelligence, which shows the intelligence unit *interpreting* the criminal environment and *influencing* decision-makers through producing and presenting reports and tactics, and the decision-makers *impacting* criminal environment through intelligence-informed actions known to be effective and appropriately tailored to the context. Using intelligence well requires organisational structures that bring decision-makers (not necessarily only police, but also other agencies) together to consider and use intelligence products to formulate and action crime reduction strategies.

Research has identified understanding between police and analysts of what each role requires to produce effective work as one possible area for increasing the quality of the intelligence product (Cope 2004). This study identified that 'a poor understanding of analysis amongst police officers and a lack of understanding of policing amongst analysts, influenced the usefulness of analytical products for operational policing' (Cope 2004, 188). To be useful in operational policing, intelligence and its analytical products must be based on good data, and provide management and operational information. For this analysts must understand policing and the needs of police; police must understand the process of analysis and analytical products and be able to 'read' the analysis. Cope suggests that training and development for both analysts and police is crucial to developing productive working relationships. This work is based on participant observation of a county force and an urban force, and on interviews with intelligence staff: analysts, field researchers, handlers, intelligence unit managers and the superintendents responsible for leading the tasking process.

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Ratcliffe (2002) raised a number of concerns about the information technology system requirements and intelligence processes associated with implementing 'intelligence-led' policing, suggesting that embracing the terminology of intelligence-led policing may be easier than implementing the model itself. He warns against enthusiastic implementation with little evaluation. His key concerns are with:

- the information technology demands of intelligence-led policing
- the use of police informers and the potential for corruption
- the challenge of ensuring that police responses are appropriate and apply the principle of proportionality in relation to the severity of the offences investigated.

Certainly, a number of the evaluations referred to in this review have specifically mentioned the demands that particular strategies have made on the IT systems, on the quality of data available and the enormous investment of resources required to gather the intelligence required. For example, Townsley, Homel and Chaseling (2000) report the resource-intensive data cleaning process required to be able to extract repeat victim data for the Beenleigh study; Hale et al. (2004) comment on the high intelligence unit demands of the MRA trials; the first of the staged performance measures established by UK policing to operationalise reducing repeat victimisation as a crime prevention strategy was the capability to identify repeat victims (Farrell et al. 2000).

6.5.1 Coordinated intelligence-led strategies—COMPSTAT and National Intelligence Model

The New York Police Department COMPSTAT process is the best-known of the coordinated intelligence-led approaches. COMPSTAT was initiated as a strategic management approach to crime reduction enabling police organisations to think and act strategically, and to put resources where crime problems were emerging. The primary targets of change were the middle managers, the district commanders. It became their responsibility to closely monitor crime in their areas, to identify crime patterns, to devise and implement solutions and then to make sure that those solutions worked. They were held accountable at periodic meetings with top police executives where they were expected to present crime patterns in their areas with strategies for dealing with them and to show the results they had achieved (Skogan and Frydl 2003). A New York Police Department case study showed COMPSTAT to be a resounding success (Silverman 1999—cited in Skogan and Frydl 2003). A more recent field study of COMPSTAT implementation in three other US police forces had more mixed outcomes (Willis et al. 2003—cited in Skogan and Frydl 2003). This study showed that although the District Commanders were highly accountable for crime in their district and acted quickly in response to emerging 'hot' spots, this sense of responsibility was not passed on to their subordinates; there were no parallel meetings at which district staff were involved and also held accountable. Data analysis tended to focus on short-term changes without looking at longer-term trends, analyzing problems or assessing police interventions. The pressure on District Commanders to come to COMPSTAT meetings with problems identified and solutions in place inhibited the potential of these meetings to become forums for creative and innovative problem solving. Innovative strategies were the exception. The researchers suggested that the COMPSTAT reforms were 'transplanted onto traditional policing structures' without sufficient measures to support full implementation,

such as in-depth management training in data analysis and its uses, and adequate staffing of the crime analysis functions.

A modified COMPSTAT process was introduced in NSW in 1998 in the form of OCR panels (Chilvers and Weatherburn 2001a, 2001b). At OCR meetings senior police provided local area and regional commanders with information on crime trends and patterns in their local areas, asking them to devise various tactics and strategies to reduce crime. Their performance was reviewed at a later OCR panel. There was a substantial drop in crime rates over two years, with a 10% reduction in residential burglaries—results which strongly suggest that OCR panels have been instrumental in reducing crime. The OCR process was suspended in the lead-up to the Sydney Olympics and crime reduction outcomes over a longer time period are not reported.

The UK National Intelligence Model (NIM), like COMPSTAT, is intended to enable strategic management and the timely direction of resources to crime problems. NIM sets out in detail the ways in which the police service is to handle information, produce intelligence products and make the key decisions about the redeployment of resources. However, according to the Home Office (2000), the NIM is primarily a business model for use in allocating police resources and concerned with management and cost-effectiveness. It appears that full implementation of NIM is currently in progress, and the effectiveness of the model awaits future evaluation (John and Maguire 2004).

6.6 Specialist squads

Many of the initiatives that have positively impacted on the burglary rate have employed special squads focused on burglary or on particular aspects of a strategy targeting volume crime.

Frequently these squads appear to have been formed for the short-term duration of special operations, for example, Canberra's Operations Chronicle and Dilute (Harman 2001) and Operation Anchorage (Ratcliffe 2001); or the squads are formed as a means of focusing resources on a particular crime strategy, but not as a permanent deployment structure. A burglary squad was formed and disbanded on several occasions by the Merseyside police, with a substantial reduction in dwelling burglaries on each occasion it was formed (Gresty and Taylor 1995).

Dedicated squads to enable greater use of intelligence and targeting of offenders were key factors in the effectiveness of the strategies for combating burglary adopted by three UK police forces evaluated by Stockdale and Gresham (1995). Although the evaluation did not focus on the effectiveness of specialist squads per se, the recommendations for good practice state that 'it is unlikely that a high profile antiburglary strategy could be successful without specialist units for whom burglary is a major responsibility' (Stockdale and Gresham 1995, 61).

Taylor and Hirst (1995) advocated for the formation of specialist teams to visit house burglary scenes for the initial investigations to improve the quality of both evidence gathering and service to burglary victims. Where these specialist burglary response teams had been - -----

formed they were able to respond with a single prompt and effective visit, and were not called away on other 'urgent' incidents. Members of these teams became better informed and more skilful, and as a distinct unit received specific training from detectives and forensics staff.

Specialist units have been formed at national level in UK policing:

- when there was a need for particular expertise or training
- when there was a need for a unified force-wide approach
- where the facilities required were expensive
- for the development of good practice in the force
- where external agencies needed a clear point of reference (Morgan, McCulloch and Burrows 1996).

Morgan, McCulloch and Burrows were concerned more with establishing a framework for monitoring and evaluating the performance and cost-effectiveness of such units than with evaluating the impact of specialised squads on crime. Of note is their finding that specialist units tended to become permanent, with no regular review of the circumstances that led to their establishment.

There are arguments for and against the formation of specialised burglary squads. Stockdale and Gresham (1995) presented some of these in discussing their recommendation that forming specialist squads is good practice which enables a proactive approach to burglary reduction. The formation of dedicated squads offers the benefits of specialist knowledge, skills and expertise, and a committed accountable resource protected from concerns that may distract from the targeted crimes. However, the separation of proactive targeted work from reactive policing requires close cooperation to ensure the exchange of information and liaison on operational matters. Special burglary squads can reduce the responsibility of other police for burglary and foster elitism, and Stockdale and Gresham (1995) suggest that squad members be rotated so that squads are integral to overall service, with close liaison with CID and uniformed officers. White (2001), in his review of international literature on specialised police teams (not specifically burglary focused), summarised the general arguments for the formation of specialised squads and came to similar conclusions, with the addition of the benefits of the more focused training that is possible and the high level of staff commitment and job satisfaction which can result. However, the formation of special squads:

- diminishes the coverage and effectiveness of police patrols (seen as the key to effective policing and argued most frequently in the literature)
- can be detrimental to community policing, as specialist squads may operate with little knowledge or regard for local work
- can be detrimental to force deployment, communication and satisfaction
- can create arrangements more prone to corruption.

6.7 Problem-oriented policing

Problem-oriented policing (POP) requires police to gather information and analyse the issues underlying any problem they are responding to, learning about the nature and extent of the event(s), offenders and victims and to consider all the factors that have brought them together. The in-depth understanding gained from analysis allows the development and implementation of a range of responses specifically tailored to address the problem, responses which may involve a range of other community and agency groups and which may go beyond traditional offender- and offence-focused policing practices. The approach also requires assessment and evaluation of what worked and why. It is a systematic approach which is seen as a proactive process that can prevent crime by addressing contributing factors rather than simply reacting to incidents after they have occurred, and was initially advocated by Goldstein (1979—cited in Skogan and Frydl 2003; 1990—cited in Skogan and Frydl 2003). Eck and Spelman (1987—cited in Skogan and Frydl 2003) devised the acronym SARA for the underlying systematic problem-solving process of Scanning-Analysis-Response-Assessment that is used to identify, think about and respond to specific crime problems.

Sherman et al. (1997) assess POP as a promising approach to crime reduction in that the more accurately police can identify and minimize the underlying (proximate) causes of specific patterns of crime, the less crime there will be. Jordan (1998) also regards it as a promising approach. Although POP is based on a simple premise, he points out that in practice it is demanding, requiring that officers 'know the underlying issues locally; be in contact with the community; have information to help understand the nature of the underlying problems that generate clusters of incidents; be supported by senior officers in attempting to solve problems imaginatively and tailor problem-solving to local issues' (Sherman et al. 1997, 73). Although this approach is used by many police forces in the US and UK, it appears that application tends to be to small-scale problems and by specialist teams.

Successful application of a problem-solving approach is described by Mazerolle et al. (2000) in their study of the impact of POP on serious crime problems in six public housing sites in New Jersey. Problem-solving teams were formed for each site, with each team bringing together representatives from the police, local housing authority, social service providers and public housing tenants. These teams implemented a broad range of site-specific responses:

- CPTED (e.g. installing lighting)
- situational crime prevention (e.g. altering pay phones to accept outgoing calls only)
- civil remedies (e.g. evictions and special lease provisions)
- policing responses (e.g. sweeps, arrests, and surveillance)
- treatment (e.g. drug and alcohol counseling)
- increasing informal social control.

The study showed that, over a two-and-a-half-year period for all six sites, there were fewer serious crime calls for service; and that two sites in particular successfully reduced violent, property and vehicle-related crimes.

8

A recent examination of the application of problem-solving to crime reduction initiatives across the police forces in the UK found some problem-solving successes, with the commonest targets being burglary, vehicle crime, drugs and youth (Read and Tilley 2000). However, overall the review concluded that effective high-quality problem-solving was the exception, in spite of some promising small area initiatives, and that quality outcome evaluations were rare. There were few initiatives that involved community or agencies in problem solving, formulating and implementing appropriate responses. Leigh, Read and Tilley (1996, 1998) provide an overview of the initial application of POP in the UK, and review POP demonstration projects in Leicestershire and Cleveland. They conclude that the case for POP is compelling and that full implementation requires a long-term commitment to the change processes for UK policing.

Goldstein's original vision of POP is that all police officers need to be problem-focused with problem-solving occurring routinely, and that this orientation is not just the domain of analysis specialists and senior management. This requires extensive training in problem solving, which is not traditionally included in police education, to equip officers to analyse problems and shape effective solutions to the underlying issues.

Any of the strategies focusing on 'hot' locations, victims, or offenders could be part of a POP response to a specific context. A problem-solving approach could be said to have been taken in many of the burglary reduction initiatives described in this literature review, even where the POP process was not consciously adopted. Intelligence-led policing could also be seen as a more recent application of a POP approach to crime reduction, with the capacity to apply the SARA process being essential within both Intel units and any decision-making groups formulating appropriate interventions to local crime. Tilley and Laycock (2002) have extracted principles for effective evidence-based problem-solving approaches to crime prevention from the research and presented these as a 'working out what to do' report intended to inform policing partnerships.

7 Comprehensive burglary reduction strategies

Many of the studies reported in the literature reviewed for this work were designed to assess the effectiveness of burglary reduction strategies composed of more than one intervention. Table 3 presents an overview of some of the multicomponent strategies that have been referred to in this literature review and summarises the interventions applied and the overall effectiveness of each strategy.

These strategies integrate a number of the targeted interventions described individually. These were often selected after analysis of the burglary problem in a specific area and in conjunction with other interest groups in multi-agency approaches. This is particularly true of the UK projects where a large amount of research and evaluation effort has been put into burglary reduction initiatives over the last 20 years—as in the RBI launched in 1999 as part of the CRP (nearly 250 projects funded) and the much earlier Safer Cities Programme launched in 1988 (some 3600 schemes funded, of which around 500 were aimed at tackling domestic burglary).

The scale of these national programmes has enabled comparative research into and the formulation of guidelines for:

- multi-agency partnerships
- comparative cost-benefit analyses
- investigation of the impact of programme intensity
- the role of publicity in programme outcomes.

A brief outline of each national crime reduction initiative is presented, followed by discussion of the lessons and findings of comparative studies on burglary reduction initiatives.

7.1 The Reducing Burglary Initiative

The RBI was launched in 1999 as part of the Home Office Crime Reduction Programme. The aims of the RBI were to:

- reduce burglary nationally by targeting areas with the worst domestic burglary problems
- evaluate the cost effectiveness of different approaches
- find out what works best where.

Summaries of five RBI projects are included in Table 3.

Local Crime and Disorder Partnerships were invited to identify areas of 3,000–5,000 households with a burglary rate at least twice the national average. Nearly 250 burglary reduction projects were funded across three phases, covering over 2.1 million households that suffered around 110,000 burglaries per annum. Activities typically included a combination of:

- target hardening of vulnerable premises
- 'alley-gating'
- improved street lighting
- high-visibility policing
- promotion of neighbourhood/home watch
- work with repeat victims
- publicity campaigns/awareness raising
- youth diversion initiatives
- security patrols.

Three regional university consortiums have conducted evaluations of the first round of 63 RBI projects, and a range of publications have reported (and continue to report) their findings (Home Office 2004).

A summary outcome evaluation of 55 of the phase one projects compares the residential burglary rates before and after project implementation with those in comparison areas (Kodz and Pease 2003). Relative decreases were found in 40 of the projects, with relative increases in 15. The number of burglaries per month across the 55 projects was calculated to have fallen by 20%, compared to a fall of 13% in the comparison areas.

 Table 3:
 Overview of some multicomponent burglary reduction strategies

Project	Interventions	Agencies involved	Outcomes
Beenleigh, Brisbane Queensland Criminal Justice Commission 2001 Pilot project: 12-month enhanced police response to residential burglary in an area with above average rate	 Three-tiered response: Stopbreak—to all residences broken into: security assessment, crime prevention kit including property marking kit, neighbours encouraged to upgrade security Hot Dot—to repeats: specific security advice, loan of security equipment, burglary prevention kit to near neighbours, extra patrols Hot Spot—all residences in area offered free home-security assessment, burglary prevention training offered to community, encouraged to form Neighbourhood Watch, increased police patrols 	Police Police project officer Volunteers	 Repeat victimization in Beenleigh reduced by 15% Hot Spot interventions followed by short-term drop in residential burglaries, with no evidence of displacement No reduction in burglaries in overall area
Tea Tree Gully and Norwood, Adelaide, SA South Australian Crime Prevention Unit 2002 Pilot project: volunteer services to repeat burglary victims—14-month project	Aimed to provide interventions within two weeks of the offence: • security audit, tailored to dwelling and victim • informal victim support • referral to engravers for property marking • cocoon watch—through contact with neighbours and provision of burglary kits • referral to other support agencies if required.	Local community volunteers, screened and trained to deliver interventions Crime Prevention Unit Police planning, information and support Victim Support Services Local government Volunteer SA	 Overall, repeat victimization remained stable in intervention areas, but rose in control area No reduction in burglaries in intervention areas A promising reduction in burglaries six months after project
Safer Towns and Cities, Ashfield and Mid North Coast, NSW Taplin et al. 2001 Introduction of burglary reduction strategies as part of standard police response—12-month project	 Training of police officers Security assessments conducted at all residences broken into Follow-up including Victim Support package—by police volunteers Informing of immediate neighbours Increased attendance rate of fingerprinting team Target hardening of victims' residences by provision of locks to 	Police Volunteers-in-Police	 Burglaries reduced by 28.8% in Ashfield and by 8.9% in Mid North Coast, compared with statewide reduction of 10.0% No apparent effect on repeat victimisation At follow-up, most burglary victims had improved security and were more security conscious in both project and control areas

Project	Interventions	Agencies involved	Outcomes
Y	those in need of assistance—repeats in one area; 'hot' spot response to all residences in other Targeting of offenders Public burglary reduction education campaign	v	Major finding: victim appreciation of increased police service offered
Boggart Hill, Killingbeck Estate, UK	Problem analysis and intervention planning	Leeds Safer Cities Leeds Department of Housing Services	Burglaries in Boggart Hill reduced by 60%—attributed largely to arrests
Farrell, Chenery and Pease 1998	Initial police crackdown on known burglars—arrests	Local councillor Community good neighbours scheme	Repeat burglaries reduced by 35%No evidence of burglary displacement
Problem-oriented crime prevention project—burglary reduction through 'crackdown and consolidation strategy'	 Target hardening of residences burgled in previous six months— additional door and window locks, strengthening of door frames Continued offender focus 	Police	to surrounding areas or to other types of crime, but diffusion of benefits (up to 50% burglary reduction in surrounding areas)
Cambridge, UK	Potential victims:	Domestic Burglary Task Force—	Reduction of burglaries in targeted
Bennett and Durie 1999 Crime audit and partnership approach to reducing residential burglary—14-month project Crime audit/dat- gathering phase—crime pattern analysis, offender residence analysis, local burglar interviews, environmental survey, repeat burglary victim survey, household survey Identification of 'hot' spots Consultation with local agencies to formulate appropriate local strategies	 cocoon Neighbourhood Watch—victims loan alarm—victims security advice—fact sheets and free home surveys— to victims free security upgrades available to those at risk—pensioners, single parents, etc.—as well as to victims additional external security gates fitted to access ways 'Beat the Burglar' security pack to all area residents Potential capable guardians: Post Watch—postal workers enhanced existing Neighbourhood Watch 	representing City and County Councils, police, Probation Service, Victim Support, Cambridge University Police Council project worker Detached community development youth workers	 'hot' locations and 'hot' spot Reduction of repeats in one targeted location But, burglary reduced in Cambridge at same time Low uptake of services—approximately 20% of victims Evaluation concluded that programme contained the right elements to be effective, but was of insufficient intensity to make an impact—right medicine, wrong dosage.
Programme implemented in identified 'hot' locations and 'hot' spots	 targeted police patrols increased public awareness through seminars and information Potential offenders: Youth Development—intensive support and focused activities—through youth workers 		

Project	Interventions	Agencies involved	Outcomes
Huddersfield, UK Biting Back initiative Chenery et al. 1997 Preventing repeat burglary and motor vehicle crime as a standard mode of crime prevention in a policing area	 Research phase—data gathering Creating effective partnerships with local authorities Training for police Three-tiered response to victims (Olympic model): victim letter, with property marking kit cocoon Neighbourhood Watch rapid repair and security upgrade victim support security audits police patrols offender targeting 	Metropolitan Council Victim Support Huddersfield University Police	 Thirty percent reduction in residential burglary Twenty percent reduction in motor vehicle crime Reduced levels of repeat burglaries Increased arrests from temporary alarms by 10% No evidence of burglary displacement Improved quality of service to victims
Kirkholt Project, UK Forrester et al. 1988, 1990 Burglary prevention demonstration project based on problem-solving approach in high-burglary-risk housing estate	 loan of silent alarms to repeat victims. Phase 1: data gathering—burglar, victim and neighbour interviews; community organizations problem-solving with relevant agencies removal of cash pre-payment gas meters (frequent targets) target hardening for burglary victims—based on individual assessment of dwelling vulnerability cocoon Neighbourhood Watch property marking community project support workers—victim support and agency referrals Phase 2 (Sept. '88-Mar. '90): Continuation of Phase 1 interventions plus community crime prevention initiatives which included: establishing Home Watch groups probation group work programme community clean-up campaigns with community service offenders schools crime prevention project 	Police Probation Service Local Housing Authority Department Gas and electricity authorities Local victim support organisation Manpower Services Commission Community involvement in local crime prevention group Schools	 Seventy-five percent reduction in residential burglary over duration of project No evidence of burglary displacement with 24% reduction of residential burglary in remainder of the housing subdivision Eighty percent reduction in repeat burglaries in Phase 1 (not specifically reported for Phase 2 of the project) Victimisation of tenants who had lived at their current address for a year or less rose by 19%; compared with almost 50% reduction for those 10 years or more at their current address The Weds/Thurs peak in burglaries practically disappeared with removal of coin-fed meters

Project	Interventions	Agencies involved	Outcomes
Rochdale, UK Home Office 2003a Findings 204, Supplement 1 RBI project in a multi-ethnic area with a high burglary rate—area scores high on social deprivation index and has frequent turnover of residents	 Raising awareness of crime prevention through a publicity campaign (leaflets in four languages) Improving household security (target hardening) of victims of burglary within three days increasing community involvement through Homewatch schemes providing an arrest drug referral scheme after initial assessment—voluntary participation in drug 	Police with in partnership with: Local Council Victim Support Housing Association Jointly-staffed project—police and local authority Community Safety Officer Target hardening by Victim Support volunteers	 Net fall in the number of burglaries of 37%, when controlling for burglary trends in the rest of the police force area Seven new HomeWatch schemes established Successfully fostered community involvement, not just in burglary reduction but also in community integration
Fordbridge, Solihull, UK Home Office 2003b Findings 204, Supplement 2 RBI project area in four wards with significant economic and social difficulties—with areas of high density housing rented from local authority	programme Target hardening vulnerable properties Installing of alley-gates Installing of electronic entry systems for multi-dwelling properties Improving street lighting Providing access to leisure facilities for young people—in the 'open' environment and in organised leisure facilities Doing outreach work with local	Multi-agency Focus Group jointly chaired by police and local Head of Housing, involving: Other local authorities Local elected members Police Community members	 Net fall in the number of burglaries of 12%, when controlling for burglary trends in the rest of the police force area Possible small geographic and crime type displacements Impact of youth interventions not able to be evaluated, but uptake of opportunities evident
Yew Tree, Sandwell, UK Home Office 2003c Findings 204, Supplement 3 RBI project in two economically deprived estates that are geographically isolated from other urban areas by a canal and a major motorway	 Young people Targeting known offenders: police crackdown using eviction orders, high visibility policing, bail enforcement, antisocial behaviour orders Property marking, micro-chip tracking system Community involvement schemes: police/community radio system, increase in the number of Neighbourhood Watch schemes Tackling repeat victimisation: database of identified repeat victims Environmental improvements: 	Police-led project Partnerships with: Local Housing Authority Local Planning Authority Local Health Authority Councillor Community—Neighbourhood Watch Community artist	 Net fall in the number of burglaries of 39%, when controlling for burglary trends in the rest of the police force area Seventeen offenders targeted, 15 charged Evidence of geographical and crime type displacement

Project	Interventions	Agencies involved	Outcomes
Stirchley, Birmingham, UK Home Office 2003d Findings 204, Supplement 4	architectural surveys locating crime 'hot' spots, establishment of Secure by Design protocols for building developments and environmental work • Youth diversion initiatives: Garden creation scheme, football coaching, summer play scheme trips • Publicity strategy: crime prevention campaign and broadcast/newspaper media approach • Installation of alley gates • Improvements to fences • Property marking • Publicity campaign, through a	Police and city council Consultation with residents	Burglary in the target area fell by 46% when comparing the number of burglary incidents during 1998 with the number in 2000
RBI project in nine residential streets of two-storey terraces and old semi-detached housing—burglary rate twice national average	newsletter		 Initially some displacement to neighbouring areas, but on completion of alley-gating burglaries fell further in target area and surrounding buffer areas
Stockport, UK Home Office 2003e Findings 204, Supplement 8	 Police crackdown on prolific offenders Target hardening of vulnerable properties—new and repeat victims, elderly, single parents, private housing renters, those new to the area 	Burglary Reduction Management Group with representatives from Police, Victim Support, local council Police Burglary Response Unit Victim support—target hardening Local housing authority	 Burglary in the target area fell by 14% when comparing the number of burglary incidents during the years of 1999 and 2001 Stolen property worth £100,000 was recovered
RBI project in three police beats identified as areas with high levels of crime, disorder, deprivation and truancy	 Offender-based interventions to reduce recidivism on release from prison Publicity campaign on crackdown—also TV footage and on websites Stand-alone crime prevention publicity campaigns—leaflets and info packs 	·o	 Seventeen arrests in crackdown phase Limited uptake of offender interventions—focus on those resident in area too narrow Evidence to suggest diffusion of benefits into other policing areas

7.2 Safer Cities

Launched by the Home Office in 1988 with £30 million of funding, the Safer Cities programme formed part of Action for Cities, a wider government programme aimed at tackling socio-economic problems within areas of urban deprivation. Covering 20 areas, Safer Cities funded some 3,600 schemes addressing a wide range of crime problems through a multi-agency problem-solving approach. Around 500 of the schemes were aimed at tackling domestic burglary. Schemes generally focused on target hardening measures and/or the encouragement of community-based action such as neighbourhood watch, property marking, and awareness raising.

Two evaluations of the burglary schemes have been conducted. Ekblom, Law and Sutton (1996) conducted a large-scale analysis of the 300 schemes underway or completed by summer 1992. Outcomes were measured in two ways:

- via 7,500 before and after interview surveys, in over 400 high-crime areas in eleven 'safer cities' and eight comparison cities
- via police crime statistics from 700 police beats covering 240 of the schemes, together with city-level statistics in nine comparison cities.

The survey results offered compelling evidence as to the effectiveness of Safer Cities interventions in reducing domestic burglary, findings that were backed up by police data.

Tilley and Webb (1994) examined in more detail the operation and effectiveness of 11 projects that focused on reducing residential burglary with varying degrees of success. Their report is somewhat equivocal about the effectiveness of targeting repeat victims and at-risk households. Area-based measures were successful for fairly high-dosage interventions in small areas and comprehensive approaches to target hardening using specialist advice were beneficial. This report also raises concerns about multi-agency working, finding that multi-agency groups are complex and problematic. Nevertheless, the evaluation overall concluded that focused, high-intensity, multicomponent packages could be effective.

7.3 Lessons learned from these initiatives

7.3.1 Partnerships

The projects of the RBI were initiated by multi-agency partnerships and the experiences of those involved demonstrate that, while the crime reduction benefits are considerable, working in partnership is complex and demanding. A significant number of the projects experienced implementation problems which included:

- establishing commitment amongst partner agencies
- identifying the nature of the burglary problem
- recruiting skilled and experienced project personnel
- ensuring community involvement and accountability

• monitoring progress (Kodz and Pease 2003).

Jacobson (2003) has put forward key points on what needs to be in place to support partnerships to work effectively, learning drawn from research into the successes and problems of the partnerships involved in 21 of the RBI projects. Three essential prerequisites to effective partnership working were identified as a good practice framework.

- Knowledge—Knowledge refers to the information that a partnership requires about the
 crime problem being addressed. The framework highlights the need to adopt a problemsolving approach and go through all stages of the problem-solving process—SARA.
 Most partnerships were committed to this approach in principle but not always in
 practice.
- *Commitment*—Whilst there was widespread recognition of the importance of partnership working, levels of practical commitment varied. Partners variously believed that they:
 - lacked the capacity to engage in partnership work
 - had differing agendas
 - had difficulties balancing partnership and 'day-to-day' work
 - felt a lack of ownership.

Addressing such issues requires that efforts are made to:

- engage all partners from the outset
- clarify expected inputs from each partner
- encourage open airing of the inevitable tensions and grievances
- encourage intra- as well as inter-partnership consultation to build genuine ownership within agencies
- highlight the benefits of partnership working for each partner.
- *Capacity*—Identification of the capacity of each partner to contribute to the project is a crucial part of project planning. Regardless of how they are funded, the majority of crime reduction projects require the following resources from partners:
 - staff time for strategic and operational work
 - staff with the necessary skills and aptitude
 - scope for contracting out packages of work
 - access to appropriate equipment and facilities
 - access to specific information.

7.3.2 The role of publicity

Publicising burglary prevention initiatives may be an important component of a strategy, enhancing the overall impact both by enhancing community awareness and participation and by influencing offenders' perceptions of the risks, the effort required and the probability of decreased returns. For example, an effective publicity campaign and positive media coverage were included in Stockdale and Gresham's (1995) list of the key elements of a successful antiburglary strategy, and a safer cities evaluation reported that well-publicised projects were more likely to be effective (Ekblom, Law and Sutton 1996).

Evaluation of RBI projects supports this. Approximately half of the 21 schemes studied by one evaluation consortium set up local stand-alone publicity campaigns and these schemes tended to be the most successful at reducing burglary, with a clear relationship between the timing and intensity of the publicity and the burglary reduction outcomes (Johnson and Bowers 2003). An 'anticipatory benefit' was observed across 42 schemes, with a significant reduction in burglary in the three months prior to project implementation. The authors suggest that this effect was, at least in part, due to pre-implementation publicity and that publicising burglary reduction projects can, in itself, reduce burglaries. There was no comparative analysis of the types of publicity used and their relative effectiveness, and the report warns that 'consideration should be given to the message delivered—not all publicity is good publicity' (Johnson and Bowers 2003, 4).

7.3.3 Displacement of crime and the diffusion of benefits

In implementing targeted crime prevention and policing initiatives there is a concern that one of the effects may be to simply deflect offenders to other areas, other targets or other types of offending. Alternatively, focused crime prevention activity may result in a 'positive' displacement, a diffusion of benefits, and reduce offending in other geographical areas or crimes (Clarke and Weisburd 1994).

Evaluations of the RBI projects concluded that the total gains achieved across the projects were not at the expense of displacing crime into other areas (Kodz and Pease 2003). Accurate measurement of crime displacement to other geographical areas and to other crimes is demanding and beyond the scope of data available to many evaluations. Bowers, Johnson and Hirschfield (2003) undertook a detailed study of crime displacement in one of the RBI projects, developing tools and techniques to analyse the impact of the scheme. They found evidence of some geographical displacement of burglary into surrounding areas as well as the diffusion of benefits into one area in the close vicinity of the project and to untreated households within the project area. Some offenders may have switched to other types of crime, with theft from cars increasing significantly in the area, but not to theft from persons or car theft. This study highlights the power of using a finely detailed level of analysis in assessing the impact of targeted burglary reduction schemes: a substantial impact on the burglary rate was found for the sub-area in which the interventions were almost exclusively focused, while the change in the burglary rate for the larger scheme area was relatively modest.

Hesseling's (1994) review of 55 published studies which looked specifically for evidence of displacement concluded that displacement is not inevitable, and that if displacement occurs, it will be limited in scope. Most of these studies evaluated the impact of crime prevention initiatives that aimed to:

- increase the effort required to offend (e.g. target hardening)
- increase the risks of offending (e.g. increase enforcement and surveillance)
- reduce the rewards of offending (e.g. make it more difficult to dispose of goods)
- implement a combination of these strategies.

(These studies were not focused on burglary but covered a range of offence types including burglary.) Among the 40% of published studies which found no displacement effect were initiatives using a combination of crime prevention strategies and where the strategies were implemented throughout a whole geographical area. In those reporting some form of displacement, it was found to be quite limited in extent.

Hesseling also reviews six studies with known or imprisoned offenders who were asked how they reacted when they were unable to commit a particular crime. As many as two-thirds of the offenders interviewed in these groups indicated that they would seek alternative targets or other crimes. In most cases, this reported displacement was to the use of different tactics, times or places but was essentially to the same type of crime (e.g. from burglary to other property crimes). Hesseling suggested that those at the beginning of their offending career would probably be much more easily discouraged from crime than offenders in these interview studies who had extensive criminal histories.

The findings of Hesseling's review suggest that including a strategy of targeting known offenders as one part of a crime prevention initiative could substantially decrease any crime displacement that may occur. This suggestion is supported by the outcomes of, for example, the Boggart Hill (Farrell, Chenery and Pease 1998) and the Huddersfield Biting Back burglary reduction initiatives (Chenery et al. 1997), which are described in other sections of this literature review and outlined in Table 3. It is also supported by the crime displacement and the diffusion of benefit impacts from Operation Anchorage, a policing operation targeting property crime offenders in Canberra in 2001, reported by Ratcliffe and Makkai (2004). Their research found no displacement of crime, either spatially or by crime type, and found a diffusion of benefits, with significant reductions in both property and car crime in the parts of NSW which surround the ACT and therefore were outside the area covered by the operation. They suggest that a combination of deterrence, discouragement and the incapacitation of prolific offenders as a result of the operation may be able to account for this 'free policing benefit' for NSW. A deterrent effect could arise from offender perception of the increased risks of arrest during the targeting operation, and discouragement from the perceived need to put more effort into offending successfully with less likelihood of reward. Both perceptions, according to rational choice theory (Cornish and Clarke 1986—cited in Hough and Tilley 1998), make it likely that offenders will choose to modify their criminal behaviour.

Looking for evidence of displacement in the Safer Cities projects, Ekblom, Law and Sutton (1996) observed that, whilst there was some displacement where crime prevention activity was of low intensity, for medium and high intensities the opposite was the case, with a 'diffusion of benefits' to outlying areas.

7.3.4 Programme intensity

Crime prevention initiatives vary in the levels of activity occurring over time, also referred to as the intensity of the programme. Intensity can be thought of as the amount that is put into a project (input measures, e.g. the funds spent in a particular area) and also as the number of programme outcomes that are implemented (output measures, e.g. number of houses target hardened). Both measures can be correlated to the degree of burglary reduction a project achieves. Evaluation of the Safer Cities projects, which were classified as low, medium or high intensity based on the amount of funding per household, found that low intensity

schemes reduced the burglary risk by 10%, medium intensity schemes by 22%, and high intensity schemes by 43%, compared with a 3% risk increase in the comparison cities (Ekblom, Law and Sutton 1996).

Evaluations of RBI projects indicated that 'dosage', or intensity of project activity, and speed of implementation had an impact on burglary reduction outcomes. One evaluation concluded that it may be the intensity of action per se which has the greatest impact, rather than any specific intervention. More detailed analysis of 21 RBI projects by Bowers, Johnson and Hirschfield (2004) found that while the success of a scheme in reducing burglary can be directly, and positively, related to overall project intensity, it is the intensity of actual implementation of measures on the ground that significantly predicts any changes in burglary rate. The study also suggests that although the most successful schemes were also the most intense, this did not necessarily make them the most cost-beneficial. While these findings may seem obvious—the success of a programme depends more on the amount of action that is taken (outputs) than on the amount of resourcing (inputs)—the study appears to be the first that has exhaustively documented and analysed both the resourcing (including contributions in kind, sunk costs, training, travel etc.) and the implementation of 'deliverables' to construct measures of input and output intensity to test hypotheses about burglary outcomes.

7.3.5 Cost-effectiveness and cost-benefit

Research on the impact of burglary reduction interventions has concentrated primarily on whether or not an intervention effectively reduces burglaries, rather than on cost-effectiveness (the cheapest way of preventing burglaries) or cost-benefit analysis (whether the costed benefits of preventing burglary are greater or smaller than the costs of the intervention).

Cost-benefit analysis of the Safer Cities burglary reduction projects in aggregate estimated that around 56,000 burglaries were prevented by the schemes, with a resultant saving to the state of £31 million—roughly the cost of the initiative (Ekblom, Law and Sutton 1996).

The RBI projects have been examined from a cost analysis perspective, with evidence that the benefits generated by the projects considered in aggregate exceeded the costs (Bowles and Pradiptyo 2004). Economic evaluation was an integral part of the brief given to each evaluation consortium. Bowles and Pradiptyo have subjected the data generated by these evaluations to cost-effectiveness and cost-benefit analyses. Their study is limited by the diversity of intervention and degree of implementation across the RBI projects evaluated and by variations in the way project impacts have been estimated. Efforts at cost-benefit analysis by intervention type were compromised by these variations and also by the absence of estimates of future benefits. This skews economic analysis in favour of short-term crime prevention initiatives that will give quick results, and against longer-term interventions aimed at criminality prevention.

With these provisos, the study yielded a generalised conclusion that projects with a benefit/cost ratio greater than one were those where the principle interventions were:

• location-specific (target hardening of households)

• stakeholding (publicity and educational campaigns, watch schemes and resident involvement)

• enforcement- and offender-focused (directed policing, intelligence, disrupting offender behaviour).

The remaining interventions were characterised as:

- area-wide (environmental or CPTED improvements)
- offender-based schemes (diversion, drug rehabilitation and offender treatment programmes)
- property marking
- other (victim support, improved management and interagency working).

This second group of interventions includes those which cannot be expected to give quick reduction in burglary but which can plausibly contribute to longer-term solutions to burglary problems. For example, the American cost-benefit analysis of offender and non-offender treatment programmes (Aos et al. 2001) shows that specifically targeted programs can cost-effectively reduce criminality. (It is intended to extend this analysis to include the effectiveness of other crime prevention approaches, including policing resourcing and practice.)

8 Conclusion

The broad conclusion on policing effectiveness in reducing burglary is that police have made a significant impact on burglary where they have taken a strategic approach and adopted locally relevant tactics tailored to the nature of local burglary issues. This necessitates:

- excellent intelligence systems
- routine in-depth analysis of local burglary
- strategic management of the routine policing responses to burglaries and burglary investigations as well as of specific targeted burglary reduction initiatives
- the ongoing monitoring of performance
- the ability to respond creatively to a constantly changing crime picture.

Where police have focused their attention on a burglary 'hot' spot and on 'hot' offenders in that area they have been able to make significant reductions in the local burglary rate with little displacement. Indeed, the effectiveness of policing focused on risk factors in this way is, in the words of Sherman et al. (1997, 8-1), 'the most powerful conclusion from three decades of research'.

The programmes that have most effectively reduced burglary have been those that have taken a problem-solving approach and initiated comprehensive multicomponent strategies to deal with burglary both in the short term by targeting 'hot' offenders and 'hot' spots and protecting 'hot' victims, and in the long term by introducing burglary prevention measures to medium- to high-risk communities, often working in partnerships with other local agencies and community groups. Programmes with focused medium- to high-intensity interventions have given better outcomes than programmes where burglary prevention resources have been distributed more widely.

Crackdown and consolidation strategies appear to give longer-lasting results. In these strategies the gains from targeted policing of 'hot' spots and 'hot' offenders have been effectively consolidated by following up with longer-term burglary prevention interventions that effectively reduce the number of opportunities for offending in an area. Longer-term burglary prevention measures to reduce opportunity include area-wide environmental (CPTED) interventions and community action to protect vulnerable households, approaches that have proved more difficult to evaluate rigorously but where the weight of evidence supports their contribution to crime prevention. These are most effectively initiated and implemented through multi-agency and community partnerships.

Burglary prevention requires effective partnerships with other agencies and brings the challenges of establishing robust, trusting and open-minded multi-agency groups meeting routinely and committed to collaborative action. Working out of collaborative partnerships is

also demanding and requires effective coordination, planning and project management, as well as committed organisational support and resourcing.

One of the most challenging areas for burglary prevention initiatives would appear to be the implementation of strategies to reduce to the pool of motivated offenders. However, the principles of effective offender treatment programmes have been well-researched and established, and it has also been established that specifically targeted programmes to reach atrisk youth and their families can cost-effectively reduce criminality.

In summary, proactive problem-solving policing works effectively to reduce residential burglary. Preventing residential burglary, however, requires a proactive problem-solving approach with committed wider community and local agency participation.

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