

**What works for domestic burglary crime prevention:
strength of evidence indicators
(Tables 1-6: Part I)**

**Andrew Kent
Crime Reduction and Community Safety Group
January 2007**

Purpose of the paper

The 'What works for domestic burglary crime prevention' paper is divided into two sections; Part 1 Strength of evidence indicators and Part 2 Techniques and Context. The main purpose of Part 1 is to provide the currently known research evidence on a number of evaluated interventions that aimed to reduce the levels of domestic burglary. An attempt has been made to relatively compare the success of specific approaches and indicate whether they were cost-effective to implement. Part 2 takes each of the interventions evaluated in Part 1 and details the good practice points whilst also highlighting potential barriers to delivery.

Who is this paper useful to?

This paper is primarily intended for practitioners and those involved in making decisions on funding projects. A secondary function is to highlight the interventions approaches that require further research, with a view to determining more conclusively if they have had a positive or negative impact on levels of domestic burglary crime. In particular Part 2 may be of use to practitioners seeking to replicate any of these interventions and allows some setting of context so that the right set of interventions is selected following detailed analysis of the local issue to be tackled.

Methodology

The evidence shown in this paper has largely been derived from the findings of the Home Office's Reducing Burglary Initiative (RBI). This initiative was launched in 1999 and was implemented over three years. The main objectives of the RBI were to:

- reduce burglary nationally by targeting areas with the worst domestic burglary problems;
- evaluate the cost-effectiveness of the different approaches;
- find out what interventions showed promising results and the conditions that were needed to successfully implement them.

Two hundred and forty-seven burglary reduction projects were funded, covering over 2.1 million households suffering around 110,000 burglaries a year.

To examine the impact of specific interventions, for ease, these have been organised into the five main categories outlined in Clarke & Eck's (2003) *Twenty-five techniques of situational crime prevention*. A brief explanation of these five categories is as follows.

- 1) Increase the effort – this category relates to interventions that have a discouraging effect on offenders by controlling the potential environment of crime and controlling potential crime-assisting tools and weapons.
- 2) Increase the risks of crime – this category relates to interventions that aim to increase the chance of an offender being detected whilst carrying out an offence, specifically increasing the visibility of offenders to assist with identifying offenders and quickly apprehending the offender whilst the offence is taking place.
- 3) Reduce rewards of crime – this category relates to interventions making crime less profitable for the offender, principally by removing (i.e. taking cash out of shop registers overnight) or devaluing the target of the crime (customising items to make them less attractive when they are sold on stolen goods markets).
- 4) Reduce provocation to commit crime – this category relates to interventions that try to prevent crime through tackling influences that encourage crime. Specifically this approach attempts to remove potential offenders from situations where crime is very tempting or isolate them from peers who are encouraging them to take part in crime.
- 5) Removing excuses for crime – this category relates to interventions that focus on engaging the offender's conscience through a number of methods – raising awareness of rules and boundaries and assisting compliance with rules.

A further category has been added – 'supporting/complimentary interventions' – that covers interventions that do not fit neatly into one of the five above categories or provide a supporting role for the functions mentioned in these categories.

Note that most of the evidence presented here from the RBI explores interventions within a wider package of interventions attempting to reduce the level of domestic burglary in the

areas where they were implemented. This reflects the greater number of crime prevention projects that use a multi-intervention approach to tackle burglary, principally because the different interventions tackle specific aspects of the burglary problem. Additionally, where this was available, research external to the Home Office on the impact of isolated or 'stand-alone' interventions has been included.

In Part 1 the tick ratings included in the success rating are based on a subjective decision based on the level of research information available. For example a three tick 'strong evidence' classification has been awarded to interventions with the following characteristics.

- At least one or more stand-alone research reports that indicated the intervention was associated with a reduction in crime;
- the intervention was a large component in a number of RBI projects where:
 - o the intervention was associated with a reduction in crime in more than 50 per cent of the examined RBI projects;
 - o the range of net changes¹ for the RBI projects including this intervention showed average reductions in crime of 15 per cent or over;
 - o where there was no indication that one or more of the RBI projects had been associated with a large increase in burglary crimes (the range of net changes measures shows the maximum and minimum changes in burglary crimes).

Discretion was used to value one tick and two tick success ratings. Mainly these were given to interventions where there was an absence of one of the above factors or where the intervention was a small component in projects.

Where the success rating was marked with a question mark and a tick or cross, this meant that the findings were generally positive or negative respectively. However, for this classification more evidence was required on the impact on burglary levels for projects that used this intervention as a stand-alone approach or as a large component in a crime reduction project.

Success ratings indicated by a cross were classified as such because there was evidence that they were associated with evaluated stand-alone projects that had experienced increases in burglary crime coupled with RBI packages that were associated with increases in burglary crimes.

¹ Net change – where changes in crime in the wider or surrounding areas were taken into consideration, for instance, the reduction in crime if wider trends (i.e. reductions in crime at the force level and/or surrounding level) were subtracted from the reduction in crime experienced in the project area (See Clarke & Eck for more information).

Box 1: Key for Situational Crime Prevention Tables

'Stand-alone evidence' – Where evidence does exist on the stand-alone impact of a given technique the number of studies are indicated and the studies referenced.

'Type, implementation and use' – Under the RBI the vast majority of interventions were implemented within a broader package. This column indicates whether, *on average*, a given intervention represented a significant part of this package (in terms of expenditure). The number of RBI projects where this intervention was employed are also indicated.

Key to Success Ratings

- ✓✓✓ Strong evidence (both RBI package and isolated) that method works
- ✓✓ Moderate evidence (both RBI package and/or isolated) that method works
- ✓ Minimal evidence (RBI package only) that method works
- ?✓ Promising – Mixed evidence but overall associated with positive results
- ?x Disappointing – Mixed evidence but overall associated with negative results
- x No evidence that this works (from RBI and/or isolated evaluation results)

'Range of net change in RBI studies' – Under the RBI, the precise impact of individual techniques was generally impossible to assess because they were part of a broader package of measures. Therefore, the figures given here relate to the average impact – and the range of impacts – achieved by *projects as a whole* where a specific technique was employed. Only projects where the relevant technique was implemented properly are included in this measure.

'Percentage of RBI projects where intervention is associated with positive outcome' – This column details the percentage of projects where a technique was implemented properly and was also judged to have a positive impact.

Key to cost-effectiveness ratings

- *** Associated with packages where input (costs) are substantially greater than the output (savings) $X < -0.75$
- ** Associated with packages where input (costs) are moderately greater than the output (savings) $-0.75 < x < -0.25$
- * Associated with packages where input (costs) are marginally greater than the output (savings) $-0.25 < x < 0.5$
- = Associated with packages where output (saving) is roughly equal to the input (costs) $0.5 < x < 1.5$
- ✓ Associated with packages where output (savings) are marginally greater than the input (costs) $1.5 < x < 2.25$
- ✓✓ Associated with packages where output (savings) are moderately greater than the input (costs) $2.25 < x < 2.75$
- ✓✓✓ Associated with packages where output (savings) are substantially greater than the input (costs) $2.75 < x$

'Cost-benefit average and number of cost-beneficial RBI studies' – This measure reports the cost-effectiveness of projects as a whole, and is only based on instances where the technique in question was viewed as having been implemented effectively. Cost-benefits are reported in terms of how much money was saved (or lost) for each pound of project money invested. Thus a cost-benefit ratio of 1:1.8 indicates that for each pound invested £1.80 was saved in terms of the benefits derived from the project. This would, therefore, indicate that a project was cost-effective. A cost-benefit ratio of 1:0.5 would indicate that for each pound invested only 50 pence was saved, thus indicating that the project was not cost beneficial. Negative cost-benefit ratios reported here related to a limited number of instances where projects were judged to have led to 'net increases' in crime (see Hope *et al.*, 2004).

Table 1. The evidence on interventions reducing burglary through 'increasing the effort' for offenders

Intervention	Stand-alone evidence of reduction (no. of studies)	Type, implementation and use within RBI studies	Success ratings for combined RBI and stand-alone results	Range of net change in RBI studies (average in bold)	Percentage associated with positive outcomes when implemented	Cost-benefit rating for RBI studies	Cost benefit(s) for RBI studies (average in bold)
Locks on windows and doors (area-wide)	Gross increase of 30%, but a net reduction of between 24-29% compared to control area and BCU wider area respectively in one study (Allatt, 1984)	Large component in 3 RBI studies	✓✓✓	17% net reduction (-10% to -27%)	100	✓✓✓	1:3.87 (2 studies cost-beneficial)
Alley gating	50-60% gross reductions noted across 4 studies (Young, 1999; Armstrong, 1999; Holden McAllister Partnership, 2002; University of Liverpool, 2003)	Large component in 7 RBI studies	✓✓✓	15% net reduction (+5% to -59%)	63	=	1:1.17 (3 studies cost-beneficial)
Locks on doors windows (targeted)	Gross increase of 30%, but a net reduction of between 24-29% compared to control area and BCU wider area respectively in one study (Allatt, 1984)	Large component in 26 RBI studies	✓✓	9% net reduction (+44% to -34%)	66	=	1:1.18 (13 studies cost-beneficial)
Fencing	No evidence available	Large component in 5 RBI studies	✓	12% net reduction (+21% to -59%)	40	*	1:0.21 (2 studies cost-beneficial)
Barrier plants	No evidence available	Small component in 3 RBI studies	?✓	19% net reduction (+16% to -43%)	67	*	1:-0.02 (1 study cost-beneficial)

References for Table 1:

Allatt, P. (1984) 'Residential security: containment and displacement of burglar', *Howard Journal*, 23(3): 99-116.

Armstrong, Y.A. (1999) *Evaluation of the Forest Fields Gating Project*. Unpublished manuscript. Bristol: University of the West of England, Bristol.

Holden McAllister Partnership (2002). *Evaluation of the Dukeries Gating Project*. Evaluation report for the Hull Community Safety Partnership. (unpublished)

University of Liverpool (2003) *Closing off opportunities: the impact of alleygating*. Liverpool: University of Liverpool Civic Design Department.

Young, C. (1999) *The Smithdown Road pilot 'Alleygating' project: evaluated on behalf of the Safer Merseyside Partnership*. Liverpool: University of Liverpool: Department of Civic Design report.

ough increasing the risks or perception of risks on

Range of net change in RBI studies (average in bold)	Percentage associated with positive outcomes when implemented	Cost-benefit rating for RBI studies	Cost-benefit(s) for RBI studies (average in bold)
8% net reduction (+16% to -59%)	50	**	1:-0.5 (4 studies cost-beneficial)
8% net reduction (+44% to -41%)	67	=	1:0.91

Table 3. The evidence on interventions reducing burglary through 'reducing the rewards' to offenders'

Intervention	Stand-alone evidence of reduction (no. of studies)	Type, implementation and use within RBI studies	Success ratings for combined RBI and stand-alone results	Range of net change in RBI studies (average in bold)	Percentage associated with positive outcomes when implemented	Cost-benefit rating for RBI studies	Cost-benefit(s) for RBI studies (average in bold)
Property marking	Little evidence of stand-alone effectiveness (Knutsson, 1984; Laycock, 1985; Laycock, 1991; Heller <i>et al.</i> , 1975)	Small component in 20 RBI studies	✓	14% net reduction (+16% to -43%)	67	✓	1:2.08 (8 studies cost-beneficial)
Covert trackers/cameras	No evidence available	Small component in 6 RBI studies	?✓	2% net reduction (+16% to -27%)	50	**	1:-0.32 (No studies found to be cost-beneficial)

References for Table 3:

Heller, N.B., Stenzel, W. W., Gill, A.D., Kolde, R.A. & Schimmerman, S.R. (1975) *Operation Identification Projects: assessment of effectiveness. National Evaluation Program, Phase I, summary report.* : National Institute of Law Enforcement and Criminal Justice.

Knutsson, J. (1984) *Operation Identification - a way to prevent burglaries?* Report 14. Sweden: Office of Community Oriented Policing Service, National Council for Crime Prevention.

Laycock, G. (1985) *Property marking - a deterrent to domestic burglary?* Crime Prevention Paper 3. London: Home Office.

Laycock, G. (1991). 'Operation Identification, or the Power of Publicity?' *Security Journal* 2(2):67-72.

Table 4. The evidence on interventions reducing burglary through 'reducing provocation' of offenders

Intervention	Stand-alone evidence of reduction (no. of studies)	Type, implementation and use within RBI studies	Success ratings for combined RBI and stand-alone results	Range of net change in RBI studies (average in bold)	Percentage associated with positive outcomes when implemented	Cost-benefit rating for RBI studies	Cost-benefit(s) for RBI studies (average in bold)
School awareness programme	No evidence available	Large component in 4 RBI studies	✓	5% net reduction (+16% to -21%)	75	✓	1:0.62 (1 study cost-beneficial)
Youth diversion schemes	Mixed results: (Loxley, Curtin, and Brown, 2002)	Large component in 15 RBI studies	✓	17% net reduction (+5% to -43%)	79	✓	1:1.5 (9 studies cost-beneficial)
Outreach work	No evidence available	Small component in 1 RBI studies	?✓	6% net reduction	100	✓	1:1.54 (1 study cost-beneficial)

References for Table 4:

Loxley, C., Curtin, L & Brown, R. (2002) *Summer Splash Schemes 2000: Findings from six case studies*. Crime Reduction Research Series Paper 12. London: Home Office.

Table 5. The evidence on interventions reducing burglary through removing excuses

Intervention	Stand-alone evidence of reduction (no. of studies)	Type, implementation and use within RBI studies	Success ratings for combined RBI and stand-alone results	Range of net change in RBI studies (average in bold)	Percentage associated with positive outcomes when implemented	Cost-benefit rating for RBI studies	Cost-benefit(s) for RBI studies (average in bold)
Media broadcasts and handouts targeted at offenders	No evidence available	Supportive component in 8 RBI studies	✓	16% net reduction (+5% to -42%)	75	✓	1:2.04 (4 studies cost-beneficial)
Landlord registration	No evidence available	Small component in 5 RBI studies	✓	10% net reduction (+16% to -27%)	60	*	1:0.19 (2 studies cost-beneficial)
Tenant-based approaches	No evidence available	Small component in 8 RBI studies	?✓	12% net reduction (+44% to -55%)	88	✓✓	1:2.38 (3 studies cost-beneficial)
ASBO	No evidence available: ASBO use for burglars is relatively new - hence there is no current evaluation data	Small component in 3 RBI studies	?✓	16% net reduction (-5% to -27%)	67	=	1:0.55 (0 studies cost-beneficial)
Signs (including posters and stickers)	No evidence available	Supportive component in 3 RBI studies	?*	2% net increase (+16% to -10%)	67	**	1:-0.45 (0 studies cost-beneficial)

Table 6. The evidence on supporting/complimentary interventions that support burglary reduction projects

Intervention	Stand-alone evidence of reduction (no. of studies)	Type, implementation and use within RBI studies	Success ratings for combined RBI and stand-alone results	Range of net change in RBI studies (average in bold)	Percentage associated with positive outcomes when implemented	Cost-benefit rating for RBI studies	Cost-benefit(s) for RBI studies (average in bold)
Media approaches – broadcasts, newsletters, posters and handouts (community focussed)	No evidence available	Supportive component in 15 RBI studies	✓	14% net reduction (+16% to -41%)	80	✓✓	1:2.36 (8 studies cost-beneficial)
Crime prevention advice packs	No evidence available	Supportive component in 18 RBI studies	✓✓	12.6% net reduction (+16% to -43%)	72	✓	1:2.51 (11 studies cost-beneficial)
Tidy up appearance of area	No evidence available	Small component in 5 RBI studies	✓✓	27% net reduction (-1% to 4-3%)	100	✓	1:1.39 (3 studies cost-beneficial)
Target prolific offenders/ zero tolerance policing	Reduction of 62%, relative to 41%, and by 18% in other areas (diffusion of benefits) in one study (Farrell, Chenery, and Pease, 1998)	Large component in 9 RBI studies	✓✓	17% net reduction (+16% to -59%)	80	=	1:1.14 (4 studies cost-beneficial)
High visibility patrolling	Domestic gross reduction between 16 and 21% in the target areas (city) but relative to a 25% gross reduction in the control area in one study (Jones, and Tilley, 2004)	Small component in 8 RBI studies	?✓	18% net reduction (+16% to -59%)	75	=	1:1.09 (5 studies cost-beneficial)

References for Table 6:

Farrell, G., Chenery, S. & Pease, K. (1998) *Consolidating police crackdowns: findings from an anti-burglary project*. Police Research Series Paper 113. London: Home Office.

Jones, B. & Tilley, N. (2004) *The impact of high visibility patrols on personal robbery*. Research findings 201. London: Home Office.