

Police Research Series Faper 108

Preventing Residential
Burglary in Cambridge:
From Crime Audits to
Targeted Strategies

Trevor Bennett

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Preventing Residential Burglary in Cambridge: From Crime Audits to Targeted Strategies

Trevor Bennett Linda Dune



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Policing and Reducing Crime Unit: Police Research Series

The Policing and Reducing Crime Unit (PRC) was formed in 1998 as a result of the merger of the Police Research Group (PRG) and the Research and Statistics Directorate. PRC Unit is now part of the Research, Development and Statistics Directorate of the Home Office. The PRC Unit carries out and commissions research in the social and management sciences on policing and crime reduction, broadening out the role that PRG played.

The PRC has now combined PRG's two main series into the Police Research Series, continuing PRG's earlier work. This will present research material on crime prevention and detection as well as police management and organisation issues.

Research commissioned by PRG will appear as a PRC publication. Throughout the text there may be references to PRG and these now need to be understood as relating to the PRC Unit.

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(ii)

Foreword

This report describes work undertaken by Cambridgeshire Police in conjunction with the Cambridge Domestic Burglary Task Force to design and implement a strategy to counter domestic burglary in the city.

The report is timely. The 1998 Crime and Disorder Act places a statutory duty upon police forces and local authorities to work together to identify and tackle local crime and disorder problems. The Cambridge initiative provides a good example of a crime audit and practical example of the partnership approach encouraged by the Act.

The importance of a strategic approach to tackling domestic burglary is reflected in the Government's new crime reduction strategy. The report provides a candid account of the issues involved in implementing such strategies. Police forces and local authorities will be interested in the range of initiatives identified to tackle various aspects of the problem.

Dr GLORIA LAYCOCK

Head of the Policing and Reducing Crime Unit, Research, Development and Statistics Directorate, Home Office.

May 1999.

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We would also like to acknowledge the County Council Crime Reduction Coordination Department for their work in generating a crime audit and the Safer Cambridge Steering Group for supporting and guiding the work of the DBTF.

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Finally, we would like to acknowledge the contribution of the members of the community in the target areas for attending the community seminar and for agreeing to be interviewed as part of the evaluation. We would also like to thank the local burglars who agreed to be interviewed.

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Executive summary

The report describes the work of the Domestic Burglary Task Force (DBTF) in Cambridge, which was established in July 1994 to examine the nature of residential burglary in Cambridge and to design and implement initiatives to prevent it. The group devised an overall strategy which was to divide the work into two stages: (1) a data-gathering stage, during which information about burglary in Cambridge was collected, and (2) a programme implementation stage, during which various projects were designed and implemented.

The main findings of the data-gathering stage were that residential burglary in Cambridge was concentrated within specific wards to the north of the city and within specific 'hot spots' within these wards. The 'hot spots' and the 'hot wards' were characterised by high levels of repeat victimisation. There was some evidence that residential burglaries in the area were committed by local youths who lived in the same or adjacent wards and who selected the target areas as a result of convenience, easy access through footpaths and alleyways, and the perceived abundance of suitable targets. As a result of these findings, the DBTF identified the largest 'hot spot' in the north of the City, and the two wards which contained the 'hot spot', as the targeted area.

One of the key principles of the overall programme strategy was that the nature of the solution to burglary in Cambridge should be based on sound knowledge of the nature of the problem. A number of seminars were organised for representatives of local agencies in order to identify burglary prevention strategies which would best match the nature of the problems identified. As a result of these seminars, a number of burglary prevention strategies were identified and implemented. The final list of projects implemented was as follows:

Projects aimed at potential victims

- Cocoon neighbourhood watch
- · Loan alarm scheme
- · Security advice to victims
- KeepSafe (fitting additional security locks)
- GateSafe (fitting additional external gates)
- · Security pack to residents

Projects aimed at potential capable guardians

- · Post Watch
- · Enhanced neighbourhood watch
- · Community seminar
- · Community Centre Information Link
- Targeted police patrols

Projects aimed at potential offenders

Youth Development project

The results of the outcome evaluation showed that total burglaries reduced in the targeted wards and in the targeted 'hot spot' over the evaluation period and that repeat burglaries reduced in one of the targeted wards, but not in the other ward or in the targeted 'hot spot'. The results also showed that burglary reduced generally by the same or greater amounts in the City as a whole, and in the various comparison areas, over the same period of time.

The results of the implementation evaluation concluded that the majority of the projects were implemented as planned and were generally regarded positively by the residents and victims to whom they were directed. However, the intensity and coverage of the projects as a whole was not great in terms of the number of residents involved or the time or area over which the scheme operated. It is possible that Arbury and Castle Wards (areas which included long-term burglary 'hot spots') required larger amounts of crime prevention resources and greater intensity and coverage than were achieved by the Domestic Burglary Task Force.

Overall, the report concludes that there was evidence of a reduction in burglary in the targeted areas. However, the most likely causes of this reduction were wider developments in policing during the programme period and economic and social factors that were affecting property crime generally.

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1. Background

The Domestic Burglary Task Force

The Domestic Burglary Task Force (DBTF) was established in July 1994 as a multi-agency group of representatives from the City Council, the County Council, the police, the Probation Service, Victim Support, and the University of Cambridge, with the task of reducing residential burglary in Cambridge. The specific aims of the DBTF were to examine the nature and extent of residential burglary and to suggest and implement initiatives on a pilot basis to prevent it.

The DBTF was a sub-group of the Safer Cambridge Steering Group which was also a multi-agency group which aimed to reduce crime and increase community safety. The Steering Group was established in 1992 with the remit to co-ordinate practical projects involving different organisations in order to reduce crime and fear of crime. The motivation for the creation of both groups was to broaden the base of crime prevention activity in the City by involving a broad spectrum of agencies in the crime prevention process.

The general strategy

The general strategy of the DBTF was to collect information on the nature of the problem of residential burglary in Cambridge before proposing actions on how to deal with it. It was proposed that information should be collected on the nature of burgled properties, the characteristics of burgled victims, and the characteristics of known burglars.

The main administrative strategy of the group was to divide the work into two stages: (1) the first stage of the project was a data-gathering stage, which aimed to identify the nature of the problem of residential burglary; and (2) the second stage was the implementation stage, which aimed to establish and monitor individual projects generated from the findings of the first stage. The first stage of the programme began with the first meeting of the group in July 1994 and ended in December 1995. The PRG-funded evaluation period began in January 1996 along with the beginning of the second stage of the programme. The majority of the projects were devised and implemented between January 1996 and August 1996 (two projects were implemented in 1997). The formal evaluation period for the purposes of assessment of the programme began in September 1996 and ended at the end of the programme in August 1997.

The data-gathering process

The first stage of the programme involved extensive data gathering as a means of informing the second stage. During the first year, various methods were used to collect information on the nature and distribution of residential burglary:

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- *Crime pattern analysis:* Police-recorded data on residential burglary in the City of Cambridge were mapped in order to determine spatial patterns of burglary.
- Offender address analysis: Police data on offenders were used to identify the addresses of all offenders convicted of residential burglary in Cambridge.
- *Interviews with local burglars:* Local burglars were interviewed from among current clients of Cambridge Probation Service and from among offenders currently held on charges of burglary at the local prison in Bedford.
- Environmental survey: Two local police officers experienced in crime prevention conducted on-the-street surveys of properties in the areas targeted by the DBTF in order to identify environmental factors that generate opportunities for burglary.
- Repeat burglary victim survey: A self-completed questionnaire was given to every new burglary victim by the investigating police officer in order to determine the previous burglary histories of current victims.
- *Household survey:* A limited household survey was conducted using postal questionnaires in order to confirm the location of burgled dwellings identified from the analysis of police-recorded crimes.

The programme implementation process

The main method used for converting the findings of the data gathering stage to a programme of projects designed to reduce residential burglaries in the targeted areas was to convene three 'brainstorming' sessions involving representatives from relevant agencies and organisations. The design of the sessions was based on the three main elements of crime identified in the academic literature: vulnerable victims, motivated offenders, and capable guardians (Cohen and Felson, 1979). Three groups of discussants were generated to consider each of these three elements of crime.

Structure of the report

Chapter 2 presents the main findings of the data-gathering phase of the research in which the characteristics and spatial patterns of residential burglary in Cambridge were identified. Chapter 3 describes the main programme elements implemented during the second stage of the project. The fourth chapter presents the main findings of the evaluation on the extent to which the programme was successful in

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reducing residential burglary in the targeted areas. The fifth chapter assesses implementation effectiveness and considers the strength of the programme elements. The final chapter discusses the effectiveness of the multi-agency partnership as a whole and the lessons that were learned.

2. The nature of the problem: residential burglary in Cambridge

The first stage of the programme involved data gathering as a means of identifying the nature of the problem to be tackled. The results of three of the six methods of data gathering (crime pattern analysis, offender address analysis, and interviews with burglars) are discussed below.

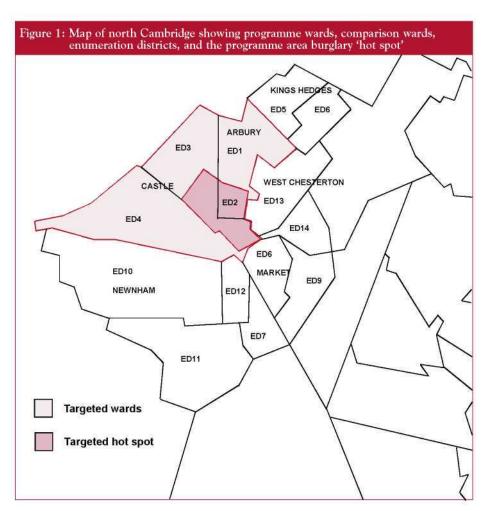
The data-collection strategy

The data-collection process was split into two distinct stages. The first stage was conducted shortly after the establishment of the DBTF with the main purpose of identifying the targeted locations. The second stage was conducted after the selection of the programme areas with two main purposes: the first was to provide detailed information on the nature of burglaries in order to inform the choice of preventative strategies and the second was to provide time-series data for the purpose of monitoring and evaluating the projects implemented.

The first stage of data collection and analysis was conducted mainly by Cambridge County Council Research Group from both new and existing sources. Some information on the broad distribution of burglary in Cambridge was already known as a result of periodic reports to the Safer Cambridge Steering Group by the Research Group. Additional geographic information was also collected and analysed by the Research Group specifically at the request of the DBTF. These included maps of burglaries in Cambridge, plotted by hand, covering three consecutive six-month periods, spanning the whole of 1993 and half of 1994 (the period immediately before the establishment of the DBTF). The three maps identified the existence of a large 'hot spot' of burglary in the north of the City spanning two wards that was more or less stable in size and location across the three periods. This 'hot spot' and the two wards in which the major share of the 'hot spot' fell (Castle and Arbury Wards) were subsequently selected by the DBTF as the areas to be targeted. The location of the selected wards and the 'hot spot' area (drawn at the level of particular streets) are shown in the map below.

Castle Ward was predominantly owner-occupied (65%), with a small proportion of housing rented from the local authority (4%), whereas Arbury Ward was partly owner-occupied (45%) and partly rented from the local authority (47%) (all figures are taken from the 1991 Census). Castle had a resident population of 6,064 people comprising 2,665 households and 643 resident students (with a home address in Cambridge) and Arbury had a resident population of 6,895 people comprising 3,024 households and 127 resident students. Castle Ward had 6 university colleges within its area, while Arbury had none.

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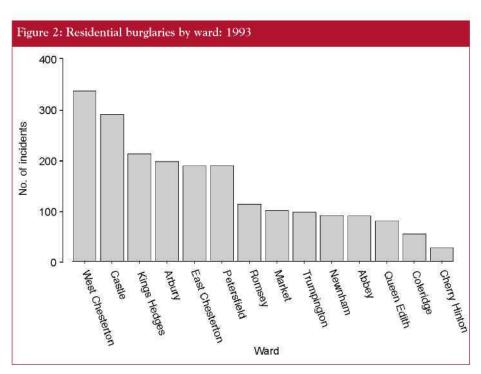
The second stage of data gathering drew mainly on police-recorded crime data on burglaries in Cambridge and the police database of offenders found guilty of burglaries in Cambridge. The first database covered the period from the beginning of 1991 (and was updated to the end of the project) and the second database covered the period from the beginning of 1994 (and was similarly updated).

Crime pattern analysis

The following analysis is based mainly on the data collected for 1993 and 1994 as these were the years assessed by the DBTF in making decisions about the programme location and preventative strategies. However, the tables and figures presented are not necessarily those used at the time by the group. At the beginning of the project, most of the maps used were plotted by hand, while by the end of the projects most of the maps were produced by GIS software packages.

Geographic distribution of burglaries

Figure 2 shows the 14 wards of Cambridge ranked by number of residential burglaries in the year 1993 (the main year of the original crime analysis). The five most heavily burgled wards were all in the north of the city in close proximity to the targeted wards (Arbury and Castle). The four highest-ranking wards accounted for half of all burglaries in Cambridge for 1993 and included the two targeted wards, which were second and fourth in the ranking. These two wards accounted for almost one-quarter (23%) of all residential burglaries in Cambridge in that year.



6

The following four charts show the location of burglary 'hot spots' in Cambridge for 1993 and 1994- The charts show two large 'hot spots' (labelled as '1' and '2' in the enlarged maps) in the northern part of the City. These two 'hot spots' were fairly stable over the period 1993 to 1994- However, other 'hot spots' (particularly the larger 'hot spot' in the far north of the City) became visible in 1993, but disappeared again in 1994- The analysis of 'hot spots' for 1991 (see Figure 10 in Appendix A), and anecdotal information from the police, suggested that these two 'hot spots' had been stable in Cambridge for many years.

'Hot spot' 1 was the largest 'hot spot' in the targeted wards in 1993 and included almost 10 per cent (9.5%) of all residential burglaries in Cambridge for the year. 'Hot spot' 2, just outside the targeted wards, included just over 5 per cent of all burglaries (5.5%). The smaller 'hot spots' in the targeted area included a further 2 per cent and 1 per cent respectively of all burglaries. In 1994, 'hot spot' 1 declined in size a little (containing 7 per cent of burglaries in Cambridge) and 'hot spot' 2 increased in size (containing 8 per cent of burglaries in Cambridge).

The first rather than the second 'hot spot' was chosen for targeting by the group for two main reasons. The first reason was that the main part of the first stage of crime analysis was conducted on data relating to 1993 when the 'hot spot' was dominant. The second reason was that the first 'hot spot' spanned both privately owned and publicly owned housing and it was believed at the time that such a spread would maximise opportunities for intervention.

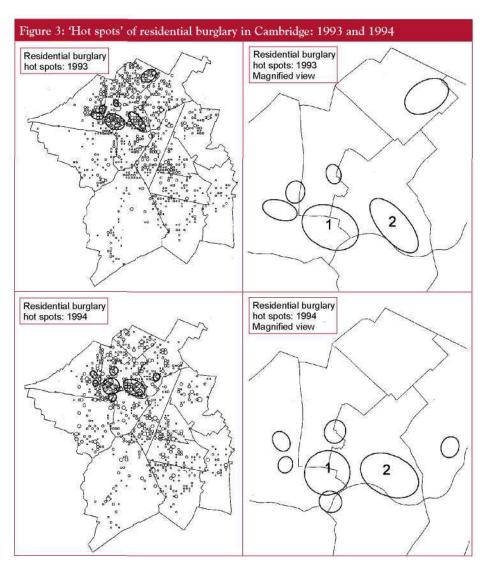


Figure notes: The marker symbols represent the location of residential burglaries to the nearest 100m grid square. The symbols have been graduated from 1 to 22 (1993) and 1 to 15 (1994) to represent the frequency of burglaries in each 100m grid square. The 'hot spot' ellipses were calculated using STAC ^[I] software based on a search radius of 150m and drawn using MapInfo. All ellipses identified in the analysis are included on the full-sized maps.

^[I] The Spatial and Temporal Analysis of Crime Software was developed by the Illinois Criminal Justice Information Authority. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of the Illinois Criminal Justice Information Authority.

Geographic distribution of repeat burglaries

The DBTF was established at a time of growing interest in the phenomenon of repeat victimisation. There was some evidence from recent research that high crime areas and crime 'hot spots' contained high rates of repeat victimisation (Tricketet *al.*, 1992). Conversely, the research suggested that high crime areas and crime 'hot spots' were to an extent created by high levels of repeat victimisation.

Previous research has shown that it is not straightforward to calculate repeat rates of dwellings using police-recorded data (Anderson *et al.*, 1995). There are at least two large problems to overcome. First, it is difficult to identify unique dwellings, which is an essential part of the process of measuring repeats. Address data are not always entered correctly or according to the same protocols. House names and house numbers may or may not be included and street names may be spelled correctly or incorrectly or abbreviated or not abbreviated. Second, it is difficult to identify whether or not an address is a multi-occupancy address. Police data on residential burglary do not necessarily conform to specific rules in relation to identifying multi-occupancy addresses. A burglary in a flat might be recorded at the level of the individual dwelling unit (for example, 13a Madeup Court) or at the level of the building unit (Madeup Court). It would be expected that repeat rates of the latter would be greater than repeat rates of the former.

It might be helpful in terms of explaining the following figures, and in terms of identifying some of the problems that might be faced by others in performing the same task, to explain the way in which these two problems were handled by the current analysis.

The method used for identifying unique addresses was to sort addresses by street number and street name and to identify variations in presentation by eye and correct them. Unique identifier numbers were then given to each address by combining recoded versions of the two variables making up the address (that is, street number and street name). These were once again sorted and checked manually and missing values were added by hand.

The method used for identifying the level of the address in terms of whether or not it identified an individual dwelling unit (e.g. individual houses or flats) or whether it identified a block of dwelling units (e.g. a block of flats, a college, a hostel, or a hotel) was to generate an additional variable for each address that showed whether or not it was multi-occupancy or non-multi-occupancy. These variables were created from information contained in the Electoral Register, from the addresses

themselves (for example, when the name of the dwelling indicated its status), and from lists of multiple occupancy dwellings made available by the City Council Housing Department.

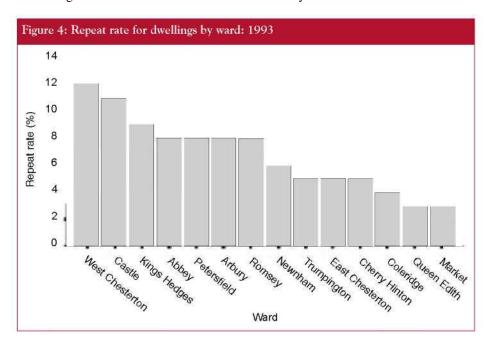
In most cases it was fairly obvious whether the address referred to a single house or flat (the address was recorded by the police at the dwelling unit level) or whether the address referred to a block of flats or to a college or hotel (the address was recorded by the police at the building unit level). However, there were a number of cases when 'best estimates' had to be generated from the information at hand.

In order to reduce the number of uncertain cases as much as possible, the analyses of the data which follow are based only on addresses recorded at the dwelling unit level (either single houses or single flats). In most cases, this comprises the vast majority of the data collected (for example, in the analysis that follows for repeat burglary in 1993, 86 per cent of cases were classified as single dwelling units and were included in the analysis). However, 14 per cent of cases comprised multi-unit addresses (for example, colleges, hotels, hostels, and blocks of flats), and these were excluded from the analysis.

There are at least two methods of calculating repeat rates from police data. The first might be referred to as the 'calendar year-within year comparison'. The repeat rate is calculated as the percentage of dwellings burgled two or more times during a particular calendar year. This method has the advantage that it is fairly simple to analyse and to present graphically. However, it has the disadvantage that dwellings burgled at the beginning of the year have a longer time period in which to be burgled again than those burgled at the end of the year.

The second method might be referred to as the 'target month-previous 12 month comparison'. The repeat rate is calculated by selecting a target month (or similarly short period) and determining the proportion of dwellings burgled in that month that were also burgled in the previous 12 months. This method has the advantage that it overcomes the problem of a variable 'period at risk' of the previous method as each dwelling has exactly 12 months to be burgled again. However, it has the disadvantage that it requires a reasonably large number of burglaries to occur in the target month (or other short period) to be able to arrive at an accurate rate. For example, 10 burglaries recorded in the target month would yield a repeat rate of 10 per cent if 1 of the dwellings had been burgled in the previous 12 months and a repeat rate of 20 per cent if 2 had been burgled previously.

The following chart shows the geographic distribution of repeat burglaries of single dwelling units in Cambridge for the year 1993 (the year used for most of the early analysis of the data by the DBTF) using the first method (the 'calendar year-within year comparison'). This method was chosen as the number of burglaries per month was too small in each ward to use the second method. The chosen method would tend to generate slightly lower repeat rates than the alternative method. However, the main purpose of the graph is to make comparisons across wards. As the same method is used across all wards over the same period of time, it is still possible to make comparisons among them and (the main point) to compare the repeat rates of the targeted wards with the other wards in the City.



The ranked order of wards for repeat rates among single dwellings (excluding colleges, etc.) is similar to the ranked order of wards for all offences (see Figure 2). The top three wards in terms of total burglaries were the same top three wards in terms of repeat burglaries. Castle Ward was second in rank order in terms of both total burglaries and repeat burglaries. However, Arbury was the fourth highest ward in terms of total burglaries, but the sixth highest ward in terms of repeat burglaries.

The proportion of dwellings burgled in each of the targeted wards is shown more clearly in Table 1 below.

Area	Repeat rate [1]	
	n	%
'Hot Spot' 1 (targeted 'hot spot') ²	166	13
Arbury Ward (targeted ward)	161	8
Castle Ward (targeted ward)	208	11
Cambridge City	1531	8

Table notes: ^[1] The repeat rate calculated as a percentage of dwellings burgled two or more times in 1993;^[2] See Figure 3.

Eleven per cent of dwellings in Castle Ward and 8 per cent of dwellings in Arbury Wards were burgled more than once. The Castle rate was higher than the rate for Cambridge City as a whole, but Arbury had an identical rate to the city as a whole. The repeat rate for the targeted 'hot spot' (13%) was higher than the repeat rate for the wards within which it fell, and for Cambridge as a whole. These results lend support to results of other studies which show that areas with high total offence rates also have high repeat offence rates.

Burglars in Cambridge

The first part of the following analyses is based on the police offender database and relates to offender address locations. The second part is based on the interviews with offenders and relates to offenders' accounts of why they selected areas within Cambridge and whether they committed repeat burglaries.

Offender address locations

The original analysis of offender address locations was based on data held for offences committed in 1994, during the first stage of crime analysis. The number of offenders found guilty of offences in the targeted wards was fairly small, which hindered the investigation. In order to increase the number of cases, the following analysis is based on all offenders found guilty of burglaries within the targeted wards during the two-year period immediately before the implementation of the programme, covering the period from September 1994 to August 1996.

In this two-year period, there were 592 residential burglaries in the targeted wards. Ninety-seven of these (16%) were 'cleared up', which resulted in 37 unique offenders who worked alone or in collaboration with others. Thirty-two of these had addresses in Cambridge. These 32 offenders generated 100 offence-offender combinations and the distance between the offender's address and the offence address in each of these combinations was used as the basis for the following analysis.

Figure 5 shows the distance decay curve for offences committed in the targeted wards in the two-year period. The chart shows that the estimated mean distance travelled by these offenders to offences committed in Arbury and Castle Wards was 1,459 metres (see table note for method of calculation). The minimum distance travelled was zero metres (the offender lived in the same 100 metre grid square as the burglary victim) and maximum distance travelled was 6,185 metres.

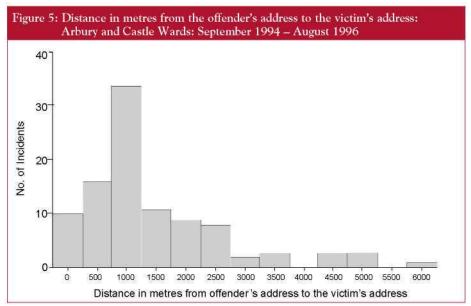


Table note:

The histogram shows various distance ranges between the offender's address and the victim's address measured from the centroid of the 100m grid square in which each address postcode fell. The chart is based on all offences 'cleared up' during the two-year period before the programme for which offender details were included in the police offender database.

Recoding the distance travelled shows that 15 per cent of 'cleared up' offences where the offenders had Cambridge addresses were committed by offenders who lived 500 metres or less from the dwelling and just over half (51%) of 'cleared up'

offences were committed by offenders who lived 1,000 metres or less from the dwelling. Two-thirds of offences were committed by offenders who lived 1,500 metres or less from the dwelling and over three-quarters (77%) involved offenders who lived 2,000 metres or less away. In terms of ward of residence, two-thirds of offences (69%) committed in the Arbury and Castle Wards were committed by offenders who lived in those two wards.

Figure 6 shows the spatial relationship between the offender's address and the victim's address in terms of the position of offence and offender 'hot spots'. The

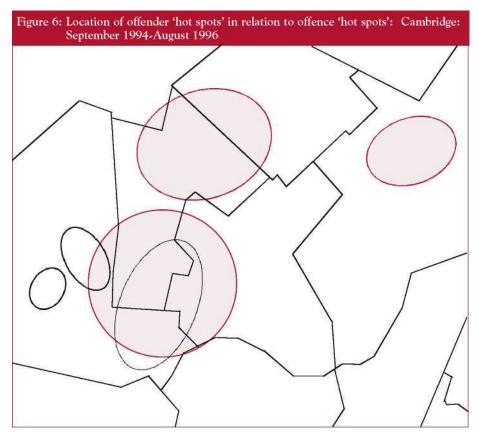


Figure notes: The shaded 'hot spots' show the aggregates of address locations (of points [not shown] drawn to the nearest 100m) of burglars who were found responsible (by various methods of 'clearing up') for burglaries committed in the two-year period before the full implementation of the programme (September 1994-August 1996) in the two targeted wards. The non-shaded 'hot spots' show the offence locations for those offences 'cleared up' during the same period.

shaded ellipses represent the three largest 'hot spots' of offender address locations. The non-shaded ellipses show the three largest 'hot spots' of burglary offence locations for those offences which were 'cleared up'. The figure shows that the largest 'hot spot' of offenders' addresses almost completely overlaps the largest 'hot spot' of offence addresses. In other words, the offenders tended to live in, or close to, the offence 'hot spots'. Six of the 32 offenders responsible for all 'cleared up' burglaries in Castle and Arbury Wards during this period lived within the largest offence 'hot spot' and 8 lived in the largest offender 'hot spot'.

Hence, the evidence from each of the preceding analyses of the relationship between offence and offender address location among burglars who were resident in Cambridge shows that burglaries committed in the target wards during the period before the implementation of the programme tended to be committed by offenders who lived nearby.

Offender interviews

In order to obtain greater insight into burglary in the targeted area, interviews were conducted with local burglars. The interviewing was completed in two stages. The first stage was conducted shortly after the DBTF was established in order to provide information that might instruct the choice of strategies for preventing burglary. The primary aim of this stage was to speak to local offenders who might have committed burglaries in the targeted areas. The local probation department representative of the DBTF asked all clients who had recent convictions for burglary in Cambridge if they would be willing to be interviewed by researchers from the Institute of Criminology. At the time, Cambridge Probation Service had about 30 clients on its register who met our conditions. In the first year of the DBTF, interviews were conducted with 10 of these offenders.

The second stage was conducted mainly during the second year of the programme in order to provide additional information on repeat burglaries and target selection. It was felt unlikely that we would be successful in interviewing many more offenders on probation. Hence, we approached Bedford Prison and requested access to detainees currently convicted of burglary. During the second year of the work of the DBTF, interviews were conducted with 16 burglars from Bedford Prison and a further two burglars from Cambridge Probation Service. Overall, 28 burglars were interviewed.

All of the burglars interviewed in the first round of interviews had committed at least one offence in Cambridge and 8 of the 10 had committed the majority of their offences in the City. Six of the eight offenders said that they had committed

the majority of their offences in the two targeted wards. Hence, while the number of offenders interviewed was small, they represented a relevant group of offenders whose opinions were of particular interest to the DBTF.

One issue of particular concern to the DBTF was the relationship between the location of the offence address and the location of the offender's address. The interviews showed that most of the offenders interviewed committed most of their offences less than a mile from their home. Four of the six offenders who said that they committed most of their offences in the targeted wards also lived in the targeted wards. When asked why they chose their main offence locations, the majority (6 out of the 10) gave the nearness of the offence site to their home as their primary reason. The remainder gave a variety of reasons relating to the general attractiveness of the area in terms of burglary.

Three of the ten offenders admitted committing recent burglaries in the targeted 'hot spot'. Two of the three offenders said that the most important reason for choosing the 'hot spot' was that it was near to where they lived. Other reasons given related to their perceptions of the risks, rewards, and effort involved, including the perceived vulnerability of the windows of dwellings in the 'hot spot' area, the existence of passageways to facilitate entrance and escape, and the expectations that there would be something worth stealing in the area. They all believed that other burglars would also find the 'hot spot' an attractive site for burglary for the same reasons.

The issue of repeat victimisation was of particular interest to DBTF as the group wanted to find out whether they should target repeat victimisation in the second stage of their work. Repeat victimisation was also of a more general interest as it was unknown at the time why dwellings were repeatedly victimised. Three potential explanations could be found in the research literature: (1) the same offender returns; (2) the offender tells others and they return; (3) the home is generally an attractive target to all potential burglars (Polvi et *al.*, 1991). The offenders were asked if they ever went back to any of the dwellings that they had burgled. The responses given by the first-stage, local burglars in Cambridge and the second-stage, imprisoned burglars in Bedford were different.

The majority of offenders in the first stage of interviewing in Cambridge said that they had gone back to dwellings that they had burgled in the past. The main reasons for returning covered the main reasons given by burglars generally for committing offences (namely perceived low risks, high rewards, or ease of access) (see Bennett and Wright, 1984). They were also asked whether they had

ever burgled a dwelling as a result of other burglars giving them information. Almost half of the offenders said that they had committed this kind of repeat burglary. When asked why they returned to the homes that others had burgled, they gave a number of reasons that focused mainly on the nature of the goods to be stolen (rather than low risk or ease of entry).

The majority of offenders in the second stage of interviewing in Bedford said that they did not return to dwellings previous burgled and none of the burglars said that they committed offences as a result of information from other burglars. Those who did commit repeat burglaries explained this in terms of the benefits of the knowledge gained about the method of entry and what goods the property contained.

Conclusion

The results of the data-gathering stage were important in orienting the DBTF to the nature of the problem being addressed. The key characteristics of the problem of residential burglary in the north of Cambridge were the concentrations of burglary within specific 'hot spots' and within particular wards. The 'hot spots' and the 'hot wards' were characterised by high levels of repeat victimisation. There was some evidence from detected offences and from offender interviews that residential burglaries were committed by local youths who lived in the same or adjacent wards and who selected the target areas as a result of convenience, easy access through footpaths and alleyways, and the perceived abundance of suitable targets which were within the ability of these offenders to overcome.

3. The nature of the solution: programme elements

The relationship between the problem and the solution

One of the key principles of the overall programme strategy was that the nature of the solution to burglary in Cambridge should be based on sound knowledge of the nature of the problem. However, it was not clear from the outset by what process information about the problem could be converted into crime prevention strategies. The method chosen by the DBTF to achieve this was discussed briefly in Chapter 1. It was decided that three seminars should be organised to address what were regarded as the three main elements of crime: vulnerable victims, motivated offenders, and the absence of capable guardians.

The idea for developing seminars based on these topics derived from routine activity theory. The theory is most commonly associated with the early research of Cohen and Felson (1979) in which they state that in order for a crime to occur there must be three essential conditions: a likely offender, a suitable target, and the absence of capable guardians. The authors argued that increases in residential burglary in the United States during the 1960s and 1970s were the result of changes in routine activities which affected occupancy patterns (guardianship) and the availability of stealable goods (suitable targets). This theory has been very influential and provides not only a powerful explanation of changes in crime, but also a rational means of generating targeted crime prevention strategies. For example, programmes based on CCTV systems can be thought of as methods of extending capable guardianship (Brown, 1995) and programmes based on repeat victimisation can be viewed as methods of reducing the vulnerability of potential victims (Chenery et *al.*, 1997).

Representatives of various agencies with particular knowledge or expertise in these areas were invited to attend one or more of the seminars. The three groups discussed the nature of the problem in relation to their topic area and potential strategies to affect the problem in the targeted areas. The ideas generated from these discussions were fed back to the DBTF. A number of the projects suggested were submitted to the Safer Cambridge Steering Group for approval. Table 2 summarises some of the initial list of projects suggested and those that were eventually selected.

The selection of projects

Action plans were drawn up by various members of the DBTF (depending on their knowledge and expertise) for selected projects. In practice, not all of the projects initially identified were eventually implemented. The idea of a community shop as a local police base was eventually abandoned as a result of the lack of suitability of available accommodation and as a result of the reluctance of the police to dedicate

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Project Projects aimed at potential victims		Description	
Proposed	Implemented		
Cocoon neighbourhood watch	Yes	Small neighbourhood watch schemes based on the dwellings immediately adjacent to a victim's dwelling	
Loan alarm scheme	Yes	Plug-in alarms loaned to recent victims of burglary for 8 weeks	
Security advice for victims	Yes	Fact sheets for victims on methods to reduce repeat burglaries and free home security surveys	
KeepSafe	Yes	Free security upgrading for specific categories of victim	
GateSafe	Yes	Free installation (but not purchase cost) of gates across shared pathways and alleyways	
Security pack to residents	Yes	'Beat the Burglar' security advice pack mailed to all residents in the targeted wards	
Projects aimed at po capable guardians	tential		
Proposed	Implemented		
Post Watch	Yes	Postal delivery workers look out for suspicious activities and report them to the police	
Enhanced neighbourhood watch	Yes	Improved training for neighbourhood watch co-ordinators	
Community seminar	Yes	A meeting for local residents to give advice and to discuss concerns relating to residential burglary	
Community safety shop	No	A local base for community beat officers in order to provide contact between the police and the public	
Community Centre Information Link	Yes	Local community centres provide an outlet for distributing security advice to residents	
Targeted police patrols	Yes	Use of patrol time to patrol the targeted areas	
Projects aimed at po	tential offenders		
Proposed	Implemented		
'After School' project	No	Collaboration between the DBTF and the project staff based in the targeted area	
School excludee	No	Collaboration between the DBTF and other agencies	
Mediation scheme	Planning almost completed	Collaboration between the DBTF and the Probation Service	
Youth Development project	Yes	Collaboration between the DBTF and the Community Development Department of the City Council	

police time to staffing the shop. The police were concerned at the time that policing in the area should aim to respond to current tasking policy, which required police to tackle a range of local problems in a flexible way. The projects originally identified as focusing on potential offenders (in practice, young people) all made some progress during the lifetime of the DBTF. The Youth Development project was implemented during the programme period and the mediation scheme reached an advance planning stage. However, the After School' project and the 'School Excludee' project had made little progress by the end of the programme.

The final list of projects also differed from the initial list as a result of the addition of the Community Centre Information Link that aimed to provide security advice to members of the local community through local community centres.

Programmes aimed at potential victims

The first five projects listed in the preceding table were implemented as a package of measures. They were all aimed at recent victims of burglary and were organised by Cambridge Police Crime Reduction Unit in collaboration with the Employment Foundation Scheme (EFS) of the Cambridge City Council Planning Department.

The process of organising the package began with the Crime Reduction Unit who trawled, every few days, the list of recently reported crimes and identified residential burglaries that fell in the targeted area. Initially, a trawl was made just among burglaries committed in the 'hot spot', but this was later extended to the two targeted wards. The police then sent a letter to the victim stating that they were sorry to learn about the recent burglary and offered a list of practical services (the first five projects listed in the table above). A pre-paid envelope was provided for the victim's reply which was posted and returned to the Crime Reduction Unit who (in those cases when help was sought) made a referral to the EFS by telephone. A member of the EFS was funded by the City Council to work one-fifth full-time on the project (with the support of other staff members) and trained by the Crime Reduction Unit to carry out visits with those victims who requested the programme services.

Cocoon neighbourhood watch

The aim of the cocoon neighbourhood watch scheme was to reduce the risk of repeat victimisation and fear of burglary among recent victims. The idea for the scheme derived from the Kirkholt and Huddersfield crime prevention projects (Forrester et *al.*, 1988; Anderson et *al.*, 1995). It was based on the principle of involving immediate neighbours in looking out for anything suspicious in the area in the period immediately following a burglary. The representative from the EFS asked

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the victims if they would be willing for him to speak to their immediate neighbours. They would then visit the neighbours in order to discuss what had happened and what they could do to help. It was hoped that on some occasions these embryonic watch schemes might develop into larger and longer-last ting schemes.

Loan alarms

Residents visited by the EFS were offered a plug-in loan alarm that fitted directly into a domestic electrical power socket. The alarm detected movement in the room in which it was placed and emitted a loud tone inside the home when triggered. The main aim of the alarm was to provide reassurance to the victim of burglary and to reduce the risk of repeat burglaries. The alarm was collected by the EFS after eight weeks following the initial burglary and reissued to new victims.

Security advice to victims

Recent victims of burglary in the targeted wards were given an advice sheet on basic home security. The sheet was contained in the original letter sent to the victim by the Crime Reduction Unit. The aim of the advice was to enable victims to take early action to prevent a repeat burglary. In addition to the fact sheet, those victims who requested a visit were asked at the time if they would like the representative from the EFS to conduct a home security survey.

KeepSafe

The KeepSafe scheme was funded by Cambridge City Council and provided by the EFS. The scheme aimed to make available to certain eligible categories of householders free security upgrading on their property. Pensioners, people who were registered as disabled, single parents, and people who had been unemployed for six months or longer were eligible for free installation of locks and people who, in addition, were on full housing benefit, full council tax benefit, full family credit, or income support were eligible for a free supply of locks. The KeepSafe scheme was available to residents across the whole of Cambridge. However, all recent victims of burglary who were visited by the EFS were specifically asked if they would like to receive this service.

GateSafe

The GateSafe scheme was also funded by Cambridge City Council and provided by the EFS. The scheme aimed to provide and fit gates to access ways and shared passageways at the side and rear of properties. The supply and installation of the gates was arranged by the EFS and was free. However, residents were required to pay for the purchase of the gates. In the case of communal gates covering access ways across two or more properties, the resident had to obtain agreement from the

immediate neighbours. The aim of the scheme was to prevent access to the side and rear of the property by potential offenders. The gates were six feet high and cost between £100 and £300 each which was typically shared among the neighbours benefiting from the scheme.

Security pack to residents

The security pack was a separate initiative covering all residents and was unrelated to the security advice given to victims of burglary. At an early stage of the programme, all residents in Arbury and Castle Wards were mailed a copy of the Home Office 'Beat-the-Burglar' pack which was funded by Cambridge City Council. The main difference in the advice given to victims and the advice given to all residents was that the security pack was wider ranging and covered both long-term and short-term measures to reduce the risk of burglary.

Programmes aimed at potential capable guardians PostWatch

The Post Watch scheme involved postal workers who delivered mail in the targeted areas looking out for anything suspicious during their rounds and reporting these to the police. The postal workers were given advice on the kinds of things to look out for, including: lights left on, insecure windows or doors, items which appeared to be hidden or abandoned, and suspicious people or vehicles. In cases of emergency, the postal worker was required to make a '999' call to the police. In other cases, the postal workers wrote down what they had seen on an incident form which was handed to the postal manager who forwarded the information to the police.

Enhanced neighbourhood watch

The aim of the enhanced neighbourhood watch scheme was to make neighbourhood watch schemes already operating in the targeted area more effective. In order to achieve this, the police organised a training day for local neighbourhood watch co-ordinators who were advised on the nature of crime in the area and what could be done to prevent it. At a later date, the local police organised a similar series of meetings in the targeted wards for neighbourhood watch co-ordinators. These were primarily established as part of the new system of sector policing, but involved collaboration between the police and the DBTF. The two sessions organised for the two targeted wards involved informing the co-ordinators about local policing initiatives and matters relating to: communication between the police, the co-ordinators and the watch members, information available to co-ordinators from the police, and the level of support that the police could offer.

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Community seminar

The community seminar comprised a local evening meeting which covered issues relating to residential burglary in the targeted wards. The seminar was attended by senior representatives of the police and Cambridge City Council, members of the DBTF, and invited local residents. The main aims of the seminar were to make contact with those members of the community who had not necessarily been burgled (the EFS part of the programme focused wholly on victims of burglary) and to broaden the intervention to include a community-level approach to crime prevention. The seminar included presentations by representatives of the police, the local council, and residents involved in local anti-burglary community action.

Community Centre Information Link

The aim of the Community Centre Information Link was to provide local residents with information about community safety and crime prevention through local community centres. The DBTF obtained funds from the City Council to provide information racks for five community centres in the target area. The racks contained a range of leaflets on crime prevention literature and other advice that could be offered to residents attending the centre. A separate advice sheet was displayed near to the racks listing useful contact names and telephone numbers relating to crime prevention and community safety.

Targeted patrols

The aim of the targeted patrols project was to use police time, when they were not responding to calls for service, to patrol the target areas. The project developed through two distinct stages. In the first stage, routine patrol officers were tasked by their shift sergeant or inspector to use any uncommitted time to patrol the two targeted wards. The decision to patrol the wards was then left up to the individual patrol officers. In the second stage (which followed the transition of Cambridge Police to a system of sector policing), patrolling the targeted area was established more formally. This involved: four dedicated officers who were tasked with patrolling the targeted areas as part of their proactive duties, a response car staffed by two officers which contained a record sheet for officers using the car to record time spent in the targeted wards, and the involvement of six community beat officers who were allocated to the beats covered by the target area.

Programmes aimed at potential offenders

Youth Development

A number of youth projects were in operation in the north of Cambridge during the programme period as part of the general work of the Community Development

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Department. However, the DBTF were particularly interested in monitoring the work of one of these projects which involved young people in a central location of the targeted area. The programme was based on contacts between young people and detached youth workers and involved providing intensive support and focused activities in order to help the young person's development with particular attention to anti-social behaviour.

4. Outcome effectiveness: did the programme work?

One of the most important measures of crime prevention effectiveness was whether the programme succeeded in reducing the number of residential burglaries in the target areas.

The main method for determining a programme effect used in the research was to compare changes over time in the rates of residential burglaries in the programme areas (areas which received additional crime prevention initiatives) with comparison areas (areas which did not receive additional crime prevention initiatives). In the following analysis the results for the programme areas have been presented in an aggregated form comprising the combined area, and in a disaggregated form comprising the two wards, four enumeration districts making up these wards, and the targeted 'hot spot'. The results for the comparison areas have also been presented in an aggregated form comprising the whole city, and in a disaggregated form comprising the four nearby wards, 10 enumeration districts making up the these wards, and the three comparison long-term 'hot spots'. At each level of analysis, changes in residential burglary in the programme areas over the 12 month period before and during the programme are compared with changes over the same period in the comparison areas. Initial evidence of a programme effect would be shown when burglary reduced by a greater amount (or increased by a lesser amount) in the programme areas than in the comparison areas.

Trends in total residential burglaries

Table 3 summarises trends in residential burglary in the City of Cambridge and in various parts of the city in the 12-month period before the programme was implemented (September 1995 to August 1996) and in the 12-month period during maximum programme implementation (September 1996 to August 1997).

The first section of the table shows that the number of burglaries committed in the City as a whole fell by 19 per cent from the pre-programme period to the programme period. The number of burglaries committed in the combined area comprising the two targeted wards reduced by 4 per cent during the same period. Hence, the first comparison does not suggest that burglary in the programme area reduced by a greater amount than the City as a whole.

The previous comparison does not by itself suggest the absence of a programme effect. It is possible that burglary reduced by greater amounts in specific parts of the target area. The second section of the table show changes in burglary at the ward level. Burglary in both Castle and Arbury Wards reduced, but by amounts less than the reductions shown for the City as a whole. However, the most important comparison is not with the City of Cambridge, but with similar wards in a similar

location. A more equal comparison can be made between the targeted wards and their adjacent wards, which share many of the characteristics of the target area. The table shows that three of the comparison wards showed greater reductions in residential burglary than were shown in the targeted wards. The only exception was Newnham ward which showed a substantial increase in burglary over the same period. However, this finding goes against the trend of burglary in the city as a whole and the difference between the Newnham and Arbury and Castle appears to be more a product of unusually high levels of criminal activity in Newnham than a result of unusually low levels of criminal activity in the targeted wards. Hence, while the comparison could be used to show that Castle and Arbury in a sense 'outperformed' Newnham, the combined evidence of the other comparisons does not suggest that the difference could be attributed to a programme effect.

It still remains possible that, while there were no greater reductions in burglary in the two targeted wards than in neighbouring wards, there were areas within the targeted wards that were particularly affected by the programme and which reduced by greater amounts. The third section of the table shows the changes in burglary at the enumeration district (ED) level.

The table shows that in two of the four EDs within the target wards (EDI and ED3) burglary increased over the programme period. The table also shows that in two of the four EDs (ED2 and ED4) burglary reduced. The reduction in ED4 was in line with reductions across the city as a whole, while the reduction in ED2 was higher than the average reduction for burglary in the city as a whole. It is perhaps significant that the two EDs that showed reductions were mainly in the south of the combined programme area and the two EDs which showed increases were in the north of the area. It is possible that the programme had a greater impact in the south of the area (around the area of the main 'hot spot' of the programme site) and less of an impact in the north. It is also possible that the observed movements might have been a result of some displacement of burglary out of the south and into the north of the area. However, in order to attribute this movement to a programme effect (rather than an unrelated characteristic of burglary reduction in the area generally), it would have to be shown that there was in fact a greater-than-expected reduction in burglary in the main programme area 'hot spot'.

The fourth section of the table shows changes in numbers of burglaries at the 'hot spot' level. The first row shows the change in number of burglaries in the original programme area 'hot spot'. The number of burglaries committed in the original programme 'hot spot' reduced during the evaluation period by 18 per cent. In order to determine whether this was greater than what might have been expected in similar areas, changes in other 'hot spots' in the north of the City were also measured.

	Pre-programme	Programme	Percentage
	period ¹¹¹	period	change
City level			
Whole city	1,974	1,597	-19%
Programme area part of the city [2]	298	286	-4%
Ward level			
Programme area: Castle	200	194	-3%
Programme area: Arbury	98	92	6%
Comparison: Kings Hedges	140	96	-31%
Comparison: Market	196	146	-26%
Comparison: Newnham	100	157	+57%
Comparison: West Chesterton	209	145	-31%
Enumeration district level			
Programme area ED1 (Arbury) Programme area ED2 (Arbury) Programme area ED3 (Castle) Programme area ED4 (Castle) Comparison ED5 (Kings Hedges) Comparison ED6 (Kings Hedges) Comparison ED7 (Market) Comparison ED8 (Market) Comparison ED9 (Market) Comparison ED10 (Newnham) Comparison ED11 (Newnham) Comparison ED12 (Newnham) Comparison ED13 (West Chesterton) Comparison ED14 (West Chesterton)	63	71	+13%
	31	17	-45%
	72	76	+6%
	130	117	-10%
	50	37	-26%
	91	59	-35%
	47	28	-19%
	73	52	-29%
	75	55	-27%
	23	60	+161%
	48	64	+33%
	31	35	+13%
	99	69	-30%
	114	78	-32%
Hot spot' level [3]	3000	35070	1,1500
Original programme 'hot spot' Programme 5-year 'hot spot' 1 Programme 5-year 'hot spot' 2 Comparison 5-year 'hot spot' 3 Comparison 5-year 'hot spot' 4	114	94	-18%
	15	7	-53%
	111	70	-37%
	83	58	-30%
	37	17	-54%

Table Notes: [11] Pre-programme =September 1995-August 1996; programme period=September 1996-August 1997.
[22] Castle and Arbury wards. [33] The original programme 'hot spot' comprises the area of high levels of residential burglary identified by the DBTF in Stage 1 of the programme. The 5-year 'hot spots' were created by mapping police data for residential burglary for the period September 1991 to August 1996.

The counts shown comprise the number of burglaries which fell inside the 5-year 'hot spot' boundaries during the pre-programme and programme periods.

This analysis was based on identifying the location of 'hot spots' in the area using data for five years before the programme was implemented (see Figure 7). Once located, the number of burglaries committed inside these 'hot spots' during the year before and year during the programme was calculated. This method has the advantage that it makes use of computer-generated 'hot spots' rather than 'hot spots' drawn by hand and that the 'hot spot' is held stable over time. Table 3 shows that burglary in the smaller 'hot spot' within the programme area ('hot spot' 1) reduced by over 50 per cent during the course of the programme and the larger 'hot spot' in the programme area ('hot spot' 2) reduced by 37 per cent. However, the table also shows similar reductions in burglary in the comparison 'hot spots'.

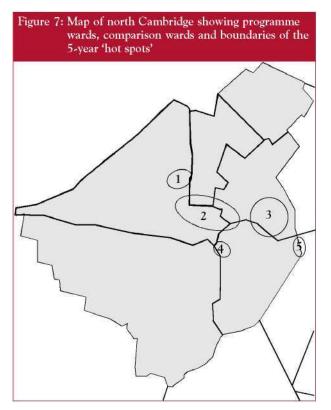
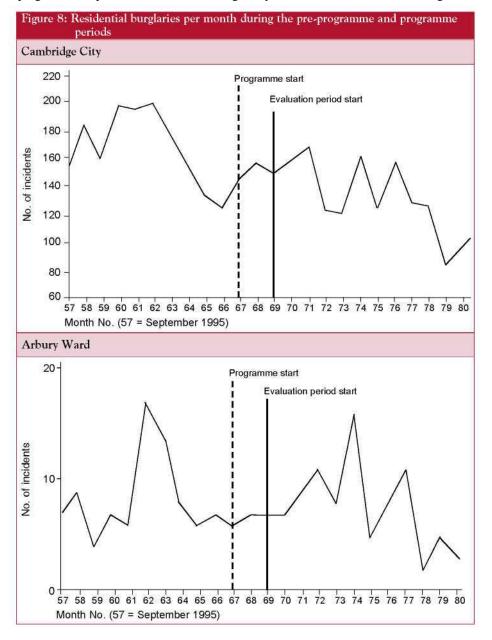
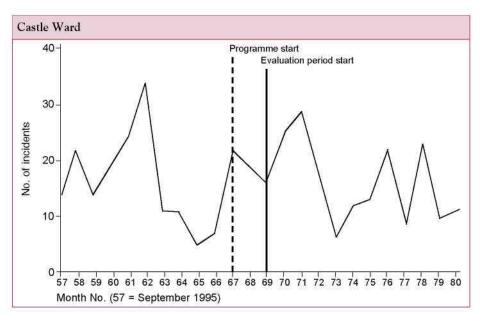


Figure notes: The shaded area covers the programme wards and comparison wards. The areas with the bold outline comprise the programme wards. The five ellipses labelled 1 to 5 represent the 5-year 'hot spots'.

Another consideration is whether or not the reductions were related in any way to the development of the programme and the crime prevention mechanisms which might be generated by it. It would be expected that the crime prevention effect of the programme would increase over time as these processes strengthened over the evaluation period. The following figures show the monthly changes in burglary during the 12-month period before the programme evaluation period and the 12-month period during programme implementation for Cambridge City as a whole and for the two targeted





wards. The figures show some evidence of a steady reduction over time in Arbury Ward, dropping from an early peak to just three burglaries in the last month shown. However, there is less evidence of a month-by-month reduction in burglary in Castle Ward. In fact, there is a steeper reduction in burglary towards the end of the programme period in the City as a whole than in Castle Ward.

It is hard to explain why the trend in burglary in Castle Ward showed less of a reduction over time than was shown for the City as a whole. It is possible that some of the variation across the wards of the City might be explained by broader-based changes in factors relating to crime (such as economic change) or by policing and other crime-reducing interventions conducted outside the evaluated programme which impacted in different ways across the wards of the city.

Hence, while there is some evidence of a reduction in burglary across the programme period in both the targeted wards and in 'hot spots' within those wards, the level of the reduction is not markedly different to that of comparison wards and comparison 'hot spot' areas.

Trends in repeat residential burglaries

It is possible that, while there might have been no reduction in total burglaries in the programme wards, there might have been a reduction in repeat burglaries (which might either have been too small to detect when measuring total burglaries or might have been accompanied by an increase in single burglaries). A large proportion of the programmes implemented were designed to impact on repeat burglaries. Hence, it is plausible that any programme effect would be most clearly identified by examining changes in repeats.

As before, the data were based only on addresses that were recorded by the police at the dwelling unit level (either single houses or single flats). The method of calculating repeat was the same as described earlier (calculating the percentage of dwellings burgled once in a calendar year that were burgled again in the same year). It was noted earlier that the method of counting repeats within a set window period had the effect of providing a longer time gap in which to detect a repeat burglary among dwellings burgled at the beginning of the period than at the end. However, this method has certain advantages over other methods (discussed earlier) and is less problematic in relation to the current analysis as the main point is to make comparisons across areas. The fact that the same method is used for measuring repeats across all areas in both periods should not bias in favour of any of them.

The repeat rates for the pre-programme and programme periods are shown in Table 4 for the whole City and for the targeted areas. The percentage point change has been calculated by subtracting the programme period repeat rate from the pre-programme repeat rate. The table shows that repeat rates reduced by 3 percentage points from the pre-programme to the programme period in the City as a whole. In

	Pre-programme period [1]	Programme period	Percentage point change
City level			
Whole city	9%	6%	-3%
Ward level			
Programme area: Castle Programme area: Arbury Comparison: Kings Hedges Comparison: Market Comparison: Newnham Comparison: West Chesterton	6% 9% 10% 18% 3% 9%	7% 7% 6% 0% 6% 5%	+1% -2% -4% -18% +3% -4%
'Hot spot' level			
Original programme area 'hot spot'	7%	9%	+2%

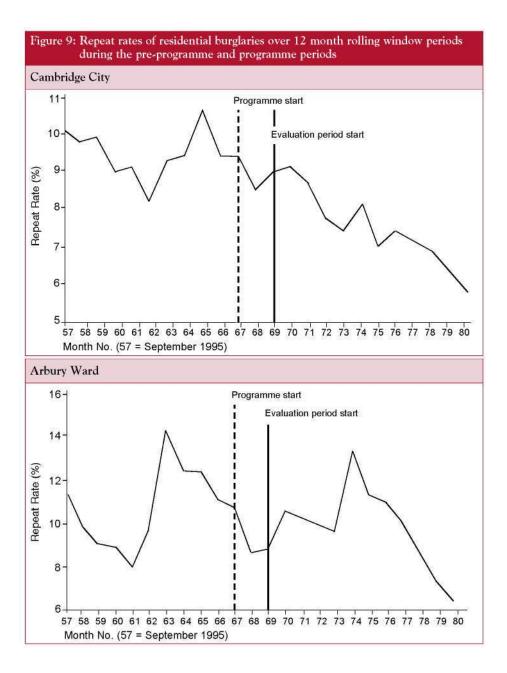
Table Notes: ^[1] Pre-programme=September 1995-August 1996; programme period=September 1996-August 1997.

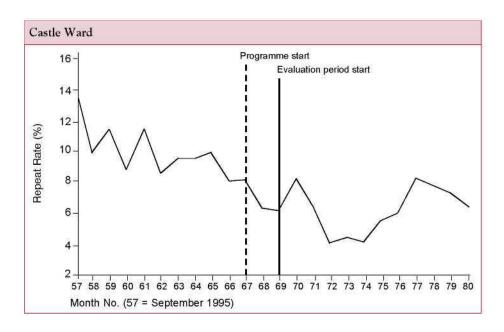
comparison, the repeat rate in Arbury Ward reduced by 2 percentage points and increased in Castle Ward by 1 percentage point. These changes do not suggest that the targeted area 'outperformed' in any way the City as a whole. However, a closer comparison can be made between changes in the targeted wards and the surrounding wards. In relation to three of these wards, the percentage point reduction was greater in the comparison areas than in the targeted wards (ranging from -4 percentage points to -18 percentage points).

It is also possible that the main impact of the programme on repeat rates occurred over time and aggregated 12-month periods might obscure much larger reductions towards the end of the programme. Figure 9 shows the rolling 12-month repeat rates for the City as a whole and for the target wards spanning the pre-programme and programme periods. The method of calculating the number of dwellings burgled two or more times during a specified window period is the same as that used in the previous analysis. However, the 12-month window period was allowed to roll in 12-month blocks from the beginning of the pre-programme period (month 57= September 1995). Hence, a repeat rate for the period month 46 to 57 was calculated (months before month 57 are not shown on the graph) and entered as a point at month 57. A second repeat rate was calculated for the period month 47 to 58 and entered at month 58 on the chart, and so on.

This method overcomes the problem of variable periods of time for repeats to occur among dwellings burgled at different times during the 12-month window period. Each offence is included in the calculation at each position in the 12-month period. Hence, all offences will be included at the beginning of a 12-month window period (allowing a full 12 months for repeat to occur) and all offences will be included at the end of a 12-month window period (allowing just 1 month for a repeat to occur). For example, an offence occurring in say month 67 will be included in the calculations for the 12-month periods 56-67, 57-68, 59-69 and so on, with the time allowed for a repeat to occur varying accordingly from 1 month, 2 months, 3 months (and so on).

The results of this analysis are shown in Figure 9. The first chart shows that the rolling repeat rate for dwellings in the City as a whole declined during the programme period. The same analysis conducted for Arbury Ward also shows a declining rate, which is particularly sharp towards the end of the programme, reducing from a high of about 13 per cent to a low of about 6 per cent over a six month period. The rolling repeat rate for Castle Ward shows a flatter curve with little evidence of any trend in repeats in either direction over the programme period.





Conclusion

The findings relating to changes in total burglaries and changes in repeat rates of burglary are similar. In Castle Ward, there was an overall small reduction in total burglaries during the 12-month programme period and little evidence of a month-on-month trend. There was also no evidence of an overall reduction in repeat burglaries during the programme and no evidence of any general monthly trend. In Arbury, there was a slightly larger overall reduction in total burglaries and stronger evidence of a month-on-month trend starting half-way through the evaluation period. There was also a small reduction overall in repeat rates and stronger evidence of a reducing trend.

The issue of whether or not the programme worked cannot be resolved from these data alone as it is necessary to determine the causes of the reductions shown. One method of determining whether the programme might have produced these reductions is to examine the implementation effectiveness of each of the programme elements.

5. Implementation effectiveness: was the programme implemented as planned?

The main aim of examining the nature and level of implementation of the programme elements (the projects) is to determine the extent to which they had the power and ability to generate the mechanisms that could have led to a reduction in burglary or to an enhancement of feelings of safety. In order for the process to be effective, the projects need to instigate mechanisms which are theoretically sound (in order to avoid 'theory failure') and to implement programme elements strong enough to initiate the processes in practice (in order to avoid 'programme failure'). The following appraisal will consider the extent to which the projects implemented by the DBTF were effective in achieving these objectives and the extent to which they could have brought about the reductions in burglary identified in the previous chapter.

Programmes aimed at potential victims

The five initiatives for victims of burglary were implemented as a package as a means of reducing the risk of repeat victimisation and reducing anxiety. The programme was initially directed at victims living in the programme area 'hot spot', but was later broadened to include the two targeted wards. In the 14-month period of the scheme (July 1996 to August 1997), 171 burglaries were committed in the area covered by the scheme. A letter was sent by the Crime Reduction Unit of Cambridge Police to all victims offering a visit and the five services provided in the package. Just over one-fifth (21%) of all victims requested a visit. In order to find out the reasons for the losses at each stage, the Crime Reduction Unit telephoned as many non-respondents as possible to find out why they had not replied. The main reasons given were: the burglary was not serious enough, the victim had already taken actions to improve security, the victims were not interested, and the victims thought that there was nothing that could be done. Twenty-eight of the 35 people requesting a visit were actually visited. The main reason for not visiting a victim who requested a visit was that the person changed his or her mind or did not respond to repeated attempts to be contacted. Fifteen of the 28 residents who were visited were interviewed a few months later to find out how useful the services had been to them.

Cocoon neighbourhood watch

The aim of the cocoon neighbourhood watch package was to enhance guardianship of the victim and the victimised dwelling during the period immediately following a burglary when the risk of repeat is possibly higher than normal. Two of the 28 victims visited said that they would like the EFS visitor to contact the immediate neighbours with the view of establishing a cocoon neighbourhood watch scheme.

The majority of the remainder (22 of the 26) said that they intended to contact their neighbours themselves (although there was little evidence from the follow-up interviews that any of the victims had done so). Some believed that a more informal personal contact would be more suitable than a formal programme. Some residents said that they 'kept themselves to themselves' and did not want to contact their neighbours. Others said that they already operated their own version of a cocoon neighbourhood watch scheme.

Loan alarms

The aim of the loan alarm was to provide a deterrent to burglars and comfort to victims during the period immediately following a burglary. Fifteen victims (54%) visited requested the use of a loan alarm. Some of the victims who did not request an alarm said that they were concerned about the alarm being triggered by pets and others thought that the alarm would not be effective in deterring burglars. Others had already installed alarms. Elderly victims tended to be worried by the idea of an alarm going off. Residents who requested an alarm typically responded positively to it (particularly those who were burgled at night). Some mentioned that they were comforted by the alarm and said that it made them feel safer at home and helped them sleep more easily at night.

Security advice to victims

The aim of security advice was to ensure that properties were secure during the period of heightened risk following a burglary. The majority of victims (93%) said that they would like the representative from the EFS to conduct a security survey of the dwelling and to give advice on what further measures might be taken. Residents interviewed as part of the evaluation generally spoke very favourably about the advice. Some said that it motivated them to take action and had made security changes on the basis of it. Others said that they thought that it was helpful to be able to discuss their particular security needs with another person rather than to read about general security advice in official leaflets. Others simply welcomed the support and 'caring' nature of the person offering the advice.

KeepSafe

The aim of KeepSafe was also to ensure that properties were secure during the period of heightened risk following a burglary. Just under half of all victims (43%) qualified to receive free installation of additional window and door locks and other security devices (such as door chains and 'spy holes') and about half of these (6 people in total) also qualified to receive free locks. All of those who qualified for the scheme completed an application form to receive additional locks. Residents interviewed thought that the scheme was very useful and succeeded in motivating

them to take action. Some residents attributed the fact that they had not been burgled since to the installation of the locks. The only negative comments came from elderly people who sometimes thought the locks difficult to operate.

GateSafe

None of the victims visited said that they would like to be considered for free installation of security gates. The main reason given for not taking up the scheme was that the property did not have a communal alleyway or pathway. (However, the number of victims spoken to was small and many of the other properties in the target area did have alleyways or pathways suitable for gating.)

Programmes aimed at potential capable guardians

Post Watch

The main aim of the Post Watch scheme was to encourage postal delivery workers to look out for suspicious incidents and to report these to the police. The aim of the project was to reduce opportunities for crime. Information about programme implementation effectiveness was obtained from weekly monitoring forms which showed (amongst other things) the number and nature of incidents reported to the scheme manager and the nature of the information reported to the police for action. Monitoring forms were returned each week during the period from the start of the project (end of April 1997) and the end of programme (August 1997).

During this period, 15 weekly forms were returned. The results showed that between 8 and 13 postal workers were involved in the project each week. In total, 19 incidents were reported to the police (typically one or two per week). These included reports of suspicious people (typically looking at properties or vehicles), suspicious vehicles (including sightings of stolen vehicles from information given to them by the police), insecure properties, concern about the welfare of occupants, and alarms sounding. The only problems reported by the postal workers in relation to the operation of the scheme were occasional lapses or lateness in the weekly information from the police and problems relating to periods of leave taken by key personnel.

Enhanced neighbourhood watch

The aim of the neighbourhood watch co-ordinators' training day was to provide coordinators with advice and resources that might enhance neighbourhood watch in the target area. The meeting was attended by local and force-level police, representatives of security companies, local business people, and the neighbourhood watch co-ordinators. The session considered methods of communication, methods of reporting suspicious incidents to the police, and methods of improving domestic

security. At the end of the session, the co-ordinators completed a brief questionnaire evaluating the training given.

Thirty neighbourhood watch co-ordinators attended the training session and 22 completed the questionnaire. Almost all thought that the aims of the session had been met and almost all thought that the content of the session was useful. Overall, the response to the session was positive and co-ordinators reported that the session had helped them to do their job better and had re-motivated them.

Community seminar

The aim of the community seminar was to make contact with residents of the targeted wards who had not necessarily been victims of burglary. The DBTF hoped that, in bringing together a broader spectrum of local residents in the context of a community seminar, some of the social mechanisms of community crime prevention might be instigated.

The seminar was monitored using two questionnaires: the first (the monitoring questionnaire) to collect information about local residents before the seminar started and the second (the evaluation questionnaire) to collect information on the usefulness of the seminar when it was over. In total, 43 people attended the seminar and 89 per cent returned the monitoring questionnaire and 92 per cent returned the evaluation questionnaire. Seventy-six per cent of residents lived in Castle Ward and 21 per cent lived in Arbury Ward (the remainder lived elsewhere). The majority (78%) were aged over 40 years.

The results of the analysis showed that 68 per cent of respondents had heard about the Safer Cambridge Steering Group. Ninety-seven per cent of residents said that they were better informed as a result of the seminar. Forty-three per cent said that they would definitely take some action against burglary and a further 39 per cent said that they may take some action. Eighty-seven per cent of respondents recommended holding similar meetings in the future.

Community Centre Information Link

The Community Centre Information Link aimed to provide local residents with information about crime prevention and general security. It was hoped that information received in the context of a community centre might be more relevant to local people and might be more easily accessed and understood. Local staff were also available to give additional advice and contact telephone numbers were made available for members.

The programme was implemented in five community centres and was monitored using forms completed by the staff at the centres for each week of operation. The number of each of the different kinds of leaflet taken by members was counted each week. The result was entered on the monitoring form along with other information relating to the effectiveness of the scheme.

In the first 3 months of the scheme, 300 leaflets were taken from the information racks. Almost one-third of these (30%) comprised the 'Make your Mark' antiburglary pack, with a free property marker pen. Other popular information material included: a leaflet on car crime (13%), a simple guide to choosing an alarm (11%), a security-based anti-burglary leaflet (11%), and a 'lock or lose it' general security leaflet (10%). The monthly return forms from the community centres included a short section of the scheme manager's view of public reaction to the scheme. Of the six responses received, 2 rated resident interest as 'good', 3 rated the level as 'fair', and 1 rated it as 'non-existent'.

Targeted patrols

The targeted patrols project aimed to increase the visible presence of the police in the programme areas in order to deter potential offenders and to increase perceptions of safety among local residents. Routine patrol officers were tasked with patrolling the area when they were not responding to calls for service and Community Beat Officers working in beats in the targeted wards were similarly tasked. The project developed in two phases.

The first phase was implemented on 1st July 1996 and was monitored by time sheets completed by the shift sergeant indicating each occasion on which the targeted area was visited by routine patrols. During the period from January to April 1997 no monitoring forms were returned and there were some concerns expressed among the police about the appropriateness of the programme following the recent transition of Cambridge Police to sector policing. Following discussions with the new sector inspector in May 1997, a revised system of targeted patrols was agreed which fitted more easily into the objectives of the sector as a whole. The inspector took an active interest in the work of the DBTF and attended some of its meetings. Twelve officers were dedicated to the task of patrolling the target area when not involved in other duties. The second phase began in June 1997 and was monitored using revised time sheets which included information on what actions were taken by the officers when in the targeted area.

During the course of the evaluation year of the programme, 240 patrols (including foot and mobile patrols and single and double crewed vehicles) went out and spent

over 400 hours in Castle and Arbury wards. During the first two months of phase 1 of the project, 29 patrols went out covering the area for 56 hours (an average of 28 hours per month) and during the three most active months of the first phase, 162 patrols went out covering the area for 304 hours (an average of 101 hours per month). During the most active month of phase 2 of the project, 45 patrols were sent out providing 96 hours of cover in the programme area (an average of 96 hours per month). The kinds of actions taken were recorded on the revised forms used for phase 2 of the scheme. These showed that the most common actions taken apart from routine patrols were person checks (43 per cent of all actions) and arrests (9 per cent of all actions).

Comparing the most active period of targeted patrols with trends in burglary over the evaluation period (see Figure 8) does not reveal any obvious connection between the two. During the first period of heightened police activity (months 69 to 72) burglaries increased in Arbury Ward and increased then decreased in Castle Ward. During the second period of heightened police activity (months 79 and 80) burglary reduced a little in Arbury Ward and increased a little in Castle Ward.

Programmes aimed at potential offenders

Youth Development

The Youth Project aimed to support young people living in the target area who were currently experiencing various social and individual problems and who were identified as being at risk of offending. The project was based on work with up to 13 young people who were befriended by youth workers. The youths and the youth workers met regularly and formed a strong relationship. An internal evaluation of the project showed that there had been some positive changes among the young people, especially in relation to behaviour and attitudes towards each other. Since starting the project, three members of the group had gained employment. The report concluded that crime and anti-social behaviour had reduced in the specific location of the project and it was not thought that the continuing problems on the estate were caused by the current group members. Since completion of the project the members of the group have continued to meet at a local community centre.

Conclusion

The projects aimed at potential victims were implemented as planned by the Police who organised the referrals and the EFS who provided the services. However, community interest in the programme as a whole was mixed. The take-up rate of the home visits was fairly low (about one-fifth of victims contacted) and the take-up rate of the services provides was variable. There was little interest in cocoon

neighbourhood watch and for most of them the GateSafe scheme was inappropriate. However, there was greater interest in loan alarms, home security surveys, and the KeepSafe scheme. Victims who received these services were generally happy with them and made use of them. Overall, it might be concluded that the programme was strong, but the level of take-up was variable.

The projects aimed at potential capable guardians were all strongly implemented within the context in which they operated. The Post Watch scheme worked very well, but was limited to the period of time in which the area was covered by postal workers. The enhanced neighbourhood watch initiative, the community seminar, and the Community Centre Information Link initiatives were all implemented as planned, but were limited to specific audiences and specific occasions on which they were operated. The targeted patrols project involved a substantial number of hours of patrol time spent in the target area, but again only provided cover at times when police officers were present. Overall, the projects aimed at increasing guardianship were established as planned. However, the total amount of guardianship given to the area as a whole was limited to some extent by the time and locations covered.

The project aimed at young people was established in the target area during the course of the programme. The evidence of the internal evaluation suggested that substantial progress had been made with the young people involved in the scheme. Once again, the project operated as planned but covered only a small proportion of young people in the area.

The aim of this chapter is to consider whether the programme was successfully implemented (whether or not there was programme failure) and whether once implemented it was capable of instigating the processes that might lead to a reduction in burglary (whether or not there was theory failure). The evidence suggests that the individual projects were implemented as planned. However, there is some doubt about whether the programme as a whole was sufficiently powerful in its design to instigate the kinds of processes required to reduce burglary rates at the community level.

One interpretation of these findings (using a medical analogy) is that it was the right medicine, but the wrong dosage. It is plausible that the amount of programme resources needed to reduce residential burglary varies by area depending on a range of factors, including: the level of motivation of local burglars, the existence of other interventions, the impact of prior attempts to reduce burglary, and environmental and other opportunities for crime. In other words, it might be harder to generate

marginal reductions in crime in areas in which the balance of these factors is unfavourable to crime prevention. It is possible that Arbury and Castle Wards (areas which included long-term burglary 'hot spots') required larger amounts of crime prevention resources than were feasible within the financial constraints of the Domestic Burglary Task Force.

6. Discussion

Issues relating to burglary prevention

One of the main issues to consider in relation to burglary prevention is whether the programme reduced burglary in the target areas. It was shown earlier that residential burglary reduced during the programme period and repeat burglary reduced in one of the two target wards. One explanation of this reduction is that it was brought about by the prevention programme. However, there are rival explanations which should be assessed before arriving at a conclusion. Some of these are shown below:

- 1. The prevention programme caused the reduction.
- Other preventative programmes operating in the target areas caused the reduction.
- 3. Other factors which affect crime rates generally caused the reduction.

The first explanation is the default explanation which could be accepted if no other explanations could reasonably explain the reduction in burglary.

The second explanation might explain the reduction as a number of changes occurred in the City of Cambridge during the course of the evaluation which might have impacted on crime in the target areas. One significant change was the development of sectorisation by Cambridge Police and the more general focus on targeted and proactive policing. As the reduction in burglary was widespread in the area (and not limited to repeat victims or particular 'hot spots'), it is very possible that the more proactive approach to policing had some impact on burglary in the programme areas and in Cambridge generally.

The third explanation is also plausible. The reduction in burglary in the targeted wards was similar to the reduction in burglary across the City as a whole and across the country as a whole during the same period (notified residential burglary reduced nationally by 6 per cent during the period 1995-1996). There is also some evidence that the reduction in burglaries began to occur before the programme was implemented. (See Figure 12 in Appendix A which plots the number of burglaries per month in Cambridge City for the period 1991 to 1997 and shows that the number of burglaries has been steadily declining since 1993.) Hence, there is some evidence to suggest that the reduction in the targeted wards also reflected general trends in burglary over the period of the evaluation.

In order to determine causality (for example, the programme caused the reduction in burglary) it is necessary to identify correlation, temporal order, and absence of rival explanations (control of extraneous variables). The evidence presented

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suggests that there is some correlation (the development of the programme and the reduction in burglary moved together in time) and there is mixed evidence relating to temporal order (the reduction in burglary was sometimes shown to precede and sometimes shown to follow programme implementation). However, there is less evidence to suggest that no other factors could be involved in explaining the reduction. In fact, the evidence suggests that it is very likely other factors which explain property crime generally also explain at least some of the reduction of burglary in the targeted wards. The evidence presented also suggests that, while the projects were implemented largely as planned, there is some doubt about whether the programme as a whole was sufficiently powerful to show a measurable reduction in burglary at the community level.

On these grounds, we cannot conclude that the programme resulted in a measurable reduction in burglary. However, this does not mean that the programme did not contribute to these reductions in a way which was not detected within the context of the current research design. On balance, the most likely explanation of the reduction in burglary was a combination of changes in policing and other economic and social factors which affect crime. However, this conclusion is based on a balance of probabilities. The most probable explanation is that the programme did not cause the reduction.

Issues relating to programme multi-agency co-operation

Despite the fact that there is little evidence that the programme reduced burglary, it is possible that there were other successful outcomes. In the last few weeks of the programme, all the members of the DBTF and some other key players were interviewed to obtain their more general evaluations of the programme. The responses showed that there were a number of beneficial outcomes.

Composition

The multi-agency structure of the DBTF was thought to be one of its strengths. It was generally thought that the balance of agencies was about right and that the level of the representatives (described as middle management) was also about right. The involvement of criminologists in the group was also seen to be an advantage. It was believed that the agencies were represented by particularly able and motivated people which was important to the development of the programme. However, attendance was inevitably variable and the important knowledge and skills of absent representatives on some occasions were missed.

Leadership

The issue of leadership was considered very important by all of the respondents. One common view was that leadership of the group should be attached to the main representative who was responsible for making sure that things happened. It was generally agreed that leadership was strongest at the beginning and at the end of the life of the DBTF when these two roles were closely combined (with a representative of the local council in the lead in the former and a representative of the police in the latter). During the middle period, the group lost direction a little during the transition from one state to the other. The respondents also commented on the personalities of the leadership and stressed the importance that the person in this role should be motivated and effective in action

Effectiveness

It was unanimously agreed that the group had achieved a considerable amount and some thought that it had achieved more than was normal for sub-groups of its kind. It was felt that the group had achieved its objectives in terms of analysing the problem of burglary in Cambridge and devising and implementing burglary prevention strategies. This objective had been achieved regardless of whether or not burglary declined. It was also widely believed that the group worked together effectively as a multi-agency group and overcame many of the problems inherent in multi-agency partnerships. In addition, it was also believed that inter-agency skills had been developed during the programme which it was felt could be transferred to future partnerships.

Issues relating to lessons learned

We believe that the DBTF achieved a considerable amount during its two years or so of operation. It analysed the problems of residential burglary in Cambridge and implemented 12 burglary prevention projects. In a general sense, it achieved what it aimed to achieve and did this within the context of a friendly and effective working relationship of local agencies. However, this does not mean that everything worked to plan and that no lessons were learned.

One lesson was that co-operation and commitment of member agencies could have been administered more effectively had the level of expected involvement of agencies been agreed from the outset. There was no early discussion on who the 'stakeholders' were in the partnership or what level or resources each agency would be expected to commit. While substantial staff resources were allocated to staffing the DBTF meetings, project resources were harder to secure. It would have been helpful if some kind of commitment could have been made at both senior and

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middle management levels to the level of resource input that could be expected in order to enable effective programme planning.

Another important lesson was the key role of leadership in the group. In one sense, the issue of leadership refers specifically to the need to have one person who can steer the group and ensure that actions are taken. However, in another sense leadership refers to the ability of the individual to motivate and empower the group and to give a positive sense of direction. While the group experienced some difficulty in relation to leadership and direction in the middle stages of the project, it was the strength of leadership at the beginning and end of the project which gave the group its reason for existence and its energy to sustain the long period of programme implementation.

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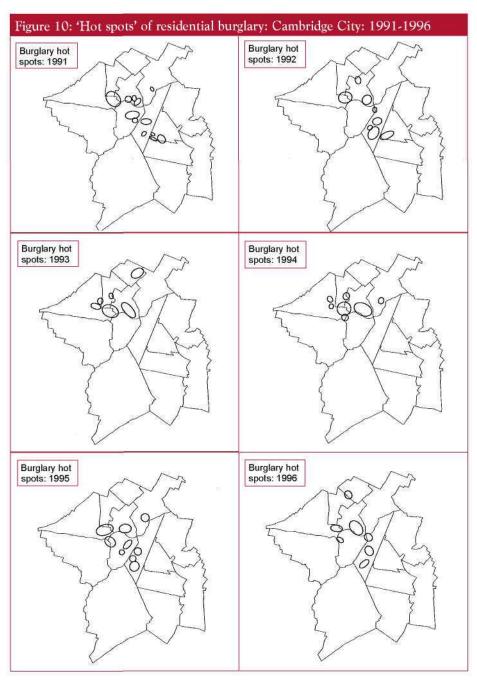
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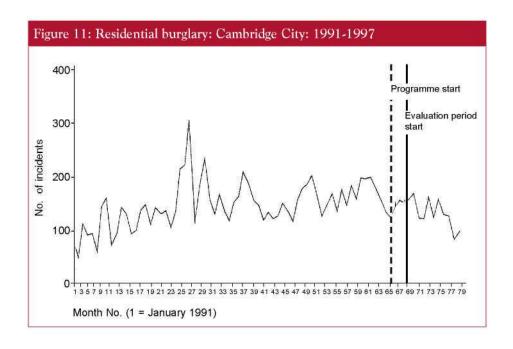
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Appendix A





RECENT POLICE RESEARCH GROUP AND POLICING AND REDUCING CRIME UNIT PUBLICATIONS:

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- **91.** Auditing Crime and Disorder: Guidance for local partnerships. Michael Hough and Nick Tilley. 1998.
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