

**THE PREVENTION OF CRIME AGAINST
SMALL BUSINESSES:
THE SAFER CITIES EXPERIENCE**

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Crime Prevention Unit Papers

The Home Office Police Research Group (PRG) was formed in 1992 to carry out and manage research relevant to the work of the police service and Home Office Policy Divisions. One of the major Police Department divisions which acts as customer for the PRG is the Home Office Crime Prevention Unit which was formed in 1983 to promote preventive action against crime. It has a particular responsibility to disseminate information on crime prevention topics.

The object of the present series of occasional papers is to present research material in a way which should help and inform practitioners, whose work can help reduce crime.

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Foreword

One of the reasons for the setting up of the Safer Cities programme was to create cities where economic enterprise and community life can flourish. This report considers the work done by the Safer Cities teams in addressing the problems of the small, local businesses essential to healthy economic and community development.

The report reviews the vulnerability of small businesses to crime and the consequences of it, from the relatively sparse published literature and the experience in Safer Cities areas. It paints a grim picture of high rates of offending and repeated offending against small shops and businesses. There is generally a dearth of knowledge of the consequences of this offending, although there is some basis for assuming that in certain inner city areas it contributes significantly to the decline of communities.

On the more optimistic side, there is some evidence in the report that security upgrading can effectively reduce the vulnerability of individual businesses, but the protection of whole areas requires cooperation and a coordinated approach. Attempts have been made to develop corporate approaches under the Safer Cities programme and the report highlights the difficulties in achieving and maintaining programmes of this kind.

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1. Introduction

This paper draws on Safer Cities work to examine three major issues: first, the vulnerability of small, mostly independent businesses to crime; second, the consequences of crime against business; and third, the effectiveness of certain crime prevention schemes directed at business. In regard to these the existing literature is notoriously thin. Whilst the individual data sources used here are frequently weak in ways which will be described, jointly they suggest certain conclusions both for action and for further research.

The initial Safer Cities programme was announced in March 1988. Twenty locally driven Safer Cities Projects have since been established in Urban Programme Areas. Each has a co-ordinator, assistant coordinator and personal assistant, who are employed by the Home Office. They work to a local steering committee drawn from major statutory agencies (police, probation and the local authority), the voluntary sector and business. Each project has £250,000 per annum to spend on crime prevention schemes, the smaller of which can be approved locally, and the larger of which have to go for agreement by the Home Office centrally. The aims of these Safer Cities are first to reduce crime, second to reduce fear of crime, and third to establish safer cities where economic enterprise and community life can flourish. The local focus of each Safer City project means that the pattern of work varies widely. Whilst all have attended to general crime conditions which may affect business, here the focus is on those where there has been significant direct attention to crime against business and where usable data can be retrieved at this stage. In dealing with crime prevention schemes, we shall, following the emphasis of most Safer Cities schemes directed at business, focus mainly, though not exclusively, on burglary.

2. Vulnerability of Small Businesses to Crime

Hibberd and Shapland (1993) note that 'until the last few years there has been almost a complete dearth of in-depth investigation into crime committed against businesses and their employees'. That said, there have been a few published studies of crime in the retail sector (Laycock 1985; Ekblom 1986, 1987; Burrows 1988, 1991; Ekblom and Simon 1988; Hibberd and Shapland 1993). There has been one study of crime on industrial estates (Johnson et al 1991a; 1991b). The British Crime Survey has included questions about crimes committed against people at work (Mayhew et al 1988). There have been one off studies of robbery prevention in building societies (Austin 1988), of crime and nuisance and their prevention in shopping centres (Phillips and Cochrane 1988), of fraud in general, and that involving cheques and credit cards in particular (Levi 1988; Levi et al 1991), as well as a few slim volumes containing guidance about how to address the issue and/or hand wringing about lack of research (Burrows 1988, Standing Conference on Crime Prevention 1986; Shapland & Wiles 1989; CBI/Crime Concern 1990, 1991; Home Office Crime Prevention Centre 1992).

As we shall see, work undertaken within the Safer Cities programme adds something to this limited literature on business and crime.

The rate of crime against business

The four sweeps of the British Crime Survey have given us some idea of rates of victimisation of individuals and households to complement the statistics for recorded crime. Both the British Crime Survey and the recorded crime statistics permit calculations of the rates of crime (that is, numbers of offences for every 100 or 1000 or 100,000 individuals or households) which can then be compared for different subsections of the population. In the case of business this is not possible: first, there has so far been no national Business Crime Survey of the kind undertaken in the Netherlands, to provide bench mark data corresponding to that for individuals provided by the British Crime Survey; and second, police crime statistics characteristically do not enable crimes against businesses to be distinguished.

In the absence of statistics for recorded offences or a national business crime survey we are dependent on a patchwork of studies whose results are not strictly comparable. What the various studies of business and crime are united in finding, however, are rather higher rates of victimisation than those found in domestic settings. Evidence to date also suggests that crime problems vary widely by area and by sector.

Looking at small shops in an inner city area in London and another in the Midlands, Hibberd and Shapland (1993, pp. 23-24) found that 90% of those in the Midlands sample (of 70) and 87% of the London sample (of 92) had been victims of at least one of the incidents of abuse, violence, theft, vandalism and arson considered. They found burglary rates of 16% and 7% respectively, lower than rates for robbery/attempted

robbery which stood at 17% and 26%, and for 'open or flaunted shoplifting' at 29% and 36%, and 'apprehended shoplifting' at 21% and 17%. Ekblom and Simon (1988), following a survey of 240 Asian shopkeepers in four areas in London - Muswell Hill, Brixton, Brent and Newham - found that 80% had experienced at one time at least one of the similar set of incidents included in the Hibberd and Shapland study (though it should be noted that the categories used in each study are not identical). The rates of experience of these incidents varied from 88% (Muswell Hill) to 89% (Brixton) to 84% (Brent) to 60% (Newham). 22% had suffered burglaries in the past year, varying from 'nearly a third' in Muswell Hill and Brent to 13% in Newham. 54% had suffered shoplifting at some time, this varying between 71% in Muswell Hill and 24% in Newham.

Three small Safer Cities business crime surveys, undertaken prior to the implementation of schemes to reduce vulnerability in what were perceived to be problem areas, add something to this overall picture. All are of businesses in high streets, predominantly shops, restaurants, pubs, banks, offices and building societies. These studies were undertaken most importantly not as academic exercises but as aids to scheme development. The questions were formulated for those purposes and the studies have been conspicuous successes in prompting action. They were not conceived for the purposes to which they are being put here.

In Lewisham, in 1990 a study of 50 businesses, comprising 40% of those in Deptford High Street, was undertaken. 90% employed four staff or less. Table 1 indicates how they were categorised.

Table 1. Types of business included in Deptford High Street Business and Crime Survey

Foodstores	28%
Clothing	18%
Offices, building society etc	10%
Restaurant/Takeaway	8%
Household goods	8%
Bookmakers	4%
Pubs	4%
Newsagents	4%
Other (Offlicence, florist, jeweller, record shop etc)	16%

The study found that 30% had been victims of burglary or attempted burglary in the previous twelve months (Charlton 1990). This compares with 1992 national BCS estimates of 5.3% for household burglary (Mayhew and Aye Maung 1992). The highest domestic rate (including attempts/no loss and with loss incidents) in the most burglary prone type of area - 'poorest council estates' - was found to be 2.8 times the

overall rate, that is approximately 14.4%. This is half that found in businesses in Deptford High Street. Turning to crimes to which there is no directly comparable domestic equivalent, in the Deptford sample 12% of the businesses had been victims of robbery, and also in 12% there had been physical attacks on staff. 58% claimed to have experienced at least one incident of shoplifting, two thirds of the relevant population estimating a loss of over £100 over a year, and a quarter estimating losses of over £1000.

In Wirral there have been two local business crime surveys. The first and larger study, which will be referred to extensively below, examined crime against business in three shopping streets in the local City Challenge area. Responses were received from 231 of the 245 businesses identified. Of these 59% were in the retail sector, 36% provided commercial services, 4% were public service providers and 1% were manufacturers. In the three streets, rates of victimisation had been 42%, 57% and 65% over the previous year (McAteer 1992). The second study took an area on the edge of central Birkenhead. Responses were obtained from 58 of 70 eligible businesses. The largest single category was again the retail sector, accounting for 50%. There were 13% providing financial services, 5% licensed premises, 2% each in distribution and manufacturing, and 29% were classified as 'other'. Here 67% had been a victim of crime in the past twelve months, 50% had suffered burglary, and 33% theft (including shoplifting). These figures were derived from interview schedules where respondents were asked first whether they had been a victim of crime in the past year, only after which further details were drawn out from those who gave affirmative responses. In many crime surveys questions have been asked about individual incident types in an effort to prompt memory and to ensure that the full range of activity to be included as crimes is considered by respondents. This study's methods are likely thereby to yield lower overall rates of victimisation than others, such as those used in the British Crime Survey.

Little use has been made of recorded figures for crime against business, since these are not in a form readily available for analysis. This is especially regrettable in the case of commercial burglary, where one study (of 790 units on industrial estates in the North) has shown that 91% of completed burglaries (though only 59% of attempts) are reported to the police (Johnson et al 1990b, p. 145).

Multiple victimisation

There is increasing evidence that vulnerability to crime is very unevenly distributed (Farrell 1992). This is shown in patterns of repeat victimisation in relation to domestic burglary (Polvi et al 1990, 1991; Pease 1992), burglary in schools (Burquest et al 1992), domestic violence (Farrell et al 1993) and obscene 'phone calls. There is as yet little hard evidence in relation to business. The present study has, however, with the help of the Hartlepool Safer Cities Research Unit, furnished an opportunity to try to throw some light on the issue of multiple victimisation of businesses. In particular data have been collected on commercial burglary whose prevention has been a common concern of Safer Cities schemes. Fortunately, if the 91% figure for

reporting rates of burglary found in the study of northern industrial estates holds good here also, the recorded figures analysed below will be less weak than those for many other offence categories where reporting rates are characteristically much lower.

'Commercial burglary' is not a standard police or Home Office classification. Burglaries are either 'domestic' or 'non-domestic', and the latter includes garages, garden sheds, schools etc, and thus much that is also non-commercial. It had originally been hoped to assemble data on non-domestic burglaries in all Hartlepool. In the event, it proved too time consuming to do this, since sorting out the records was very difficult – indeed, it was necessary to have a local police officer with close knowledge of the area at hand to make sense of the reports and the businesses to which they related.

Four Hartlepool beats were covered comprehensively for 1990 and 1991, providing data on 45% of incidents potentially open to inclusion had the whole town been covered. In order to find the annual rate of repeat victimisation for burglaries committed during 1990, data had to be collected for both 1990 and 1991. The reason for this is obvious. If the first burglary at business X was committed on December 5th 1990, then to find all its re burglaries in the following twelve months all incidents up to December 5th 1991 have to be identified, and any after that date disregarded. If the first burglary at business Y was committed on January 12th 1990, re burglaries till January 12th 1991 are included and subsequent incidents disregarded. Thus, to find the annual rate of re burglary for a year's worth of burglaries, two years' incidents have to be assembled, even though clearly not all are included in the final analysis.

Over 1990 and 1991 there were 1,145 non-domestic burglaries in the area covered in Hartlepool (those identified as attempts accounted for only 92 of these and have not been treated separately, since they represent such a small proportion). Data on schools, colleges and training centres were then discarded (206 incidents at 14 addresses), since they have a distinctive pattern and would have distorted the results reported here (see Hope 1982, Burquest et al 1992, Department for Education 1993). Data on domestic garages were also discarded for obvious reasons. This left 910 burglaries.

Assuming an even distribution over the two years, on average half of the 910, that is 455, would take place over any twelve months. All eligible addresses at which a non domestic burglary had occurred in 1990 were then identified. There were 250 of them. From the date of the first incident at each address all subsequent incidents over twelve months were then extracted. 97 businesses (39%) were found to have been re burgled at least once, producing 209 incidents of re burglary in all.

In order to identify any temporal pattern to re burglaries, the number of days between each incident was also noted. Table 2 summarises the results:

Table 2: Commercial Burglary Revictimisation in Hartlepool, using data from January 1990 to December 1991.

Days between burglaries	Number of repeats						TOTAL
	1	2	3	4	5	6+	
0-73	21	17	17	18	17	29	119
74-146	6	12	6	6	5	2	37
147-219	7	6	4	8	3	1	29
220-292	7	4	2	0	0	0	13
293-365	9	1	1	0	0	0	11
Total repeats	50	40	30	32	25	32	209
Total burglaries	100	60	40	40	30	36	306
Total addresses	50	20	10	8	5	4	97

It can be seen that the year has been divided into five equal periods of 73 days each. The data have been sorted according to the number of times each address has been revictimised – from one to over six occasions. The first column tells us that there were fifty properties which were re-burgled once within twelve months of the first incident (meaning obviously that there were 100 burglaries at the fifty addresses). Of these fifty re-burglaries 21 (or two fifths) took place within the first fifth of the year. Six were re-burgled during the second fifth of the year, seven within the third fifth, seven also within the fourth fifth and nine within the final fifth of the year following the first incident. Going from left to right each column describes the same pattern for increasing numbers of incidents within one year of the first burglary. The final column totals the figures for all re-burglaries within the five time periods. Table 2 thus provides information both on the overall rate of revictimisation and on its time course.

As the number of re-burglaries increases a reduction in the number of long time periods (293-365 days) between each burglary is, of course, to be expected. Suppose there are three burglaries in a year, it is obviously not possible to have two periods of 293-365 days between them! Following this, it might be thought that the tendency to reduced time periods between events where there is a high rate of re-burglary would fully explain the clear preponderance of first fifth of year re-burglaries overall (119 of 209, or 57% of the total). What the table shows, however, is that even where there is only one re-burglary the distribution is clearly skewed to the early part of the year. In fact, even where there are only two burglaries one third (17) of the second are committed within six weeks of the first incident (compared with one half or 105 of the 209 re-burglaries which were committed within the same period).

The short time course of revictimisation, especially amongst those whose rate of revictimisation is relatively low, could suggest either a) that those whose revictimisation might otherwise have continued installed successful burglary prevention measures and/or b) that for a period an address is either returned to by the same offender or becomes known as a soft target amongst criminals.

It is difficult to estimate the overall incidence of commercial burglary in an area. In Hartlepool both the VAT register and the local authority identify 2500 businesses. If the 45% coverage of the recorded incidents included in the study here is representative of all businesses they would describe the experience of 1125 businesses in all (45% X 2500). The 250 addresses at which burglaries had occurred would lead to a 22% prevalence rate. Of those 250 addresses, 40% are reburgled at least once within 12 months of the first incident. Of those reburgled at least once 48% are reburgled at least twice within twelve months of the first incident. Of those reburgled at least twice 57% are reburgled at least three times within twelve months of the first incident. Vulnerability is clearly very unevenly distributed. The time distribution data suggest also that in the short term even those not suffering the very high rates of reburglary may be at particular risk.

Routine activities theory (Cohen & Felson 1979) might make some sense of variations in vulnerability to burglary. It would suggest that those businesses most at risk are those where, a) there is high accessibility for motivated offenders, b) there are attractive targets and c) there are few capable guardians. This may make some parts of the retail sector particularly vulnerable, since cash and readily saleable finished goods furnish attractive targets, and accessibility is a requirement, although guardianship will be high during shop hours. High street service providers may also offer fairly rich, accessible pickings in the form of cash and equipment. Factories, workshops, warehouses and offices will again sometimes contain attractive goods, but their accessibility is more variable. As Table 3 shows, the largest category of reburgled commercial premises in Hartlepool comprised retailers, with other businesses routinely accessible to the public (pubs, places of entertainment and service providers) also figuring large.

Table 3: Types of business revictimised in Hartlepool

Shops	34
Pubs	14
Offices	12
Service providers	9
Places of entertainment	7
Factories and workshops	7
Building and timber yards	5
Warehouses	2
Other (building site, service station, tip etc.)	7
Total	97

These results are, however, only suggestive of sector vulnerability variations, since the overall distribution of businesses in the area covered is unknown.

The evidence on multiple victimisation relating to commercial burglary presented here for Hartlepool is striking. It is, in general terms, consistent with that found for other offence categories.

3. The Consequences of Crime Against Businesses

The consequences of property crime against business relate in part to the individual company's bottom line¹. The effects may, however, also be broader, affecting the community more widely. We turn first to the company – to perceptions of local crime problems and patterns of response to them. We shall then look briefly at the issue of community impact.

The literature to date suggests, remarkably, that businesses are generally rather poorly placed to assess the losses to them from individual types of crime even where they can estimate overall 'shrinkage', which is by no means usual. In particular, there are difficulties in estimating the proportion of loss through external and internal theft, and distinguishing both from breakages, promotional gifts etc. On the basis of a study covering 15,917 outlets run by 121 retail groups, The Report of the Working Group to the Home Office Standing Conference on Crime Prevention concluded in 1986 that 89% of loss could be not attributed to a specific cause (Standing Conference on Crime Prevention, 1986).

There appears to be no systematic research which estimates the consequences of crime for business viability, though this would be most useful. It is clear, however, that crime can be a very significant cost. There are also various pieces of anecdotal evidence suggesting that crime may not only lead some businesses to fail, but may also lead others to relocate. In either case local areas are thereby deprived of employment and in some cases important local services for vulnerable members of the community, such as the elderly and disabled, who may find it difficult to travel to make use of services in less crime prone areas.

We do have a little evidence, from the business crime surveys used to estimate rates of victimisation, about the attitudes to, perceptions of and preferred ways of reducing vulnerability to and impact of crime. Here again, the Safer Cities Surveys add to existing picture.

In their study of Asian small-shop keepers, Ekblom and Simon found that the most widely used methods (those adopted by more than 40% of respondents) of attempting to reduce vulnerability to crime were window grilles/shutters (65%), mirrors (65%), burglar alarms (53%), special care when cashing up (51%), security locks to doors (49%), positioning of tills and counters (45%), and positioning of shelves/gondolas (44%). The Deptford survey again comprising mostly, though not exclusively, small shops, found the most common methods were good locks/doors (98%), security grilles/shutters (82%), burglar alarm/alarmed glass (62%). The Wirral City Challenge area study notes that, 'The greatest expenditure to date has been on security grilles to

¹Violent, personal crimes are sometimes committed against workers in businesses, either in the course of a property crime or not. The effects of these can be quite traumatic. This study does not address that important issue (see Hibberd and Shapland 1993).

front elevations and burglar alarms'. Rather differently from the studies dealing exclusively or mainly with shops, the commonest security measure found by Johnson et al on industrial estates were the installation of intruder alarms (56%) and security lights (56%), followed by special locks (54%), and bars and grilles (46%), though there were quite wide differences between the factories, large workshops and small workshops into which units were classed.

Some of these differences will reflect variations in the data collection methods. For example, in the Ekblom and Simon study respondents were presented with a range of 25 measures they might take, to which they could also add. In the Deptford study the choice was only 7, though again respondents could add to these. The frequently chosen Ekblom and Simon choices (mirrors, care in cashing up, till position and shop arrangement) were not options given directly to the Deptford respondents. The Johnson et al study went through a series of measures one by one, asking respondents about each. The measures listed tended to reflect the rather different risks faced on industrial estates from those encountered by shops open to members of the public. None of the studies asked questions which would easily elicit information on any measures taken to reduce internal vulnerability to crime.

Individual studies asking questions about worry over crime did so in different ways and used rather different terms to scale responses. What they do indicate consistently in the areas covered, however, is that crime is a significant concern. Thus, asked about worry over the risk of crime Ekblom and Simon found that 21% worried 'a lot', 24% 'a fair amount', 19% 'a little', 17% 'not very much at all', and 19% not at all. In the Wirral City Challenge study 35% were found to be 'very worried', 29% 'worried', 24% 'slightly worried', 11% 'not worried' and 1% 'unconcerned'. In Deptford, crime was perceived to be a 'big or very big problem' by 28%, a 'bit of a problem' by 48%, 'not much of a problem' by 16%, and 'no problem at all' by 2%. The study in the Wirral took a number of offence categories and asked about perceptions of them separately. Talking categories of 'big problem' and 'great problem' together, greatest concern was expressed about drugs and burglary (66% each), followed by vandalism (55%), theft from motors (45%), shop theft (42%), and theft of motors (33%).

In the Wirral and in Deptford respondents were asked about the consequences of crime for business. A very general question in Deptford about the effect of crime on business and business growth found that 12% believed it to be 'very serious', 36% 'serious', and 40% 'not serious' whilst 10% did not know. In the Wirral, a question was asked about a number of separate effects, offering the respondent a number of categories. The commonest 'big problem' was 'cost of security' (47%), followed by 'damage to premises' (28%), 'loss of trade' (15%), and 'theft of stock' (14%).

Insurance is very commonly taken out to soften the impact of major incidents. In the Wirral City Challenge study 80% had some form of insurance against crime, 39% of whom had had to meet special conditions such as increased excess or premium, a security survey or increased security for their cover. In Deptford 82% had insurance

against criminal activity, 10% did not and 8% were uncertain. This compares to the 80% found in Ekblom and Simon's study to have insurance covering criminal activity. These rates for small businesses, largely shops, are rather lower than those for contents of businesses on the industrial estates studied by Johnson et al where the figure was as high as 95%, though fell to only 30% for assault. In the Wirral 19 of the 47 businesses without insurance had suffered losses during the previous year (40%). This compares with a figure of 24% for those with insurance who made claims on their policy, though the claims here tended to be rather higher than the losses suffered by the non-insured.

What these businesses would like to see as a way of reducing vulnerability tends fairly consistently to be an increased police presence. In two out of the three areas within the Wirral City Challenge area study it came top of the list of preferred measures (in the one area where it did not, a particularly sympathetic, helpful and energetic beat officer was already in regular contact). In Deptford, an enhanced, more visible police presence was overwhelmingly the most wanted development. 60% mentioned it without prompting, the next most wanted measure being 'better policing' (12%), with nothing else scoring more than 6%. Shop Watch and Traders' associations came a long way down (respectively sixth and eighth of the eight choices made available in the Wirral study).

Let us turn now to the community impact of crime against business. Unfortunately there is a dearth of literature. In a brief recent discussion Fisher (1991) notes the perplexing lack of attention to 'the effects that crime, fear and disorders have on neighbourhood business areas'. Fisher stresses the importance of businesses for interaction between residents and the formation of community identity. She notes the role of small businesses in helping 'to make the community a pleasant convenient, stable place in which to live and shop'. Local business activity is said to 'serve as a barometer of the health of the local economy and quality of life.' Fisher notes the costs of crime and incivilities to business which in turn are restricted in their functioning to the disadvantage of residents. In so far as the viability of businesses is jeopardised by crime the whole health of the community is put at risk². Fisher's own very small study of about forty businesses in Columbus, Ohio finds high rates of crime and crime concern. 94% had been victimised at least once in the previous three years. The average number of offences was four. The major concerns were vandalism and burglary, considered respectively by 46% and 30% of respondents to be 'big problems'. These results are not strictly comparable to those reported here, but it is fairly clear that the sorts of problems caused by business crime which are raised in Fisher's discussion would be no less serious in some areas in Britain, including those in Safer Cities.

There is scope for more systematic research into the community consequences of crime against business. What can be said here is that there is a very high rate of crime

²Shapland & Vagg (1988) note the role of business in surveillance and social control in communities. In so far as local businesses perform this function their failure and withdrawal may be a factor in leading to increases in crime and incivility.

against the predominantly small businesses included in the business crime surveys undertaken within Safer Cities projects. These are generally located in poorer areas of towns. It is likely that crime constitutes a major cost, and that these important sources of service and of economic activity in the area are at risk from crime. It should be noted in this context that the 231 businesses included in the Wirral survey in the City Challenge area produced 301 full time and 432 part time jobs.

4. SAFER CITIES SCHEMES AIMING TO REDUCE CRIME AGAINST BUSINESS

Safer Cities schemes have been directed almost exclusively at small businesses rather than large ones. Although not always conceived with this intention they have been taken up in the main by shops and high street service businesses rather than those involved in manufacturing.

Safer Cities schemes will be divided into four categories. First, there have been general schemes for upgrading the physical security of small businesses in two Safer Cities. Second, there have been schemes in particular areas, which include security upgrading and other measures also, in a further two. Third, there have been several schemes upgrading the security of varying numbers of businesses in particular geographic areas within the Safer City. Finally, there have been schemes aimed at increasing the co-operativeness of businesses vulnerable to crime, but without significant physical security upgrades. In some cases no evaluation data are available, in others it is very weak, and only rarely does it approach robustness. The problems in police record keeping which have already been mentioned are, of course, a serious handicap.

General schemes providing security upgrades

Salford and Hartlepool have operated security upgrade schemes which are open to any eligible business in the local authority. In Salford, the business must have no more than fifteen workers, though at the start of the scheme the maximum was set at ten. In Hartlepool the maximum has remained ten workers throughout, though here an additional condition is that the business will not have been in operation for more than three years. In Hartlepool certain types of business are excluded. These include public houses, night clubs, gaming establishments, or those involving politics, religion, pornography or clairvoyance. No such formal exclusion has operated in Salford, though in the event none of these sorts of business has applied. Hartlepool's exclusions have been made to offset potentially damaging publicity, though doing so may have reduced the scope to make safer especially vulnerable groups. In both schemes the business has to provide a proportion of the costs, in Salford 50% and in Hartlepool 25%, and there is a maximum grant respectively of £500 and £1,000. Both schemes are administered by the local economic development agency, in Salford the local authority Economic Development Unit, and in Hartlepool the Enterprise Agency. Both are directed mainly at burglary.

Various minor problems have faced the implementation of these schemes. These have mostly had to do with determining eligibility for grant and frauds/sharp practice by both firms undertaking the security work and businesses applying for grants. In both schemes also, there were problems in eliciting applications in the early days, though in time a steady stream developed.

In practice, though previous experience of burglary was not a requirement of either scheme it was this that tended to provoke interest in applying for a grant though the

scheme. In Salford 95% of those responding to an evaluation survey indicated that they had suffered break-ins or attempted break-ins prior to applying for a grant to upgrade security. In Hartlepool routine monitoring at the time of application reveals

Table 4: Experience of burglary before and after security upgrades in Hartlepool.

nature of business	date business began	burglary before install.	date of install.	burglary to Dec 1992.
WHOESL.NEWS/TOBAC	FEB 91	0	OCT 92	0
RETAIL NEWS.	FEB 91	1	JAN 92	0
ART SHOP	MAY 89	6	JUL 92	0
ELECT.RETAIL/PLUMB	JUN 90	0	AUG 92	0
MENSWEAR RETAIL	MAR 90	1	JUN 91	0
FOOD TAKE-AWAY	JUL 90	1	DEC 91	0
MENSWEAR RETAIL	OCT 90	1	NOV 91	0
GREENGROCER	NOV 89	0	JUL 91	0
JOINERY BUSINESS	JUN 89	4	APR 91	0
LOOSE COVER MAKERS	NOV 90	3	JAN 92	0
NEWS/OFF-LICENCE	OCT 90	1	JUN 91	0
SPORTS RETAIL	JUL 90	2	JUN 92	0
FINANCIAL SERVICES	NOV 88	7	AUG 91	0
ROOFER	1988	3	JUN 91	0
NEWSAGENT	SEP 88	2	SEP 91	0
BAKERY	MAR 89	0	MAY 92	0
GENERAL DEALER	NOV 89	1	FEB 92	0
CAR SALES	JAN 92	0	JUL 92	0
GENERAL DEALER	JUL 89	0	FEB 92	0
SECOND HAND GOODS	MAR 89	4	APR 92	0
HOME BREW RETAIL	APR 91	0	SEP 92	0
TOY & CYCLE RETAIL	APR 89	5	AUG 91	0
INDUSTRIAL DESIGN	FEB 91	1	JAN 92	0
FISH & CHIP SHOP	1990	0	MAR 92	0
GENERAL DEALER	DEC 90	3	APR 92	0
total burglary before install.		46	burg.aft	0

that over 75% had previously experienced burglary. In Hartlepool regular monitoring arrangements have thrown up some useful evaluation data. In Salford it has been necessary to reconstruct evaluation data by a post hoc survey undertaken by the Economic Development Unit.

Evaluation of the effectiveness of the Hartlepool scheme: In Hartlepool, data relating to the previous year's experience of crime were collected from businesses applying for security upgrades by the Hartlepool Safer Cities Research Unit. This has been followed by regular checks on the experience of burglary.

Table 4 describes the experience of 25 businesses all of which had been established at least six months at the time the security was upgraded. Interviews took place in December 1992, so the period of after data is variable, and in some cases very short. Given the patterns of reburglary identified earlier it is clear, nevertheless, that the scheme has been of substantial benefit to those taking part in it. In the total of 563 months trading covered by the 25 businesses before the security improvements (the sum of each of the dates of installation minus the corresponding dates when the business began), there had been 46 burglaries. In the total of 270 months after security improvement (the sum of December 1992 minus each date of installation), there were no burglaries.

Evaluation of the effectiveness of the Salford scheme: In Salford 161 businesses took part in the scheme between 1988 and 1992. Table 5 indicates the security measures installed.

Table 5: Security measures fitted in the Salford Business Security Grant Scheme

Security measure	Number of businesses
Roller shutters	83
Alarm systems	57
Security lighting	13
Grilles/bars/mesh	13
CCTV	10
Security doors	4
Metal plating	3
Intercoms	1
Security reinforced glass	1

The Economic Development Unit sent questionnaires to all 161 businesses which had taken part in the scheme between 1989 and 1992. Disappointingly, there were only 86 responses (53%), and obviously we cannot be certain that they are representative. Questions were asked about attempted break-ins, actual break-ins, vandalism, and 'other offences' over the twelve months before and after security improvements were made. Table 6 shows the results.

Table 6: Overall results of the Salford Business Security Upgrade Scheme

	Before security improvement	After security improvement
Attempted break-in	243	58
Actual break-in	169	25
Vandalism	217	99
Other	16	12
Total	645	194

In the year prior to security improvements a total of 645 offences had been committed against the businesses surveyed but there were only 194 in the following year. Eighteen of the 86 respondents had suffered five or more attempted break-ins in the year preceding security improvements, but only two of them had had as many in the year after. Nine had suffered at least five actual break-ins the year before, but these had suffered little since. The Salford report notes that sixteen businesses had suffered very high rates of vandalism prior to security improvements, but only three in the following year.

Turning to the what was actually done to upgrade security as a result of the scheme, Table 7 shows the results calculated from data contained in the Salford report, where three or more businesses had had the same measure or measures installed.

Table 7: Crime experience of businesses in the years before and after security upgrades under the Salford Business Security Grant Scheme

Security measure	No. of businesses	Businesses victimised in year before security upgrade	Businesses victimised in year after security upgrade	Total offences in year before security upgrade	Total offences in year after security upgrade
Shutters	40	38	22	265	80
Alarm	20	18	9	135	33
Grilles/bars	8	8	5	82	27
Alarm/light	4	4	3	31	10
CCTV	3	3	3	35	30
Lighting	3	3	3	29	8

Given the low response rate to the questionnaire, and the lack of data on other measures taken by the businesses to improve their security, these results should of

course be interpreted cautiously. They do seem, however, to indicate that the measures were generally well chosen. One possible exception is CCTV where success is least marked, though the data relate to only three businesses. All were victimised both in the twelve months before installation and in the twelve months after, though the total number of incidents did come down from 35 to 30.

Though the evaluation data from Hartlepool and Salford are imperfect it is fairly clear from them that the security improvements have been effective in stemming high rates of revictimisation for many businesses.

General area specific schemes including security upgrade and other measures

In Lewisham and Wirral schemes which focus on particular inner city business areas have operated. These are implementing a battery of measures including security upgrades. In both cases Safer Cities are joint funders with other government agencies and the schemes involve a partnership approach involving also the local authority, the police and local traders. In both, a business survey to ascertain need preceded the scheme and informs its operation. The Wirral scheme is only in its very early stages of development, and no outcome data are yet available; indeed, the scheme is not yet fully implemented. In Lewisham the scheme has been in operation since July 1991, and there are some outcome data.

The Lewisham and Wirral areas are quite similar. They comprise old shopping streets in poor areas, where a history of decline has led to the disappearance of most major retailers. A wide range of businesses can be found. Most are either single units, or parts of small chains, though there are a few building society branches. There are few signs of prosperity. Rather, the casual visitor is left with an impression of urban decay.

All businesses in the area are eligible to apply for grants for security upgrades, except, as in Hartlepool, pubs, gambling establishments, night clubs and places involving politics, religion, pornography or clairvoyance.

In Wirral, the driving force has been the local Crime Prevention Panel, which, with a strong chair, information from the business crime survey, and money and advice from Safer Cities, has become a quite powerful and effective planning group. What is planned in Wirral comprises a package of security improvements for all businesses, provided through City Challenge, together with a Watch scheme bridging both community and business, advice on management and internal display patterns to minimise vulnerability, a paging system to provide for rapid transmission of information about shoplifting, and a local contact point for the police within the business area (funded initially through the Merseyside Urban Crime Fund). Since several of the ingredients of the approach are not yet in place there can clearly be no outcome data. This scheme does, though, represent an imaginative, multi-faceted holistic and co-operative way forward for business crime prevention.

In Lewisham, a worker has been in post since July 1991 to promote, develop and administer the Deptford Business Security Scheme. He works closely with the local

High Street Association, which has become much more active with the scheme. An advisory group to the scheme, including agency sponsors, meets every six weeks to oversee the work. A maximum grant of £2000 is payable to each applicant for grant aid in improving external security. This can cover up to 85% of costs. The work undertaken is decided following a security survey by a Crime Prevention Officer. Estimates are obtained from three contractors for each job, the final selection being made by the advisory group. Installation is ordinarily completed within six to seven weeks of the application. Only one application for funding has been turned down 'for technical reasons'. Fifty were accepted from the estimated 150 eligible businesses (including a small number in the High Street which fall within the London Borough of Greenwich but are treated as members for the purposes of the scheme). The administrative arrangements for the scheme appear to have worked satisfactorily.

The scheme originally operated in Deptford High Street, for which there is a little evaluation data. It has since been extended to New Cross Road and Deptford Broadway due to its eventual popularity. The scheme was, however, not instantly welcomed. It took several months to take off. It proved difficult to stimulate interest in the business community, and the first security improvements were not installed until February 1992.

First reports of the scheme suggested that there had been very significant reductions in the crime rate in Deptford High Street following the scheme's introduction. Unfortunately, however, it transpired that the 'before' statistics furnished by the police included a wider range of offence categories than did the 'after' figures. Using more recent available figures Table 8 compares February to December 1991 with February to December 1992 for various crime categories, taking February 1992, when security installations began, to mark the start of the scheme proper.

Table 8: Crime figures for Deptford High Street before and after start of scheme

	Feb-Dec 1991	Feb-Dec 1992
Non-residential burglary	49	59
Criminal Damage (non motor veh)	16	26
Commercial Robbery	7	6
Shoplifting	4	10
Non-residential theft	26	0
All offences	383	348

Several points can be made about this. First, for those categories of property crime most likely to be committed against businesses, excepting for the moment non-residential theft, there has apparently been no decrease in the rate of offences.

Second, the enormous reduction in non-residential theft, together with the fact that there are nine other 1992 zero scores not shown here and no zero scores for 1991, strongly suggests that the categories are not being used consistently by police officers allocating incidents. Third, there has been an apparent small reduction in the total number of incidents, though in the light of uncertainties over police recording it would be unwise to attach too much significance to this. Finally, given the pattern of take up for the scheme it would have been very surprising for it to have the instant effects first reports suggested.

In addition to security upgrading the Deptford High Street scheme has attempted to increase levels of co-operation between businesses. One strategy has been to try to stimulate Business Watch of which there are about fifty members. Another has been to supply pagers to facilitate communication between shops where offenders are at large. In the event the pagers have been little used and this part of the scheme is being discontinued. As we shall see, however, pagers have been introduced more successfully in Sunderland.

Selective area specific security upgrade schemes

In Nottingham, Sunderland and Wirral there have been Safer Cities schemes where either individual businesses in a given area or groups of businesses have been target hardened. In each case work has been directed at those already known from past patterns of victimisation to be at high risk of crime.

In Sunderland security shutters have been fitted to parades of shops owned by the council. The parades chosen for this work were those deemed by local police to have been most victimised. There are no figures for the actual rate of crime amongst those included in the scheme and none comparing the crime experienced with other sets of shops thought to be less at risk. However, a sample of 20 was visited by the researcher and co-ordinator of the Sunderland Safer Cities project thirty months after the scheme was completed in June 1990. It was found by then that overall only one had been burgled with loss and there had been six attempts, all at a shop selling electrical goods.

In Sunderland also fencing was fitted to one part of the port area, after a survey of eighteen of the 24 businesses in the area revealed extensive concern about crime, though unfortunately the report did not indicate the actual rate of crime experienced.

In Nottingham shops with a history of victimisation in a disadvantaged inner city area have been offered target hardening in accordance with recommendations from the Crime Prevention Officer. The scheme has been evaluated post hoc by researchers from the local university (Burke and Gregson 1993), from the report of which this account is drawn. A comparison area, similar in composition and adjacent to the scheme area had been picked out at the time the scheme was started, and this was used by the evaluators for comparative purposes, though they acknowledge weaknesses in doing so. There are something over 200 shops in the area covered by the scheme, of

which about 250% are vacant at any point. Those eligible for a grant towards security upgrading had either themselves been burgled or their neighbours had. Grants ran from up to 50% for those with a turnover of more than £150,000 to up to 100% for those with a turnover of less than £50,000, most in the event being made to those with relatively low turnovers. Between August 1989 and September 1992, 63 grants were made. The evaluation report notes that there was an increase of 81% in cases of recorded burglary/theft against commercial premises in the scheme area between 1989 and 1992, but no significant change in the comparison area (it went up from 4 to 6, though remained constant from 1990). The 81% increase for commercial burglary/theft is compared with a 140% increase in all categories of crime in the scheme area, and a 276% increase in recorded crime overall in the comparison area. Table 9 shows the raw figures on which these percentage comparisons are based, year by year. They show some volatility, making interpretation difficult. Burke and Gregson note the significance of the opening in April 1990 of a huge superstore in the area, which may have drawn some crime from other parts, it becoming a major site for crime. For instance 24 thefts are recorded for this one store in 1990, 64 in 1991 and 97 in 1992.

Table 9: Crime Trends in Scheme and Comparison areas in Nottingham

Year	Scheme area			Comparison area		
	Comm burg/ theft	All business crime	All crime	Comm burg/ theft	All business crime	All crime
1989	26	120	240	4	16	34
1990	14	141	346	6	29	79
1991	26	149	367	6	19	68
1992	47	272	576	6	28	125

These equivocal but less than hopeful results can be set alongside conclusions concerning the effects of the measures adopted on the vulnerability of individual businesses which took part in the scheme. It is conceded that the data are not very robust, and relate not to recorded incidents but to some quite loose survey material making strict time comparisons impossible. The authors, nevertheless, state that, 'there is some evidence on which to base the tentative conclusion that traders in both (the scheme and comparison) areas were less likely to experience burglaries or attempted burglaries if they had introduced security improvements to their premises. There is also the possibility that security measures introduced after a comprehensive security survey (by crime prevention officers) are a more adequate deterrent against the opportunistic burglar.' There may have been some displacement within the scheme area, from the security upgraded premises, especially to the attractive large superstore whose high rate of victimisation has already been described.

Finally, one of the by-products of the Nottingham scheme noted by Burke and Gregson in their study is a strong traders' association, which is constituting an increasingly effective voice.

In Wirral high iron paling security fencing and floodlighting was installed to the rear of a small row of shops which had been frequently burgled, following demolition of various outbuildings which obscured visibility. A dramatic fall in rates of victimisation followed immediately. The five shops in the small parade had experienced 12 actual burglaries and three attempts from August 1989 to the implementation of the security measures in October and November 1990. Since that time to date, February 1993, there have been no further burglaries or attempts. In addition, it is said that drug dealing/usage around the backs of the building has also ceased.

Also in Wirral CCTV cameras were installed to a small industrial estate whose members had been frequent victims of break-ins and vandalism. This scheme involved, after an initial set-up period, co-operative arrangements amongst several companies for payment of a security firm to provide guards who would watch the monitors and call the police where suspicious activity was observed. This arrangement has proved very difficult to sustain. The 'gentlemen's agreement' for cost sharing broke down immediately, the period of time when screens were watched had to be reduced radically, and significant ill will has resulted. Systematic records of rates of incident before and after installation of the CCTV have not been kept. It was said, nevertheless, by the works director of the largest unit, which employed 110 staff, that its parent company in Canada had been threatening either to close the factory or to relocate it because of the number of break-ins and the amount of vandalism. That, he said, is no longer a danger because of improvements which have followed installation of the CCTV. Moreover metal sheets welded over vulnerable sky-lights, have been removed to restore natural light, because the risks are seen to have been diminished.

Schemes aimed at increasing co-operation between businesses

These schemes normally involve some variant of business watch or shop watch. One such scheme has been operated in an area of Wirral. Another, with the help of pagers, has operated in Sunderland, where Safer Cities has made a small supplementary contribution to the main scheme.

As part of a wide range of crime prevention schemes in the Ferries project in the Wirral, both an Industrial Watch on an industrial estate of 21 businesses and a Shop Watch scheme for a refurbished row of shops have been attempted. However, despite the best efforts of the local crime prevention co-ordinator, they have proved very difficult to sustain. It was said of those in the area covered by the Industrial Watch that the priorities for businessmen in difficult trading times had lain in the efficient management of their firms and in winning orders for them. Co-operative efforts at reducing external vulnerability very much took second place to this. Nevertheless, the rate of non-domestic burglary in the beat in which the Industrial Watch is located went down from 62 in 1990 to 53 in 1991, coincident with the start of the Ferries

project, a reduction of 15%. In the same period, the overall number of crimes in the beat increased from 531 to 553. Moreover, the subdivisional non-domestic burglary figures went up from 1077 to 1214, an increase of 13%.

In Sunderland, a small grant of only £160 was made to print pro forma message pads to facilitate the efficient exchange of information via the radio paging system. These had been introduced to enable city centre shops to inform each other about shoplifters and other suspicious persons in relation to whom increased action could then be taken to reduce theft. The evaluation data made available are shown in Table 10:

Table 10: Reported and detected incidents of shoplifting before and after introduction of radio paging scheme in Sunderland City Centre.

	1990	1991
Reported offences	902	1380
Detected offences	721	1150
Detection rate	79.9%	83.4%

It is difficult to interpret these results. They are seen to indicate success in the paging arrangements, since the detection rate increased. However it increased only slightly against the background of a much larger increase in the number of offences identified. This latter may have been facilitated by the efficient operation of the pagers.

5. Conclusions and Recommendations

1. Crime against business is substantially greater than crime against individuals and households. This is not to say it has quite the same traumatic effect, though in the case of violence it may well do so. The focus of most of the Safer Cities schemes considered here has been on burglary, which again takes place at a higher rate than against households. It has the potential to jeopardise the viability of businesses and may lead to disinvestment. This has obvious economic and social implications, which would repay further research.
2. The analysis of multiple victimisation in Hartlepool suggests that businesses which have been victims of burglary are at high risk of revictimisation. Examination of the time course of this indicates that subsequent revictimisation occurs disproportionately in the first few months following an incident. The target hardening suggested by Crime Prevention Officers and supported by Safer Cities grants has succeeded in stemming revictimisation of individual businesses. Multiple victimisation thus suggests a way of targeting crime prevention advice and funds.
3. Planning business related crime prevention and evaluating its effectiveness could be made much easier if police record keeping were altered. Record keeping was generally found wanting for crime prevention purposes; indeed in one area the author was told that the police did not see crime prevention as a reason for keeping records: they were for operational purposes and to satisfy the Home Office. In these circumstances the commonly found ambiguity and inattention to detail are not surprising. There are some specific needs in dealing with business crime. First, coding crimes against businesses would be useful. Second, coding for type of business would be helpful, since we lack robust evidence on the relative risks associated with different business sectors. Because of accessibility and the attractiveness and salability of the items available there the retail sector looks especially vulnerable to property crime, though we do not yet have very strong evidence on its position relative to others. Third, conscientiously identifying and attaching post-codes to individual records would assist geographic analyses, which are now possible at best by beats whose boundaries are apt to change.
4. In addition to police data before and after business crime surveys can be extremely helpful in developing and evaluating business crime prevention initiatives.
5. Security upgrades are effective for individual businesses but they may not reduce the vulnerability of areas, if offences are displaced. To deal with this co-operative schemes, possibly involving the community, are worth trying. The difficulties in sustaining these should not be underestimated. Experiments such as that being tried in the Wirral should be encouraged, but without investing

unrealistic hopes. Future evaluation studies need to attend to the circumstances in which various physical and other measures can have short and longer term effects both for individual businesses and for the business community in an area.

6. Some guidance about ways of reducing vulnerability has been made available by the CBI and Crime Concern, but something particularly for very small companies, delivered through police or insurance companies could usefully be disseminated. Local schemes along these lines, which were not evaluated as part of this study, have been supported by Nottingham and Wirral Safer Cities projects.
7. There is a potential role for large companies, with experience in dealing with crime, to use their philanthropic resources to run a number of demonstration shops in areas where there is a high need, but where they are not viable because of crime. Lessons learned from these could then be passed on to prospective independent proprietors. The demonstration shops, if successful, could of course be handed over in due course to independents.
8. Given the limitations of police data and uncertainties in the area of business crime, a national victim survey is needed to obtain baseline data.
9. Insurance is seen by small businesses in the inner city as a particular problem. They would be helped by a scheme such as the National Enterprise Insurance Scheme. This was developed by certain underwriters at Lloyds in conjunction with Business in the Community, the co-ordinating body for Enterprise Agencies. It is available for those receiving funds through the latter. The scheme offers lower minimum premiums than those available from other insurers and provides cover for businesses in inner city areas where it is often difficult if not impossible to find it in the open market. With the implementation of properly evaluated security measures crime risks could be reduced, and this could very usefully be recognised and rewarded by the development of an appropriate insurance scheme.
10. The volume of victimisation and re-victimisation of businesses means that there is a substantial flow of crimes. This facilitates evaluable crime prevention since impacts can clearly and quickly be seen. Businesses constitute promising sites for crime prevention efforts.

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