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REPEAT BREAK AND ENTER CRIMES: An Analysis of Police Calls for Service Data in a Brisbane Region

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The purpose of this paper is to explore the phenomena of repeat victimisation and crime hot spots, using police calls for service data on break and enter (B&E) offences from the Beenleigh region of Brisbane over an 18 months period. The ultimate objective of the research is of course to devise more effective strategies for the prevention of break and enter offences.

BURGLARY AND REPEAT VICTIMISATION

Burglary is a growing problem, both in Queensland and in Australia as a whole, although both police statistics and crime victim surveys indicate that the Queensland rate is close to the national average (CJC, 1996a). However, burglary or break and enter rates are not distributed equally on a geographical basis. Areas with the highest residential burglary rates in Queensland are the coastal tourist regions, the inner city areas of Brisbane, and a band of suburbs to the south of Brisbane stretching from Ipswich to Beenleigh (CJC, 1996a). Beenleigh has a rate of 2,663 residential burglaries per 100,000 population, the sixth highest ranking police division in Queensland.

Recent research (e.g., Trickett et al., 1992, 1995; Hope, 1995) suggests that an important factor causing high crime areas is *repeat victimisation*: the concentration of offences per victim in a given time period is higher than in low crime areas (although prevalence - the percentage of victimised people or addresses - is also higher in high crime areas). Farrell & Pease (1993) show from British Crime Survey data that in Britain throughout the 1980s, about 14% of the population were victimised on 2+ occasions in the past year, and that this group accounted for 71% of all the incidents. The 3% who experienced 5+ crimes suffered nearly a quarter of all the crimes reported. Many other studies have found similar levels of skewness.

On the basis of these kinds of data, Farrell and Pease present a cogent case for *rationing* crime prevention resources by concentrating on those who have already been victimised. They also cite data (see Polvi et al., 1990, 1991) that the risk of victimisation is greatest in the period immediately after the victimisation. Other points made by Farrell and Pease:

- The most likely explanations of repeat victimisation are that some offenders return to take things they overlooked the first time, and that they tell others of the opportunities (both explanation supported by Bennett, 1996).
- To the extent that individual incidents (such as B&E) are not reported with 100% frequency, *multiple* victimisations will necessarily be even more under-reported (this is supported by analyses of survey data in Australia: Mukherjee et al., 1997).
- Incident logs (calls for service data) are more accurate than crime incident reports and probably surveys, but suffer from the *huge* disadvantage of inaccurate address recording. This is very costly to fix this up, but it makes a very big difference to the ultimate pattern of repeat victimisation to get it right.
- The length of the "time window" in the study of the time course of repeat victimisation is of vital importance. The shorter the window, the greater will be the under counting of repeat victimisation, so several years data are desirable.

- Prevention of repeat victimisation is socially just, since victims are typically poor and otherwise vulnerable. Even if displacement occurs, it "spreads the agony around."
- Prevention strategies should be multi-pronged and tailored to the needs of the area or situation (as in the Kirkholt study: Forrester et al., 1988)
- A bonus flowing from this approach to crime prevention is that *prevention and detection are brought together.* Maximum prevention is achieved if counter-measures are implemented within 24 hours.

Farrell and Pease identify as a challenge for future research elaboration of the relationship between repeat offending, repeat victimisation, and crime hot spots. Bennett (1996) and Bennett and Durie (1996) come closest to this in their Cambridge study. They identified burglary hot spots in Cambridge (UK) using STAC software, (Illinois Criminal Justice Information Authority, 1996), and showed that hot spots contained more repeat victim addresses than other areas. They also showed through interviews with a small sample of apprehended offenders that perhaps six offenders who lived very close to the hot spot accounted for up to half of all burglaries in the nearby Council wards.

The present study partly replicates the Cambridge study, but omits interviews with offenders. It is based on 18 months of data from calls for service for B&E in the Beenleigh police division, and identifies both hot spots and repeat victimisation. It arises from the *Beenleigh Calls for Service Project*, which is a joint project of the Queensland Police Service (QPS) and the CJC (CJC, 1996b). The aim of the project is to reduce the demands being made on police resources through the systematic management of calls for service and the application of problem solving techniques which are aimed at addresses generating repeat calls for service. The analyses are purely descriptive at this stage: techniques such as Poisson modelling (Polvi et al., 1991) have been explored, but results are not reported here.

DATA ANALYSIS

The data used in this report are derived from the Information Management System (IMS) of the QPS. The IMS records all calls for service made to the police regardless of whether a police crew attended a given incident or not. Calls for service (CFS) are requests for police assistance made by the public by dialling either the emergency 000 number or by directly contacting their local police station. Communications staff record particulars of the call including details of the caller, the nature of the incident, and the address. The communications coordinator then prioritises the calls and determines which crew will respond to which call. The police division chosen acts as the communication centre for the district , which comprises eight other divisions.

We have chosen calls for service data because they provide a more comprehensive picture of all crimes and incidents occurring within a region or division than crime reports. Crime data (CRISP reports in Queensland) record only those incidents where an officer has attended the scene of the crime and that visit has been followed up by a "scene of crime" officer who lodges a report. Calls for service data provide information about the full range of break and enters, attempted break

and enters, and burglaries that occur, regardless of whether resources have permitted a CRISP report to be prepared. On the other hand, IMS misses "over the counter" reports, but these are only a small minority of incidents that come to the notice of the police.

The first stage of the data analysis was to collect information regarding the frequency and locations of break and enters occurring within the division. Addresses were separated into residential and non-residential locations (Sherman et al., 1989) and then repeat address analysis was performed to establish the extent of repeat victimisation occurring within the division. All addresses were mapped using the MAPINFO software in order to illustrate the geographical pattern of incidents (Bennett, 1996). The process of identifying unique addresses and correcting errors was extremely difficult and time consuming, consistent with the experience of Farrell and Pease (1993) and others.

IMS and CAD Data

The QPS groups all property offences under the category of *Against Property* which consists of the following specific offences: *Breaker at Premises; Insecure Premises; Break and Enter & Wilful Damage.* Table 1 shows the numbers of *Against Property* offences for the Beenleigh Police Division for the period June 1, 1995 to December 13, 1996.

Table 1. Types of Against Property Offences in the Beenleigh Police Division, June 1, 1995 to December 13, 1996

Total Number of Calls for Service	12996	% of calls for service
Total Against Property Offences	2786	21.4%
Breaker at Premises	32	0.2%
Insecure Premises	154	1.2%
Break and Enter	1790	13.8%
Wilful Damage	810	6.2%

The other computer aided dispatch system in place in the state is, appropriately named, CAD. It operates from police headquarters and services metro politan north and south Brisbane. It has different features than IMS including:

- the ability to retrieve telephone numbers from incident addresses;
- a flag appears if there has been previous police attendance to a given address;
- a history screen provides summary details (job number/ verified codes/ action codes) for each call;
- addresses are validated against an address (UBD street directory) database; and

- statistics are only supplied to the regions if they are requested.

There are advantages and disadvantages in operating either system , but basically IMS is a smaller, more localised version of CAD.

Mapping

Currently, 18 months of data have been edited, geo-coded, mapped and analysed (June 1, 1995 to December 13, 1996). To properly discern spatial and temporal patterns, the entire dataset has been split into 3 six-monthly time periods:

- 1st period: 1/6/95 to 30/11/95
- 2nd period: 1/12/95 to 31/5/96
- 3rd period: 1/6/95 to 13/12/96

The third and last time period has an extra 13 days of data. This number of records (approximately 40 incidents) should not affect results.

The 18 month database contains 1790 records of verified break and enter offences that Beenleigh police attended. Of those, 107 (approximately 6%) were not able to be geo-coded (put on a digitised map). This occurred for two main reasons:

- the age of the digitised street map. Although only a few years old, the street map used in this project is sufficiently old to not contain every address in the police district.
- the incidents were not applicable. Incidents outside the boundary of the Police Division appear in the dataset. These records are not representative of the Division's true break and enter distribution and were therefore not mapped.

Once mapped, it was observed that the incidents were concentrated in the north-west corner of the division. A target area was chosen within the division, which was thought would capture the majority of the incidents. The area is nearly ten kilometres across and seven up, and covers over 66 square kilometres. Of the remaining 1683 records, 1467 incidents (87%) were contained in the target area.

Using STAC

Spatial and Temporal Analysis of Crime, STAC (Illinois Criminal Justice Information Authority, 1996) was employed to analyse spatial aspects of the data. STAC can be used to calculate hot spots of spatially distributed data and represent these as standard deviation ellipses. A standard deviation ellipse is the two dimensional equivalent of a confidence interval. Once an ellipse's boundaries have been mapped, there is a 95% chance that the centre of the hot spot is contained within the boundary.

The user enters two parameters, the search radius and the minimum number of incidents in a cluster. STAC lays a lattice of points, which can be either triangular or rectangular, over the map. The distance between each point in the lattice is the same as the search radius. A circle of equal radius to the search radius is then laid over each point in the lattice and the number of observations within each circle is recorded. The 25 circles with the highest counts are calculated and their locations recorded. If any of the top 25 circles share observations (that is, there is an

observation that is in more than one circle and thus has been counted twice), those circles are combined to make clusters. Thus it is possible, due to the spatial spread of the observations and the size of the search radius, to end up with very few clusters. All circles, whether combined or not, are now referred to as clusters.

Once the clusters have been finalised (each cluster has a total count of observations that occur only in that cluster and no others), then those that have a total count greater than the minimum number of incidents in a cluster, as specified by the user earlier, are considered to be hot spot areas.

By increasing the search radius, hot spot clusters will group together to form larger clusters. If a large enough value is chosen, the entire dataset becomes a hot spot area. The only influence the minimum number of incidents has is that smaller, insignificant clusters can be disregarded by choosing appropriate values.

SPATIAL PATTERNS AND HOT SPOTS

Spatial patterns of the data were investigated in order to determine the location and stability of any existing hot spot areas. Hot spot areas that are present across all three time periods were considered stable and those that are not were considered temporary or transient.

As mentioned previously, different values for the parameters of STAC, search radius and number of incidents in a cluster, yield different results. A number of combinations of parameter values were selected to determine the optimal values. A search radius of 100 metres proved to be too small relative to the size of the selected area (66 square kilometres). Conversely, a search radius more than 300 metres returned results that were meaningless (whole suburbs or more were hot spots). The most suitable search radius appeared to lie somewhere in the range of 100 to 300 metres. It should be pointed out that the search radius most suitable for analysis will vary from city to city. A sprawling community such as the one studied here is vastly different form the concrete jungles of New York or Chicago. Search radii in larger cities may be possible at 50 metres.

The second parameter (number of incidents in a cluster), is of secondary importance compared to the first, the search radius. The search radius controls the size of the clusters, whereas the number of incidents in a cluster controls how many hot spots there are in the analysis. Changing the number of incidents will not change the size of the clusters, it merely allows clusters with a smaller incident count to be included in the analysis. Values of 5 and 10 incidents per cluster were tested. When a value of 10 was used, on average 5 to 6 hot spots were reported. For 5 incidents per cluster, 12 to 14 hot spots were reported.

Of the different combination, the most reliable results were obtained for a search radius of 150 metres and 10 incidents per cluster. A number of hot spots were reported, but only three consistently appeared in the three time periods (hard copies of Figures 1, 2 and 3 can be obtained from the authors or the Australian Institute of Criminology)

- **Hot Spot 1**: In an outlying suburb, this hot spot is focused around the suburb's shopping centre. Adjacent to the shopping centre is a railway station and a childcare centre. Apart from this hot spot, the rest of the suburb is entirely residential, with the exception of the primary and secondary schools. The hot spot area accounts for the entire commercial and retail sector of the suburb.
- **Hot Spot 2**: This hot spot is focused on a major intersection of a main road and an arterial road. On one corner is a service station, and adjacent to it is a complex of retail outlets. Nearby are several large apartment blocks and there are many retail outlets scattered across the surrounding area. This hot spot sees a substantial amount of traffic each day. One of the roads that forms the intersection is the unofficial border of the commercial/retail sector and the industrial sector.
- **Hot spot 3**: This hot spot is centred on the Central Business District (CBD) of Beenleigh. A significant number of people visit the area everyday by various means : a five way main road intersection lies within the area, nearby is a train station, a bus terminal, a high school, a public swimming pool, a community centre, a sports centre, several shopping centres , and numerous other retail outlets.

The above hot spots are formed when analysed with a search radius of 150 metres. When the same data are used with a search radius of 300 metres, the elliptical boundaries are somewhat different. Hot Spots 2 and 3 tend to become combined to form a much larger hot spot , and two other stable hot spot areas become apparent (one is northwest of Hot Spot 1, adjacent to a railway station, and the other is northeast of the CBD hot spot).

The CBD hot spot is characterised by high levels of target hardening , particularly barbed wire, bars and grills on doors and windows , and security alarms. Other hot spots have a number of targets in a small area. This situation is compounded by the presence of paths which give immediate access to the rear of properties. In addition, many areas (paths, streets, lanes) are poorly lit. Other areas are characterised by large areas of public space surrounding them. Unfortunately, this space is generally poorly maintained , providing easy access for offenders with diminished guardianship for owners.

REPEAT VICTIMISATION

Tables 2 and 3 show the extent of repeat victimisation in residential and non-residential properties respectively.

Table 2, Repeat Victimisation of Residential Properties:

times victimised	# addresses	% victims (approx)	# crimes	% crimes	Cum. % crimes	# Res. prop.	% res. prop.
0	0	0	0	0	0	10844	91.00
1	848	84	848	68	68	848	7.15
2	126	12	252	20	88	126	1.06
3	25	2	75	6	94	25	.21
4	6	1	24	2	96	6	.05
5 or more	7	1	46	4	100	7	.06
Total	1012	100	1245	100		11856[a]	100

[a] From ABS 1991 Census Table B45

Table 2 shows that:

The total amount of residential break and enter crime is experienced by 8.54% (1012) of all addresses.

31.89% (394) incidents of crime was experienced by 16.2% (164) victim addresses. (Two or more each household)

11.65% (145) incidents of crime was experienced by 3.75% (38) victim addresses. (Three or more each household)

5.62% (70) incidents of crime was experienced by 1.3% (13) victim addresses. (Four or more each household)

3.69% (46) incidents of crime was experienced by 0.7% (7) victim addresses. (Five or more each household

Table 3, Repeat Victimisation for Non-residential Properties

times victimised	# addresses	% victim addresses (approx)	Cum. % addresses (approx)	# crimes	%crimes approx	Cum. % crimes approx	# Non-res. prop.	% n Res
0	0	0		0	0		740	75.2
1	141	58	58	141	26	26	141	14.3
2	43	18	76	86	16	42	43	4.37
3	22	9	85	66	12	54	22	2.24
4	16	7	91	64	12	66	16	1.63
5	10	4	95	*50*	9	75	10	1.02
6	2	1	96	12	2	77	2	0.20
8	2	1	97	16	3	80	2	0.20
9 +	7	3	100	110	20	100	7	0.71
Total	243	100		545	100		983[a]	

[a] from ABS Local Government Area Statistics, 1995

Table 3 shows that:
The total amount of non-residential break and enter crime is experienced by 24.72% (243) of all addresses.

74.13% (404) incidents of crime was experienced by 41.98% (102) victim addresses. (Two or more each household)

58.35% (318) incidents of crime was experienced by 24.28% (59) victim addresses. (Three or more each household)

46.24% (252) incidents of crime was experienced by 15.23% (37) victim addresses. (Four or more each household)

34.50% (188) incidents of crime was experienced by 8.64% (21) victim addresses. (Five or more each household)

25.32% (138) incidents of crime was experienced by 4.53% (II) victim addresses. (Six or more each household)

23.12% (126) incidents of crime was experienced by 3.7% (9) victim addresses. (Eight or more each household)

20.18% (1 10) incidents of crime was experienced by 2.88% (7) victim addresses. (Nine or more each household).

The residential sector experiences 69% of B&Es in the Division, yet of all the addresses that reported a B&E, over 80% came from the residential properties. This indicates that there is more concentrated victimisation of non-residential properties. It is apparent from Table 4, which shows the top 35 addresses, that many of the most frequently victimised addresses are public facilities such as schools, shopping centres, and commercial properties.

Table 4: Top 30 Addresses (June 1995 - December 1996)

Position	Nature of Address	Frequency
1	SCHOOL	25
2	SHOPPING CENTRE	22
3	MOTEL	18
4	SHOPPING CENTRE	16
5	RESIDENTIAL	11
6	SHOPPING CENTRE	11
7	SCHOOL	10
8	SCHOOL	10
9	SCHOOL	10
10	SCHOOL	10
11	COMMERCIAL	9
12	RESIDENTIAL	9
13	RESIDENTIAL	9
14	RESIDENTIAL	8
15	RETIREMENT VILLAGE	8
16	RESIDENTIAL	8
17	ENTERTAINMENT	7
18	SERVICE STATION	7
19	CARAVAN PARK	7
20	SHOPPING CENTRE	7
21	SCHOOL	7
22	COMMERCIAL	6
23	SHOPPING CENTRE	6
24	COMMERCIAL	6
25	SHOPPING CENTRE	6
26	COMMERCIAL	6
27	SPORTING	6
28	COMMERCIAL	6
29	COMMERCIAL	6
30	COMMERCIAL	*5*

***Commercial = Strip of commercial shops not situated within a shopping centre.**

Table 2 shows that with respect to residential break and enters, 91% of addresses were not victimised in the 18 month period and of the remaining 9%, nearly 70% were only victimised once. This means that nearly 32% of the total residential break and enter crimes can be accounted for by just over 1% (164) of the Police Division's addresses. However, this must be put in context: residential B&Es are relatively rare events, even in an area like Beenleigh with a higher than average incidence. Perhaps a less misleading way of putting the result is to say that 16.2% of victim addresses accounted for 31.9% of the incidents. As the number of victimisations rise, so does the imbalance. Thus 7 victim addresses, or 0.7% of all victim addresses, account for 46 incidents (3.7% of all incidents). This is a ratio of more than 5 to 1. The *concentration* of crime (mean number of incidents per address) was 1.23.

The skewness of the distribution can be expressed in another way. The chance that a residential address will be victimised is 1012/11856 = .0854. Having been a victim once, the chances of revictimisation are (1012 - 848)/1012 = .1621, about double the overall chance of becoming a victim. However, data cited by Farrell and Pease (1993) and others suggest that in many data sets the skewness is much more extreme, with the probability of revictimisation being much more than double the probability of being a victim at least once.

The relative lack of skewness may mean that many repeat victims do not report the offence to the police, perhaps because there is no insurance advantage in doing so. This possibility is discussed by Farrell and Pease (1993), and is supported by analyses of crime victim survey data reported by Mukherjee et al. (1997). These authors show that based on survey data for residential break and enter in Queensland, the proportion of victims experiencing two or more *additional* break and enters within 12 months (i.e, three or more victimisations in all) is at least four times higher than the proportion in Table 2. Consistent with this, the survey data suggest that (in Queensland) 83% of victims of a single B&E incident report the incident to the police, compared with only 55% of repeat victims.

Despite the probable incompleteness of police data on repeat victims, the data in Table 2 show that the elimination of *all* known repeat victimisation in residential properties (i.e., a 100% effective prevention program that stopped all revictimisation with no displacement) would prevent (in 18 months) 233 B&Es, or 18.7% of the total. This provides a theoretical "ceiling" on the benefits that could be obtained by focusing on repeat residential incidents using police data.

Turning to non-residential B&Es (Table 3), 25% of incidents were experienced by 11 addresses, which make up just over 1% of non-residential addresses for the Division, or 4.5% of victim addresses. The overall prevalence of B&Es in non-residential properties is much higher than in residential: 25% of properties were victimised, compared with only 9% of residences. This higher prevalence, together with the higher concentration of incidents (2.24, compared with 1.23) is what accounts for the greater degree of revictimisation in non-residential addresses. The chances of a non-residential property being victimised once (or more) are 243/983 = .247. Having been victimised once, the chances of being done again (in the period) are (243 - 141)/243 = .420. The ratio of risks is 1.7, actually *less* than for residential addresses.

If all repeat victimisations in non-residential addresses identifiable through police data were eliminated through 100% effective prevention with no displacement, 302 incidents, or 55.4% of the total, would be eliminated. Clearly the prevention potential is much greater with non-residential than residential B&E.

Hot Spots and Repeat Victimisation

Table 5 shows the relationship between the number of victimisations and whether or not the address is in a hot spot. Stable and unstable hot spots have been distinguished, to explore the hypothesis that unstable hot spots might arise from a

series of B&Es committed by the same individual or group for a period before they are apprehended.

Table 5. Hot Spots and Repeat Victimisation.

Number of Victimisations	Stable Hot Spots		Unstable Hot Spots		Rest	
	N	%	N	%	N	%
1	80	67.8	33	70.2	1040	88.2
2	28	23.7	6	12.8	98	8.3
3	3	2.5	3	6.4	34	2.9
4+	7	5.9	5	10.6	7	0.6
TOTAL	118	100.0	47	100.0	1179	100.0
AREA	0.4 sq klm		0.1 sq klm		62 sq klm	

CHI-SQUARE (6) = 85.9, *p* = .000
CRAMER'S *V* = .18

It is apparent that unstable hot spot areas do indeed have the highest number of repeat victim addresses, consistent with (but not proving) the hypothesis. Stable hot spots also have more repeat victim addresses than non-hot spot areas, and the relationship is statistically significant. The results for stable hot spots are somewhat "stronger" than Bennett's (1996) findings for Cambridge. For example, Bennett found that 19% of all addresses burgled in his hot spot in the 18 months were burgled more than once. The comparable figure for stable hot spots from Table 5 is 32%.

Time Course

The time course of break and enter victimisation in this Police Division is very similar to the time courses presented by Polvi et al. (1990) and Bennet et al. (1996), although no corrections have been made at this stage for "expected" distributions based on a Poisson process (random and independent events), nor even for diminishing risk periods inherent in any time course analysis (Anderson et al., 1995).

Because analysis is at such a preliminary stage, no details are reported here. Suffice it to say that as with the British data (Anderson et al. 1995), most repeat incidents appear to occur very quickly, many within a few days.

CONCLUSION

The concentration of targets and the poor management of public space, which includes inadequate street lighting, give rise to criminogenic factors that aid in the establishment of geographical clusters of break and enter offences. Both factors have a common cause, the type of community setting. The Police Division is semi-rural in nature and, like all semi-rural communities, its services are all provided in a small part of the town. As the surrounding area is semi-rural, there are large, open, public use areas in many parts of the Division. The installation of adequate lighting and the maintenance of public use areas (for example, perhaps having parks regularly mowed to remove shoulder high grass which hides potential offenders!) would increase the risk for offenders and the guardianship potential for property owners.

One of the hot spots, the CBD Hot Spot, has a high element of target hardening already in place. This implies that the offenders who target properties in this area may be more experienced, determined and strategic in their approach and that offenders elsewhere are more opportunistic. Until more information can be obtained through such means as CRISP records, this conjecture cannot be verified.

While repeat victimisation occurred in both residential and non-residential properties, it was more chronic in non-residential properties than residential. This reflects the higher overall incidence of B&Es in non-residential properties, incidence being the product of both prevalence (the proportion of properties victimised) and concentration (how often victimised properties are victimised). There are several possible explanations for the relatively high incidence of non-residential B&Es, and the corresponding high rate of repeat victimisation. .

First, non-residential properties are clustered together and there are many fewer of them than residential properties. On the other hand, residential properties, in a semi-rural setting, tend to be spread further. Residential properties that do experience repeat victimisation are often in close proximity to a collection of non-residential addresses.

Another factor which almost certainly influences the levels of recorded residential break and enter incidents is that of under-reporting of incidents. In particular sections of the Police Division, residents live in public housing, probably with little or no insurance. As the analyses of Mukherjee et al. (1997) suggest, chronically victimised individuals may not report break and enter offences if they feel they will gain little in doing so. Owners of retail outlets, on the other hand, are most probably insured and would be required to report an incident to claim for losses. It may well be therefore that the higher levels of repeat victimisation in the non-residential sector is a reflection of greater reporting levels by virtue of greater financial status.

A further likely possibility is that calls for service data overcount non-residential targets since addresses are imprecisely specified. “Shopping center” or “retirement village” include many individual addresses, and it is often not clear from available data whether the same individuals or businesses are involved in repeat incidents. Whether this lack of specificity matters depends on details of the immediate physical environment, the characteristics of the businesses or other targets, and the nature of the prevention strategies being planned.

The results of the time course analyses for both residential and non-residential addresses agree with overseas findings of a heightened risk period immediately following an incident. This has significant implications for law enforcement. More work needs to be done to understand why some properties experience long times between “visits” and others only short ones. Perhaps with the aid of CRISP data, and its information regarding items taken, a better predictive model can be developed. If properties that experience short times between victimisation s tend to have little taken on the initial incident and much more on the second, then that implies some sort of rationality on the part of the offender (perhaps he uses the first break and enter to “scope” the place and the second one to clean it out). This type of information is not available on IMS records but may be available from CRISP data.

In time, CRISP will be used to complement the calls for service data already used. Although not as accurate in terms of address quality, CRISP provides a different type of information, such as modus operandi, items stolen, and point of entry. By combining the two sets, CRISP and CAD, a comprehensive and potentially powerful tool is available for analysing crime incidents.

The finding that hot spots flare up because of repeat victimisation is important, and suggests that police strategies should be developed to nip “serial break and enter” in the bud. However, it is also clear that some spots are hot because of the type of area they are, and that the whole area, not just repeat addresses, should be the focus of attention.

In summary, at least four types of prevention strategies are suggested by the research. First, the probable high level of under-reporting of repeat residential victimisation to police suggests that police should keep in touch with *all* households in an area known to have been broken into in the past year or so, in order both to provide support and suggest prevention strategies, but also to ascertain whether they have been victimised again but have not reported the incident(s) to the police. This would serve the dual purposes of improving the quality of police data (and hence increasing the effectiveness of police responses designed to prevent repeat break and enters) and also providing a valuable public service.

Secondly, and consistent with the overseas research (e.g., Farrell and Pease, 1993), preventive measures need to be put in place very quickly after the “first” B&E. This may involve “cocoon neighbourhood watch,” temporary installation of silent alarms, or intensive efforts to apprehend the offenders, perhaps in extreme cases by “lying in wait” for a day or two. The role of the police is vital here. Our results

suggest that the primary targets, at least in areas like Beenleigh, should be non-residential properties, especially schools.

Thirdly, crime prevention through environmental design (CPTED) needs to be taken very seriously as a strategy. Open space with unlit tracks providing access to the rear of properties has been cited in this paper as a problem, but that needs to be verified through more intensive analysis of local conditions. In addition, the amenity of the area needs to be kept in mind. Open space with trees can be a real bonus in terms of lifestyle, illustrating the familiar point that crime prevention cannot be divorced from other aspects of social policy and planning. CPTED thinking should be incorporated in an overall plan for the development of the area that gives due weight to the cost and suffering caused by repeat victimisation for B&E.

Finally, the reasons why some areas are hot, regardless of the incidence of repeat victimisation within those area, need to be better understood. Bennett's (1996) research suggests that maybe half of all the incidents in these areas are caused by a small group of offenders who live nearby. These areas (and the offenders) could probably be characterised as "high risk" or multiply disadvantaged (Vinson and Homel, 1975), and prevention thinking must therefore take account of the marginalisation and deprivation of the community as a whole, probably exhibited through drug abuse as well as crime. Prevention is not just about "designing out crime" or detecting and incapacitating repeat offenders; it is also about understanding and dealing with some of the social problems that are the primary generators of crime.

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