



No. 213

Policing Urban Burglary

Jerry Ratcliffe

Burglary is a significant issue in most urban areas and many agencies are involved in efforts to combat the problem. The police are one such agency that relies on accurate and rigorous analysis of crime and offender data to focus their available resources. The Australian Institute of Criminology has been working with a number of police services to better understand patterns of offending and criminal behaviour across Australia.

This paper presents a spatial and temporal analysis of burglary patterns in the Australian Capital Territory and then discusses issues surrounding Operation Anchorage, a burglary reduction operation recently conducted by the Australian Federal Police. Some of the complexities in developing an effective crime reduction strategy are discussed in relation to both Operation Anchorage and other policing initiatives.

Adam Graycar
Director

The Problem of Burglary

Burglary is one of the most pervasive crime problems in Australia. ("Burglary" is also sometimes referred to as "unlawful entry with intent" or "break and enter". Here the term is also taken to include attempted burglaries.) The annual financial and economic costs of burglary to Australia have been estimated in excess of \$1,000 million (Walker 1997) and this value does not include either the psychological effect on victims or the impact of increased security measures upon the broader community. The International Crime Victimization Survey (van Kesteren, Mayhew & Nieuwebeerta 2000) attributed Australia with the highest burglary victimisation level of 17 industrialised countries, including the United Kingdom and the United States. The same report found that over 30 per cent of Australians felt that they were "likely" or "very likely" to be burgled in the next 12 months. In 1999 more than 60 in every 1,000 Australians were the victims of a property crime (SCRCSSP 2001) and approximately one-third of those were burglaries (ABS 2000).

Within the Australian Capital Territory (ACT), which is dominated by the city of Canberra, the Australian Federal Police (AFP) have responsibility for policing the local burglary problem. Recent high levels of burglary in Canberra have necessitated the implementation of Operation Anchorage, a burglary reduction program. This is the latest in a series of crime reduction strategies conducted in the city.

This *Trends and Issues* paper describes patterns of urban burglary based on data from the ACT. It highlights where the situation in Canberra may be similar and different from patterns in other urban areas. The paper then discusses the implications for burglary prevention in the ACT arising from Operation Anchorage and the complexities and broader issues of assessing the impact of operational policing initiatives.

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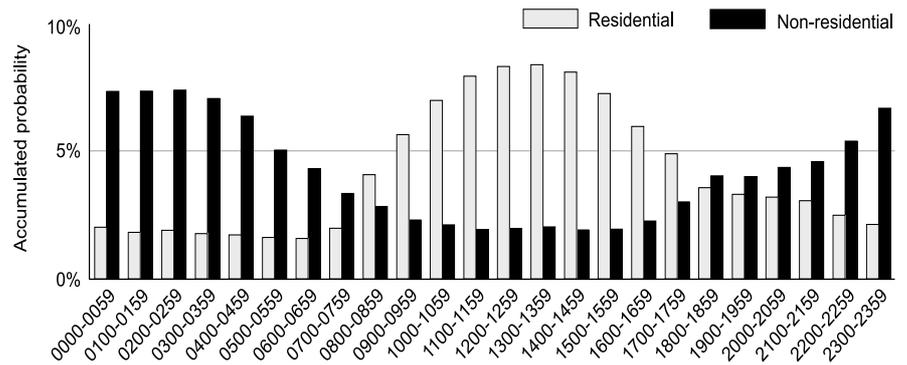
Burglary Patterns

The most recent figures issued by the Australian Bureau of Statistics show that rates of residential burglary in the ACT were the third highest for a State or Territory in Australia for 2000 (behind Western Australia and the Northern Territory) at 2,494 per 100,000 population (ABS 2001). This was an increase of 75 per cent since 1997. The following discussion is drawn from analysis of burglary data obtained from the PROMIS database of the AFP for the years 1999 and 2000. Over the two-year period, 70.3 per cent of burglaries were classified by the AFP's ACT region (hereafter "ACT police") as occurring at dwellings (residential), 9.6 per cent at shops and 20.1 per cent at premises classified as "other". This last category includes churches, sports clubs, schools and other educational establishments. Thirty per cent of burglaries therefore occurred at non-residential locations.

Residential and non-residential (shops and "other") burglary patterns can be distinguished by their spatial and temporal characteristics. Because most burglaries occur when property owners are not present, the police are limited to recording a time span during which the offence occurred, usually recorded as a START and an END date and time.

The time span between the START and END can range between a few minutes if the victim left their property to go to the shops, to days or weeks if the owner has been on holiday and returned to find their property burgled. The time span between the START and END times recorded by the police can tell us something about the routine activities of the victims, and from this it is possible to estimate a probability of offence day and time by aggregating a number of offences, examining the time span of each and distributing the probability of the offence time between the start and end time. This process is explained in greater depth elsewhere (Gottlieb, Arenberg & Singh 1998; Ratcliffe 2000).

Figure 1: Time risk of burglary in the ACT



Source: PROMIS database, Australian Federal Police

Using this Aoristic analysis technique it is possible to generate a graph of the probability of offence times. As can be seen from Figure 1 (derived from over 14,000 burglaries over two years), the highest probability for residential burglaries is between 8am and about 6pm. This is the period when most people are at work. A similar analysis of days of the week indicates that residential burglary levels are lower over the weekend. As the data are drawn from START and END times, it is clear that the database is recording the times when victims left their homes in the morning and returned at the end of the day.

The temporal pattern for non-residential burglary is almost exactly reversed. Non-residential burglaries increase over the weekend and overnight when many commercial premises, schools and colleges are unattended. Given the work patterns of most individuals, and the operating hours for the majority of businesses in Australia, it would appear reasonable to conclude that these patterns are mimicked in other urban environments. With this clear demarcation of burglary type by temporal pattern, it is clear that the spatial and temporal patterns of residential and non-residential burglary should be examined separately.

Spatial distribution is one area where some variation may occur between urban burglary patterns. Canberra has a population of approximately 320,000, and a significant percentage of the workforce (about 40 per cent) is employed in the public sector. The regular working hours associated

with public sector work help to account for the temporal burglary patterns shown in Figure 1.

There are just over 120 suburbs in Canberra, less than one-quarter of which (25) are the victim of half the residential burglaries. Hotspots include the more established suburbs of the inner-north of the city and the inner south-east. There is a far greater spread of residential burglary activity across Canberra than non-residential burglary and the most targeted regions include both old and more recently developed suburbs. The housing characteristics of the residential burglary hotspots vary considerably across the city, suggesting that the effectiveness of generic Territory-wide crime prevention initiatives may be limited.

Eleven suburbs accounted for over half of the non-residential burglaries in the ACT and the four commercial centres (Fyshwick, City, Belconnen and Phillip/Woden) were highly targeted (Figure 2). Architect Walter Burley Griffin's original 1913 plan for the layout of Canberra allocated suburbs as commercial, public sector or residential areas. This demarcation of residential and commercial land use is evident in the distribution of burglary. The concentration of commercial premises into particular areas of the city, a result of Griffin's urban design, has also concentrated the commercial burglary activity. This concentration of business premises is an unusual feature of Canberra and the concentration of non-residential burglary is a feature that may not be replicated in other cities. In some respects

this concentration is advantageous in that it provides opportunities for targeted crime prevention activity. However, it also provides an “Aladdin’s Cave” for the offender.

Burglars

Profiles of arrested burglary suspects were obtained from the AFP’s PROMIS database for 1999 and 2000. Extrapolation of sample data from over 400 cleared (solved) burglaries (involving about 350 individual burglars) gives an outline of the offender pattern. It must be noted that the following description of burglary offenders is based on the sample of arrested suspects. Although there is no indication that this sample is unrepresentative of the larger burglary-committing population, there is a body of research which suggests that young people come to greater notice of police as they are more often in groups and have less access to private space than adults. The possibility of over-representation of young people should therefore temper interpretation of the following description of arrested burglary suspects.

The mean age of an offender is 19.5 years (median 16 years) for residential burglaries and slightly higher at 20 years for non-residential burglary (median 18 years). The mean residential burglary offender figure is skewed, however, by a small number of older offenders. One-quarter of detected residential burglaries are committed by offenders under 16

years old, and half are committed by offenders under the age of 18. Eighty-two per cent of detected burglaries are committed by males. Seventy per cent of burglaries are committed by lone offenders with a further one in five being committed by two offenders working together. A small minority are committed by offenders working in larger groups.

(Some caution should be applied in interpreting these figures. The recording of numbers of offenders relies on either capture of offenders at the time of offence or individuals admitting to police the involvement of others. These figures are therefore likely to have an element of unreliability.)

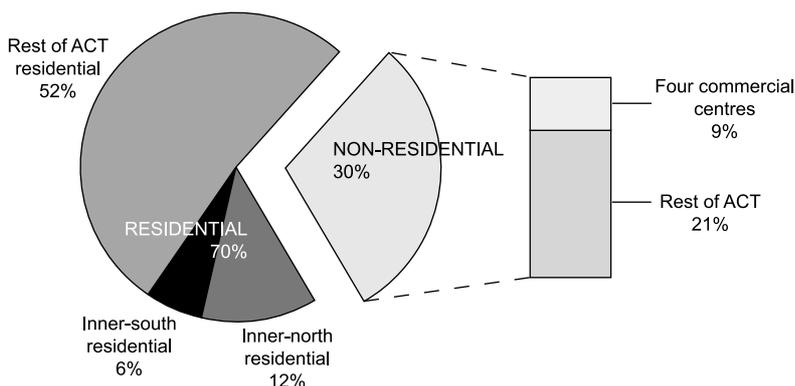
The average journey from the offender’s home to the burglary target is five kilometres for residential burglary offenders and 4.9 kilometres for non-residential burglary offenders. This figure agrees with broad findings from the United Kingdom and the United States (Wiles & Costello 2000; Rossmo 1995) and is slightly longer than those reported by Barker (2000). Again, however, this figure is skewed by a small number of offenders who travel relatively long distances. One-third of burglaries are committed by offenders who have travelled less than 1,500 metres from their home. Surprisingly, considering the unique geography of the ACT and the segregation of industrial and residential regions, this figure is the same for non-residential burglaries. This can be explained by a substantial number of non-dwelling burglaries within residential suburbs at shops,

schools and community buildings. Less than half the burglaries are committed by individuals who have travelled more than three kilometres. This finding corroborates the research mentioned earlier and has a theoretical basis in the distance decay model of environmental criminology (Rengert, Piquero & Jones 1999).

By selecting burglary targets far from home, offenders are increasing both the risk of capture and the effort required to commit the offence and return stolen property to their base. By being further from home they are also more likely to be in unfamiliar suburbs—areas in which they feel less comfortable (Brantingham & Brantingham 1981; Rossmo 1995). This sense of unease can make offenders feel out of place in a suburb that has different social characteristics, making them “stand out”, and can reduce their knowledge of potential escape routes. Proximity to home or a similar “anchor” provides less risk and greater territorial familiarity. The reduction in criminal activity further from home is known as the distance decay effect.

The problem with committing offences too close to home is the possibility of being discovered and recognised by neighbours. The desire to avoid detection and recognition in the immediate environment creates a buffer zone around the home address in which offending is less likely. Outside this buffer zone the distance decay effect occurs (Rengert, Piquero & Jones 1999). Of the ACT residential burglaries committed by arrested offenders who apparently acted alone, 72 per cent of offences were at a location in a different suburb from the offender’s home. This figure rises to 79 per cent for non-residential burglary. This can probably be explained by the *buffered* distance decay function (Rengert, Piquero & Jones 1999; Rossmo 1995). Local, inter-suburb travel is relatively easy in the ACT. Many housing estates are on the edge of suburbs in Canberra and an offender does not have to travel far to venture into a neighbouring area.

Figure 2: Burglary in the ACT, 1999–2000



Source: PROMIS database, Australian Federal Police

Minor geographical idiosyncrasies of the ACT aside, the general patterns of offender demographics and journey-to-crime characteristics described here are likely to be similar to that of other Australian urban centres. Residential burglaries are usually committed between Monday and Friday, during working hours, by mainly juvenile male offenders who live relatively close by. Non-residential burglaries are also committed by young offenders, either overnight or at weekends. Offenders usually work alone or in pairs and favour residential burglary over other types of break and enter activity.

These offender characteristics can be explained by a number of relevant environmental criminology theories. Offenders and targets usually come into contact as a result of their daily patterns of activity (Routine Activities Theory). This means that offenders often find their targets in areas that they frequent through the course of other activities such as going to and from school or work. Indeed all that is often required for a criminal act to occur is the presence of a motivated offender, a suitable target and the lack of a suitable guardian (Cohen & Felson 1979). Some locations are also targeted more than others due to environmental factors that increase their vulnerability, such as a lack of surveillance from neighbours or the presence of vegetation near the rear of a property that might hide a burglar. Efforts to correct these criminogenic factors have been termed Crime Prevention Through Environmental Design (CPTED), a sub-field of Situational Crime Prevention, and this is an area that has seen increased police involvement in recent years.

Policing in the ACT

Responsibility for combating the burglary problem in the ACT rests predominantly with the AFP. Section 8 of the *Australian Federal Police Act 1979* charges the AFP to provide policing services to the ACT. In 1990 the Commonwealth Minister for Justice and the

Attorney-General for the ACT signed an arrangement that transferred responsibility for policing services from the Federal Government to the ACT Government, subject to an annual review. Each year this agreement stipulates targets that the ACT police must meet. For example, for the financial year 2000–01, the ACT Policing Purchasing Agreement included targets of:

- 3,800 person-days spent on community crime awareness and prevention programs;
- 105,000 random breath tests conducted;
- a five per cent increase in the number and quantity of drug seizures;
- attendance at 2,800 traffic accidents (although this number seems a little out of the control of the ACT police); and
- 100 per cent of crime prevention programs evaluated against set objectives.

This last point will be returned to later.

Within these rigid parameters the ACT police had, as of June 2000, 584 sworn officers and 86 unsworn personnel (AIC, unpublished data). This is the lowest rate of sworn officers to population in Australia and the 2001 Report of Government Services shows that although the population of the ACT has increased, the police-to-population rate is at its lowest for seven years. It should be noted, however, that the agreement between the AFP and the local government does not stipulate a certain number of police officers for the Territory. Also, the number of officers will have fluctuated since June 2000.

Operation Anchorage

In response to the high levels of burglary in Canberra, ACT police began Operation Anchorage at the end of February 2001. This was the latest in a number of police crime reduction strategies (previous operations included “Chronicle” and “Dilute”). Operation Anchorage was a dedicated burglary reduction initiative with four teams of about 10 to 12 investigators supported closely by six intelligence analysts,

surveillance teams and, where necessary and available, other operational support (such as traffic police). Given the number of police dedicated to policing the ACT, an operation supported by about 10 per cent of all available officers constituted a significant investment by the ACT police. Inevitably, with a force strength of only a few hundred officers, a number were moved into the operation from other duties. The teams concentrated their activities on a number of recidivist offenders using a variety of tactics and a broad mandate. Initial successes were recorded as the teams were directed by intelligence activity to the most problematic areas and the most active offenders.

In addition to the deployment of investigative teams, a number of other strategies were incorporated into Operation Anchorage. These included use of traffic police for stops and random breath tests in high burglary areas, dedicated surveillance teams attached to the four investigative teams, and increased opposition to bail for persistent offenders.

At the start of Operation Anchorage there was a drop in the number of recorded burglaries within the ACT (Figure 3). The short-term effect on the burglar community in Canberra was evident and it is reasonable to conclude that police were having an impact on criminal behaviour. The difficulty for police in these circumstances is sustaining pressure on the local criminal element and maintaining gains in crime reduction in the long term. Given the considerable investment by ACT police in Operation Anchorage, the limitations of available resources to support a protracted operation have become evident over time. Large numbers of arrests over a short period dramatically increase costs due to overtime payments. They also increase the burden on the local criminal justice system and add to the stress levels of staff and officers required to work long hours. Some weeks into Operation Anchorage it was necessary to suspend the operation for a week to allow

officers time to complete inquiries, investigations and paperwork, and have some leave. This was sensible management but highlighted the difficulties of maintaining pressure on the criminal community with limited resources. Interestingly, the same week was also a period marked by an increase in reported burglaries.

Figure 3 shows weekly levels of reported burglary in the ACT from January 1999 to April 2001. (This data would benefit from an interrupted time-series analysis, however space does not permit such analysis here.) The timings of previous crime reduction operations are shown along with the start date for Operation Anchorage. Figure 3 would suggest that the previous operations, with their primary focus on burglary, did have an effect on the levels of burglary but their long-term impact was not sustained. Given that Operation Anchorage only finished at the end of June 2001, the long-term influence of the operation is not yet measurable. However, based on the increase in burglary levels after the previous operations, it would appear that a long-term reduction in burglary beyond a few months post-operation might not be likely. The impact of all three operations is the subject of ongoing study by the Australian Institute of Criminology in conjunction with the ACT police and will be the subject of a future paper.

It is clear that without substantial increases in personnel numbers and financial support, initiatives such as Operation Anchorage will have only a finite

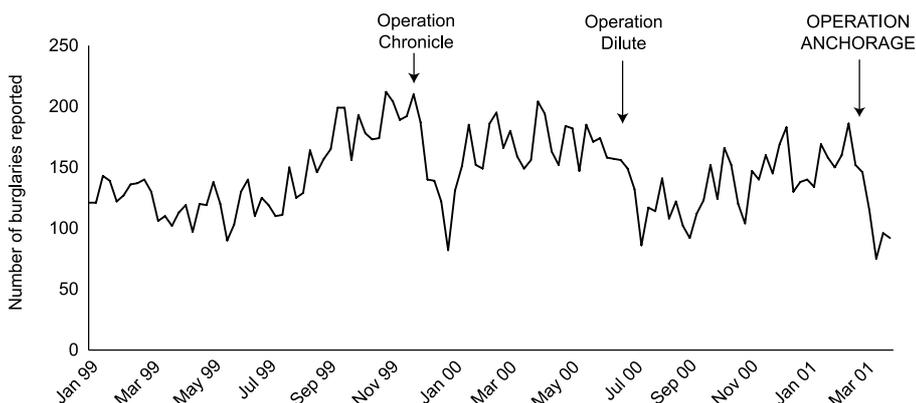
lifetime. In the short term, factors that impel individuals to commit crime rarely change and neither do the factors that affect the risk of victimisation. The difficulty for police in this situation is to determine a longer-term crime reduction strategy that they can sustain within financial and operational limits. Within the ACT, a reasonable long-term strategy might be to identify and employ those components of the operation that had a large impact on criminal activity but a small burden on the police service. The number of different approaches employed during Anchorage complicates the identification of potential “value-for-money” components. While it is possible to calculate the cost of each approach, it may be impossible to isolate the impact and estimate the effectiveness of individual measures. Indeed, it is certainly possible that some law enforcement tactics may only be effective in conjunction with certain crime prevention measures. Identification of individual or combined strategies in the “large impact–small burden” category may not be possible from a post-operation assessment.

The complexities in assessing police strategies are evident from the recent work of the New South Wales Bureau of Crime Statistics and Research (Chilvers & Weatherburn 2001). Their evaluation of the Operations and Crime Review (OCR) panels of the New South Wales Police Service is a thorough and complex statistical analysis of long-term crime causation, and arrest and burglary figures spanning a number of

years. Although the Bureau reported that the introduction of OCRs and the targeting of repeat offenders appeared to reduce crime, the fall in crime was not sustained (BOCSAR 2001). What was strongly suggested to have impacted on crime in one period of time did not account for the increase in crime at a later time, and it is suggested that the strategy of targeting repeat offenders may only produce a temporary suppression of crime (Chilvers & Weatherburn 2001, p. 9). Under these circumstances, the extraction of the more effective strategy to influence best practice in crime reduction may be difficult. The New South Wales Bureau of Crime Statistics and Research and the New South Wales Police Service therefore face a similar difficulty to the ACT police. In the ACT, a longitudinal study of the effects of Operation Anchorage will undoubtedly be of value, but will be complicated by the influence on crime statistics of changing tactics due to Operations Chronicle and Dilute.

With the requirement mentioned earlier that 100 per cent of ACT police crime prevention initiatives be evaluated against set objectives, there are additional pressures placed on ACT police. Unsuccessful projects are unlikely to be viewed favourably, either internally or externally, and evaluating police performance is still a sensitive issue (Laycock 2001, p. 71). Researchers struggle to explain to operational practitioners why one thing works this month and is ineffective next month. Practitioners want clear answers but, without a thorough analysis, these can be elusive. ACT police recognise these complexities and are working with the Australian Institute of Criminology to develop an evaluation strategy for future operations.

Figure 3: Weekly burglary rate for the ACT



Source: PROMIS database, Australian Federal Police

Conclusion

While long-term crime reduction may not be achieved, there are a number of positives evident from Operation Anchorage. The term “intelligence-led policing” is used

and abused widely, often with little consensus as to its meaning. With Operation Anchorage, the ratio of intelligence analysts to investigators has been relatively high and Anchorage has attempted to employ a more objective method of target selection for police operations. This is closer to the original meaning of intelligence-led policing than much policing activity elsewhere. Operation Anchorage was put together at relatively short notice and it is clear that the police are capable of responding to local issues and providing a dynamic short-term response to a local crime problem. What is also clear from Anchorage is the intractability of maintaining a level of police activity high enough to sustain pressure on a significant area of criminality.

Intelligence-driven strategies have their origins in the financial constraints that are a reality of modern policing (Ratcliffe, in press). Significant additional personnel or resources are unlikely and the absence of a long-term burglary reduction strategy is perhaps a reasonable criticism of Operation Anchorage. As Weatherburn (2001) has pointed out, the causes of crime are complex. Factors that increase the risks of criminal activity include the quality of parental upbringing, peer influence, reduced levels of informal social control and poor urban design: all factors over which the police have little or no influence. Fortunately other organisations and local government bodies can influence these areas. The employment of non-law-enforcement organisations towards a long-term crime reduction goal may be achievable within the ACT by targeted engagement with local government, or by what has been termed "third-party policing" (Buerger & Mazerolle 1998).

There is considerable scope for police in the ACT and beyond to engage in a collaborative policing strategy. As the central "gatekeepers" (Ericson & Haggerty 1997) to crime-related information, they can offer an analysis of crime patterns and distributions unavailable to other organisations. The police can be

effective at short-term crime reduction tactics. The challenge for police is to coordinate the development of a long-term strategy that might involve outside partners. While these are under discussion and development, the police are ideally suited to employing short-term tactics to fill the implementation gap. Stakeholders from outside agencies involved in strategic planning must, however, be reminded that if a problem goes away due to immediate police action it is only a temporary solution (as can be seen with operations in the ACT). Using a short-term fix in the medium or long term will often be unsustainable in terms of finances and personnel, and may rob a police commander of the flexibility to use resources effectively.

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