

# PHYSICAL PLANNING PLANNING AND CRIME IN CANBERRA

John Walker

Australian Institute of Criminology

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### Introduction

In April 1980 the National Capital Development Commission (NCDC) conducted a twenty per cent sample survey of standard houses in the 'inner' northern suburbs of Canberra (see map - Figure 1) primarily as an aid to their planning of community facilities in these suburbs. The NCDC's Urban Economics Branch and the Australian Institute of Criminology saw this as an opportunity to research crime in a planned environment - a topic of long-standing interest to the Institute's Director, Mr W. Clifford. In addition to seeking demographic data the mail questionnaire (see p. 21) asked residents their opinion of the level of crime in their suburb, and their reactions to and experiences of crime in the preceding twelve months. Respondents were also asked to choose from a list of physical planning factors which issues (if any) they thought were particularly related to crime in their suburb. Almost one-third of the 2000 mailed questionnaires were returned.

Canberra is a unique city, particularly in Australian terms, because of its comprehensive physical planning system which is controlled by the National Capital Development Commission. New suburbs are usually developed quickly and do not remain long as extensive building sites. The result is that a very large percentage of the residents of any Canberra suburb move in during the suburb's three-to-five year development phase, and since typical new-home buyers are young

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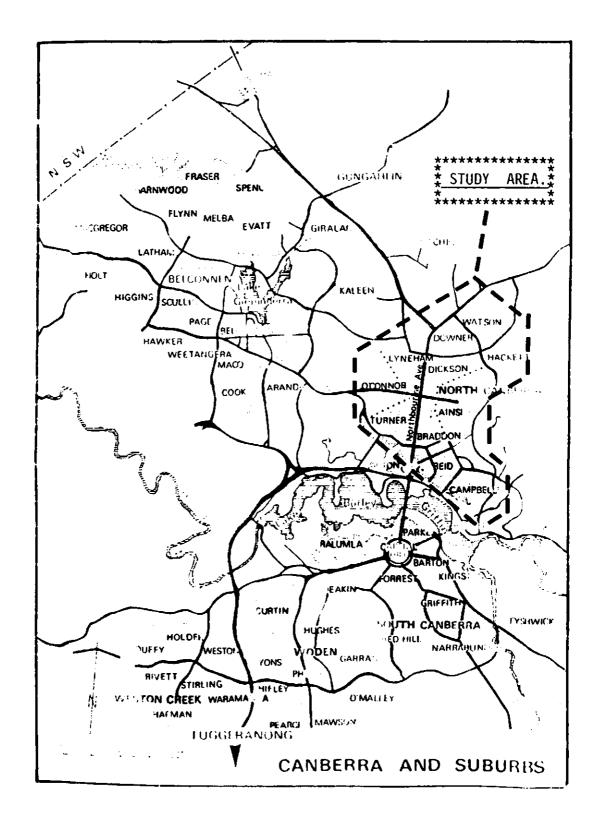


Figure 1: STUDY AREA LOCATION

couples or families, where the adults are likely to be in their 20's or 30's, this has a profound effect upon the suburban demography for the subsequent decades.

Other characteristics which make Canberra different from other similarly sized cities of Australia include the hierarchical nature of the road systems, where very few residential or non residential blocks have a frontage onto a through-route, and the hierarchy of retail and recreation centres, where, for example, each suburb has one small centrally located shopping centre, each group of suburbs has a major district centre and so on.

The results which follow suggest that these policies have a significant and measurable effect, if not on the amount or level of crime but certainly on the type and distribution of crime in Canberra.

## Residents' Attitudes Towards Crime in Their Suburb

Question I was designed to divide the suburbs into those of good, mixed or ill-repute as judged by their own residents. The question asked 'Is the level of crime and anti-social behaviour in your suburb worse than elsewhere in Canberra?' In fact this original objective was not achieved at all but, as a sort of consolation prize, it threw into prominence a significant dichotomy in the attitudes of the individual respondents. The initial responses were as follows:

	Worse	Not Worse	Don't Know (includes non response)	Total
Number of responses	16	622	001	738
Percentage of responses	2.2	84.3	13.6	100.0

Only 16 people believed their suburb has worse levels of crime and anti-social behaviour than elsewhere in Canberra. Those who did so - only 2% of the respondents - are consistently different from the others in their assessment of the crime problem, their reaction to it and their experience of it. For example, when their responses to subsequent questions were analysed it was found that these sixteen respondents -

- were 50 per cent more likely to feel unsafe in their own homes than the others,
- accorded significance to twice as many planning factors as did the others,
- have resorted to more crime-preventive measures than the others over the last 12 months,
- have been victimised more than once in the last 12 months in seven cases, whereas the majority of the other respondents had not been victimised at all in that time,
- have suffered 35 incidents of crime in the last 12 months 31 of which were vandalism or theft of property around the home - a far greater incidence of these particular crimes than suffered by other respondents,
- have a tendency to nominate fellow-residents of their suburb, or the number and location of government houses, as responsible for the level of crime.

In geographical terms it is not so easy to find significant differences. Five of the 16 who are unhappy about crime levels come from the suburb of Ainslie (5.2 per cent of Ainslie respondents), four from Downer (4.5 per cent), three from O'Connor (3.0 per cent), two from Watson (2.7 per cent), and one each from Reid (2.5 per cent) and Lyncham (2.9 per cent), but there is no obvious planning or demographic characteristic which unites this group of suburbs. Variables such as distance from the Civic city centre and the distribution of flats, government houses, hostels, high schools, sports, shopping and social

facilities and teenage children, all fail to explain the dichotomy.

In terms of personal characteristics, chi-squared tests show that the 16 households are <u>not</u> significantly different from the rest of the respondents in age structure, sex composition or State/country of previous residence. Household structure was significant at the .001 level, however it shows simply that the 'couple plus 2 children' group is over-represented at the expense of the 'couple plus 3 or more' group, and the author can see no reason why this characteristic might contribute to the jaundiced views held by the group of 16 towards crime in their suburb.

So, while the characteristics of these 16 respondents are interesting, they seem to tell us far more about the individuals than about planning or crime in their suburbs. The most statistically valid contrast we can make, of value to planners, from the variables we have been able to consider is that the extent of vandalism appears to be the most significant determinant of the resident's perception of crime levels. Eight, or 50 per cent of those unhappy about crime levels in their suburb have suffered (an average of three) incidents of vandalism, while overall only 82, or 11 per cent, of respondents were vandalised (an average of 1.5 times each). The probability of this being a random occurrence is far less than one in a thousand.

In connection with this, it is interesting to note that

Canberra's planning regulations generally prohibit front fences, and

that this is a recurrent topic of public debate, yet only one of these

respondents ranked 'design of your suburb - e.g. street layout, open

space, etc.' better than fifth out of ten planning factors. The respondent who ranked it third had been vandalised nine times in the last twelve months yet had not reported a single incident!

Acts of vandalism are occasionally committed in full public view and the results are often left for everyone to see, whereas virtually all other crimes which occur in residential areas affect only those people directly concerned, and have little public impact unless they are serious enough to attract media coverage. It would not be surprising therefore to find that the perceived incidence of vandalism is an important determinant of residents' perceptions of the level of crime, and to the extent that planners can prevent vandalism (e.g. by use of vandalproof materials, avoidance of unlit public spaces, etc.) they may have an important beneficial effect on local perceptions of crime.

Before leaving the analysis of these 16 respondents, it is worth comparing their small numbers with results to similar questions overseas. Van Dijk<sup>2</sup> reported that 'it has appeared from several American studies that three-quarters of respondents think their own neighbourhoods to be relatively safe (McIntyre 1967, Gibbons et al 1972)' and even that 'residents of neighbourhoods with an extremely high crime rate think favorably of the level of crime in their neighbourhood (Rhodes 1977)'. This relatively rose-coloured view of one's neighbourhood was also found in questions about perceptions of the growth of crime. In Stuttgart, 20 per cent were of the opinion that crime had increased locally while 83 per cent of the same respondents thought it had increased nationally (Stephan, 1976 cited Van Dijk). In Switzerland, comparable figures were 19 per cent and 70 per cent

respectively (Stephan, 1976). It would seem, therefore, that there may be a tendency for residents to see their own neighbourhood through relatively rose-coloured glasses, but it would also seem that Canberra's 98 per cent level of satisfaction may be unusually high.

### House Design is Unimportant

Subsequent survey questions concentrated on residents' experience of, reaction to and opinions as to the causes of crime, and a number of interesting points arose. Question 2 asked 'With respect to any fears of criminal or anti-social behaviour, does the design of your dwelling make you feel safer?' 676 responses were received, split as follows:

	Yes	<u>No</u>	Unimportant
Number of responses	146	353	277
Percentage of responses	21.6	37.4	41.0

In retrospect, this question may have been poorly phrased and consequently misunderstood, but to the extent that the responses can be interpreted it is clear that the majority of respondents do not think that the design of their house offers much security from crime. As noted previously only standard houses were included in the NCDC's survey, so that the residents of medium density residences have been excluded. The 16 respondents discussed above were significantly more likely than average to answer 'No' (56 per cent) and less likely to answer 'Yes' (13 per cent) to this question. No significant differences were found between responses from different suburbs. Unfortunately no house design characteristics were available from survey and it could be valuable to include such questions in future surveys.

### Apportioning Blame

Question 3 was aimed at identifying factors, relevant to physical planning of the suburbs, which may have an influence on crime in these suburbs. Many other factors which may be deemed relevant such as level of education, ethnicity, and employment levels were omitted. Respondents were asked 'Which of the following factors mostly influence crime and anti-social behaviour in your suburb?' 585 persons responded to this question, some ranking all nine factors listed, others ranking only those they thought to be significant. Analysis of both classes of responses gives similar indications of which factors are thought to be important. Table 1 summarises these results, listing the factors in descending order according to the number of respondents who thought they were worth citing. The table shows however that, apart from 'the type of people who live in the suburb' which was a clear winner, and 'too many facilities' which came a clear last, preferences for the other factors were very evenly distributed.

There were significant differences in the responses by suburb — for example the residents of Braddon, an inner suburb adjacent to the city centre much used for free street-parking and an area of hardware and motor trade outlets, cited 'type of people who visit the suburb' and 'location relative to Civic' over 20 per cent more than average. To illustrate perhaps the opposite end of the scale, residents of Watson, a relatively new residential suburb with a high percentage of flats and teenagers, were over 10 per cent more likely to give significance to 'type of people who live in the suburb' and 'shortage of community facilities'. Residents of Reid, an older inner residential suburb were

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Table 1: PLANNING FACTORS INFLUENCING CRIME AND ANTI-SOCIAL BEHAVIOUR

Physical planning	Number of respondents regarding factor as significant				_		on of r	_		
factor	enough to be ranked	lst	2nd	3rd	4th	5th	6th	7th	8th	9th
Type of people who live in the suburb	311	59.2	13.8	<b>6.1</b>	5.5	4.8	1.6	1.6	3.5	3.9
Type of people who visit the suburb	249	22.5	25.3	16.1	9.6	9.2	7.2	4.4	2.8	2.8
Shortage of community facilities	229	24.9	16.6	15.3	8.3	6.1	8.7	9.2	6.6	4.4
Design of suburb	215	16.3	14.9	13.0	14.4	10.2	7.9	9.3	7.9	6.0
Age of suburb	214	15.9	19.2	14.5	8.4	9.3	12.6	9.3	4.7	6.1
Location relative to Civic	211	19.4	16.1	10.4	11.8	10.9	10.9	8.1	7.1	5.2
Number and location of flats	211	13.3	20.9	15.6	10.4	9.0	10.0	10.4	7.6	2.8
Number and location of government houses	200	12.0	15.5	10.5	9.5	9.0	9.0	8.0	12.5	14.0
Too many community facilities	170	7.6	8.8	5.9	8.2	7.1	5.3	11.2	17.6	28.2

10 per cent less likely than average to specify <u>anything</u>, except 'location relative to Civic'. As we would expect, the level of citation for 'location relative to Civic' is fairly highly correlated with travel time from Civic (taking into account traffic lights and speed restrictions), although the small suburb of Lyneham rates this factor much lower than its neighbouring suburbs of O'Connor and Dickson. When these results are compared with the responses to Questions 4 and 5 a consistent pattern emerges, as we shall see below.

### Reactions to Crime

Question 4 was included to discover if significant differences exist in recent patterns of reaction to crime and anti-social behaviour. Respondents were asked 'Have you done any of the following to protect yourself and your property against crime, within the last year or so?'

563 responses were received, distributed as follows:

298 respondents (52.9 per cent) said they 'lock doors and windows'

244 respondents (43.3 per cent) said they 'lock or garage the car'

226 respondents (40.1 per cent) said they 'insure against theft or burglary'

212 respondents (37.7 per cent) said they 'leave lights on, or installed new lights'

156 respondents (27.7 per cent) said they 'put valuables in a safe place'

87 respondents (15.5 per cent) said they 'installed new alarms, locks or chains'

73 respondents (12.9 per cent) said they 'changed their activity pattern during the night'

36 respondents (6.4 per cent) said they 'bought a watchdog for protection'

30 respondents (5.3 per cent) said they 'changed their activity pattern during the day'

9 respondents (1.6 per cent) said they 'bought a weapon for protection'

To the extent that some of these actions are habitual for some people, there is room for ambiguity in their responses, however, many

people wrote in 'always do this' and they have been excluded from the results. Furthermore, certain of these actions, for example, buying a watchdog for protection or buying insurance cover need to be repeated occasionally anyway — even watchdogs don't live forever! So this question cannot determine a level of reaction to crime or even whether there has been an <u>increase</u> in the percentage of households taking these precautions. Even supposing these percentages are an accurate reflection of the numbers of people who, last year, became sufficiently frightened of crime to take additional precautions about it, we could not say whether it shows an increasing level of fear of crime since there are no baseline measurements with which to compare.

What we can do with the responses to this question is to see if they differed either from suburb to suburb, or when related to any other variable. The results are undeniably significant. In no fewer than three of the precautions listed, the residents of Ainslie, Braddon and Reid are the most likely to have taken extra precautions - they are 'changing nightly activity patterns', 'leaving lights on' and 'locking or garaging the car'. (Reid is however something of an enigma, since comparatively very few of its residents claim to have 'changed daily activity patterns' or 'installed new alarms, locks or chains'.) At the other end of this scale we find O'Connor, Lyneham and Watson where, in several of the categories of precautionary measures, the numbers of residents taking action is particularly low. Watson residents, for example, generally feel that 'locking doors and windows', 'locking or garaging the car' and 'insuring against theft' are all the precautions they need to take. O'Connor and Lyncham residents even pay less than average attention to these simple precautions.

# (A) Question 4 Responses: (Reaction to perception of crime)



Key:

Low percentage buy weapons; low Cluster 1: percentage fear the streets at 

night; high percentage fit alarms;

high percentage buy insurance, etc.

Cluster 2:

High percentage buy weapons; high percentage fear the streets day and night; high percentage leave

lights on.

Cluster 3: 

Low percentage take precautions

of whatever kind.

### (B) Question 5 Responses: (Incidence of crime)



Key:

 $\overline{\cdots}$ 

Cluster 1: High incidence of Break and Enter; high incidence of Theft

from inside the house.

Cluster 2: High incidence of Theft from

outside the house.

Cluster 3: Relatively high incidence of

Vandalism.

Figure 2: RESULTS OF CLUSTER ANALYSES OF RESPONSES TO QUESTIONS 4 AND 5.

precautions such as buying weapons or having to change activity patterns are not particularly surprising since many writers have found an inverse relationship between fear of crime and the level of education, and a positive relationship between fear of crime and age. Canberra's population is, especially in the outer suburbs of the study area, younger and better educated than the Australian average. Wilson and  $\operatorname{Brown}^3$  (1973) asked residents of Brisbane, Sydney and Melbourne 'Would you say you do any of the following things because of fear of crime', finding that 21 per cent 'install special locks or chains on doors and windows', 29 per cent 'keep a watchdog', 8 per cent 'own or carry weapons', 58 per cent take various defensive measures at night (stay off streets, use taxis, don't go out alone, etc.), and 73 per cent 'take more care locking up the house'. Even allowing for the fact that Wilson and Brown were asking about habitual actions whereas our question related to actions initiated within the last year or so, Canberra's figures appear on the low side.

### The Question of Victimisation

Turning to the actual experience of criminal and anti-social behaviour, Question 5 asked 'How many times during the past year has any member of your household been a victim of the following crimes? How many times did you report these crimes to the police?' The results have been summarised as follows:

	Percentage of Households Victimised	Percentage of Incidents Reported
Damage to property around the dwelling	16.9	26.4
Theft of property around the dwelling	13.1	37.1

Theft of parts from, or property left		
inside your motor vehicle	5.7	23.8
Breaking and entering	3.3	70.8
Theft of property from inside the dwelling	2.9	81.0
Assault within or around the dwelling	1.1	25.0
Theft of your motor vehicle while parked		
at the dwelling	0.5	75.0

The question of reporting rates can be disposed of very simply, since in each case, taking account of different definitions of crime, they are very close to percentages found by other Australian researchers, notably the Australian Bureau of Statistics and Wilson and Brown. On a suburb by suburb basis, there are differences but they are almost entirely due to the differences in the types of crime occurring in the suburbs.

In terms of victimisation, where comparisons are possible our data show only one major divergence from other survey results. Wilson and Brown's data imply a 6 per cent victimisation rate for vandalism in The Gap, a relatively well-to-do Brisbane suburb with a young, mainly professional population. This makes our 16.9 per cent for the equivalent category appear as a rather serious problem for those suburbs which bear the brunt of it, although our respondents may have interpreted 'around the dwelling' comparatively liberally.

Factor analysis, using varimax rotation, and cluster analysis were also performed using the percentages of residents in each suburb victimised by each type of crime. Because the low-incidence crimes of car theft and assault appeared to dominate the results, these were left out of the final runs, which again reduced the data to three factors and three corresponding clusters. The joint incidence of breaking and

entering with theft from inside the house explained 50.8 per cent of the variance and resulted in the suburbs of Ainslie, Braddon, Reid,

Campbell, Downer and Hackett being separated from the other suburbs because of their high incidence of these crimes. The next most significant factor was damage to property outside the house and theft from the car, accounting for 29.1 per cent of the variance and dividing this group into Ainslie, Reid and Hackett on the one hand (higher incidence of these crimes) and Braddon, Campbell and Downer on the other. Factor three, accounting for the remaining 20.1 per cent of the variance, linked damage to property outside the house with theft of property from outside the house. This clearly separated Dickson from the other suburbs owing to the high incidence of both these offences.

Figure 2B maps the clusters described here.

### The General Picture

When comparisons are made between Figures 2A and 2B, the similarity of the patterns of responses to Questions 4 and 5 becomes apparent. In fact, when combined with the responses to Question 3, a highly coherent picture emerges unifying the crime-incidence pattern, the precautions taken, the planning factors, and the demographic differences between the suburbs as obtained from the 1976 census.

The older inner contiguous suburbs of Braddon, Reid and Ainslie have relatively large percentages of elderly and single persons, and low percentages of teenage school-children. They also attract much 'passing traffic' in the form of shoppers, people driving to work or school/ college. The concentration of the motor trade in Braddon also forms a

special feature of the area. The demographic aspects probably largely determine the high level of fear of crime, as measured by the responses to Question 4, since it is a well-researched phenomenon that fear of crime increases with age. Furthermore the high percentages of single persons and couples without children are indicative of a relatively high level of opportunity for burglary — it's easier to steal from an empty house, and we can surmise that these types of people are more likely to leave the house unattended than those with children at home. Residents are probably correct in their belief that non-residents are responsible for much of the crime in these suburbs since burglary is typically a crime not committed in an area where the culprit is known and recognisable.

At the other end of the urban continuum are the suburbs of Turner, O'Connor, Lyneham and Watson, once again constituting a virtually contiguous area linked by Northbourne Avenue. In some respects, both Dickson and Downer can be considered as members of this group which would then be a totally contiguous unit. Demographically these suburbs contain a high percentage of teenage school-children and parents in their mid 30s and 40s. There are also many students, especially in the suburbs close to the Australian National University. These people, with all the rashness of relative youth, do not appear to feel the need to actively protect themselves from crime beyond the simple precautions of leaving lights on and doors locked. They occasionally suffer damage to and theft of (particularly in Dickson) property around the outside of the house - typically a juvenile crime - which they attribute, probably correctly, to persons living in or near the same suburb, and which are in the main so insignificant as to be not

worth reporting.

In an intermediate status are the suburbs of Campbell and Hackett, both containing pockets of relatively prestigious housing and close to Mt. Ainslie. Although these suburbs are, like the second group, of entirely post 1950 construction and with a predominantly young population the crime pattern is more akin to that of the inner suburbs to which they are adjacent. It is probable that the higher prices which housing blocks in these suburbs tend to attract results in a generally better-off (and probably rather older) type of family locating there. This would account both for their tendency to actively protect their possessions by purchase of insurance and safety gadgets and, conversely, for the greater prizes to be obtained by acts of burglary.

### Conclusion

The pattern of concentric rings of development, well known to planners of metropolitan areas is evident in a semi-matured form relating to crime in inner north Canberra. A 'typical' metropolitan city has an inner area occupied largely by relatively young single persons and the elderly, an intermediate ring occupied by middle-aged relatively established families often with children of high-school age, some of whom are survivors of the early days of their suburb, and an outer ring occupied by young families, first-time house buyers with primary and pre-school children. The nature of crime in each of these rings differs from that found in other rings — juvenile crimes such as vandalism are prevalent in the outer suburbs, property crimes such as burglary are more prevalent in the middle ring, and property offences

aimed at business premises are concentrated in the central area. No one will be surprised to see that the planned northern suburbs of Canberra conform to this pattern, but it is perhaps surprising that this generally young, educated population should conform so strongly - perhaps it is just that conformity comes naturally to public servants?

# Footnotes

- Defined as single/young couple/couple + 1 child/couple + 2 children/ couple + 3 or more children/old couple/adult + children/group of adults/other.
- J. van Dijk, "The Extent of Public Information and the Nature of Public Attitudes Towards Crime", in <u>Collected Studies in</u> <u>Criminological Research</u>, Vol XVII, Council of Europe, Strasbourg, 1979.
- 3. P.R. Wilson and J.W. Brown, Crime and the Community, University of Queensland Press, St. Lucia, 1973.
- 4. General Social Survey Crime Victims, Australian Bureau of Statistics, Canberra, May 1975.



# AUSTRALIAN INSTITUTE OF CRIMINOLOGY

	AUSTRALIAN INSTITUTE OF CRIMINOLOGY	Have you done any of the following to protect yourself and your property against crime, within the last year or so? (please tick appropriate boxes)  Changed your activity pattern during the day (eg avoid talking
1	Is the level of crime and anti-social behavior in your suburb worse than elsewhere in Camberra?	to strangers, don't go out alone).  Changed your activity pattern during the night (eg go out less, stay off the streets).
	Yes About the same	Started to lock doors and/or windows.  Installed a burglar alarm, new
2	With respect to any fears of criminal or anti-social behavior, does the design of your dwelling make you feel safer?	locks and chains, etc.  Installed new lights, leave lights on, etc.
	Yes	Carry/bought a weapon for protection.
1	No Unimportant	Bought a watchdog for protection.  Started to lock car, keep in garage, etc.
3	Which of the following factors mostly influence crime and anti-social behavior in your suburb? (number boxes 1 for most important, 2 for next most important, etc.)	Put valuables in a safe place.  Insured your belongings against theft or burglary.
	The type of people who live in the suburb.	Other (please specify)
	The type of people who visit the suburb (eg to work, for school, recreation, etc)	5 How many times during the past year has any member of your household been a victim of the following crimes? How many times did you report these crimes to the police?
	whether yours is a "relatively new" (like Hackett) or "established" (like Reid) suburb.	No. cf No. of times times crime crime reported committed to police
	The design of your suburb (eg street layout, open space, etc)	Damage to property around your dwelling (eq mail box, lights, fences, etc)
	The location of your suburb in relation to Civic.	Breaking and entering  Theft of property from
	A shortage of community facilities and services (eg meeting rooms, leisure facilities, etc).	Inside your dwelling  Theft of other property  around your dwelling  (eg outdoor furniture,
	Too many community facilities (attract vandals, etc.)	bicycle, gardening equipment)
	The number and location of flats.	Theft of your motor vehicle when parked at your dwelling
	The number and location of government houses.  Other (please specify)	Theft of parts from, or property left inside your motor vehicle
		Assault within or around your dwelling