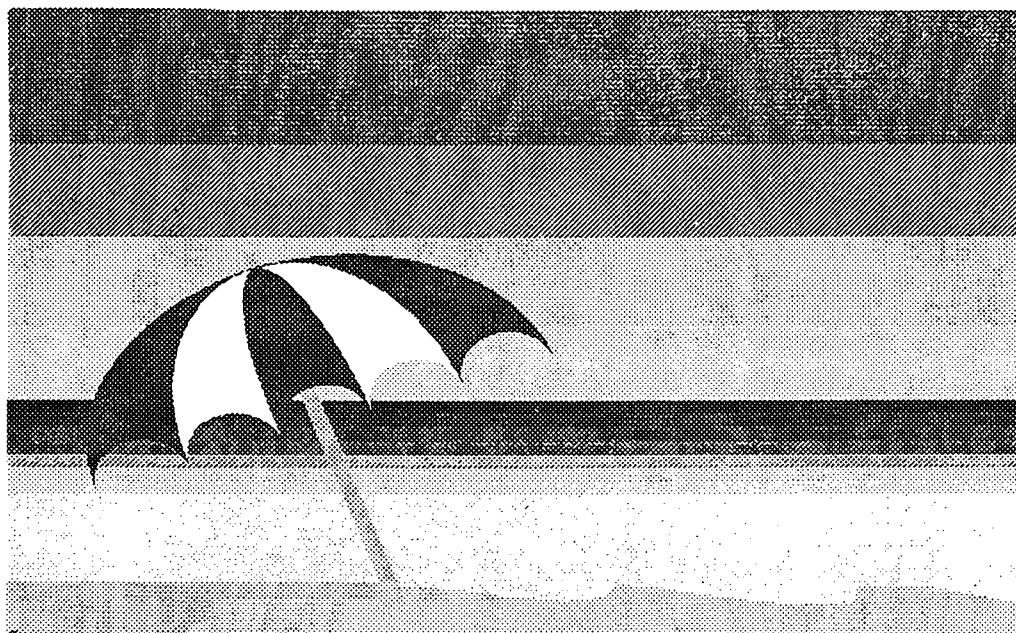


DESIGNING SAFER COMMUNITIES

Life on the Coast: Reducing Crime through
Environmental Design

A Preliminary Analysis



Paul Wilson & Bud Wileman (Bond University), Bill Lim & John Minnery (Queensland University of
Technology), Mark Lynch-Blosse (University of Queensland)

1996

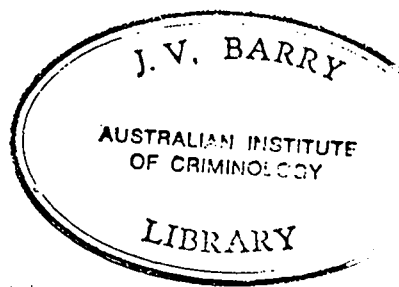
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ABSTRACT

One approach to reducing both criminal activity and fear of crime in urban areas is through deliberate and conscious design of the built environment. This approach to creating safer cities is known as Crime Prevention Through Environmental Design (CPTED), and is the focus of this study which is one of the first in Australia to test CPTED using empirical data. It is also the only one of which we are aware where criminologists, social scientists, urban planners and architects have combined in order to test some basic assumptions inherent in CPTED.

This research study, which was conducted in selected areas of the Gold Coast, developed an environmental crime prevention instrument designed to operationalise generally accepted principles of CPTED. The study also tested a survey instrument which explored fear of crime and actual experience of crime. The instruments tested whether dwellings, streets and neighbourhoods which score high on measures of CPTED have lower rates and incidence of fear of crime, than those which score low on measures of CPTED.

The study attempted to expand the range of options available to crime prevention agencies. A strong association between high household and street CPTED values and low rates of crime was found. Thus, CPTED principles might well be relevant in reducing property crimes.

If good design principles are applied to existing development by upgrading the environmental factors of households, streets and neighbourhoods, property crime rates could be reduced. Similarly, if CPTED principles are adopted in proposed developments, the level of security is likely to be increased.

We are very encouraged by the development and application of the CPTED scales, and their possible use in both academic and policy research. Despite the controversy surrounding environmental crime prevention, all the indications from this study are that we should employ CPTED wherever possible, in planning Australian dwellings, estates and suburbs.

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CHAPTER ONE

INTRODUCTION

There are increasing demands for cities around the world to be safer places in which to live, work and play. Demands to reduce crime are often an integral part of the demand for safety. Crime impacts on a huge range of aspects of people's lives, and the clamour to reduce crime produces a massive range of potential "solutions." The diversity of types of crime and the arguments about potential solutions are so broad and wide-ranging, that answers are almost impossible to identify. Nevertheless, citizens from all sections of society are seeking a safer, more secure living environment.

Safety is related to a number of factors: to the prevalence of crimes themselves, to the mix of social groups, to the physical and social environment and, of course, to economic and social conditions. The City of Toronto in Canada, for example, has developed and tried to implement the concept of a "safe city" for all inhabitants. The city's concept echoes the ideals of people in many other parts of the world:

A safe city for everyone means that all people, regardless of gender, race, ethnicity, language, disabilities, age and sexual orientation, have an equal right to freedom from fear and violence in their city (City of Toronto, 1990:1).

In creating such a safe city, there are at least three main components: a reduction in the level of crime (especially violent crime and related crimes which induce fear and uncertainty in individuals), an increased tolerance of individual and group

differences, and freedom from fear of crime. For this study, the crucial impacts are the incidence of crime (especially crimes involving property) and people's general perceptions of the levels of crime and the levels of personal and property safety, in the areas in which they live. Whilst fear of crime is connected often with personal experience of crime, there is not necessarily a clear and direct link.

The drive for safer cities is taking a number of directions. Clearly, crime can be addressed through social and psychological measures which help reduce the underlying causes of criminal behaviour. Such measures include reducing levels of poverty and deprivation in society, campaigning against racial and other intolerance, and public campaigns to increase awareness of domestic violence.

Although evidence of its effectiveness is at least equivocal, crime is also thought to be capable of being addressed through harsher penalties for those found guilty of crimes, an action which is sometimes thought to discourage other potential offenders. A third approach to reducing both criminal activity and fear of crime is through deliberate and conscious design of the built environment. This approach is the focus of this study.

The physical environment can be designed in a number of ways with prevention of crime in mind. At the most basic level this can include "target hardening" of homes through the installation of security grilles, deadlocked doors and the like, actions designed to exclude criminals. At this level, where the principle of private control and exclusion is most clearly expressed, it seems to be felt that specific exclusionary measures afford the individual person or household the greatest control over his or her interactions with others in the community. When the "other" can include those with criminal intent, this control becomes particularly important.

At the wider urban scale, a number of designed options are available in terms of developing "safer" cities. At one extreme is the burgeoning development of "gated suburbs", where walls and gates are put up around whole housing developments or suburbs. Within these walls there may be surveillance cameras, anti-terrorist devices or even armed guards (Dillon, 1994). A much lower key approach, however, which is attracting growing attention is that of Crime Prevention Through Environmental Design (CPTED).

Interest in exploring CPTED as an approach to safer cities comes mainly from land-use planners, architects and other designers of the built environment. There is also an increasing interest from police officers aware that there is a need to devote more resources to crime prevention rather than to crime control (e.g., McCamley, 1990).

At present, substantial community resources are directed mainly at apprehension, punishment and incarceration of offenders, rather than at the prevention of crime. The increased cost of crime is being passed on to the Australian community through higher taxes for expanded police services, more jails, and through higher insurance premiums. CPTED is seen as a proactive approach to crime prevention, an approach which potentially can apply to residential areas, shopping centres, housing estates and even to parks. CPTED requires better and more thoughtful use of existing resources rather than substantial increases in new resources.

CPTED is not a form of physical determinism. No claims are made that certain physical designed forms of themselves will necessarily reduce or prevent crime. There is considerable debate about which are in fact appropriate CPTED elements. Even when there is agreement on the design principles involved, there is debate about the nature of the intervening variables through which CPTED works, given

that it is not the physical design *per se* which influences potential criminal behaviour. The two major variables are reported usually as "surveillance" and "opportunities."

Surveillance-oriented CPTED works by ensuring that, as far as possible, there are always "eyes in the street." In other words, buildings are designed and land uses allocated so that the area in question is a centre of activity, and always has vantage points, such as windows and doors which overlook potential places in which criminal activity may occur. This approach assumes implicitly that potential criminal activity will be deterred if miscreants can be seen or are aware that they may be seen.

The "opportunities" approach assumes that much criminal activity is opportunistic, and that by reducing the opportunities, then crime itself can be reduced. For example, as Fisher and Nasar (1992) show, there is less fear of crime in areas where there is both a "prospect" for potential victims (i.e., they can see clearly the areas they are about to travel) and when there is no "refuge" for potential attackers.

Surveillance and opportunity approaches are combined in Newman's (1972) concept of "defensible space."

Clearly, there is a narrow conception of CPTED and a far wider one. The more focused definition concentrates purely on physical elements of the built environment. The wider one includes social management and law enforcement strategies which reinforce the impact of the physical elements. A report by the United States Justice Department (1976) is a good example of the wider approach. That report identifies some three-hundred CPTED strategies related to four

functional areas (residential, commercial, school and transportation uses), specifically dealing with physical strategies, social strategies, management strategies and law enforcement strategies which are combined within the rubric of CPTED.

Cities must not only be safe places, but they must also appear to be safe. Fear of crime is not necessarily linked directly with experience of crime, or to objective data on crime occurrence. For example, Dillon (1994) shows that there is no necessary direct link between actions taken based on fear of crime and actual crime:

. . . the rush to gated communities coincides with widely reported decreases in violent crime statistics. The latest Dallas police department statistics, for example, show violent crime in the city decreasing for 25 consecutive months. From 1991 to 1993 the city's overall crime rate fell 34 percent. Yet a May citizen survey also revealed that 62 percent of Dallasites are still afraid to walk around their neighbourhoods at night (Dillon, 1994: 9).

Clearly, crime is a complex phenomenon, without any single cause, and the impact of CPTED strategies upon crime is uncertain. Further, there is limited empirical evidence about CPTED, and that which exists is equivocal. Nevertheless, CPTED would seem to have some influence upon prevention and reduction of some types of crime and CPTED may have some influence on some householder's feelings of security or insecurity.

These uncertainties, and the questions which flow from them, form the basis for this

study. Indeed, this study is one of the first in Australia to test CPTED using empirical data. It is also the only one of which we are aware where criminologists, social scientists, urban planners and architects have combined in order to test some basic assumptions inherent in CPTED.

CHAPTER TWO

THE THEORY AND HISTORY OF CPTED

Environmental crime prevention emerged in the 1960s (Jacobs, 1961; Wood, 1967). Geason and Wilson (1989) suggest that Jacobs' book was the first influential work to propose that street-life could cut down opportunities for crime. Jacobs dealt with the changing social and cultural circumstances of whole inner-urban sections of North American cities, dealing with crime as well as livability and community interaction. She was concerned that:

expansion of urban business and commercial centres tended to drive out residential users, and to transform inner-urban environments into social wastelands. Her proposed solution was to bring back residential and other activity, to reassert control and to exercise 'natural surveillance' (White & Sutton, 1995: 87).

In the early 1970s there was much interest in manipulation of the built environment in order to prevent delinquency and crime (Jeffrey, 1971; Newman, 1972). According to Jeffrey, urban design, including design of streets and parks, might prevent crime by reducing opportunities. This "opportunity theory" was expanded by Mayhew, Clarke, Sturman & Hough (1976), Clarke and Mayhew (1980) and Brantingham and Brantingham (1981).

An important body of research suggests strongly that environmental prevention can reduce crime by influencing some potential offenders to reconsider. Where

displacement of offending might occur, only a proportion of initial potential offenders will pursue intent to commit crime (Heal and Laycock, 1986). However, physical design and planning decisions facilitating situational crime prevention have been ignored by most city planners (*Governor's Commission on Crime Prevention and Control*, St. Paul, Minnesota, 1977). For example, during the early 1960s, in New York's Greenwich Village, Washington Square was closed and remodelled. Fences around the playground were demolished. Crime rates began to climb. The local residents became outsiders in their own neighbourhood. A few chain-link fences were then erected around wrecked playgrounds, and emergency telephones were installed. Oscar Newman, professor of city planning at New York University said:

The only time the park is safe is when it is pouring rain. . . .
When you talk to the cops you find that the police are just as afraid of the guys as everyone else. Now, if policemen with guns and clubs are frightened, what chance does the average citizen have in here? (Newman as cited by Nieburg, 1974: 41).

Newman recommended the building of a seven-foot-high wrought-iron fence around the park. He said:

Our hope is that through the fence we will begin to establish a rule system once again in the park. . . .The small-town environments, rural or urban, which once framed and enforced their own moral codes, have virtually disappeared. We have become strangers sharing the largest collective habitats in human history. Because of the size and density of our newly evolving megalopoly we have

become more dependent on each other and vulnerable to aberrant behavior than we have ever been before (Newman as cited by Nieburg, 1974: 41, 42).

Design principles incorporating a hierarchy of sovereignty from public to private are recommended (Nieburg, 1974: 42).

With Australia's crime rate increasing substantially since the mid-1960s, many are concerned that Professor Newman's observations of Washington Square park, in New York City, could become a reality in Australia. The fact that the equivalent situation does not exist now is no reason for complacency. Crime prevention, by definition, is about reducing the possibility of crime in the future.

(1) DEFENSIBLE SPACE

One of the major components of environmental crime prevention is the principle of "defensible space." Newman (1972) studied public housing and crime in New York City. In that study, which is especially relevant to Australia, Newman established a definite relationship between urban design and crime rates. He cites three crucial factors: territoriality, natural surveillance, and image and milieu.

Territoriality assumes that people must define and defend territory. Good design will encourage people to defend territory from outsiders. A well-designed housing project will, therefore, make clear which spaces are to be completely private, which are to be shared with permission from the owner, and which are to be public.

Natural surveillance involves residents casually observing and monitoring public and semi-public open spaces in their environment and intercepting those

who do not belong. They need to develop a territorial instinct about their neighbourhood, feeling responsible for its safety, and be able to view all the non-private areas if they are to assist in preventing crime.

In addition, defensible space design should be aimed at creating a positive image of the *milieu*, insisting upon the need for harmony between the housing project and its immediate neighbourhood. Residents relate better to smaller land spaces attached to specific buildings or clusters of buildings, and use them more often (Geason & Wilson, 1989: 5, 14).

Rubenstein *et al.* (1980) have developed Newman's surveillance factor into what is termed "social surveillance." In addition to watching the environment for intruders, residents should challenge them. This theory assumes that changes to physical design can affect social interaction and cohesion, which in turn should reduce the incidence of crime and fear of crime (Geason & Wilson, 1989: 5).

(2) MANAGEABLE SPACE

An Australian researcher, Don Perlmut (1981, 1982), believes the scope of defensible space is too limiting and stresses the additional role of management in improved security. (This view has been endorsed also by the work of Wilson (1976) in his study of public housing). According to Perlmut, the two most important crime prevention strategies, in what is termed "manageable space" are management policies and practices, and the process of creating easily managed space by residents through physical design and site layout.

Manageable space combines "soft" architecture which responds to people, with "soft" management practices which assume that most residents can learn to accept,

and even seek responsibility, and exercise high degrees of imagination and creativity in participating in their environment (Wilson, 1976).

Perlgut stresses importance to security of design considerations such as definition of territorial zones, surveillance opportunities, proper hardware, provision of community facilities, adequate lighting, controlled access to housing projects, avoidance of spaces no-one "owns" and spaces over which people may quarrel. Management can influence the incidence of crime in the way in which it responds, e.g. the degree of coordination with police and other relevant agencies.

According to Felson (1987), "the principle of least effort", i.e. people will find the easiest means to achieve an objective, can be utilised in an attempt to predict where contact between offenders and victims will take place. Thus, manipulation of the environment can minimise such contacts. Therefore, according to Felson, physical design and kinetic management are important in diverting likely offenders and likely targets away from each other, or keeping them restricted to areas where they can be observed.

(3) URBAN SPACES & FACILITIES

Although, according to Westover, both crime rates and fear of crime are increasing in urban spaces and facilities, little reliable, comparable data have been collected which would demonstrate the nature, extent, location or frequency of crime in such areas (Westover *et al.*, 1980). However, Westover (1985) has since explored the extent and impact of fear of crime in suburban parks and has evaluated the "general fear of crime model" as it relates to the parks studied. The model, as developed by Garofalo (1981), shows fear of crime to be a dynamic state influenced by and, in turn, influencing individual behavioural responses and belief

systems.

Widely shared beliefs about the danger of victimisation in a particular setting, such as a public park, can decrease dramatically the use of that park because it is perceived as unsafe (Fletcher, 1983; Godbey and Blazey, 1983; McDonald & Newcomer, 1973).

Research suggests that media focus on sensational crimes, particularly those against women and older people, may lead to a "vicarious victimisation" among these groups (Bynum & Puuri, 1980; Riger *et al.*, 1978). Also, women are more fearful than men of becoming crime victims (Harold Lewis Malt Associates, 1972). Research also suggests that exposure to non-criminal but socially disruptive behaviour, e.g. vandalism, littering, verbal harassment, etc., which may be inconsistent with a person's social norms, is more strongly related to assessments of crime risk than is actual criminal victimisation (Dubow *et al.*, 1979; Lewis & Maxfield, 1980; Smith, 1983).

The operational measure of behavioural response to perceived safety is reported avoidance (Westover, 1985: 415).

In Westover's (1985) study, 268 visitors to three Midwestern district level parks, in the United States, were interviewed on-site using a structured questionnaire. 42 percent report feeling unsafe alone in the park at some time, 46 percent report evening avoidance and 20 percent report daytime avoidance. Thus, while more than half of the park visitors report neither fear nor avoidance, those who do express safety concerns appear to be modifying their behaviour.

Many female respondents in Westover's (1985) study report that they "never go anywhere alone" or "never go out alone at night." In an Australian study Wendy Morris (1992), deputy director of the Urban Design Unit of the Victorian Department of Planning and Housing comments:

To walk along a shrubbed, no-access collector road (which is usually where the bus stop is), where there is no surveillance from adjacent houses, no protection from the unwanted attention of cruising 'louts' and no ability to see who may be lurking in the shrubbery two metres ahead is hardly conducive to a feeling of safety. Then there's the night time journey home from work, which is often travelled in darkness on a winter night. To feel safe walking from the bus or train, women need well-lit streets with houses fronting them and cars passing, leading directly to and from transport stops. . . . A street with a park on one side and a school on the other looks innocent enough on a plan - but that street will be a no-go area for many women at night.

In Westover's (1985) study, visitors consider the parks to be fairly safe. However, 56 percent of respondents believe crime is increasing in the parks. This finding is consistent with other studies which indicate that people tend to believe that crime, generally, is increasing (Dubow *et al.*, 1979). Westover's findings reveal a link between perception and behaviour. Also, the study results clearly demonstrate differences in safety-related perceptions and behaviour between men and women. Further research might reveal the extent to which women's safety-related concerns constrain their recreational behaviour, which types of parks and other public open spaces women consider

to be safe or dangerous, and which setting components contribute to these evaluations.

Violence, especially against women, must be recognised as a community concern, not just a problem for the victim or the police.

Public violence against women not only refers to those acts which may end up in the police statistics, including murder, sexual assault, robbery etc. It also refers to subtle acts of violence which are more difficult to monitor and prevent, such as sexual and racial harassment. While the hidden violence may appear to be less harmful than sexual assault, in the end such insidious violence may cause the greatest long-term harm to the greatest number of women (*Safe City Committee*, 1988: 1).

(4) ROLE OF LOCAL GOVERNMENT

The potential for crime in Australia's urban spaces and facilities, and property crime against householders are issues over which local government has obvious jurisdiction. The implementation of an environmental crime prevention strategy by local government, will not only benefit the whole community, but will be invaluable especially for the vulnerable, i.e. women, children, the elderly and the disabled.

Staying at home to avoid risky situations is not the most desirable approach to crime prevention. Withdrawal weakens ties with others which may help to prevent crime, reduce fear, and offer support in the event of an assault. Instead of making people feel safer, staying at home may enhance their fears. The quality of people's lives is seriously impaired by restricting their full participation in society.

Preventing current acts of public violence calls for a variety of approaches. Approaches that modify physical and social environments, not just personal behaviour. Approaches that go beyond victimization prevention to real crime prevention (*Safe City Committee*, 1988: 2, 3).

(5) URBAN PLANNING

Inadequate urban planning is not the cause of crime but may, when interacting with other factors, facilitate its commission. In one study (*Safe City Committee*, 1988) of the relationship between design and opportunity for public violence, it was found that:

... overall, 21 percent of sexual assault incidents occurred inside the victim's residence, and an additional 11 percent took place either in the home of a friend or acquaintance or in the vicinity of the victim's own home. The remaining 68 percent took place outside or in other public locations. The victim's home was the location of half the actual rapes, whereas attempts and molesting occurred most often in outside places (36 percent, 50 percent).

Stoks (1982) studied urban space environments in Seattle for danger of violent crime, especially rape, and found:

The typical rape site tended to be in a small physically confined space, generally less than 10 metres square in area. The rape site was usually defined by a series of barriers such as dense vegetation, and building walls or fences, that have the effect of

physically and psychologically restraining the victim. The rape site was frequently adjacent to strong victim movement or location predictors such as pedestrian thoroughfares and bus-stops.

Violence, therefore, may be facilitated by urban spaces and facilities which are not in full public view (*Safe City Committee*, 1988:4).

Urban spaces and facilities requiring attention, in terms of their potential violent and property crime generating tendencies, include:

- (a) public parks, toilets;
- (b) streets/walkways and other areas of pedestrian flow;
- (c) school playgrounds;
- (d) car parks;
- (e) malls and other public semi-commercial areas;
- (f) recreation and sporting facilities,
- (g) common areas in residential and commercial buildings, e.g., stairwells, hallways, public toilets, etc.

In formulating minimum standards, it is desirable therefore that the principle of defensible space be incorporated.

(6) TOWARDS A HOLISTIC APPROACH

It should be noted that an environmental/defensible space crime prevention strategy is only one of a range of responses required in order to combat crime in the 1990s and beyond. What is required is a holistic approach to crime prevention. This would also include a substantially improved police-public ratio, new forms of

"sector" policing, community crime prevention schemes that divert young people from offending, tighter controls on alcohol advertising and drinking environments in nightclubs and hotels together with other measures.

In addition, special attention should be given to cooperative local government-developer crime prevention housing developments for low- and middle-income residents, and the promotion of planning principles that create environments where people both work and live.

However, in the interests of safety and security in Australian urban spaces, facilities and dwellings, there is an urgent need for local government to take a proactive role in designing and implementing environmental crime prevention strategies which will reduce opportunities for crime. These strategies must be based upon the principle of defensible space and its management.

It may well be that Australia's crime rate is not as extensive as some media reports would suggest. However, urban spaces and facilities have the potential to become zones where crime occurs, and which are not used subsequently by residents. Likewise, defensible space strategies (target hardening of dwellings) can prevent property crime potential.

CHAPTER THREE

METHOD

The approach used in this study was partially determined by the objectives of the analysis, and partially by the restrictions on reliable and available information on crime in the target area - the Gold Coast.

The main objective of the study was to try to determine the effectiveness of CPTED measures in an ordinary residential setting. Many reports on CPTED focus on special housing provision (such as public housing for low income families), on shopping centres or other commercial developments, or on a gross high-rise versus low-rise housing dichotomy (see for example, Newman, 1972, 1975). It was also felt to be important to link effectiveness of CPTED with both actual experience of crime and with fear of crime. The report of the United States Justice Department (1976) identifies many CPTED strategies, but clearly differentiates those for residential areas from those for commercial areas, schools and transportation facilities. That differentiation was carried through in this study. The focus was on residential areas only.

There are no residential areas of any scale in Queensland which have been consciously designed on CPTED principles. Thus, it is impossible to measure the effectiveness of CPTED directly. However, observation of residential areas on Queensland's Gold Coast showed that some appeared to incorporate more CPTED principles than did other areas.

In residential areas, there are several types of CPTED scales. Design measures

which are appropriate at the neighbourhood level may not be appropriate at the level of the individual house. The clear physical differences between high rise buildings, other apartment buildings and detached houses also have to be taken into account. For example, there are no equivalents to the common entrance foyers of apartment buildings in individual houses.

(1) THE HYPOTHESES

The research project set out to test the following two hypotheses, derived from the issues discussed earlier:

1. That dwellings, streets and neighbourhoods which score high on measures of CPTED will have lower rates of crime than dwellings, streets and neighbourhoods which score low on measures of CPTED.
2. That householders living in dwellings, streets and neighbourhoods which score high on measures of CPTED will have reduced fear of crime when compared with householders living in dwellings, streets and neighbourhoods which score low on measures of CPTED.

It was felt that if these hypotheses were supported, the study would give support to town planners, urban designers and architects seeking to use CPTED principles to increase security and reduce crime in residential areas. The study could then be used to create design guidelines which could be applied in the development of future residential estates.

(2) THE SAMPLE

The sample has been drawn from two main areas, it is a random stratified sample representing a range of socioeconomic levels. The two areas are the recently developed Gold Coast suburb of Robina, and the other is the beach-front area of the Gold Coast nearest Robina, centring on Mermaid Beach. The socioeconomic status of the individual dwellings has been identified through the value of the dwelling and land on the Queensland State Government valuation roll.

23.5 percent of dwellings, in the sample, are valued at >\$250 000, 42.3 percent are valued at between \$150 000 and \$250 000 and 34.2 percent are valued at <\$150 000. In the Robina sample, 37.6 percent of dwellings are valued at >\$250 000 and 62.4 percent at between \$150 000 and \$250 000. There are no dwellings in the Robina sample valued at <\$ 150 000. In the Mermaid sample, 14.0 percent of dwellings are valued at >\$250 000, 28.7 percent at between \$150 000 and \$ 250 000 and 57.3 percent at <\$150 000 (see Table 51).

There are 991 respondents, 54.0 percent women, and 46.0 percent men. The respondents' ages range from 18 to 92 years. The mean age is 49.8 years. 64.0 percent of respondents are married and 36.0 percent are single or widowed. 70.0 percent of respondents have children, while 30.0 percent are childless.

43.0 percent of respondents work in a paid job, while 57.0 percent are either out of work or retired.

OCCUPATION	PERCENTAGE
Self-employed	20.2
Hospitality/tourism/sporting industry	13.8

Salespeople	12.3
Unskilled manual workers	12.2
Clerical workers	11.4
Higher professional	10.5
Lower professional	6.3
Managers & administrators	4.2
Skilled manual workers	2.7
Employers & proprietors	1.2
Police/security/fire officers	1.2
Technicians	0.5
No response	3.5

53.5 percent of respondents have completed, or have some, upper secondary school education. 18.7 percent have completed some kind of tertiary qualification. 18.5 percent have some lower secondary education. 4.6 percent were still studying at university or TAFE colleges. 1.3 percent of respondents have some primary school education. 3.4 percent have either no formal education, or did not respond.

51.0 percent of respondents have lived at their present residence for three years or less, while 49.0 percent have lived at their present residence between four and forty-seven years. 55.0 percent of respondents own their residence. 15.0 percent have mortgages, while 30.0 percent are renting.

72.9 percent of households have no residents under eighteen-years-of-age, while 11.7 percent of them contain one resident under that age. 10.0 percent of households contain two residents under eighteen, and 5.4 percent have three or more residents.

20.3 percent of households are occupied by a single resident aged eighteen or older. 59.3 percent contain two such residents and 20.4 percent contain three or more.

(3) THE SURVEY INSTRUMENTS

There are two major components to the study. The first is a survey instrument which explores the fear of crime and the actual experience of crime of households in selected areas of the Gold Coast. This questionnaire is in part, at least, based on earlier crime victimisation surveys that had been trialled in Australia, in order to ensure that the questions "worked." The questionnaire was pilot tested and then administered to a random sample of approximately one-thousand householders in two areas of the Gold Coast.

The second instrument is a survey instrument which attempts to operationalise generally accepted principles of CPTED. The development of the measures in the instrument was initiated through a series of stages. First, a range of CPTED principles, covering both the surveillance and the opportunity approaches, was identified in the literature. The starting point was the approach developed in the report by the United States Department of Justice (1976). That report identified a number of strategies for crime prevention relating to four principal concepts: access control, surveillance, activity support and motivation reinforcement. However, the report also included social, management and law enforcement CPTED strategies.

For this study, a more limited range of elements which relate more specifically to physical design elements was identified. These are:

- * **"defensible space"**: space which is clearly owned by, or the responsibility

of identifiable persons or groups (Newman, United States Justice Department);

- * **surveillance and visibility:** (Jacobs, Newman, United States Justice Department) - the possibility of potential crime sites being viewed by residents;
- * **legibility:** (Bell) the ease with which the designed environment can be read and understood by passers-by and residents so that there is no confusion in terms of movement and no excuse for loitering;
- * **security:** (Perlgut, Bell) - residences and other buildings clearly and visibly secured - evidence of target hardening;
- * **robustness:** (Bell) - evidence of stability and pride in the neighbourhood,
- * **land use mix:** (Bell) - a mix of land uses appropriate for the neighbourhood.

CPTED principles can be applied at a number of scales, ranging from the individual dwelling and lot, through the local street to the whole neighbourhood itself, but the principles need to be applied in slightly different ways. The principles are also likely to have different applications when multiple dwellings are compared with single dwellings (for example, there is no shared semi-private space such as entrance foyers around a single dwelling as there is for a multiple dwelling unit).

Some of these principles are appropriate only at some of these scales (such as

land-use mix, which is appropriate only at the neighbourhood and street levels). Thus, the scale of measurement which was developed applies the principles differently at the individual dwelling level, at the street level and at the neighbourhood level. A distinction is also made between multiple dwellings and single dwellings.

Each CPTED **principle** was analysed as a basis for developing more concrete appropriate CPTED **measures**, where the CPTED measure identified what the principle meant in practice at the appropriate scale. For example, "defensible space" at the dwelling scale meant, in practice, that there should be a clear distinction between public and private (or defensible) areas.

For each CPTED **measure**, one or more **performance measures** was then developed which identifies features where specific measurable indicators could be developed. For example, a clear distinction between private and public areas should be able to be seen in (i) visible boundaries or distinctions between public and private spaces, and (ii) visible buffers or barriers to people's movement from public to private areas.

Each CPTED **performance measure** was then operationalised through a series of **scale measures**. An attempt was made to standardise each scale so that it ranged from 1 (lowest) to 5 (highest). However, some measures were not appropriate for such a scale (for example, whether or not there was a Neighbourhood Watch sign visible).

The concept of developing principles, measures, performance measures and scale measures, parallels the concept used in public administration in developing

performance indicators for organisations or projects. Each level becomes more specific than the previous one. The CPTED Principles, CPTED Measures, Performance Measures and Scale Measures are shown in detail in the questionnaire in Appendix D.

The progression is illustrated below for a detached house:

CPTED Principle	CPTED Measure	Performance Measures	Scale measures
* Surveillance	* Clear visibility	* Clear route from gate to door	1 - None of route visible from street 3 - 5 - Whole of route visible from street
		* Doors & windows visible from street	1 - No doors or windows visible from street 3 - 5 - All doors & windows visible from street
		* Doors & windows visible to neighbours	1 - No doors or windows visible to any neighbour 3 - 5 - All doors & windows visible to adjacent neighbours
		* No concealment by planting or fences	1 - Places for people to hide in yard 3 - 5 - No places to hide or conceal
		* Open space between houses	1 - Spaces between houses cluttered and view obstructed 3 - 5 - Spaces between houses clear and open

Each performance measure is expressed as a 5-point scale, with the lowest CPTED performance being indicated by a "1", and the highest by "5." A response of "0" indicates that the measure is not applicable in that particular case.

Clearly, some measures are more easily quantified on a scale measure than others. For example, it is important to note whether the dwelling has been identified as part of a Neighbourhood Watch scheme. The answer to such a question could only be "yes" or "no." In the analysis of the responses, a "yes" response was graded as a response of 1, a "no" response as 2. 1 was recoded to 5, and 2 was recoded to 1. Thus, the final measures of CPTED levels were developed by combining all the appropriate responses for that particular dwelling, street or neighbourhood.

(4) VARIABLE CONSTRUCTION

THE FEAR OF CRIME VARIABLE

The "Fear of Crime" variable is based upon a scale made up of 15 items. The items used are questions Q21, Q22, Q23, Q24, Q28, Q29, Q30, Q31 Q32, Q33, Q34, Q35, Q39, Q43 and Q45.

All non-valid responses (i.e., NOT 1, 2, 3 or 4) were declared "missing." The "direction" of items was reversed wherever appropriate in order to ensure *high scores=high fear*.

A count was then instituted for each respondent recording the number of "missing" items. Respondents who had 10 or more scale items missing, were then deleted from the subsequent analyses. Respondents who were not excluded, because of

missing values, who nevertheless had items declared missing, were then accorded their individual mean for the missing item. (See example below).

IF Q21=. THEN Q21=(Q21+Q22+Q23+Q24+Q28+Q29+Q30+Q31+Q32+Q33+Q34+Q35+Q39+Q43+Q45)/(15-NN);

Note: NN=the "count" of declared "missing" items.

A simple additive scale was then created. (See example below).

FEAR=(Q21+Q22+Q23+Q24+Q28+Q29+Q30+Q31+Q32+Q33+Q34+Q35+Q39+Q43+Q45);

This scale was then dichotomised at the 75%-25% mark, i.e., the top 25% (high fear) was defined as "1", and the remaining 75% of "low" to "moderate" fear defined as "2."

IF FEAR LE 42 THEN FEAR=2; (i.e., Low/moderate fear of crime)

IF FEAR GT 42 THEN FEAR=1; (i.e., High fear of crime)

THE VICTIM OF CRIME VARIABLE

This variable was derived from questions Q47 and Q51. If respondents had in the last three years experienced an attempted break in or an actual break in, they were coded "1", if not, they were coded "2".

THE CONCERN ABOUT CRIME VARIABLE

This variable was derived from question Q13. If respondents ranked "Crime" as the number one concern, or only ticked/indicated the crime item, they were defined "1",

primarily concerned about crime. All other responses were coded "2."

THE HOUSEHOLD CPTED VARIABLE

This variable used questions H1-H20. Questions H1-H15 had all non-legitimate responses declared "missing." For questions H1-H20 "yes" was coded as "5", and "no" coded as "1." In addition, questions UI.1-UE.14 were used. Once again, all non-legitimate responses were declared "missing", and U.7-U10 "yes" was recoded as "5." U.11 and UE.15, relating to number of entrances, were deleted because of difficulty in arriving at a decision regarding the appropriate point of dichotomy.

A count was then established of missing values, and where there was no response recorded, the individual scale mean was inserted. (See example below).

```
IF H1=. THEN DO;  
ARRAY LP H2-H20; DO OVER LP; IF LP=. THEN=0;END;  
H1=(H2+H3+H4+H5+H6+H7+H8+H9+H10+H11+H12+H13+H14+H15+H16+H17  
+H18+H19+H20)/(20-NNN);  
END;
```

Note: NNN=the "count" of missing values.

This procedure was repeated for each scale item. An additive scale was then defined:

```
CP=(H1+H2+H3+H4+H5+H6+H7+H8+H9+H10+H11+H12+H13+H14+H15+H16+  
H17+H18+H19+H20);  
CP=ROUND(CP);
```

As with the "Fear" variable, the scale was then dichotomised at the 75%-25% mark, with the top 25% being the "High CPTED" households.

IF CP GE 1 AND CP LE 62 THEN CP2=2;

IF CP GE 63 THEN CP2=1;

This same procedure was repeated for the different household types.

THE CPTED NEIGHBOURHOOD & STREET MEASURES used questions S1-S12, questions N1-N9 and N11-N12. Questions S.13, N13-N17 were deleted because of difficulty in coding the responses. There were almost no missing values for the measures, so where an item was missing, it was replaced with the "item mean." A simple additive scale was then defined in each case, and then dichotomised at the 75%-25% mark.

CHAPTER FOUR

OVERALL FINDINGS

While the majority of respondents feel safe at home alone (9.2), they nominate crime as their most critical social concern (9.1). 12.4 percent of respondents possess weapons (9.3). More than half of them always lock doors and windows while at home during the day (9.4). While the majority could enjoy parks during the day, and move freely in their neighbourhood with confidence at night (9.9.3, 9.8.4), they are unlikely to use parks, public toilets or car parks at night (9.9.3, 9.9.4, 9.9.5).

Some respondents express concern about intrusion of crime into their neighbourhood (9.8.5). Less than half would consider it safe to go out on the Gold Coast at night (9.9.2) as there appear to be locations which are perceived to be unsafe, mainly due to fear of crime and the behaviour of young people (9.9.6, 9.9.7). Safety while travelling on public transport is marginal at all times, and deficient at night (9.9.1).

Although most respondents do not think that crime has increased in their neighbourhood, during the past twelve months, they do perceive that property and violent crime, vandalism and graffiti are increasing on the Gold Coast and nationwide (9.10, 9.11, 9.12).

During the past three years, 14.5 percent have experienced attempted break-ins and 17.5 percent have experienced actual break-ins (9.6, 9.7), 6.6 percent have been assaulted and 9.6 percent threatened (9.13), and 18 respondents have been threatened with, or experienced actual sexual assault during that time (9.14).

41.3 percent of respondents have been victims of crime at some time during their lives, although not specifically as a result of living on the Gold Coast (9.15). Of equal importance, 56.0 percent of respondents have families or friends who have been victims of crime (9.15).

These experiences of victimisation, many of which are vicarious (through experiences related by others and reinforced by media crime reporting) would generate a substantial level of fear and concern about crime (9.9.6, 9.9.7, 5.10). It would help to explain that 17.56 percent of respondents have a high level of fear (5.9), and 26.50 percent have concern about crime (5.10).

Fear of, and concern about crime are unlikely to be alleviated by crime prevention or environmental design factors (CPTED) for the protection of the household. While there is some indication that households with a high level of crime prevention measures and environmental design factors may have less fear and concern, the findings are not statistically significant. However, there is evidence that a number of households with a low to moderate level of crime prevention measures express fear and concern about crime (5.9, 5.10).

Given respondents' concern of, and fear of crime, it might be expected that the number of actual and attempted break-ins would be insignificant. However, the number of respondents reporting break-ins and attempted break-ins is fairly high - 17.5 percent and 14.5 percent respectively (9.6, 9.7). Because a higher level of security hardware may not be feasible, further security should be provided by other means, including improvement of the physical and social environment.

What is important in our findings is that the study indicates that a **higher level of**

household crime prevention measures and street CPTED corresponds with a lower victimisation rate. It is also evident that households with low to moderate crime prevention measures and street CPTED are more likely to be victimised (6.4, 7.3).

The apparent importance of CPTED as a security measure is further shown in the environment of streets and neighbourhoods. The majority of victims live in streets with low CPTED values, and only a small percentage of households in streets with high CPTED values, fall victims. Generally, streets with high CPTED values are more secure, and households are less likely to suffer from household crime (7.3). The association between high CPTED value neighbourhoods and low victimisation is weaker, and in Robina there appears to be no association, nevertheless respondents living in neighbourhoods with low to moderate CPTED values, are much more likely to be victimised (8.3).

CHAPTER FIVE

CRIME BY GEOGRAPHICAL AREAS

5.1: SECTORS

When the sample is divided into sectors, some interesting differences emerge. The sectors are: Robina and the former Gold Coast City Sector 7 comprising Mermaid Beach, Miami and Koala Park, hereafter Mermaid (see maps in Appendix C).

Robina contains 396 respondents or 39.96 percent of the sample. It is a relatively new Gold Coast suburb, located five kilometres west of the Gold Coast beaches. First development commenced during the mid-1980s. By the end of 1995 it had a population of more than fifteen thousand mainly middle- to upper middle-class people.

Mermaid contains 595 respondents or 60.04 percent of the sample. It is an older beach-side suburb with a younger and varied socio-economic group of people. Dwelling types range from older fibro houses, duplexes, low and high rise units to some multimillion dollar beach-front mansions.

5.2: SECTOR AND GENDER

39.25 percent of female respondents live in Robina, and 60.75 live in Mermaid. 40.75 percent of male respondents live in Robina and 59.25 percent live in Mermaid. The Robina sample comprises 53.16 percent female respondents and 46.84 percent male respondents. Mermaid comprises 54.71 percent female respondents and 45.29 percent male respondents. (See Table 1).

5.3: SECTOR AND AGE

Robina comprises:

- 24.04 percent respondents aged 18-35 years,
- 38.87 percent respondents aged 36-55 years,
- 37.08 percent respondents aged 55+ years.

Mermaid comprises:

- 31.30 percent respondents aged 18-35 years
- 25.21 percent respondents aged 36-55 years
- 43.49 percent respondents aged 55+ years.

In the age group 18-35 years, 33.69 percent of respondents live in Robina, while 66.31 percent live in Mermaid. In the age group 36-55 years, 50.50 percent live in Robina, and 49.50 percent live in Mermaid. In the age group 55+, 36.07 percent live in Robina, and 63.93 percent live in Mermaid. (See Table 2).

5.4: SECTOR AND FEAR OF CRIME

17.56 percent of all respondents have a high level of fear of crime, 41.95 percent of whom live in Robina, and 58.05 percent live in Mermaid. 18.43 percent of those who live in Robina and 16.97 percent in Mermaid have a high level of fear of crime. (See Table 3).

5.5: SECTOR AND CONCERN ABOUT CRIME

26.44 percent of all respondents report their concern about crime, among whom 31.30 percent live in Robina, and 68.70 percent live in Mermaid. Mermaid respondents are more concerned about crime with 30.25 percent of those who live in Mermaid being concerned, against 20.71 percent of those who live in Robina

being concerned. (See Table 4).

5.6: SECTOR AND HOUSEHOLD CPTED VALUES

Only 28.12 percent of all respondents report a high level of household crime prevention. Of those who have high level prevention, 54.87 percent live in Mermaid against 45.13 percent who live in Robina.

Robina respondents are more crime prevention conscious with 31.81 percent having a high level of household prevention compared with 25.68 percent of Mermaid respondents. (See Table 5).

5.7: SECTOR AND HOUSEHOLD CPTED VALUES AND AGE

High household crime prevention is more likely to be found in households occupied by the oldest age group, with the highest prevention in Mermaid households occupied by the oldest age group.

All Sectors

In each age group those who have high prevention are:

25.81 percent respondents aged 18-35 years,

24.83 percent respondents aged 36-55 years,

32.08 percent respondents aged 55+ years.

Of those who have high prevention there are:

26.28 percent respondents aged 18-35 years,

27.01 percent respondents aged 36-55 years,

46.72 percent respondents aged 55+ years. (See Table 6).

Robina

In each age group those who have high prevention are:

38.30 percent respondents aged 18-35 years,

30.87 percent respondents aged 36-55 years,

28.97 percent respondents aged 55+ years.

Of those who have high prevention there are:

29.03 percent respondents aged 18-35 years,

37.10 percent respondents aged 36-55 years,

33.87 percent respondents aged 55+ years. (See Table 7).

Mermaid

In each age group those who have high prevention are:

19.46 percent respondents aged 18-35 years,

18.79 percent respondents aged 36-55 years,

33.86 percent respondents aged 55+ years.

Of those who have high prevention there are:

24.00 percent respondents aged 18-35 years,

18.67 percent respondents aged 36-55 years,

57.33 percent respondents aged 55+ years. (See Table 8).

5.8: SECTOR, HOUSEHOLD CPTED VALUES AND GENDER

29.14 percent of female respondents, in both sectors, have a high level of household crime prevention, which is slightly higher than 26.83 percent of male respondents with high prevention. Of the total respondents with high household crime prevention, more are females, 56.16 percent, against 43.84 percent males.

(See Table 9).

In Robina, high level household crime prevention by gender is similar with 31.58 percent for female respondents and 31.69 percent of male respondents. Females represent 53.23 percent of all Robina respondents with high prevention against 46.77 percent for males. (See Table 10).

In Mermaid, 27.55 percent of respondents with a high level of household crime prevention are females, against 23.51 percent for males. Females represent 58.55 percent of all Mermaid respondents with high prevention, against 41.45 percent for males. (See Table 11).

5.9: SECTOR, HOUSEHOLD CPTED VALUES AND FEAR OF CRIME

17.56 percent of all respondents, in both sectors, have a high level of fear of crime. 26.59 of those with high fear of crime also have a high level of prevention, which is almost the same as those with low fear of crime at 28.45 percent. Although not statistically significant ($p < .622$), only 16.61 percent of those with high prevention have a high level of fear of crime against 83.39 percent of those with high prevention who have a low level of fear. (See Table 12).

In Robina 29.17 percent of those with high fear of crime have high prevention, slightly less than those with low fear of crime at 32.40 percent. But again, although not statistically significant ($p < .595$), only 16.80 percent of those with high prevention have a high level of fear of crime against 83.20 percent of those with high prevention having a low level of fear. (See Table 13).

In Mermaid, 24.75 percent of those with high fear of crime have high prevention,

slightly less than those with low fear of crime at 25.87 percent. But again, although not statistically significant ($p < .816$), only 16.45 percent of those with high prevention have a high fear of crime against 83.45 percent of those with high prevention having low fear. (See Table 14).

5.10: SECTOR, HOUSEHOLD CPTED VALUES AND CONCERN ABOUT CRIME

26.50 percent of all respondents, in both sectors, are concerned about crime. 33.72 percent of those concerned, also have a high level of household crime prevention, while 66.28 percent who are concerned, have a low to moderate level of household crime prevention. It is significant that 31.77 percent of those with a high level of household crime prevention are concerned about crime, while 68.23 percent who have a high level of household crime prevention are not concerned about crime ($p < .019$). (See Table 15).

In Robina, 40.24 percent of those concerned about crime have high household prevention, against 29.58 percent who are not concerned. Although not statistically significant ($p < .065$), only 26.40 percent with high household prevention are concerned, against 73.60 percent who are not concerned. (See Table 16).

In Mermaid, 30.73 percent of those concerned about crime have high household prevention, against 23.49 percent who are not concerned. Again, although not statistically significant ($P < .064$), 36.18 percent with high household prevention are concerned, against 63.82 percent who are not concerned. (See Table 17)

CHAPTER SIX

VICTIMISATION

6.1: VICTIMISATION AND SECTOR

34.69 percent of respondents who have been victims of household crime live in Robina, while 65.31 percent live in Mermaid. 23.74 percent of respondents who live in Robina have been victims of household crime, while 29.75 percent who live in Mermaid have been victims. (See Table 18).

6.2: VICTIMISATION AND AGE

Victimisation of household crime is fairly evenly distributed by age with 31.97 percent of respondents who have been victims aged 18-35 years. 34.57 percent are aged 36-55 years, and 33.46 percent are aged 55+ years. Of those aged 18-35 years, 30.82 percent have been household crime victims which is almost the same as those aged 36-55 years, 30.90 percent of whom have been victimised. However, those aged 55+ years are the least vulnerable with 22.39 percent having been victims. (See Table 19).

6.3: VICTIMISATION AND GENDER

More female respondents, 55.72 percent, have been victims of household crime, against 44.28 percent males. Of those who have been victimised, 28.22 percent are female respondents and 26.43 percent are male respondents. (See Table 20).

6.4: VICTIMISATION AND HOUSEHOLD CRIME PREVENTION

A relationship has been found between a high level of household crime prevention and low victimisation ($p < .053$). 27.51 percent of all respondents report being

victims of household crime. Only 23.62 percent of all respondents who have been victims have high household crime prevention, while 76.38 percent have low to moderate prevention. Further, 76.90 percent of respondents with a high level of household crime prevention have not been victimised, while only 23.10 percent who have high household crime prevention have been victimised. (See Table 21).

Although not statistically significant ($p < .063$) in Robina, 29.79 percent of respondents who have been victimised, have high household crime prevention, while 70.21 percent have a low to moderate level of prevention. Of those who have high prevention, 77.60 percent have not been victimised, while only 22.40 percent have been victimised. (See Table 22).

In Mermaid, a relationship has been discovered between high household crime prevention and low victimisation ($p > .052$). 20.34 percent of Mermaid respondents who have been victimised, have high prevention, while 79.66 percent have low to moderate prevention. Of those who have high prevention, 76.32 percent have not been victimised, while 23.68 percent have been victimised. (See Table 23).

6.5: VICTIMISATION AND FEAR

No relationship has been found between victimisation and fear of crime ($p < .165$). 20.30 percent of respondents who have been household crime victims have high fear of crime, while 79.70 percent have low fear of crime. Of those who have high fear of crime 31.61 percent have been victimised, while 68.39 percent have not been victimised. See Table 24).

6.6: VICTIMISATION AND CONCERN

No relationship has been found between victimisation and concern about crime (p

< .177). 29.52 percent of respondents who have been victims of household crime are concerned about crime, while 70.48 percent are not concerned. Of those who are concerned, 30.53 percent have been victimised, while 69.47 percent have not been victimised. (See Table 25).

6.7: VICTIMISATION, HOUSEHOLD CRIME PREVENTION AND AGE

In the age group, 18-35 years, 19.44 percent of victims have high household prevention, while 80.56 percent who have not been victimised have high household prevention. Of those who have been victimised, 16.28 percent have high prevention, while 83.72 percent have low to moderate household prevention. (See Table 26).

In the age group, 36-55 years, 35.44 percent of victims have high household prevention, while 64.86 percent who have not been victimised have high household prevention. Of those who are victims, 27.96 percent have high prevention, while 72.04 percent have low to moderate household prevention. (See Table 27).

In the age group, 55+ years, 18.75 percent of victims have high household prevention, while 81.25 percent who have not been victimised have high household prevention. Of those who are victims, 26.67 percent have high household prevention, while 73.33 percent have low to moderate household prevention (See Table 28).

6.8: VICTIMISATION, HOUSEHOLD CRIME PREVENTION AND GENDER

Although not significant ($P < .526$), 26.45 percent of female respondents, who have been victims of household crime, have high household prevention, while 73.55

percent with high household prevention have not been victimised. Of female respondents who have been victimised, 27.15 percent have high household prevention, while 72.85 percent have low to moderate household prevention (See Table 29).

A relationship has been found between victimisation, high household crime prevention and males, ($p < .027$). 19.01 percent of male respondents who have been victims of household crime, have high household prevention, while 80.99 percent of males with high household prevention have not been victimised. Of male respondents who have been victimised, 19.17 percent have high household prevention, while 80.83 percent have low to moderate household prevention (See Table 30).

CHAPTER SEVEN

CPTED VALUES OF STREETS

7.1: STREET CPTED VALUES

Only 26.34 percent of respondents live in streets with high CPTED values. Of those who live in streets with high CPTED values, 46.74 percent are in Robina, and 53.26 are in Mermaid. (See Table 31).

30.81 percent of Robina respondents live in streets with high CPTED values, and 69.19 percent live in streets with low to moderate CPTED values. In Mermaid, fewer respondents, 23.36 percent, live in streets with high CPTED values, against 76.64 percent who live in streets with low to moderate CPTED values. (See Table 31).

7.2: STREET CPTED VALUES AND DWELLINGS

Only 32.49 percent of respondents live in dwellings with high CPTED values which are in streets with high CPTED values, against 67.51 percent who live in dwellings with high CPTED values in streets with low to moderate CPTED values. Of those who live in dwellings with high CPTED values 34.75 percent are in streets with high CPTED values, while 65.25 percent are in streets with low to moderate CPTED values. (See Table 32).

In Robina, only 29.60 percent of respondents live in dwellings with high CPTED values which are in streets with high CPTED values, against 70.40 percent who live in dwellings with high CPTED values in streets with low to moderate CPTED values. Of those who live in dwellings with high CPTED values, 30.33 percent are in streets with high CPTED values, while 69.67 percent are in streets with low to

moderate CPTED values. (See Table 33).

Again, in Mermaid, 34.87 percent of respondents live in dwellings with high CPTED values which are in streets with high CPTED values, against 65.13 percent who live in dwellings with high CPTED values in streets with low to moderate CPTED values. Of those who live in dwellings with high CPTED values, 38.69 percent are in streets with high CPTED values, while 61.31 percent are in streets with low to moderate CPTED values. (See Table 34).

7.3: STREET CPTED VALUES AND VICTIMS OF HOUSEHOLD CRIME

Across the whole sample, a relationship has been found between streets with high CPTED values and low victimisation ($p < .013$). 79.34 percent of respondents, who have been victims of household crime, live in streets with low CPTED values, against 20.66 percent of victims living in streets which have high CPTED values. Of those who live in streets with high CPTED values, only 21.46 percent have been victimised, while 78.54 percent have not been victimised. Of those who live in streets with low CPTED values, 29.45 percent have been victimised, while 70.55 percent have not been victimised. (See Table 35).

Although not significant ($p < .992$), in Robina, 69.15 percent of respondents, who have been victims of household crime, live in streets with low CPTED values, against 30.85 percent of victims living in streets with high CPTED values. Of those who live in streets with high CPTED values, 23.77 percent have been victimised, while 76.23 percent were not victims. Similarly, of those who live in streets with low CPTED values, 23.72 percent have been victimised, while 76.28 percent have not been victimised. (See Table 36).

In Mermaid, a significant relationship ($p < .002$) has been found between high street CPTED values and low victimisation. 84.75 percent of victims live in streets with low CPTED values, against 15.25 percent of victims living in streets which have high CPTED values. Of those who live in streets with high CPTED values, only 19.42 percent have been victimised, while 80.58 percent have not been victimised. Of those who live in streets with low CPTED values, 32.89 percent have been victimised, while 67.11 percent have not been victimised. (See Table 37).

7.4: STREET CPTED VALUES AND FEAR OF CRIME

Although not statistically significant ($p < .196$), 22.41 percent of those with high fear of crime live in streets with high CPTED values, while 77.59 percent of those with high fear live in streets with low CPTED values. 85.06 percent of those living in streets with high CPTED values have low fear, whereas 14.94 percent of those living in streets with high CPTED values have high fear. (See Table 38).

Although not significant ($p < .676$), in Robina, 28.77 percent of those with high fear of crime live in streets with high CPTED values, while 71.23 percent of those with high fear live in streets with low CPTED values. 82.79 percent of those living in streets with high CPTED values have low fear, whereas 17.21 percent of those living in streets with high CPTED values have high fear. (See Table 39).

Again, although not significant ($p < .149$), in Mermaid 17.82 percent of those with high fear of crime live in streets with high CPTED values, while 82.18 percent of those with high fear live in streets with low CPTED values. 87.05 percent of those living in streets with high CPTED values have low fear, whereas 12.95 percent of those living in streets with high CPTED values have high fear. (See Table 40).

7.5: STREET CPTED VALUES AND CONCERN OF CRIME

Although not statistically significant, ($p < .191$), of those who are concerned about crime, 29.39 percent live in streets with high CPTED values, while 70.61 percent of those who are concerned live in streets with low CPTED values. Of those who live in streets with high CPTED values, 29.50 percent are concerned about crime, while 70.50 percent are not concerned. (See Table 41).

In Robina, of those who are concerned about crime, although not significant ($p < .462$), 34.15 percent live in streets with high CPTED values, while 65.85 percent live in streets with low CPTED values. Of those who live in streets with high CPTED values, 22.95 percent are concerned about crime, while 77.05 percent are not concerned. (See Table 42).

Again, in Mermaid, of those who are concerned about crime, although not significant ($p < .143$), 27.22 percent live in streets with high CPTED values, while 72.78 percent live in streets with low CPTED values. Of those who live in streets with high CPTED values, 35.25 percent are concerned about crime, while 64.75 percent are not concerned. (See Table 43).

7.6: STREET CPTED VALUES AND NEIGHBOURHOOD

38.82 percent of respondents live in streets with high CPTED values which are in neighbourhoods with high CPTED values, against 61.18 percent who live in streets with high CPTED in neighbourhoods with low to moderate CPTED values. Of those who live in streets with high CPTED values, 57.85 percent are in neighbourhoods with high CPTED values, while 42.15 percent are in neighbourhoods with low CPTED values. (See Table 44).

CHAPTER EIGHT

CPTED VALUES OF NEIGHBOURHOODS

8.1: NEIGHBOURHOOD CPTED VALUES AND SECTOR

29.77 percent of respondents live in high CPTED value neighbourhoods - all of which are in Robina - against 70.23 percent who live in low to moderate CPTED value neighbourhoods. Of those respondents who live in Robina, 74.49 percent live in neighbourhoods which have high CPTED values. In Mermaid, there are no high CPTED value neighbourhoods. (See Table 45).

8.2: STREET CPTED VALUES AND NEIGHBOURHOOD BY SECTOR

In Robina, 28.81 percent of respondents live in high CPTED value streets which are in high CPTED value neighbourhoods, while 71.19 percent live in high CPTED value streets in low to moderate CPTED value neighbourhoods. Of those respondents who live in high CPTED value streets, 69.67 percent are in high CPTED value neighbourhoods, while 30.33 percent are in low to moderate CPTED value neighbourhoods. (See Table 46).

23.36 percent of Mermaid respondents live in streets have high CPTED values, against 76.64 percent who live in streets with low to moderate CPTED values. All Mermaid neighbourhoods have low to moderate CPTED values. (See Table 47).

8.3: NEIGHBOURHOOD CPTED VALUES AND VICTIMISATION

28.41 percent of victims live in high CPTED value neighbourhoods, while 71.59 percent live in low to moderate CPTED value neighbourhoods. Of those who live in high CPTED value neighbourhoods, 26.10 percent have been victimised, against

73.90 percent who have not been victimised. Similarly, of those who live in low to moderate CPTED value neighbourhoods, 27.87 percent have been victimised, against 72.13 percent have not been victimised. (See Table 48).

In Robina, 81.91 percent of respondents who have been victimised live in high value CPTED neighbourhoods, while 18.09 percent live in low to moderate CPTED value neighbourhoods. Of those who live in high CPTED value neighbourhoods, 26.10 percent have been victimised, against 73.90 percent who have not been victimised. Of those who live in low to moderate CPTED value neighbourhoods, 83.17 percent have not been victimised, against 16.83 percent who have been victimised. (See Table 49).

In Mermaid there are no high value CPTED neighbourhoods. Of those who live in low to moderate CPTED value neighbourhoods, 70.25 percent have not been victimised, compared with 29.75 percent who have been victimised. (See Table 50).

CHAPTER NINE

OTHER RESULTS

9.1: SOCIAL ISSUES

Of the 921 respondents who either rank or name one social issue of most concern, crime is cited as the most important.

ISSUE	PERCENTAGE
Crime	28.5
Education	23.2
Unemployment	19.8
Economy	17.8
Domestic Violence	4.0
Gold Coast Politics	2.7
Tourism	2.3
Multiculturalism	1.7

9.2: HOUSEHOLD SAFETY is not an issue of concern for most respondents. During the day, 95.6 percent feel either completely safe, or fairly safe, while at home alone. During the night 84.8 percent feel either completely, or fairly safe.

9.3: WEAPONS

12.4 percent of respondents report having either a firearm or other weapons in their homes. Of those who have a weapon, 40.5 percent possess firearms. 45.8 percent of respondents who possess a weapon say it is because of the danger of crime.

9.4: HOUSEHOLD SECURITY

This is an issue about which most respondents are very conscious. During the day, 54.3 percent lock doors and windows always, or mostly, while at home. At night, 91.2 percent lock up always, or mostly.

Although only 13.5 percent leave outside lights on outside at night, 84.3 percent of those do so for security.

9.5: SECURITY DEVICES

These are present in a number of households.

DEVICE	PERCENTAGE
Deadlocks	63.7
Window grills	52.2
Window locks	32.2
External security lighting	30.6
Chains/bolts	29.7
Dogs	24.1
Neighbourhood Watch signs	21.0
Burglar Alarms	15.6
Other security signs	15.3
Intercom	11.5
Silent telephone number	9.0
Safety House signs	2.6

Of the 845 respondents who either rank or name their main reason for having security devices, their own experience of break-ins is cited as the most important.

REASON	PERCENTAGE
Own experience of break-ins	24.6
Publicity/news/advice	21.5
Security devices already there	20.6
Break-ins experienced by neighbours	14.0
Insurance requirement	9.7
Break-ins experienced by friends/family	5.5
Other	3.9

9.6: ATTEMPTED BREAK-INS

14.5 percent of respondents have experienced attempted break-ins during the last three years. Among these, 70.3 percent experienced one attempt, 17.6 percent experienced two attempts, and 2.2 percent experienced between three and six attempts.

45.9 percent of those who have experienced attempted break-ins did not report them to the police. The main reason given for not reporting was because it was considered too trivial/unimportant.

REASON	PERCENTAGE
Too trivial/unimportant	30.0
Uncertain about attempt	25.0
Police could do nothing	13.8
Police would do nothing	10.0
Nothing stolen	8.8
Told someone else	2.6
Private matter	1.2

No response

7.4

9.7: ACTUAL BREAK-INS

17.5 percent of respondents have had actual break-ins during the last three years. Of these, 71.9 percent had one, 16.3 percent had two and 8.4 percent had between three and five.

75.8 percent of break-ins victims said that goods were stolen. The main types of goods stolen were:

GOODS	PERCENTAGE
Cash/credit cards	20.2
Jewellery	19.0
Electrical goods	19.0
Other	15.2
Bicycles	1.2
Clothing	0.6
No response	24.8

11.6 percent of break-ins victims did not report them to the police. The main reason given for not reporting was that the victims considered it was too trivial/unimportant.

REASON	PERCENTAGE
Too trivial/unimportant	7.5
Police could do nothing	4.6
Nothing stolen	3.6
Private matter	1.2

Police would do nothing	1.2
Other	1.2
No response	80.7

9.8: NEIGHBOURHOOD SAFETY AND SECURITY

9.8.1: NEIGHBOURS

Most respondents - 86.8 percent - know a few, or many of their neighbours. 58.8 percent consider their neighbours as acquaintances, and 26.1 percent as friends. 1.7 percent are uncertain, while 13.4 percent did not respond.

9.8.2: NEIGHBOURHOOD STREET LIGHTING

Most respondents - 77.8 percent - say that street lighting in their neighbourhood is adequate, while 21.8 percent say it is inadequate.

9.8.3: NEIGHBOURHOOD MAINTENANCE

Most respondents - 94.2 percent - think their neighbourhood is maintained quite well or very well. Only 5.1 percent think it is not very well maintained.

9.8.4: FEAR OF NEIGHBOURHOOD CRIME

18.0 percent of respondents said they are very afraid to walk around their neighbourhood alone at night, while 82.0 percent are completely unafraid, somewhat or very slightly afraid.

9.8.5: FEAR OF NEIGHBOURHOOD YOUNG PEOPLE

20.4 percent of respondents avoid certain areas in their neighbourhood because of the behaviour of groups of young people. Types of areas avoided are:

AREA	PERCENTAGE
Parks	17.3
Hotels	16.8
Shops	14.4
Beaches	12.4
Service stations	2.5
Public toilets	2.0
Other	28.7

9.9: GOLD COAST PUBLIC SAFETY

9.9.1: PUBLIC TRANSPORT

Safety on public transport is marginal. Less than half, 43.0 percent of respondents, think that public transport is safe to use at any time. 14.4 percent do not use public transport, while 36.7 percent feel it safe only during the day, and 5.0 percent said it is unsafe at any time.

9.9.2: SAFETY AFTER DARK

Less than half, 45.1 percent of respondents, think it is safe to go out on the the Gold Coast after dark. 11.1 percent give a qualified "yes" or are uncertain, while 42.9 percent think it is unsafe.

9.9.3: PARKS

The majority of respondents - 80.5 percent - think that Gold Coast parks are quite safe, or very safe to use during the day. 15.7 percent think they are a little unsafe, and only 2.1 percent think they are very unsafe. However, at night, more than half, 54.0 percent of respondents, think parks are very unsafe and 36.1 percent, a little unsafe. 7.1 percent think the parks are quite safe, and only 0.6 percent think the

parks are very safe.

9.9.4: PUBLIC TOILETS

More than half, 59 percent of respondents, think Gold Coast public toilets are either quite safe, or very safe to use during the day. 30.9 percent think they are a little unsafe, while 8.5 percent think they are very unsafe. However, at night, 65.5 percent think public toilets are very unsafe. 27.0 percent think they are a little unsafe. 4.8 percent think they are quite safe, and only 0.4 percent think they are very safe.

9.9.5: CAR PARKS

77.6 percent of respondents feel that car parks are quite safe, or very safe to use during the day. 17.2 percent feel they are a little unsafe, while only 2.3 percent feel they are very unsafe. At night, 40.5 percent feel car parks are a little unsafe. 31.7 percent feel they are very unsafe. 19.4 percent feel they are quite safe, while only 3.8 percent feel they are very safe.

9.9.6: FEAR OF GOLD COAST CRIME

Most respondents - 72.7 percent - avoid certain Gold Coast areas at night because of their perceived danger of crime in these areas. The areas named are:

AREA	PERCENTAGE
Surfers Paradise	79.1
Broadbeach	2.8
Southport	2.3
Palm Beach	0.4
Miami	0.4

Coolangatta	0.3
Other	13.3
No response	1.4

39.7 percent of respondents usually, always or sometimes make a point of going out with someone else at night, because of the danger of crime, and 14.7 percent do not go out at night. 44.9 percent do not, or usually do not, make a point of going out with someone else at night because of the danger of crime.

9.9.7: FEAR OF GOLD COAST YOUNG PEOPLE

Most respondents - 63.9 percent - avoid certain Gold Coast areas at all times because of the behaviour of groups of young people. The areas named are:

AREA	PERCENTAGE
Surfers Paradise	79.6
Broadbeach	3.1
Southport	2.3
Miami	1.0
Palm Beach	0.9
Coolangatta	0.1
Other	11.4
No response	1.6

9.10: VANDALISM & GRAFFITI

41.9 percent of respondents consider the incidence of vandalism and graffiti to have been about the same in their neighbourhood during the last twelve months, while 21.6 percent think it has increased a lot. However, 40.6 percent think

vandalism and graffiti have increased a lot on the whole of the Gold Coast during the last twelve months, and 44.8 percent think vandalism and graffiti have increased a lot around Australia during the same time.

9.11: PROPERTY CRIME

33.6 percent of respondents think property crime, such as burglary and breaking and entering, has been about the same in their neighbourhood during the last twelve months, while 31.2 percent think it has increased a lot. However, 54.0 percent think property crime has increased a lot on the whole of the Gold Coast during the last twelve months, and 52.4 percent think it has increased a lot around Australia during the same time.

9.12: VIOLENT CRIME

56.7 percent of respondents think that crimes of violence, such as assault and rape, have been about the same in their neighbourhood during the last twelve months, while 17.4 percent think they have increased a lot. However, 42.7 percent think violent crimes have increased a lot on the whole of the Gold Coast during the last twelve months, and 47.4 percent think violent crimes have increased a lot around Australia during the same time.

9.13: ASSAULT & THREATENED ASSAULT

Only 65 or 6.6 percent of respondents report that they have been attacked during the past three years. 40 have been attacked once, and 22 between two and twenty times. 2 report more than one-hundred attacks. (One of these respondents is a police officer, the other is a security guard). 35 were injured during the last attack, of which there were 18 facial injuries, 2 leg injuries, 4 arm injuries, 3 chest injuries. 8 declined to describe their injuries.

95 or 9.6 percent of respondents have been threatened during the past three years, 34 have been threatened once. 56 experienced between two and fifty threats, while 5 nominated more than one-hundred. (The latter respondents are either police officers or security guards).

At the last time of a threat or attack, 21 respondents said a weapon was used. These were 4 firearms, 7 knives, 8 other weapons.

When asked why they were threatened, or attacked, the victims responded as follows. (Some gave more than one reason):

REASON	NUMBER
Unlucky	41
Other	41
Something they said or did	38
Because of their sex	13
Unsafe place	13
Part of a robbery	11
The way they dress	10
Age	9
Don't know	8
Disabled	2
Race	1
Gay or lesbian	1
No response	3

26 victims knew their aggressor/s very well. 8 knew their aggressor/s quite well. 20

knew their aggressor/s by reputation. 68 said their aggressor/s were complete strangers. 3 did not answer. Of those who knew their aggressor/s very well, 19 said they were their partner or a family member, while 7 said they were not.

64.3 percent of those attacked or threatened did not report the incident to the police. The main reason given for not reporting was because they considered it to be trivial/unimportant.

REASON	PERCENTAGE
Too trivial/unimportant	31.2
Police could do nothing	7.2
Private matter	5.6
Police would do nothing	4.8
Other	4.8
Afraid of reprisal	4.0
Too confused/upset	2.4
Told someone else	2.4
Did not want aggressor punished	0.8
No response	36.8

INCIDENT LOCATION	PERCENTAGE
Inside other building	21.6
In street	21.6
Inside home	19.2
Outside home	9.6
Inside work/study place	9.6
Outside work/study place	3.2

Other	3.2
In private vehicle	1.6
In public vehicle	1.6
In park	1.6
Outside another person's home	1.6
Inside another person's home	0.8
No response	4.8

9.14: SEXUAL ASSAULT & THREATENED SEXUAL ASSAULT

Only 8 respondents have been sexually assaulted during the last three years. 4 have reported one assault, 2 have reported two, 1 reported three and 1 has declined to respond. 10 respondents have been threatened with sexual assault during that time. 8 have reported one threat, 2 have reported two. At the last time of a threatened or actual sexual assault, 1 knife and 1 unspecified weapon have been used. Three respondents have received facial injuries, and 2 have declined to answer.

When asked why they were threatened or actually sexually assaulted, the victims responded as follows. (Some gave more than one reason):

REASON	NUMBER
Because of their sex	14
Unlucky	6
Unsafe place	4
Other	4
Age	2

The way they dress	1
Race	1
Don't know	1
No response	4

4 victims knew the aggressor/s very well. 2 knew the aggressor/s quite well. 10 said the aggressor/s were complete strangers. 2 did not answer. Of those who knew the aggressor/s very well, 2 said the aggressor/s was their partner or a family member, and 2 said the they were not a partner/family member.

13 of those sexually assaulted or threatened have not reported the incident to the police. The main reason given for not reporting the incident to police is that they assumed police could not do anything.

REASON	NUMBER
Police could do nothing	4
Told someone else	2
Other	2
Too trivial/unimportant	1
Police would do nothing	1
Private matter	1
Too confused/upset	1
No response	6

INCIDENT LOCATION	NUMBER
In street	5
Inside home	3

Inside another person's home	2
Outside another person's home	1
Inside work/study place	1
Inside other building	1
In park	2
No response	3

9.15: OTHER CRIMES

41.3 percent of respondents have been victims of other crimes. Some respondents have been victimised on more than one occasion. Their primary recollections of victimisation are as follows:

CRIMES	PERCENTAGE
Breaks & enters	38.6
Car thefts	9.5
Assaults	9.3
Thefts	8.8
Robberies	6.6
Sexual assaults	3.2
Burglaries	2.9
Vandalism	2.0
Domestic violence	1.7
Rapes	1.7
Indecent exposure	1.3
Armed robberies	1.0
Fraud	1.0
Hostages	0.6

Stalkings	0.6
Arson	0.5
Homicide	0.2
No response	10.5

56.0 percent of respondents report that they have family or friends who have been victims of other crimes. Some have been victimised more than once. Respondents primary recollections are as follows:

CRIMES	PERCENTAGE
Breaks & enters	51.3
Assaults	13.1
Robberies	8.6
Car thefts	4.9
Burglaries	4.3
Thefts	3.6
Rapes	3.1
Domestic violence	2.0
Sexual assaults	1.4
Armed robberies	1.4
Homicide	1.3
Indecent exposure	0.6
Stalkings	0.6
Arson	0.5
Hostages	0.4
Vandalism	0.2
Fraud	0.2

No response

3.0

CHAPTER TEN

DISCUSSION AND CONCLUSION

INTRODUCTION

This research study, which was conducted in selected areas of the Gold Coast, developed an environmental crime prevention instrument designed to operationalise generally accepted principles of CPTED. The study also tested a survey instrument which explored fear of crime and actual experience of crime. The instruments tested whether dwellings, streets and neighbourhoods which score high on measures of CPTED have lower rates and incidence of fear of crime, than those which score low on measures of CPTED.

FINDINGS

A preliminary statistical analysis indicates that households high on CPTED measures for the whole sample have relatively low rates of victimisation ($p < .053$, see Table 21). Although CPTED measures are not statistically significant ($p < .630$, see Table 22) in Robina, they are in Mermaid ($p < .052$, see Table 23) in reducing crime victimisation.

High street CPTED measures for the whole sample are effective ($p < .013$, see Table 35) in reducing victimisation. Although high street CPTED measures for Robina are not statistically significant ($p < .992$, see Table 36) in reducing victimisation, in Mermaid high street CPTED measures are significantly effective ($p < .002$, see Table 37) in reducing crime victimisation.

High neighbourhood CPTED values for the whole sample do not appear to be

effective (see Table 48). In Robina, there is no association (see Table 49), and in Mermaid there are no neighbourhoods with high CPTED values (see Table 50). Because the two sectors were surveyed with only a few neighbourhood questions, it can only be said that, at this stage, the neighbourhood results are inconclusive.

Although a more thorough (multivariate) analysis is necessary, dwellings and streets which score high on measures of CPTED have lower rates of crime than dwellings and streets which score low on measures of CPTED.

IMPLICATIONS

This study suggests that CPTED principles might well be relevant in reducing property crimes. If good design principles are applied to an existing development by upgrading the environmental factors of households, streets and neighbourhoods, current property crime rates could be reduced. Similarly, if CPTED principles are adopted in proposed developments, the level of security is likely to be increased.

It follows that developers should be strongly encouraged to use CPTED as part of their planning, design and marketing strategies. Buyers would be attracted by the benefits of inbuilt CPTED features. Undoubtedly, the resultant lower risk would lead to lower insurance premiums.

It is also possible that the measure of CPTED that we have developed in this study may be utilised as a reliable scale of measurement of security. By aligning this scale with existing property crime statistics, it should be possible to establish security ratings for households, streets and neighbourhoods.

FUTURE RESEARCH

The results of our research failed to prove that householders living in dwellings and streets which score high on measures of CPTED will have reduced fear of crime when compared with householders living in dwellings and streets which score low on measures of CPTED.

In the case of households, there is some indication that high CPTED measures may reduce fear (see Tables 12, 13, 14), but statistically the association is weak. Likewise, the majority of respondents living in streets and neighbourhoods with high CPTED measures appear to have low fear, but this association has not reached a statistically significant level. (See Tables 28, 39, 40).

It is likely that, as revealed by the present study, fear of crime may be only marginally associated with CPTED levels, and there may be other issues such as personality, life experiences, media crime reports, family and peer influences, etc., which have affected the respondents' perceptions of safety and security. Further research by way of social and psychological studies of residents may identify the key elements which affect the fear of crime.

CONCLUSION

The study attempted to expand the range of options available to crime prevention agencies in the face of fear in the community caused by the perception that crime is increasing, and that authorities are going "soft" on dealing with crime. Crime is likely to increase, rather than decrease, over time. This study has shown that there are compelling indicators that at least some crime may be prevented through the application of environmental crime prevention principles.

In reaching our conclusion, we have to be somewhat tentative. A great deal more analysis - which is currently beyond our resources - of the present results is required. In addition, replication of the study in other geographical areas, and further research of the association between our CPTED scales and both crime and fear of crime would be useful.

Nevertheless, we have presented preliminary results from a study of middle-Australian homes which suggest strongly that environmental prevention can reduce crime. The implication for all levels of government - especially local government, and private developers, is that it is worthwhile to include CPTED principles when planning new urban environments.

We recognise that issues relating to displacement of crime onto other areas has to be considered also in planning CPTED environments. The development and testing of the CPTED measure used in this study should help enormously in this, and related research.

Finally, we are very encouraged by the development and application of the CPTED scales and their possible use in both academic and policy research. Despite the controversy surrounding environmental crime prevention, all the indications from the present study are that we should employ CPTED wherever possible, in planning Australian dwellings, estates and suburbs.

APPENDIX A

CPTED SCALES RESPONSES

TYPE OF DWELLING

There were 721 or 72.8 percent detached houses, 84 or 8.5 percent duplexes, 55 or 5.5 percent townhouses, 126 or 12.7 percent units. There were 5 or 0.5 percent missing cases.

NUMBER OF UNITS IN BLOCK

Of the blocks of units, 72 or 54.0 percent contained between two and five units. 32 or 24.0 percent contained between six and ten units. 3 or 2.3 percent contained fourteen. 1 or 0.8 percent contained sixteen units. 7 or 5.3 percent contained 18 units. 4 or 3.0 percent contained twenty units. 1 or 0.8 percent contained 21 units. 10 or 7.5 percent contained 42 units. There were 3 or 2.3 percent missing cases.

FLOOR LEVEL OF ENTRANCE TO UNIT

89 or 66.8 percent units' entrances were on level one. 38 or 28.6 percent entrances were on level two. 3 or 2.3 percent entrances were on level three. There were 3 or 2.3 percent missing cases.

NUMBER OF STOREYS OF DWELLING

602 or 60.7 percent of dwellings contained one storey. 53 or 5.3 percent contained two storeys. 331 or 33.4 percent contained three. 1 or 0.1 percent contained four. There were 4 or 0.5 percent missing cases.

VALUE CATEGORY OF DWELLING

231 or 23.3 percent of dwellings were valued at >\$250 000. 415 or 41.9 percent were valued at between \$150 000 and \$250 000. 336 or 33.9 percent were valued

at <\$150 000. There were 9 or 0.9 percent missing cases.

BUILDING MATERIALS

818 or 82.5 percent of dwellings were of brick material. 67 or 6.8 percent were timber. 99 or 10.0 percent were of other building materials. There were 7 or 0.7 percent missing cases.

STREET POSITION

160 or 16.1 percent of dwellings were located on a corner block. 822 or 82.9 percent were non-corner blocks. There were 9 or 1.0 percent missing cases.

STREET TYPE

95 or 9.6 percent of dwellings were located on a main road. 337 or 34.0 percent were in a cul-de-sac. 551 or 55.6 percent were in a suburban street. 3 or 0.3 percent were classified as other. There were 5 or 0.5 percent missing cases.

LEVEL OF MAINTENANCE OF GARDEN/YARD

382 or 38.5 percent of dwellings had a high level of garden/yard maintenance. 438 or 44.2 percent were medium level of maintenance. 163 or 16.4 percent were low level. There were 8 or 0.9 percent missing cases.

DETACHED HOUSE AND LOT

VISIBLE PUBLIC-PRIVATE BOUNDARY

469 or 64.6 percent of houses had a clearly, or almost clearly visible public-private boundary. 87 or 12.0 percent were borderline. 164 or 22.6 percent had no clear, or indistinct boundary. There were 4 or 0.8 percent missing cases.

VISIBLE BARRIER TO MOVEMENT

536 or 73.8 percent of houses had no or almost no visible barrier to movement. 123 or 16.9 percent were borderline. 63 or 8.7 percent had an adequate, or an impenetrable barrier. There were 4 or 0.6 percent missing cases.

CLEAR ROUTE FROM FOOTPATH TO DOOR

606 or 83.5 percent of houses had the whole, or almost whole route visible from the street visible. 33 or 4.5 percent were borderline. 83 or 11.4 percent had none, or almost none of the route visible. There were 4 or 0.6 percent missing cases.

DOORS/WINDOWS VISIBLE FROM STREET

352 or 48.5 percent of houses had all, or most doors/windows visible from the street. 194 or 26.7 percent were borderline. 173 or 23.8 percent had no, or almost no doors/windows visible. There were 7 or 1.0 percent missing cases.

DOORS/WINDOWS VISIBLE TO NEIGHBOURS

372 or 51.5 percent of houses had all, or most doors/windows visible to adjacent neighbours. 225 or 30.4 percent were borderline. 124 or 17.4 percent had no, or almost no doors/windows visible. There were 5 or 0.7 percent missing cases.

CONCEALMENT OPPORTUNITIES IN YARD

257 or 35.4 percent of houses had no, or almost no places to hide in the yard. 260 or 35.8 percent were borderline. 205 or 28.2 percent had had a number of, or many hiding places. There were 4 or 0.6 percent missing cases.

OPEN SPACES BETWEEN HOUSES

320 or 44.1 percent of houses had clear and open spaces between houses. 245 or

33.7 percent were borderline. 157 or 21.6 percent had cluttered, or fairly cluttered, and obstructed views between houses. There were 4 or 0.6 percent missing cases.

LINKAGE GARAGE/CARPORT TO HOUSE

366 or 50.5 percent of houses had an internal door from the garage to the house. 216 or 29.7 percent had a garage/carport attached close to an entrance to the house. 66 or 9.1 percent had a garage/carport attached. 43 or 5.9 percent had a detached garage/carport. 8 or 1.1 had a remotely detached garage/carport. There were 27 or 3.7 percent missing cases.

TOOL SHED/LEAN-TO

675 or 93.0 percent of houses had no shed visible from the street. 34 or 4.7 percent had a shed/s visible from the street. There were 17 or 2.3 percent missing cases.

SCREENS, TRELLISES ETC

417 or 57.4 percent of houses had no screens or trellises. 87 or 12.0 percent had one screen or trellis. 139 or 19.1 percent had a few. 49 or 6.7 percent had a number of screens or trellises. 24 or 3.3 percent had screens or trellises which hid windows/doors. There were 10 or 1.5 percent missing cases.

ACCESS TO UPPER STOREYS BY CLIMBING AIDS

Of the 193 houses which contained two or more storeys, 74 or 38.3 percent had very easy access to upper storeys by vegetation, drains etc. 34 or 17.6 percent had easy access. 31 or 16.1 percent had some access. 8 or 4.1 percent had almost no access. 39 or 20.2 percent had no access. There were 7 or 3.7 percent missing cases.

VISIBLE WINDOW SECURITY

368 or 50.7 percent of houses had no, or almost no visible window security. 117 or 16.1 were borderline. 236 or 32.5 percent had all, or most windows visibly secured. There were 5 or 0.7 percent missing cases.

EASE OF ACCESS TO GROUND FLOOR ENTRANCES

389 or 53.6 percent of houses had all, or most doors visibly secured. 135 or 18.6 were borderline. 192 or 26.4 percent had no, or almost no doors visibly secured. There were 10 or 1.4 percent missing cases.

UNLIT PROJECTIONS OVER WINDOWS/DOORS

412 or 56.7 percent of houses had no, or almost no unlit projections over any windows/doors. 256 or 35.3 were borderline. 54 or 7.4 percent had many, or a few unlit projections. There were 4 or 0.6 percent missing cases.

SECURITY OF ROOF

420 or 57.9 percent of houses had a roof which was easily, or fairly easily accessible without a ladder etc. 141 or 19.4 percent were borderline. 160 or 22.0 percent had a roof which was inaccessible, or almost inaccessible. There were 5 or 0.7 percent missing cases.

VISIBLE SIGNS OF DOG OWNERSHIP

678 or 93.4 percent of houses had no visible signs of dog ownership. 43 or 5.9 percent had visible signs. There were 5 or 0.7 percent missing cases.

VISIBLE SIGNS OF ALARMS

639 or 88.0 percent of houses had no visible signs of alarms. 82 or 11.3 percent

had visible signs. There were 5 or 0.7 percent missing cases.

NEIGHBOURHOOD WATCH

519 or 71.5 percent had no "Neighbourhood Watch" signs. 201 or 27.7 percent had signs. There were 6 or 0.8 percent missing cases.

SAFETY HOUSE

714 or 98.4 percent had no "Safety House" signs. 5 or 0.7 percent had signs. There were 7 or 0.9 percent missing cases.

SECURITY FIRM'S SIGNS

569 or 78.4 percent had no security firm's signs. 146 or 20.1 percent had signs. There were 11 or 1.5 percent missing cases.

NUMBER OF GROUND FLOOR ENTRANCES FOR ACCESS

338 or 46.6 percent had between one and three entrances. 309 or 42.6 percent had between four and six entrances. 57 or 7.9 percent had between seven and ten. 3 or 0.4 percent had between eleven and fifteen. There were 19 or 2.5 percent missing cases.

ATTACHED HOUSES & UNITS (3 STOREYS & LESS) INDIVIDUAL UNITS

GROUND FLOOR ENTRANCE

221 or 82.8 percent of attached houses and units had a ground floor entrance. 42 or 15.7 percent had none. There were 4 or 1.5 percent missing cases.

PRIVATE GARDEN AREA

161 or 60.4 percent had no private garden. 101 or 37.8 percent had a private

garden. There were 5 or 1.8 percent missing cases.

CLEAR BOUNDARY BETWEEN PUBLIC & PRIVATE SPACE

93 or 34.9 percent had a clear, or reasonably clear distinction between public and private areas. 3 or 1.1 percent were borderline. 6 or 2.2 percent had no visible, or a blurred distinction. This question did not apply in 161 or 60.3 percent of cases. There were 4 or 1.5 percent missing cases.

BARRIERS TO MOVEMENT BETWEEN PUBLIC & PRIVATE AREAS

59 or 22.1 percent had no, or almost no visible barriers to movement. 6 or 2.2 percent were borderline. 38 or 14.2 percent had clear, or reasonably clear boundaries. This question did not apply in 160 or 60.0 percent of cases. There were 4 or 1.5 percent missing cases.

ADEQUATE EXTERNAL LIGHTING

211 or 79.0 percent had adequate, or reasonably adequate external lighting. 12 or 4.5 percent were borderline. 39 or 14.6 percent had inadequate, or reasonably inadequate lighting. There were 5 or 1.9 percent missing cases.

PLACES OF CONCEALMENT

87 or 32.6 percent had no, or almost no places of concealment. 33 or 12.4 percent were borderline. 5 or 1.9 percent had many, or a number of places. This question did not apply to 138 51.5 or percent of cases. There were 4 or 1.6 percent missing cases.

GARAGING FACILITIES

49 or 18.4 percent had direct internal access. 64 or 24.0 percent had close

attached access. 77 or 28.9 percent had attached access. 69 or 25.8 percent had detached access. There were no remotely detached garaging facilities. There were 8 or 2.9 percent missing cases.

VISIBLE WINDOW SECURITY

150 or 56.2 percent had no, or almost no visible window security. 15 or 5.6 percent were borderline. 98 or 36.7 percent had many, or some bars and locks visible. There were 4 or 1.5 percent missing cases.

VISIBLE SIGNS OF ALARMS

256 or 95.7 percent had no visible signs of alarms. 6 or 2.2 percent had visible signs. There were 5 or 2.1 percent missing cases.

NEIGHBOURHOOD WATCH

225 or 84.1 percent did not have "Neighbourhood Watch" signs. 37 or 13.8 percent had signs. There were 5 or 2.1 percent missing cases.

SAFETY HOUSE

261 or 97.8 percent did not have "Safety House" signs. 1 or 0.1 percent had a sign. There were 5 or 2.1 percent missing cases.

SECURITY FIRMS' SIGNS

250 or 93.6 percent did not have security firms's signs. 12 or 4.3 percent had signs. There were 5 or 2.1 percent missing cases.

NUMBER OF GROUND FLOOR ENTRANCES FOR ACCESS

43 or 16.1 percent had one ground floor entrance for access. 169 or 63.3 percent

had two. 32 or 12.0 percent had three. 9 or 3.4 percent had four. There were 14 or 5.2 percent missing cases.

EXTERNAL SPACE (FOOTPATH TO COMMON ENTRANCE)

COMMON ENTRANCE

245 or 92.1 percent had common entrances. 9 or 3.4 percent did not. There 12 or 4.5 missing cases.

VISIBLE BOUNDARIES

253 or 95.1 percent had clear visible boundaries. 1 or 0.4 percent had a blurred boundary. There were 12 or 4.5 percent missing cases.

VISIBLE BUFFER OR FILTER

217 or 81.6 percent had no, or almost no clear buffer or filter to movement. 27 or 10.2 percent were borderline. 10 or 3.8 percent had a clear, or fairly clear buffer or filter. There were 12 or 4.4 percent missing cases.

CLEAR ROUTE FROM GATE TO FRONT (COMMON) DOOR

No units had a common door.

ADEQUATE ON-SITE LIGHTING

129 or 48.7 percent had adequate, or reasonably adequate on-site lighting. 35 or 13.2 percent were borderline. 89 or 33.4 percent had inadequate, or fairly inadequate lighting. There were 13 or 4.7 percent missing cases.

DOORS/WINDOWS VISIBLE FROM STREET

115 or 43.2 percent had many, or a number of doors/windows visible from the

street. 36 or 13.5 percent were borderline. 103 or 38.7 percent had no, or almost no doors/windows visible. There were 12 or 4.6 percent missing cases.

DOORS/WINDOWS VISIBLE TO NEIGHBOURS

150 or 56.3 percent had doors/windows of most units visible to neighbours. 68 or 25.6 percent were borderline. 36 or 13.5 had some not visible to neighbours. There were 12 or 4.6 percent missing cases.

PLACES OF CONCEALMENT

97 or 36.5 percent had many or a few places of concealment. 95 or 35.7 percent were borderline. 61 or 22.9 percent had no, or almost no places of concealment. There were 13 or 4.9 missing cases.

OPEN SPACES BETWEEN BLOCKS OF UNITS

173 or 65.0 percent had clearly visible open spaces between blocks of units. 41 or 15.4 percent were borderline. 40 or 15.0 percent had congested space. There were 12 or 4.6 percent missing cases.

GARAGING FACILITIES

233 or 87.6 percent had individual, or semi-individual garaging facilities. 1 or 0.4 percent was borderline. 19 or 7.1 percent had common facilities. There were 13 or 4.9 percent missing cases.

TOOL SHEDS ETC.

235 or 88.3 percent had no tool sheds. 13 or 4.9 percent had tool sheds. 5 or 1.9 percent had structures which were hard to classify. There were 13 or 4.9 percent missing cases.

SCREENS, TRELLISES ETC.

128 or 48.1 percent had no, or almost no screens or trellises. 102 or 38.4 percent had some. 15 or 5.6 percent had many, or a few which blocked the view of doors/windows. There were 21 or 7.9 percent missing cases.

ACCESS TO UPPER STOREYS BY CLIMBING AIDS

167 or 62.8 percent had easy, or reasonably easy access to upper storeys by vegetation, drains etc. 3 or 1.1 percent were borderline. 5 or 1.9 percent had no, or almost no access from the outside. This question did not apply to 79 or 29.6 percent of cases. There were 12 or 4.6 percent missing cases.

SECURITY OF MAIN COMMON DOOR

18 or 6.8 percent had very visible security. 1 or 0.4 percent had no special security. This question did not apply to 235 or 88.2 percent of cases. There were 12 or 4.6 percent missing cases.

SECURITY OF ROOF

In 239 or 89.7 percent of cases, the roof appeared not to be able to be used for entry. In 6 or 2.3 percent of cases, it was borderline. In 9 or 3.4 percent of cases it could easily, or reasonably easily be used. There were 12 or 4.6 percent missing cases.

NUMBER OF COMMON ENTRANCES

174 or 65.4 percent had one common entrance. 43 or 16.2 percent had two. 29 or 10.9 percent had three. 4 or 1.5 percent had four. There were 16 or 6.0 percent missing cases.

STREET SCALE

LOT SIZED UNDEVELOPED OR VACANT AREAS (EXCLUDES PARKS)

857 or 86.4 percent of dwellings were in streets which had no, or almost no such areas in the street. 57 or 5.8 percent of dwellings were in streets which were borderline. 69 or 7.0 percent of dwellings were in streets which had a few, or many such areas. There were 8 or 0.8 percent missing cases.

REGIONAL/DISTRICT PARKS

605 or 61.0 percent of dwellings were in streets which had no, or almost no such parks. 18 or 1.8 percent of dwellings were in streets which were borderline. 340 or 34.5 percent of dwellings were in streets which had a few, or many parks. There were 28 or 2.8 percent missing cases.

LEVEL OF MAINTENANCE OF FOOTPATH/STREET

779 or 78.6 percent of dwellings were in streets which were well, or very well maintained. 209 or 21.1 percent of dwellings were in streets which were borderline. 3 or 0.3 percent of dwellings were in streets which were poorly, or very poorly maintained.

AMOUNT OF APPROPRIATE VEHICULAR TRAFFIC IN STREET

652 or 65.8 percent of dwellings were in streets where there was much, or considerable foot or slow vehicle movement. 235 or 23.7 percent of dwellings were in streets which were borderline. 102 or 10.3 percent of dwellings were in streets which had no, or almost no slow vehicle traffic. There were 2 or 0.2 percent missing cases.

EASE WITH WHICH PEOPLE CAN USE OR PLAY IN STREET

It was prohibitive, or almost prohibitive for people living in 480 or 48.4 percent of dwellings to play in their street. For people living in 155 or 15.6 percent of dwellings it was borderline. It was safe, or very safe and easy for people living in 356 or 36.0 percent of dwellings to play in their street.

STREET LIGHTS

678 or 68.4 percent of dwellings had had good, or very good visibility at night in their street. 308 or 31.1 percent of dwellings had borderline visibility in their street. 5 or 0.5 percent of dwellings had poor, or very poor visibility at night in their street.

VISIBILITY AT WAITING PLACES (BUS STOPS ETC.)

105 or 87.5 percent of dwellings were in streets which had waiting places that were clearly, or very clearly lit. 14 or 11.7 percent of dwellings were in streets which had borderline visibility. There was 1 or 0.8 percent missing case. 871 dwellings were in streets where there were no waiting places.

STREET VISIBLE FROM MOST HOUSE (GROUND FLOOR) WINDOWS

At least one, or part of one ground floor window was visible from the street in 895 or 90.3 percent of dwellings. 61 or 6.2 percent of dwellings were in streets which were borderline. 35 or 3.5 percent of dwellings were in streets where there were no, or almost no windows visible from the street.

DWELLINGS CLOSE ENOUGH TO HEAR FROM THE STREET

872 or 88.0 percent of dwellings were in streets where dwellings were close enough for loud noises in the street to be audible from the dwelling. 40 or 4.0 percent of dwellings were in streets which were borderline. 79 or 8.0 percent of

dwellings were in streets in which it was difficult to hear loud noises in the street from some dwellings.

HOUSE NUMBERS CLEAR

All house numbers were visible, or clearly visible in 888 or 89.6 percent of dwellings. 102 or 10.3 percent of dwellings were borderline. In 1 or 0.1 percent of dwellings, the house number was not entirely visible.

SAFE ROUTES FOR PEDESTRIANS

974 or 98.3 percent of dwellings were in streets where there was at least one pedestrian route safe and visible. 15 or 1.5 percent of dwellings were in streets which were borderline. In 2 or 0.2 percent of dwellings were in streets where some pedestrian routes were overgrown/poorly visible.

HIDING PLACES

586 or 59.1 percent of dwellings were in streets where there were no, or almost no hiding places. 348 or 35.1 percent of dwellings were in streets which were borderline. 57 or 5.7 percent of dwellings were in streets which had many, or some hiding places.

NEIGHBOURHOOD SCALE

CLEARLY DEFINED BOUNDARY TO NEIGHBOURHOOD

933 or 94.2 percent of dwellings were in neighbourhoods which had clear, or very clear boundaries on all sides. 41 or 4.1 percent of dwellings were in neighbourhoods which were borderline. There were 17 or 1.7 percent missing cases.

CLEAR PUBLIC SIGHT LINES

651 or 65.6 percent of dwellings were in neighbourhoods in which it was not possible to see more than, or a little more than the local street. 131 or 13.2 percent of dwellings were in neighbourhoods which were borderline. 192 or 19.5 percent of dwellings were in neighbourhoods where there were views across the neighbourhood from some places. There were 17 or 1.7 percent missing cases.

HIDING PLACES

547 or 55.2 percent of dwellings were in neighbourhoods which had some or many hiding places in public places/spaces. 126 or 12.7 percent of dwellings were in neighbourhoods which were borderline. 318 or 32.1 percent of dwellings were in neighbourhoods which had no, or almost no hiding places in public places/spaces.

LEVEL OF PEDESTRIAN & TRAFFIC ACTIVITY

521 or 52.6 percent of dwellings were in neighbourhoods where many "anonymous" pedestrians and vehicles cross the neighbourhood. 384 or 38.7 percent of dwellings were in neighbourhoods which were borderline. 86 or 8.7 percent of dwellings were in neighbourhoods which had no, or almost no through traffic for pedestrians or vehicles.

ON MAIN PUBLIC TRANSPORT ROUTE

846 or 85.4 percent of dwellings were in neighbourhoods which were on a number of major public transport routes with many stops. 94 or 9.5 percent of dwellings were in neighbourhoods in which public transport serves only that neighbourhood, or terminates there. There were 51 or 5.1 percent missing cases.

CLEAR STREET NAMES

991 or 100.0 percent of dwellings were in neighbourhoods in which all, or almost all street names were clearly visible.

CLEAR DIRECTIONS TO FACILITIES

501 or 50.6 percent of dwellings were in neighbourhoods in which directions to facilities were borderline. 439 or 44.3 percent of dwellings were in neighbourhoods which had clear directions to all major facilities. There were 51 or 5.1 percent missing cases.

MAINTENANCE OF PUBLIC SPACES

924 or 94.9 percent of dwellings were in neighbourhoods in which public vegetation was well, or very well looked after. 50 or 5.1 percent of dwellings were in neighbourhoods which were borderline.

SIGNS OF STABILITY & PRIDE

746 or 75.3 percent of dwellings were in neighbourhoods where all, or almost all gardens and lots were well maintained. 228 or 23.0 percent of dwellings were in neighbourhoods which were borderline. There were 17 or 1.7 percent missing cases.

NUMBER OF PUBLIC TELEPHONES IN NEIGHBOURHOOD

440 or 44.4 percent of dwellings were in neighbourhoods where there were no public telephones. 131 or 13.2 percent were in neighbourhoods with one public telephone. 116 or 11.7 percent were in neighbourhoods with two or three public telephones. 304 or 30.7 percent were in neighbourhoods with between nine and twelve public telephones.

NEIGHBOURHOOD WATCH SCHEME

496 or 50.1 percent of dwellings were in neighbourhoods which were not part of a "Neighbourhood Watch" scheme. 495 or 49.9 percent of dwellings were in neighbourhoods which were part of "Neighbourhood Watch."

SAFETY HOUSE SCHEME

No dwellings were in a neighbourhood which was part of a "Safety House" scheme.

LOCATION OF NEAREST POLICE STATION

770 or 77.7 percent of dwellings were in neighbourhoods which had Broadbeach as their nearest police station. 221 or 22.3 percent of dwellings were in neighbourhoods which had Burleigh Heads as their nearest police station.

SCALE & PURPOSE OF PARKS & PUBLIC SPACES IN NEIGHBOURHOOD

770 or 77.7 percent of dwellings were in neighbourhoods which had small-scale parks used for recreation. 221 or 22.3 percent of dwellings were in neighbourhoods which had large-scale parks used for recreation.

SOCIAL FOCUS TO THE NEIGHBOURHOOD

442 or 44.6 percent of dwellings were in neighbourhoods which had a sporting focus. 382 or 38.5 percent of dwellings were in neighbourhoods which had a holiday/recreational focus. There were 167 or 16.9 percent missing cases.

APPENDIX B

TABLES

TABLE 1

The SAS System

TABLE OF SECTOR BY SEX

SECTOR	SEX		
Frequency			
Percent			
Row Pct			
Col Pct	FEMALE	MALE	Total
ROBINA	210	185	395
	21.23	18.71	39.94
	53.16	46.84	
	39.25	40.75	
MERMAID	325	269	594
	32.86	27.20	60.06
	54.71	45.29	
	60.75	59.25	
Total	535	454	989
	54.10	45.90	100.00

Frequency Missing = 2

STATISTICS FOR TABLE OF SECTOR BY SEX

Statistic	DF	Value	Prob
Chi-Square	1	0.229	0.632
Likelihood Ratio Chi-Square	1	0.229	0.632
Continuity Adj. Chi-Square	1	0.171	0.679
Mantel-Haenszel Chi-Square	1	0.229	0.632
Fisher's Exact Test (Left)			0.339
(Right)			0.707
(2-Tail)			0.649
Phi Coefficient		-0.015	
Contingency Coefficient		0.015	
Cramer's V		-0.015	
Effective Sample Size = 989			
Frequency Missing = 2			

TABLE 2

The SAS System

TABLE OF SECTOR BY AGE

SECTOR	AGE			Total
	18-35 YR	36-55 YR	55 + YR	
Frequency				
Percent				
Row Pct				
Col Pct				
ROBINA	94	152	145	391
	9.57	15.48	14.77	39.82
	24.04	38.87	37.08	
	33.69	50.50	36.07	
MERMAID	185	149	257	591
	18.84	15.17	26.17	60.18
	31.30	25.21	43.49	
	66.31	49.50	63.93	
Total	279	301	402	982
	28.41	30.65	40.94	100.00

Frequency Missing = 9

STATISTICS FOR TABLE OF SECTOR BY AGE

Statistic	DF	Value	Prob
Chi-Square	2	21.055	0.001
Likelihood Ratio Chi-Square	2	20.862	0.001
Mantel-Haenszel Chi-Square	1	0.026	0.873
Phi Coefficient		0.146	
Contingency Coefficient		0.145	
Cramer's V		0.146	

Effective Sample Size = 982

Frequency Missing = 9

TABLE 3

The SAS System

TABLE OF SECTOR BY FEAR3

SECTOR	FEAR3		Total
	1	2	
Frequency			
Percent			
Row Pct			
Col Pct			
ROBINA	73	323	396
	7.37	32.59	39.96
	18.43	81.57	
	41.95	39.53	
MERMAID	101	494	595
	10.19	49.85	60.04
	16.97	83.03	
	58.05	60.47	
Total	174	817	991
	17.56	82.44	100.00

STATISTICS FOR TABLE OF SECTOR BY FEAR3

Statistic	DF	Value	Prob
Chi-Square	1	0.350	0.554
Likelihood Ratio Chi-Square	1	0.348	0.555
Continuity Adj. Chi-Square	1	0.256	0.613
Mantel-Haenszel Chi-Square	1	0.350	0.554
Fisher's Exact Test (Left)			0.751
(Right)			0.305
(2-Tail)			0.552
Phi Coefficient		0.019	
Contingency Coefficient		0.019	
Cramer's V		0.019	
Sample Size = 991			

TABLE 4

The SAS System

TABLE OF SECTOR BY CONCERN

SECTOR	CONCERN		
Frequency			
Percent			
Row Pct			
Col Pct	CRIME=1	CRIME=2+	Total
ROBINA	82	314	396
	8.27	31.69	39.96
	20.71	79.29	
	31.30	43.07	
MERMAID	180	415	595
	18.16	41.88	60.04
	30.25	69.75	
	68.70	56.93	
Total	262	729	991
	26.44	73.56	100.00

STATISTICS FOR TABLE OF SECTOR BY CONCERN

Statistic	DF	Value	Prob
Chi-Square	1	11.138	0.001
Likelihood Ratio Chi-Square	1	11.368	0.001
Continuity Adj. Chi-Square	1	10.653	0.001
Mantel-Haenszel Chi-Square	1	11.127	0.001
Fisher's Exact Test (Left)			4.95E-04
(Right)			1.000
(2-Tail)			9.19E-04
Phi Coefficient		-0.106	
Contingency Coefficient		0.105	
Cramer's V		-0.106	

Sample Size = 991

TABLE 5

The SAS System

TABLE OF SECTOR BY CP2

SECTOR	CP2		Total
Frequency			
Percent			
Row Pct			
Col Pct	HI CPTED	LO / MOD	
ROBINA	125	268	393
	12.69	27.21	39.90
	31.81	68.19	
	45.13	37.85	
MERMAID	152	440	592
	15.43	44.67	60.10
	25.68	74.32	
	54.87	62.15	
Total	277	708	985
	28.12	71.88	100.00

Frequency Missing = 6

STATISTICS FOR TABLE OF SECTOR BY CP2

Statistic	DF	Value	Prob
Chi-Square	1	4.392	0.036
Likelihood Ratio Chi-Square	1	4.360	0.037
Continuity Adj. Chi-Square	1	4.094	0.043
Mantel-Haenszel Chi-Square	1	4.388	0.036
Fisher's Exact Test (Left)			0.985
(Right)			0.022
(2-Tail)			0.043
Phi Coefficient		0.067	
Contingency Coefficient		0.067	
Cramer's V		0.067	

Effective Sample Size = 985

Frequency Missing = 6

TABLE 6

The SAS System

TABLE OF CP2 BY AGE

CP2	AGE			Total
	18-35 YR	36-55 YR	55 + YR	
Frequency				
Percent				
Row Pct				
Col Pct				
HI CPTED	72	74	128	274
	7.38	7.58	13.11	28.07
	26.28	27.01	46.72	
	25.81	24.83	32.08	
LO / MOD	207	224	271	702
	21.21	22.95	27.77	71.93
	29.49	31.91	38.60	
	74.19	75.17	67.92	
Total	279	298	399	976
	28.59	30.53	40.88	100.00

Frequency Missing = 15

STATISTICS FOR TABLE OF CP2 BY AGE

Statistic	DF	Value	Prob
Chi-Square	2	5.433	0.066
Likelihood Ratio Chi-Square	2	5.400	0.067
Mantel-Haenszel Chi-Square	1	3.713	0.054
Phi Coefficient		0.075	
Contingency Coefficient		0.074	
Cramer's V		0.075	

Effective Sample Size = 976

Frequency Missing = 15

TABLE 7

The SAS System

TABLE 1 OF CP2 BY AGE
CONTROLLING FOR SECTOR=ROBINA

CP2	AGE			
Frequency				
Percent				
Row Pct				
Col Pct	18-35 YR	36-55 YR	55 + YR	Total
HI CPTED	36	46	42	124
	9.28	11.86	10.82	31.96
	29.03	37.10	33.87	
	38.30	30.87	28.97	
LO / MOD	58	103	103	264
	14.95	26.55	26.55	68.04
	21.97	39.02	39.02	
	61.70	69.13	71.03	
Total	94	149	145	388
	24.23	38.40	37.37	100.00

Frequency Missing = 8

STATISTICS FOR TABLE 1 OF CP2 BY AGE
CONTROLLING FOR SECTOR=ROBINA

Statistic	DF	Value	Prob
Chi-Square	2	2.415	0.299
Likelihood Ratio Chi-Square	2	2.373	0.305
Mantel-Haenszel Chi-Square	1	2.094	0.148
Phi Coefficient		0.079	
Contingency Coefficient		0.079	
Cramer's V		0.079	

Effective Sample Size = 388

Frequency Missing = 8

TABLE 8

The SAS System

TABLE 2 OF CP2 BY AGE
CONTROLLING FOR SECTOR=MERMAID

CP2	AGE			
	18-35 YR	36-55 YR	55 + YR	Total
Frequency				
Percent				
Row Pct				
Col Pct				
HI CPTED	36	28	86	150
	6.12	4.76	14.63	25.51
	24.00	18.67	57.33	
	19.46	18.79	33.86	
LO / MOD	149	121	168	438
	25.34	20.58	28.57	74.49
	34.02	27.63	38.36	
	80.54	81.21	66.14	
Total	185	149	254	588
	31.46	25.34	43.20	100.00

Frequency Missing = 7

STATISTICS FOR TABLE 2 OF CP2 BY AGE
CONTROLLING FOR SECTOR=MERMAID

Statistic	DF	Value	Prob
Chi-Square	2	16.419	0.001
Likelihood Ratio Chi-Square	2	16.317	0.001
Mantel-Haenszel Chi-Square	1	12.797	0.001
Phi Coefficient		0.167	
Contingency Coefficient		0.165	
Cramer's V		0.167	

Effective Sample Size = 588

Frequency Missing = 7

TABLE 9

The SAS System

TABLE OF CP2 BY SEX

CP2	SEX		
Frequency			
Percent			
Row Pct			
Col Pct	FEMALE	MALE	Total
HI CPTED	155	121	276
	15.77	12.31	28.08
	56.16	43.84	
	29.14	26.83	
LO / MOD	377	330	707
	38.35	33.57	71.92
	53.32	46.68	
	70.86	73.17	
Total	532	451	983
	54.12	45.88	100.00

Frequency Missing = 8

STATISTICS FOR TABLE OF CP2 BY SEX

Statistic	DF	Value	Prob
Chi-Square	1	0.643	0.423
Likelihood Ratio Chi-Square	1	0.644	0.422
Continuity Adj. Chi-Square	1	0.534	0.465
Mantel-Haenszel Chi-Square	1	0.642	0.423
Fisher's Exact Test (Left)			0.809
(Right)			0.233
(2-Tail)			0.434
Phi Coefficient		0.026	
Contingency Coefficient		0.026	
Cramer's V		0.026	

Effective Sample Size = 983

Frequency Missing = 8

TABLE 10

The SAS System

TABLE 1 OF CP2 BY SEX
CONTROLLING FOR SECTOR=ROBINA

CP2	SEX		
Frequency			
Percent			
Row Pct			
Col Pct	FEMALE	MALE	Total
HI CPTED	66	58	124
	16.84	14.80	31.63
	53.23	46.77	
	31.58	31.69	
LO / MOD	143	125	268
	36.48	31.89	68.37
	53.36	46.64	
	68.42	68.31	
Total	209	183	392
	53.32	46.68	100.00

Frequency Missing = 4

STATISTICS FOR TABLE 1 OF CP2 BY SEX
CONTROLLING FOR SECTOR=ROBINA

Statistic	DF	Value	Prob
Chi-Square	1	0.001	0.981
Likelihood Ratio Chi-Square	1	0.001	0.981
Continuity Adj. Chi-Square	1	0.000	1.000
Mantel-Haenszel Chi-Square	1	0.001	0.981
Fisher's Exact Test (Left)			0.533
(Right)			0.553
(2-Tail)			1.000
Phi Coefficient		-0.001	
Contingency Coefficient		0.001	
Cramer's V		-0.001	

Effective Sample Size = 392

Frequency Missing = 4

TABLE 11

The SAS System

TABLE 2 OF CP2 BY SEX
CONTROLLING FOR SECTOR=MERMAID

CP2	SEX		Total
	FEMALE	MALE	
Frequency			
Percent			
Row Pct			
Col Pct			
HI CPTED	89	63	152
	15.06	10.66	25.72
	58.55	41.45	
	27.55	23.51	
LO / MOD	234	205	439
	39.59	34.69	74.28
	53.30	46.70	
	72.45	76.49	
Total	323	268	591
	54.65	45.35	100.00

Frequency Missing = 4

STATISTICS FOR TABLE 2 OF CP2 BY SEX
CONTROLLING FOR SECTOR=MERMAID

Statistic	DF	Value	Prob
Chi-Square	1	1.256	0.263
Likelihood Ratio Chi-Square	1	1.261	0.262
Continuity Adj. Chi-Square	1	1.053	0.305
Mantel-Haenszel Chi-Square	1	1.253	0.263
Fisher's Exact Test (Left)			0.888
(Right)			0.152
(2-Tail)			0.299
Phi Coefficient		0.046	
Contingency Coefficient		0.046	
Cramer's V		0.046	

Effective Sample Size = 591

Frequency Missing = 4

TABLE 12

The SAS System

TABLE OF CP2 BY FEAR3

CP2	FEAR3		Total
Frequency	1	2	
HI CPTED	46	231	277
Percent	4.67	23.45	28.12
Row Pct	16.61	83.39	
Col Pct	26.59	28.45	
LO / MOD	127	581	708
Percent	12.89	58.98	71.88
Row Pct	17.94	82.06	
Col Pct	73.41	71.55	
Total	173	812	985
Percent	17.56	82.44	100.00

Frequency Missing = 6

STATISTICS FOR TABLE OF CP2 BY FEAR3

Statistic	DF	Value	Prob
Chi-Square	1	0.244	0.622
Likelihood Ratio Chi-Square	1	0.246	0.620
Continuity Adj. Chi-Square	1	0.160	0.689
Mantel-Haenszel Chi-Square	1	0.243	0.622
Fisher's Exact Test (Left)			0.347
(Right)			0.719
(2-Tail)			0.643
Phi Coefficient		-0.016	
Contingency Coefficient		0.016	
Cramer's V		-0.016	

Effective Sample Size = 985

Frequency Missing = 6

TABLE 13

The SAS System

TABLE 1 OF CP2 BY FEAR3
CONTROLLING FOR SECTOR=ROBINA

CP2	FEAR3		Total
	1	2	
Frequency			
Percent			
Row Pct			
Col Pct			
-----+-----+-----+-----+-----			
HI CPTED	21	104	125
	5.34	26.46	31.81
	16.80	83.20	
	29.17	32.40	
-----+-----+-----+-----+-----			
LO / MOD	51	217	268
	12.98	55.22	68.19
	19.03	80.97	
	70.83	67.60	
-----+-----+-----+-----+-----			
Total	72	321	393
	18.32	81.68	100.00

Frequency Missing = 3

STATISTICS FOR TABLE 1 OF CP2 BY FEAR3
CONTROLLING FOR SECTOR=ROBINA

Statistic	DF	Value	Prob
-----+-----+-----+-----+-----			
Chi-Square	1	0.283	0.595
Likelihood Ratio Chi-Square	1	0.287	0.592
Continuity Adj. Chi-Square	1	0.154	0.695
Mantel-Haenszel Chi-Square	1	0.283	0.595
Fisher's Exact Test (Left)			0.351
(Right)			0.747
(2-Tail)			0.675
Phi Coefficient		-0.027	
Contingency Coefficient		0.027	
Cramer's V		-0.027	

Effective Sample Size = 393

Frequency Missing = 3

TABLE 14

The SAS System

TABLE 2 OF CP2 BY FEAR3
CONTROLLING FOR SECTOR=MERMAID

CP2	FEAR3		Total
Frequency	1	2	
HI CPTED	25	127	152
Percent	4.22	21.45	25.68
Row Pct	16.45	83.55	
Col Pct	24.75	25.87	
LO / MOD	76	364	440
Percent	12.84	61.49	74.32
Row Pct	17.27	82.73	
Col Pct	75.25	74.13	
Total	101	491	592
	17.06	82.94	100.00

Frequency Missing = 3

STATISTICS FOR TABLE 2 OF CP2 BY FEAR3
CONTROLLING FOR SECTOR=MERMAID

Statistic	DF	Value	Prob
Chi-Square	1	0.054	0.816
Likelihood Ratio Chi-Square	1	0.055	0.815
Continuity Adj. Chi-Square	1	0.012	0.914
Mantel-Haenszel Chi-Square	1	0.054	0.816
Fisher's Exact Test (Left)			0.462
(Right)			0.635
(2-Tail)			0.901
Phi Coefficient		-0.010	

TABLE 15

The SAS System

TABLE OF CP2 BY CONCERN

CP2	CONCERN		
Frequency			
Percent			
Row Pct			
Col Pct	CRIME=1	CRIME=2+	Total
HI CPTED	88	189	277
	8.93	19.19	28.12
	31.77	68.23	
	33.72	26.10	
LO / MOD	173	535	708
	17.56	54.31	71.88
	24.44	75.56	
	66.28	73.90	
Total	261	724	985
	26.50	73.50	100.00

Frequency Missing = 6

STATISTICS FOR TABLE OF CP2 BY CONCERN

Statistic	DF	Value	Prob
Chi-Square	1	5.498	0.019
Likelihood Ratio Chi-Square	1	5.376	0.020
Continuity Adj. Chi-Square	1	5.128	0.024
Mantel-Haenszel Chi-Square	1	5.493	0.019
Fisher's Exact Test (Left)			0.992
(Right)			0.012
(2-Tail)			0.020
Phi Coefficient		0.075	
Contingency Coefficient		0.075	
Cramer's V		0.075	

Effective Sample Size = 985

Frequency Missing = 6

TABLE 16

The SAS System

TABLE 1 OF CP2 BY CONCERN
CONTROLLING FOR SECTOR=ROBINA

CP2	CONCERN		Total
Frequency			
Percent			
Row Pct			
Col Pct	CRIME=1	CRIME=2+	
HI CPTED	33	92	125
	8.40	23.41	31.81
	26.40	73.60	
	40.24	29.58	
LO / MOD	49	219	268
	12.47	55.73	68.19
	18.28	81.72	
	59.76	70.42	
Total	82	311	393
	20.87	79.13	100.00

Frequency Missing = 3

STATISTICS FOR TABLE 1 OF CP2 BY CONCERN
CONTROLLING FOR SECTOR=ROBINA

Statistic	DF	Value	Prob
Chi-Square	1	3.401	0.065
Likelihood Ratio Chi-Square	1	3.304	0.069
Continuity Adj. Chi-Square	1	2.927	0.087
Mantel-Haenszel Chi-Square	1	3.392	0.066
Fisher's Exact Test (Left)			0.975
(Right)			0.045
(2-Tail)			0.083
Phi Coefficient		0.093	
Contingency Coefficient		0.093	
Cramer's V		0.093	

Effective Sample Size = 393
Frequency Missing = 3

TABLE 17

The SAS System

TABLE 2 OF CP2 BY CONCERN
CONTROLLING FOR SECTOR=MERMAID

CP2	CONCERN		Total
Frequency			
Percent			
Row Pct			
Col Pct	CRIME=1	CRIME=2+	
HI CPTED	55	97	152
	9.29	16.39	25.68
	36.18	63.82	
	30.73	23.49	
LO / MOD	124	316	440
	20.95	53.38	74.32
	28.18	71.82	
	69.27	76.51	
Total	179	413	592
	30.24	69.76	100.00

Frequency Missing = 3

STATISTICS FOR TABLE 2 OF CP2 BY CONCERN
CONTROLLING FOR SECTOR=MERMAID

Statistic	DF	Value	Prob
Chi-Square	1	3.430	0.064
Likelihood Ratio Chi-Square	1	3.358	0.067
Continuity Adj. Chi-Square	1	3.061	0.080
Mantel-Haenszel Chi-Square	1	3.424	0.064
Fisher's Exact Test (Left)			0.974
(Right)			0.041
(2-Tail)			0.066
Phi Coefficient		0.076	
Contingency Coefficient		0.076	
Cramer's V		0.076	

Effective Sample Size = 592

Frequency Missing = 3

TABLE 18

The SAS System

TABLE OF SECTOR BY VICTIM

SECTOR	VICTIM		Total
	VICTIM	NOT VICT	
Frequency			
Percent			
Row Pct			
Col Pct			
ROBINA	94	302	396
	9.49	30.47	39.96
	23.74	76.26	
	34.69	41.94	
MERMAID	177	418	595
	17.86	42.18	60.04
	29.75	70.25	
	65.31	58.06	
Total	271	720	991
	27.35	72.65	100.00

STATISTICS FOR TABLE OF SECTOR BY VICTIM

Statistic	DF	Value	Prob
Chi-Square	1	4.323	0.038
Likelihood Ratio Chi-Square	1	4.371	0.037
Continuity Adj. Chi-Square	1	4.026	0.045
Mantel-Haenszel Chi-Square	1	4.319	0.038
Fisher's Exact Test (Left)			0.022
(Right)			0.985
(2-Tail)			0.042
Phi Coefficient		-0.066	
Contingency Coefficient		0.066	
Cramer's V		-0.066	

Sample Size = 991

TABLE 19

The SAS System

TABLE OF AGE BY VICTIM

AGE	VICTIM		Total
	VICTIM	NOT VICT	
Frequency			
Percent			
Row Pct			
Col Pct			
18-35 YR	86	193	279
	8.76	19.65	28.41
	30.82	69.18	
	31.97	27.07	
36-55 YR	93	208	301
	9.47	21.18	30.65
	30.90	69.10	
	34.57	29.17	
55 + YR	90	312	402
	9.16	31.77	40.94
	22.39	77.61	
	33.46	43.76	
Total	269	713	982
	27.39	72.61	100.00

Frequency Missing = 9

STATISTICS FOR TABLE OF AGE BY VICTIM

Statistic	DF	Value	Prob
Chi-Square	2	8.573	0.014
Likelihood Ratio Chi-Square	2	8.703	0.013
Mantel-Haenszel Chi-Square	1	6.654	0.010
Phi Coefficient		0.093	
Contingency Coefficient		0.093	
Cramer's V		0.093	

Effective Sample Size = 982

Frequency Missing = 9

TABLE 20

The SAS System

TABLE OF SEX BY VICTIM

SEX	VICTIM		Total
Frequency			
Percent			
Row Pct			
Col Pct	VICTIM	NOT VICT	
FEMALE	151	384	535
	15.27	38.83	54.10
	28.22	71.78	
	55.72	53.48	
MALE	120	334	454
	12.13	33.77	45.90
	26.43	73.57	
	44.28	46.52	
Total	271	718	989
	27.40	72.60	100.00

Frequency Missing = 2

STATISTICS FOR TABLE OF SEX BY VICTIM

Statistic	DF	Value	Prob
Chi-Square	1	0.397	0.529
Likelihood Ratio Chi-Square	1	0.397	0.529
Continuity Adj. Chi-Square	1	0.312	0.577
Mantel-Haenszel Chi-Square	1	0.396	0.529
Fisher's Exact Test (Left)			0.758
(Right)			0.289
(2-Tail)			0.567
Phi Coefficient		0.020	
Contingency Coefficient		0.020	
Cramer's V		0.020	

Effective Sample Size = 989

Frequency Missing = 2

TABLE 21

The SAS System

TABLE OF CP2 BY VICTIM

CP2	VICTIM		Total
	VICTIM	NOT VICT	
Frequency			
Percent			
Row Pct			
Col Pct			
HI CPTED	64	213	277
	6.50	21.62	28.12
	23.10	76.90	
	23.62	29.83	
LO / MOD	207	501	708
	21.02	50.86	71.88
	29.24	70.76	
	76.38	70.17	
Total	271	714	985
	27.51	72.49	100.00

Frequency Missing = 6

STATISTICS FOR TABLE OF CP2 BY VICTIM

Statistic	DF	Value	Prob
Chi-Square	1	3.755	0.053
Likelihood Ratio Chi-Square	1	3.841	0.050
Continuity Adj. Chi-Square	1	3.453	0.063
Mantel-Haenszel Chi-Square	1	3.751	0.053
Fisher's Exact Test (Left)			0.031
(Right)			0.979
(2-Tail)			0.057
Phi Coefficient		-0.062	
Contingency Coefficient		0.062	
Cramer's V		-0.062	

Effective Sample Size = 985

Frequency Missing = 6

TABLE 22

The SAS System

TABLE 1 OF CP2 BY VICTIM
CONTROLLING FOR SECTOR=ROBINA

CP2	VICTIM		
Frequency			
Percent			
Row Pct			
Col Pct	VICTIM	NOT VICT	Total
HI CPTED	28	97	125
	7.12	24.68	31.81
	22.40	77.60	
	29.79	32.44	
LO / MOD	66	202	268
	16.79	51.40	68.19
	24.63	75.37	
	70.21	67.56	
Total	94	299	393
	23.92	76.08	100.00

Frequency Missing = 3

TABLE 23

The SAS System

TABLE 2 OF CP2 BY VICTIM
CONTROLLING FOR SECTOR=MERMAID

CP2	VICTIM		Total
Frequency			
Percent			
Row Pct			
Col Pct	VICTIM	NOT VICT	Total
HI CPTED	36	116	152
	6.08	19.59	25.68
	23.68	76.32	
	20.34	27.95	
LO / MOD	141	299	440
	23.82	50.51	74.32
	32.05	67.95	
	79.66	72.05	
Total	177	415	592
	29.90	70.10	100.00

Frequency Missing = 3

STATISTICS FOR TABLE 2 OF CP2 BY VICTIM
CONTROLLING FOR SECTOR=MERMAID

Statistic	DF	Value	Prob
Chi-Square	1	3.768	0.052
Likelihood Ratio Chi-Square	1	3.884	0.049
Continuity Adj. Chi-Square	1	3.380	0.066
Mantel-Haenszel Chi-Square	1	3.762	0.052
Fisher's Exact Test (Left)			0.032
(Right)			0.981
(2-Tail)			0.064
Phi Coefficient		-0.080	
Contingency Coefficient		0.080	
Cramer's V		-0.080	

Effective Sample Size = 592

Frequency Missing = 3

TABLE 24

FEAR3	VICTIM		
Frequency			
Percent			
Row Pct			
Col Pct	VICTIM	NOT VICT	Total
1	55	119	174
	5.55	12.01	17.56
	31.61	68.39	
	20.30	16.53	
2	216	601	817
	21.80	60.65	82.44
	26.44	73.56	
	79.70	83.47	
Total	271	720	991
	27.35	72.65	100.00

STATISTICS FOR TABLE OF FEAR3 BY VICTIM

Statistic	DF	Value	Prob
Chi-Square	1	1.931	0.165
Likelihood Ratio Chi-Square	1	1.886	0.170
Continuity Adj. Chi-Square	1	1.679	0.195
Mantel-Haenszel Chi-Square	1	1.929	0.165
Fisher's Exact Test (Left)			0.930
(Right)			0.098
(2-Tail)			0.190
Phi Coefficient		0.044	
Contingency Coefficient		0.044	
Cramer's V		0.044	
Sample Size = 991			

TABLE 25

The SAS System

TABLE OF CONCERN BY VICTIM

CONCERN	VICTIM		Total
	VICTIM	NOT VICT	
Frequency			
Percent			
Row Pct			
Col Pct			
CRIME=1	80	182	262
	8.07	18.37	26.44
	30.53	69.47	
	29.52	25.28	
CRIME=2+	191	538	729
	19.27	54.29	73.56
	26.20	73.80	
	70.48	74.72	
Total	271	720	991
	27.35	72.65	100.00

STATISTICS FOR TABLE OF CONCERN BY VICTIM

Statistic	DF	Value	Prob
Chi-Square	1	1.822	0.177
Likelihood Ratio Chi-Square	1	1.796	0.180
Continuity Adj. Chi-Square	1	1.611	0.204
Mantel-Haenszel Chi-Square	1	1.820	0.177
Fisher's Exact Test (Left)			0.923
(Right)			0.103
(2-Tail)			0.196
Phi Coefficient		0.043	
Contingency Coefficient		0.043	
Cramer's V		0.043	

Sample Size = 991

TABLE 26

The SAS System

TABLE 1 OF CP2 BY VICTIM
CONTROLLING FOR AGE=18-35 YR

CP2	VICTIM		Total
	VICTIM	NOT VICT	
Frequency			
Percent			
Row Pct			
Col Pct			
HI CPTED	14	58	72
	5.02	20.79	25.81
	19.44	80.56	
	16.28	30.05	
LO / MOD	72	135	207
	25.81	48.39	74.19
	34.78	65.22	
	83.72	69.95	
Total	86	193	279
	30.82	69.18	100.00

STATISTICS FOR TABLE 1 OF CP2 BY VICTIM
CONTROLLING FOR AGE=18-35 YR

Statistic	DF	Value	Prob
Chi-Square	1	5.894	0.015
Likelihood Ratio Chi-Square	1	6.254	0.012
Continuity Adj. Chi-Square	1	5.196	0.023
Mantel-Haenszel Chi-Square	1	5.873	0.015
Fisher's Exact Test (Left)			9.88E-03
(Right)			0.996
(2-Tail)			0.018
Phi Coefficient		-0.145	
Contingency Coefficient		0.144	
Cramer's V		-0.145	
Sample Size = 279			

TABLE 27

The SAS System

TABLE 2 OF CP2 BY VICTIM
CONTROLLING FOR AGE=36-55 YR

CP2	VICTIM		Total
Frequency			
Percent			
Row Pct			
Col Pct	VICTIM	NOT VICT	Total
HI CPTED	26	48	74
	8.72	16.11	24.83
	35.14	64.86	
	27.96	23.41	
LO / MOD	67	157	224
	22.48	52.68	75.17
	29.91	70.09	
	72.04	76.59	
Total	93	205	298
	31.21	68.79	100.00

Frequency Missing = 3

STATISTICS FOR TABLE 2 OF CP2 BY VICTIM
CONTROLLING FOR AGE=36-55 YR

Statistic	DF	Value	Prob
Chi-Square	1	0.707	0.400
Likelihood Ratio Chi-Square	1	0.697	0.404
Continuity Adj. Chi-Square	1	0.485	0.486
Mantel-Haenszel Chi-Square	1	0.705	0.401
Fisher's Exact Test (Left)			0.838
(Right)			0.242
(2-Tail)			0.469
Phi Coefficient		0.049	
Contingency Coefficient		0.049	
Cramer's V		0.049	

Effective Sample Size = 298

Frequency Missing = 3

TABLE 28

The SAS System

TABLE 3 OF CP2 BY VICTIM
CONTROLLING FOR AGE=55 + YR

CP2	VICTIM		
Frequency			
Percent			
Row Pct			
Col Pct	VICTIM	NOT VICT	Total
HI CPTED	24	104	128
	6.02	26.07	32.08
	18.75	81.25	
	26.67	33.66	
LO / MOD	66	205	271
	16.54	51.38	67.92
	24.35	75.65	
	73.33	66.34	
Total	90	309	399
	22.56	77.44	100.00

Frequency Missing = 3

STATISTICS FOR TABLE 3 OF CP2 BY VICTIM
CONTROLLING FOR AGE=55 + YR

Statistic	DF	Value	Prob
Chi-Square	1	1.563	0.211
Likelihood Ratio Chi-Square	1	1.601	0.206
Continuity Adj. Chi-Square	1	1.259	0.262
Mantel-Haenszel Chi-Square	1	1.559	0.212
Fisher's Exact Test (Left)			0.130
(Right)			0.917
(2-Tail)			0.248
Phi Coefficient		-0.063	
Contingency Coefficient		0.062	
Cramer's V		-0.063	

Effective Sample Size = 399

Frequency Missing = 3

TABLE 29

The SAS System

TABLE 1 OF CP2 BY VICTIM
CONTROLLING FOR SEX=FEMALE

CP2	VICTIM		Total
	VICTIM	NOT VICT	
Frequency			
Percent			
Row Pct			
Col Pct			
HI CPTED	41	114	155
	7.71	21.43	29.14
	26.45	73.55	
	27.15	29.92	
LO / MOD	110	267	377
	20.68	50.19	70.86
	29.18	70.82	
	72.85	70.08	
Total	151	381	532
	28.38	71.62	100.00

Frequency Missing = 3

STATISTICS FOR TABLE 1 OF CP2 BY VICTIM
CONTROLLING FOR SEX=FEMALE

Statistic	DF	Value	Prob
Chi-Square	1	0.402	0.526
Likelihood Ratio Chi-Square	1	0.405	0.525
Continuity Adj. Chi-Square	1	0.279	0.598
Mantel-Haenszel Chi-Square	1	0.401	0.527
Fisher's Exact Test (Left)			0.300
(Right)			0.769
(2-Tail)			0.597
Phi Coefficient		-0.027	
Contingency Coefficient		0.027	
Cramer's V		-0.027	

Effective Sample Size = 532
Frequency Missing = 3

TABLE 30

The SAS System

TABLE 2 OF CP2 BY VICTIM
CONTROLLING FOR SEX=MALE

CP2	VICTIM		Total
	VICTIM	NOT VICT	
Frequency			
Percent			
Row Pct			
Col Pct			
-----+-----+-----+-----+-----			
HI CPTED	23	98	121
	5.10	21.73	26.83
	19.01	80.99	
	19.17	29.61	
-----+-----+-----+-----+-----			
LO / MOD	97	233	330
	21.51	51.66	73.17
	29.39	70.61	
	80.83	70.39	
-----+-----+-----+-----+-----			
Total	120	331	451
	26.61	73.39	100.00

Frequency Missing = 3

STATISTICS FOR TABLE 2 OF CP2 BY VICTIM
CONTROLLING FOR SEX=MALE

Statistic	DF	Value	Prob
-----+-----+-----+-----+-----			
Chi-Square	1	4.890	0.027
Likelihood Ratio Chi-Square	1	5.125	0.024
Continuity Adj. Chi-Square	1	4.373	0.037
Mantel-Haenszel Chi-Square	1	4.879	0.027
Fisher's Exact Test (Left)			0.017
(Right)			0.991
(2-Tail)			0.030
Phi Coefficient		-0.104	
Contingency Coefficient		0.104	
Cramer's V		-0.104	

Effective Sample Size = 451

Frequency Missing = 3

TABLE 31

SECTOR		CPSTREET		
Frequency	Percent	Row Pct	Col Pct	Total
		HI CP	LO CP	
ROBINA	122	274	396	
	12.31	27.65	39.96	
	30.81	69.19		
	46.74	37.53		
MERMAID	139	456	595	
	14.03	46.01	60.04	
	23.36	76.64		
	53.26	62.47		
Total	261	730	991	
	26.34	73.66	100.00	

Cochran-Mantel-Haenszel Statistics (Based on Table Scores)

Statistic	Alternative Hypothesis	DF	Value	Prob
1	Nonzero Correlation	1	6.789	0.009

Estimates of the Common Relative Risk (Row1/Row2)

Type of Study	Method	Value	95% Confidence Bounds	
Case-Control (Odds Ratio)	Mantel-Haenszel	1.461	1.098	1.942
	Logit	1.461	1.098	1.944

TABLE 32

TABLE OF CPSTREET BY CP2

CPSTREET	CP2		Total
Frequency			
Percent			
Row Pct			
Col Pct	HI CP2	LO / MOD	
HI CP	90	169	259
	9.14	17.16	26.29
	34.75	65.25	
	32.49	23.87	
LO CP	187	539	726
	18.98	54.72	73.71
	25.76	74.24	
	67.51	76.13	
Total	277	708	985
	28.12	71.88	100.00

Frequency Missing = 6

Cochran-Mantel-Haenszel Statistics (Based on Table Scores)

Statistic	Alternative Hypothesis	DF	Value	Prob
1	Nonzero Correlation	1	7.627	0.006
2	Row Mean Scores Differ	1	7.627	0.006
3	General Association	1	7.627	0.006

Estimates of the Common Relative Risk (Row1/Row2)

Type of Study	Method	Value	95% Confidence Bounds	
Case-Control (Odds Ratio)	Mantel-Haenszel	1.535	1.132	2.081
	Logit	1.535	1.131	2.083

TABLE 33

TABLE 1 OF CPSTREET BY CP2
CONTROLLING FOR SECTOR=ROBINA

CPSTREET	CP2		
Frequency			
Percent			
Row Pct			
Col Pct	HI CPTED	LO / MOD	Total
HI CP	37	85	122
	9.41	21.63	31.04
	20.33	69.67	
	29.60	31.72	
LO CP	88	133	271
	22.39	46.56	68.96
	32.47	67.53	
	70.40	68.28	
Total	125	268	393
	31.81	68.19	100.00

Frequency Missing = 3

STATISTICS FOR TABLE 1 OF CPSTREET BY CP2
CONTROLLING FOR SECTOR=ROBINA

Statistic	DF	Value	Prob
Chi-Square	1	0.178	0.673

TABLE 34

TABLE 2 OF CPSTREET BY CP2
CONTROLLING FOR SECTOR=MERMAID

CPSTREET	CP2		Total
Frequency			
Percent			
Row Pct			
Col Pct	HI CPTED	LO / MOD	
HI CP	53	84	137
	8.95	14.19	23.14
	38.69	61.31	
	34.87	19.09	
LO CP	99	356	455
	16.72	60.14	76.86
	21.76	78.24	
	65.13	80.91	
Total	152	440	592
	25.68	74.32	100.00

Frequency Missing = 3

STATISTICS FOR TABLE 2 OF CPSTREET BY CP2
CONTROLLING FOR SECTOR=MERMAID

Statistic	DF	Value	Prob
Chi-Square	1	15.811	0.001

Effective Sample Size = 592

Frequency Missing = 3

TABLE 35

The SAS System

TABLE OF CPSTREET BY VICTIM

CPSTREET	VICTIM		Total
Frequency			
Percent			
Row Pct			
Col Pct	VICTIM	NOT VICT	Total
HI CP	56	205	261
	5.65	20.69	26.34
	21.46	78.54	
	20.66	28.47	
LO CP	215	515	730
	21.70	51.97	73.66
	29.45	70.55	
	79.34	71.53	
Total	271	720	991
	27.35	72.65	100.00

SUMMARY STATISTICS FOR CPSTREET BY VICTIM

Cochran-Mantel-Haenszel Statistics (Based on Table Scores)

Statistic	Alternative Hypothesis	DF	Value	Prob
1	Nonzero Correlation	1	6.181	0.013
2	Row Mean Scores Differ	1	6.181	0.013
3	General Association	1	6.181	0.013

Estimates of the Common Relative Risk (Row1/Row2)

Type of Study	Method	Value	95% Confidence Bounds	
Case-Control (Odds Ratio)	Mantel-Haenszel	0.654	0.468	0.914
	Logit	0.654	0.468	0.915
Cohort (Coll Risk)	Mantel-Haenszel	0.729	0.568	0.935
	Logit	0.729	0.563	0.943
Cohort (Col2 Risk)	Mantel-Haenszel	1.113	1.023	1.212
	Logit	1.113	1.029	1.205

The confidence bounds for the M-H estimates are test-based.

Total Sample Size = 991

TABLE 36

The SAS System

TABLE 1 OF CPSTREET BY VICTIM
CONTROLLING FOR SECTOR=ROBINA

CPSTREET	VICTIM		Total
Frequency			
Percent			
Row Pct			
Col Pct	VICTIM	NOT VICT	Total
HI CP	29	93	122
	7.32	23.48	30.81
	23.77	76.23	
	30.85	30.79	
LO CP	65	209	274
	16.41	52.78	69.19
	23.72	76.28	
	69.15	69.21	
Total	94	302	396
	23.74	76.26	100.00

STATISTICS FOR TABLE 1 OF CPSTREET BY VICTIM
CONTROLLING FOR SECTOR=ROBINA

Statistic	DF	Value	Prob
Chi-Square	1	0.000	0.992
Likelihood Ratio Chi-Square	1	0.000	0.992
Continuity Adj. Chi-Square	1	0.000	1.000
Mantel-Haenszel Chi-Square	1	0.000	0.992
Fisher's Exact Test (Left)			0.558
(Right)			0.543
(2-Tail)			1.000
Phi Coefficient		0.001	
Contingency Coefficient		0.001	
Cramer's V		0.001	

Sample Size = 396

TABLE 37

The SAS System

TABLE 2 OF CPSTREET BY VICTIM
CONTROLLING FOR SECTOR=MERMAID

CPSTREET	VICTIM		
Frequency			
Percent			
Row Pct			
Col Pct	VICTIM	NOT VICT	Total
HI CP	27	112	139
	4.54	18.82	23.36
	19.42	80.58	
	15.25	26.79	
LO CP	150	306	456
	25.21	51.43	76.64
	32.89	67.11	
	84.75	73.21	
Total	177	418	595
	29.75	70.25	100.00

STATISTICS FOR TABLE 2 OF CPSTREET BY VICTIM
CONTROLLING FOR SECTOR=MERMAID

Statistic	DF	Value	Prob
Chi-Square	1	9.249	0.002
Likelihood Ratio Chi-Square	1	9.815	0.002
Continuity Adj. Chi-Square	1	8.616	0.003
Mantel-Haenszel Chi-Square	1	9.234	0.002
Fisher's Exact Test (Left)			1.30E-03
(Right)			0.999
(2-Tail)			2.10E-03
Phi Coefficient		-0.125	
Contingency Coefficient		0.124	
Cramer's V		-0.125	

Sample Size = 595

TABLE 38

The SAS System

TABLE OF CPSTREET BY FEAR3

CPSTREET	FEAR3		Total
	1	2	
Frequency			
Percent			
Row Pct			
Col Pct			
HI CP	39	222	261
	3.94	22.40	26.34
	14.94	85.06	
	22.41	27.17	
LO CP	135	595	730
	13.62	60.04	73.66
	18.49	81.51	
	77.59	72.83	
Total	174	817	991
	17.56	82.44	100.00

STATISTICS FOR TABLE OF CPSTREET BY FEAR3

Statistic	DF	Value	Prob
Chi-Square	1	1.674	0.196
Likelihood Ratio Chi-Square	1	1.721	0.190
Continuity Adj. Chi-Square	1	1.438	0.230
Mantel-Haenszel Chi-Square	1	1.673	0.196
Fisher's Exact Test (Left)			0.114
(Right)			0.919
(2-Tail)			0.218
Phi Coefficient		-0.041	
Contingency Coefficient		0.041	
Cramer's V		-0.041	

Sample Size = 991

TABLE 39

TABLE 1 OF CPSTREET BY FEAR3
CONTROLLING FOR SECTOR=ROBINA

CPSTREET	FEAR3		Total
	1	2	
Frequency			
Percent			
Row Pct			
Col. Pct			
HI CP	21	101	122
	5.30	25.51	30.81
	17.21	82.79	
	28.77	31.27	
LO CP	52	222	274
	13.13	56.06	69.19
	18.98	81.02	
	71.23	68.73	
Total	73	323	396
	18.43	81.57	100.00

STATISTICS FOR TABLE 1 OF CPSTREET BY FEAR3
CONTROLLING FOR SECTOR=ROBINA

Statistic	DF	Value	Prob
Chi-Square	1	0.175	0.676

TABLE 40

TABLE 2 OF CPSTREET BY FEAR3
CONTROLLING FOR SECTOR=MERMAID

CPSTREET	FEAR3		Total
Frequency			
Percent			
Row Pct			
Col Pct	1	2	
HI CP	18	121	139
	3.03	20.34	23.26
	12.95	87.05	
	17.82	24.49	
LO CP	83	373	456
	13.95	62.69	76.64
	18.20	81.80	
	82.18	75.51	
Total	101	494	595
	16.97	83.03	100.00

STATISTICS FOR TABLE 2 OF CPSTREET BY FEAR3
CONTROLLING FOR SECTOR=MERMAID

Statistic	DF	Value	Prob
Chi-Square	1	2.085	0.149

TABLE 41

The SAS System

TABLE OF CPSTREET BY CONCERN

CPSTREET	CONCERN		
Frequency			
Percent			
Row Pct			
Col Pct	CRIME=1	CRIME=2+	Total
HI CP	77	184	261
	7.77	18.57	26.34
	29.50	70.50	
	29.39	25.24	
LO CP	185	545	730
	18.67	54.99	73.66
	25.34	74.66	
	70.61	74.76	
Total	262	729	991
	26.44	73.56	100.00

STATISTICS FOR TABLE OF CPSTREET BY CONCERN

Statistic	DF	Value	Prob
Chi-Square	1	1.710	0.191
Likelihood Ratio Chi-Square	1	1.685	0.194
Continuity Adj. Chi-Square	1	1.503	0.220
Mantel-Haenszel Chi-Square	1	1.709	0.191
Fisher's Exact Test (Left)			0.917
(Right)			0.111
(2-Tail)			0.192
Phi Coefficient		0.042	
Contingency Coefficient		0.042	
Cramer's V		0.042	

Sample Size = 991

TABLE 42

TABLE 1 OF CPSTREET BY CONCERN
CONTROLLING FOR SECTOR=ROBINA

CPSTREET	CONCERN		Total
Frequency			
Percent			
Row Pct			
Col Pct	CRIME=1	CRIME=2+	
HI CP	28	94	122
	7.07	23.74	30.81
	22.95	77.05	
	34.15	29.94	
LO CP	54	220	274
	13.64	55.56	69.19
	19.71	80.29	
	65.85	70.06	
Total	82	314	396
	20.71	79.29	100.00

STATISTICS FOR TABLE 1 OF CPSTREET BY CONCERN
CONTROLLING FOR SECTOR=ROBINA

Statistic	DF	Value	Prob
Chi-Square	1	0.541	0.462

TABLE 43

TABLE 2 OF CPSTREET BY CONCERN
CONTROLLING FOR SECTOR=MERMAID

CPSTREET		CONCERN		
Frequency				
Percent				
Row Pct				
Col Pct	CRIME=1	CRIME=2+	Total	
HI CP	49	90	139	
	8.24	15.13	23.36	
	35.25	64.75		
	27.22	21.69		
LO CP	131	325	456	
	22.02	54.62	76.64	
	28.73	71.27		
	72.78	78.31		
Total	180	415	595	
	30.25	69.75	100.00	

STATISTICS FOR TABLE 2 OF CPSTREET BY CONCERN
CONTROLLING FOR SECTOR=MERMAID

Statistic	DF	Value	Prob
Chi-Square	1	2.149	0.143

TABLE 44

TABLE OF CPSTREET BY CPNB

CPSTREET	CPNB		
	HI CP	LO CP	
Frequency			
Percent			
Row Pct			
Col Pct			
	HI CP	LO CP	Total
HI CP	151	110	261
	15.24	11.10	26.34
	57.85	42.15	
	38.82	18.27	
LO CP	238	492	730
	24.02	49.65	73.66
	32.60	67.40	
	61.18	81.73	
Total	389	602	991
	39.25	60.75	100.00

SUMMARY STATISTICS FOR CPSTREET BY CPNB

Cochran-Mantel-Haenszel Statistics (Based on Table Scores)

Statistic	Alternative Hypothesis	DF	Value	Prob
1	Nonzero Correlation	1	51.361	0.001
2	Row Mean Scores Differ	1	51.361	0.001
3	General Association	1	51.361	0.001

Estimates of the Common Relative Risk (Row1/Row2)

Type of Study	Method	Value	95% Confidence Bounds	
Case-Control (Odds Ratio)	Mantel-Haenszel	2.838	2.133	3.774
	Logit	2.838	2.123	3.794

TABLE 45

The SAS System

TABLE OF SECTOR BY CPNB

SECTOR	CPNB		Total
Frequency	HI CP	LO CP	
Percent			
Row Pct			
Col Pct			
ROBINA	295	101	396
	29.77	10.19	39.96
	74.49	25.51	
	100.00	14.51	
MERMAID	0	595	595
	0.00	60.04	60.04
	0.00	100.00	
	0.00	85.49	
Total	295	696	991
	29.77	70.23	100.00

STATISTICS FOR TABLE OF SECTOR BY CPNB

Statistic	DF	Value	Prob
Chi-Square	1	631.115	0.001
Likelihood Ratio Chi-Square	1	757.100	0.001
Continuity Adj. Chi-Square	1	627.556	0.001
Mantel-Haenszel Chi-Square	1	630.478	0.001
Fisher's Exact Test (Left)			1.000
(Right)			6.57E-165
(2-Tail)			6.57E-165
Phi Coefficient		0.798	
Contingency Coefficient		0.624	
Cramer's V		0.798	

Sample Size = 991

TABLE 46

The SAS System

TABLE 1 OF CPSTREET BY CPNB
CONTROLLING FOR SECTOR=ROBINA

CPSTREET	CPNB		
Frequency			
Percent			
Row Pct			
Col Pct	HI CP	LO CP	Total
HI CP	85	37	122
	21.46	9.34	30.81
	69.67	30.33	
	28.81	36.63	
LO CP	210	64	274
	53.03	16.16	69.19
	76.64	23.36	
	71.19	63.37	
Total	295	101	396
	74.49	25.51	100.00

STATISTICS FOR TABLE 1 OF CPSTREET BY CPNB
CONTROLLING FOR SECTOR=ROBINA

Statistic	DF	Value	Prob
Chi-Square	1	2.159	0.142
Likelihood Ratio Chi-Square	1	2.116	0.146
Continuity Adj. Chi-Square	1	1.807	0.179
Mantel-Haenszel Chi-Square	1	2.153	0.142
Fisher's Exact Test (Left)			0.090
(Right)			0.943
(2-Tail)			0.169
Phi Coefficient		-0.074	
Contingency Coefficient		0.074	
Cramer's V		-0.074	

Sample Size = 396

TABLE 47

The SAS System

TABLE 2 OF CPSTREET BY CPNB
CONTROLLING FOR SECTOR=MERMAID

CPSTREET	CPNB		Total
Frequency	HI CP	LO CP	
Percent			
Row Pct			
Col Pct			
HI CP	0	139	139
	0.00	23.36	23.36
	0.00	100.00	
	.	23.36	
LO CP	0	456	456
	0.00	76.64	76.64
	0.00	100.00	
	.	76.64	
Total	0	595	595
	0.00	100.00	100.00

STATISTICS FOR TABLE 2 OF CPSTREET BY CPNB
CONTROLLING FOR SECTOR=MERMAID

Row or column sum zero. No statistics computed for this table.

Sample Size = 595

CPNB	Frequency	Percent	Cumulative Frequency	Cumulative Percent
26	27	2.7	27	2.7
27	225	22.7	252	25.4
28	11	1.1	263	26.5
29	116	11.7	379	38.2
30	110	11.1	489	49.3
31	35	3.5	524	52.9
37	58	5.9	582	58.7
39	94	9.5	676	68.2
40	20	2.0	696	70.2
41	139	14.0	835	84.3
43	156	15.7	991	100.0

The SAS System

TRI	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	263	26.5	263	26.5
2	319	32.2	582	58.7
3	409	41.3	991	100.0

TABLE 48

The SAS System

TABLE OF CPNB BY VICTIM

CPNB	VICTIM		Total
	VICTIM	NOT VICT	
Frequency			
Percent			
Row Pct			
Col Pct			
HI CP	77	218	295
	7.77	22.00	29.77
	26.10	73.90	
	28.41	30.28	
LO CP	194	502	696
	19.58	50.66	70.23
	27.87	72.13	
	71.59	69.72	
Total	271	720	991
	27.35	72.65	100.00

STATISTICS FOR TABLE OF CPNB BY VICTIM

Statistic	DF	Value	Prob
Chi-Square	1	0.327	0.567
Likelihood Ratio Chi-Square	1	0.329	0.566
Continuity Adj. Chi-Square	1	0.244	0.621
Mantel-Haenszel Chi-Square	1	0.327	0.567
Fisher's Exact Test (Left)			0.312
(Right)			0.741
(2-Tail)			0.586
Phi Coefficient		-0.018	
Contingency Coefficient		0.018	
Cramer's V		-0.018	

Sample Size = 991

TABLE 49

The SAS System

TABLE 1 OF CPNB BY VICTIM
CONTROLLING FOR SECTOR=ROBINA

CPNB	VICTIM		
Frequency			
Percent			
Row Pct			
Col Pct	VICTIM	NOT VICT	Total
HI CP	77	218	295
	19.44	55.05	74.49
	26.10	73.90	
	81.91	72.19	
LO CP	17	84	101
	4.29	21.21	25.51
	16.83	83.17	
	18.09	27.81	
Total	94	302	396
	23.74	76.26	100.00

STATISTICS FOR TABLE 1 OF CPNB BY VICTIM
CONTROLLING FOR SECTOR=ROBINA

Statistic	DF	Value	Prob
Chi-Square	1	3.572	0.059
Likelihood Ratio Chi-Square	1	3.765	0.052
Continuity Adj. Chi-Square	1	3.078	0.079
Mantel-Haenszel Chi-Square	1	3.563	0.059
Fisher's Exact Test (Left)			0.981
(Right)			0.037
(2-Tail)			0.078
Phi Coefficient		0.095	
Contingency Coefficient		0.095	
Cramer's V		0.095	

Sample Size = 396

TABLE 50

The SAS System

TABLE 2 OF CPNB BY VICTIM
CONTROLLING FOR SECTOR=MERMAID

CPNB	VICTIM		Total
	VICTIM	NOT VICT	
Frequency			
Percent			
Row Pct			
Col Pct			
HI CP	0	0	0
	0.00	0.00	0.00
	.	.	
	0.00	0.00	
LO CP	177	418	595
	29.75	70.25	100.00
	29.75	70.25	
	100.00	100.00	
Total	177	418	595
	29.75	70.25	100.00

STATISTICS FOR TABLE 2 OF CPNB BY VICTIM
CONTROLLING FOR SECTOR=MERMAID

Row or column sum zero. No statistics computed for this table.

Sample Size = 595

TABLE 51

The SAS System

TABLE OF SECTOR BY Q79

SECTOR	Q79 (Q79 VALUE CATEGORY OF DWELLING)			Total
	1	2	3	
ROBINA	149	247	0	396
	15.17	25.15	0.00	40.33
	37.63	62.37	0.00	
	64.50	59.52	0.00	
MERMAID	82	168	336	586
	8.35	17.11	34.22	59.67
	13.99	28.67	57.34	
	35.50	40.48	100.00	
Total	231	415	336	982
	23.52	42.26	34.22	100.00

Frequency Missing = 9

STATISTICS FOR TABLE OF SECTOR BY Q79

Statistic	DF	Value	Prob
Chi-Square	2	346.688	0.001
Likelihood Ratio Chi-Square	2	463.646	0.001
Mantel-Haenszel Chi-Square	1	273.471	0.001
Phi Coefficient		0.594	
Contingency Coefficient		0.511	
Cramer's V		0.594	

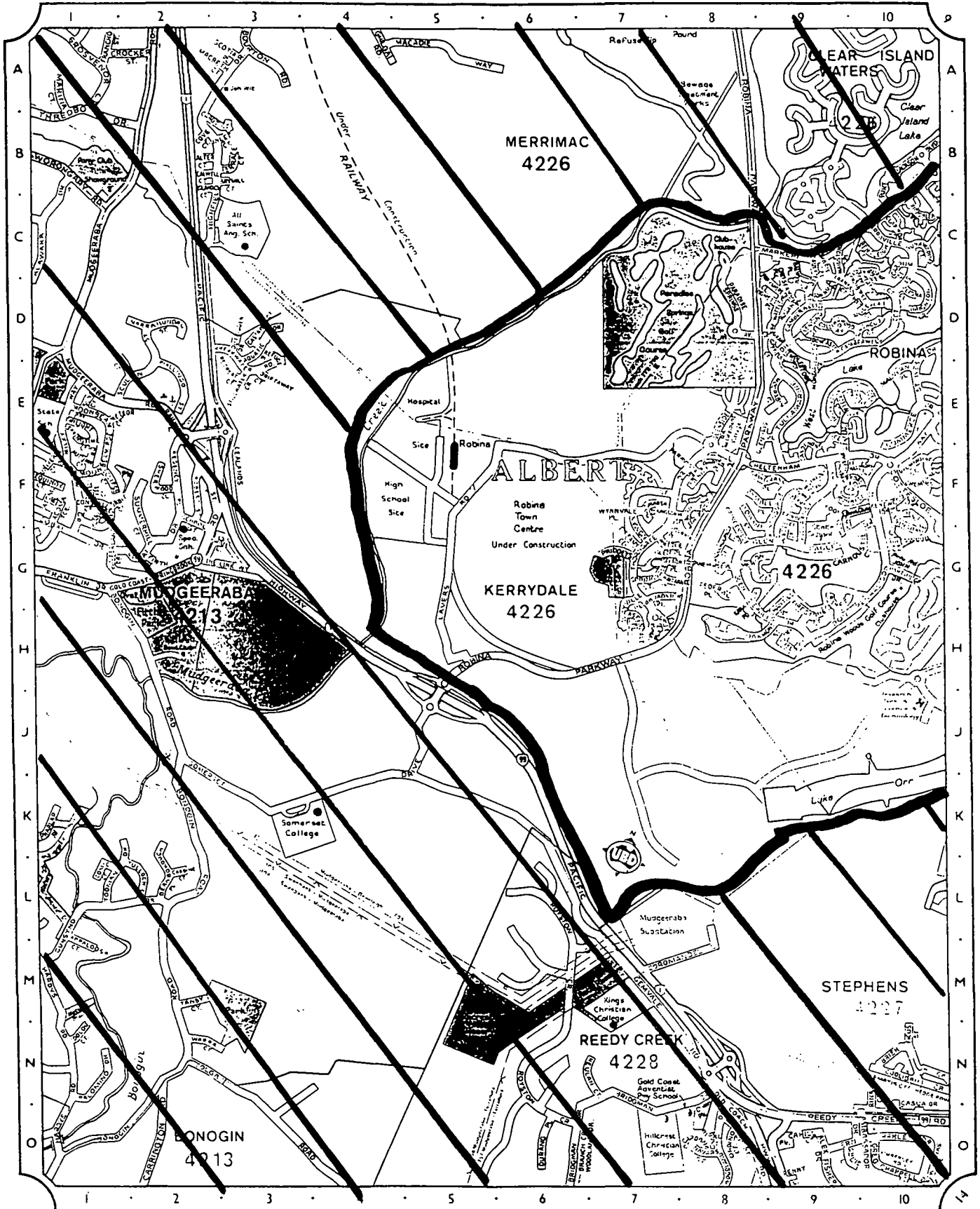
Effective Sample Size = 982

Frequency Missing = 9

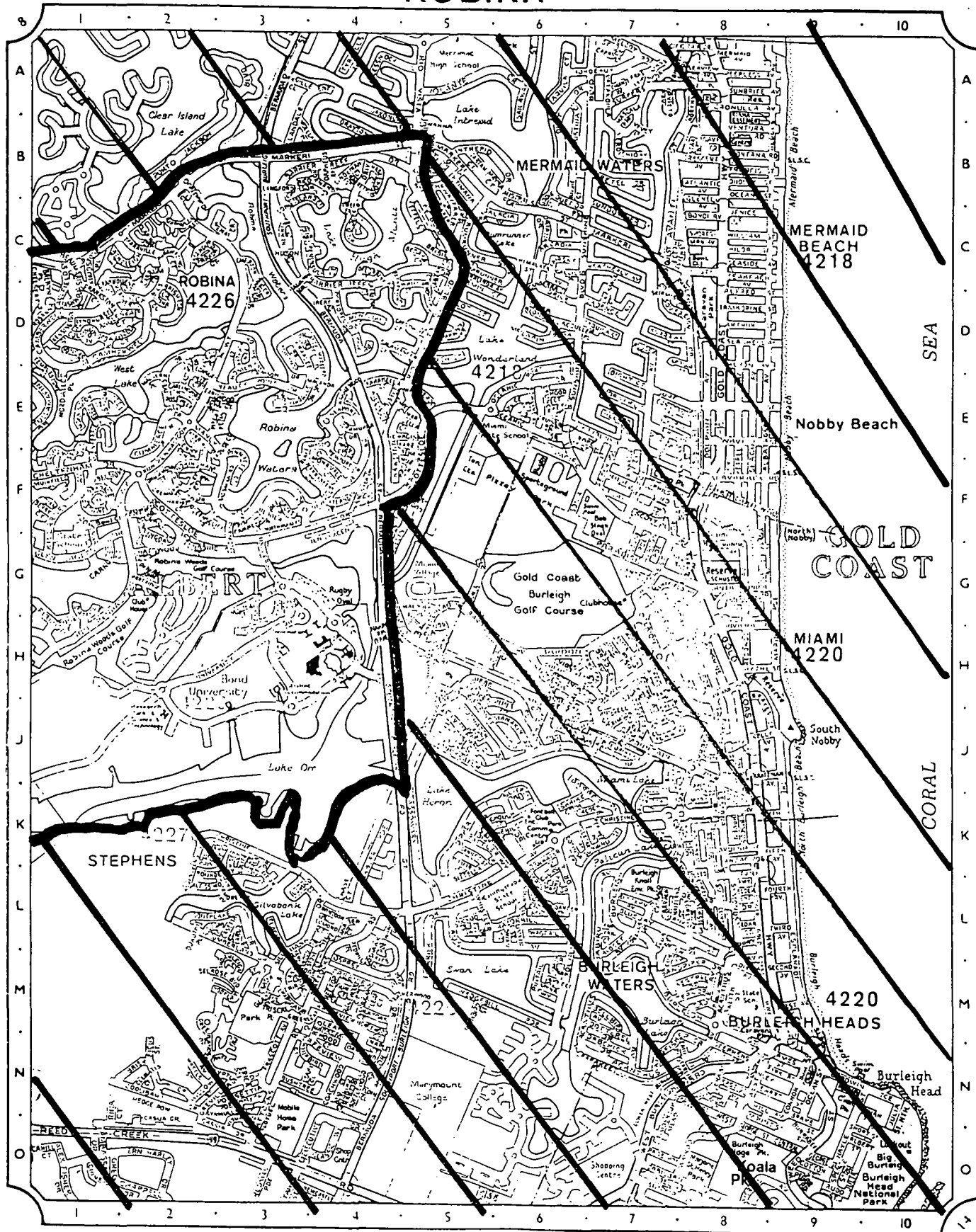
APPENDIX C

MAPS

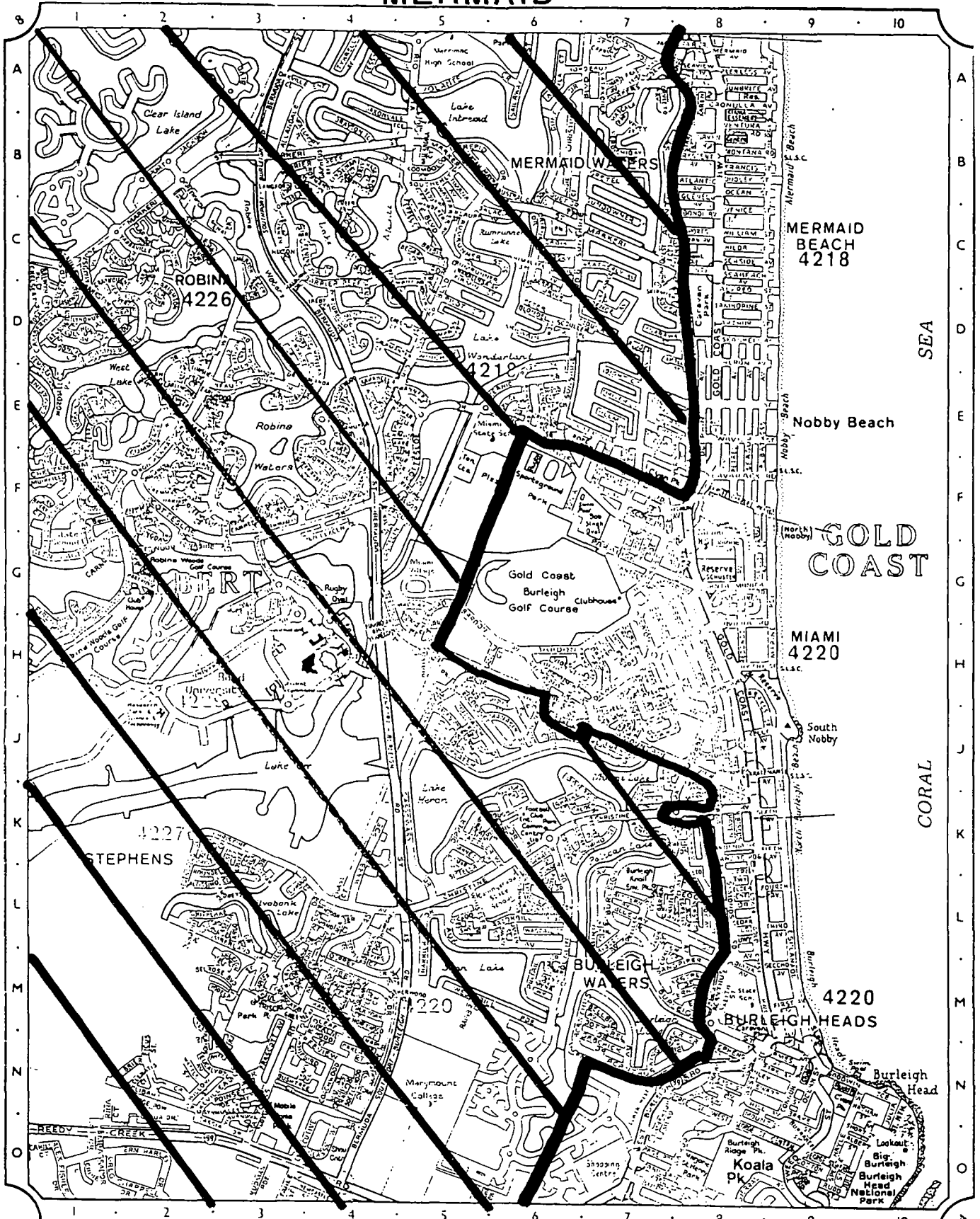
ROBINA



ROBINA



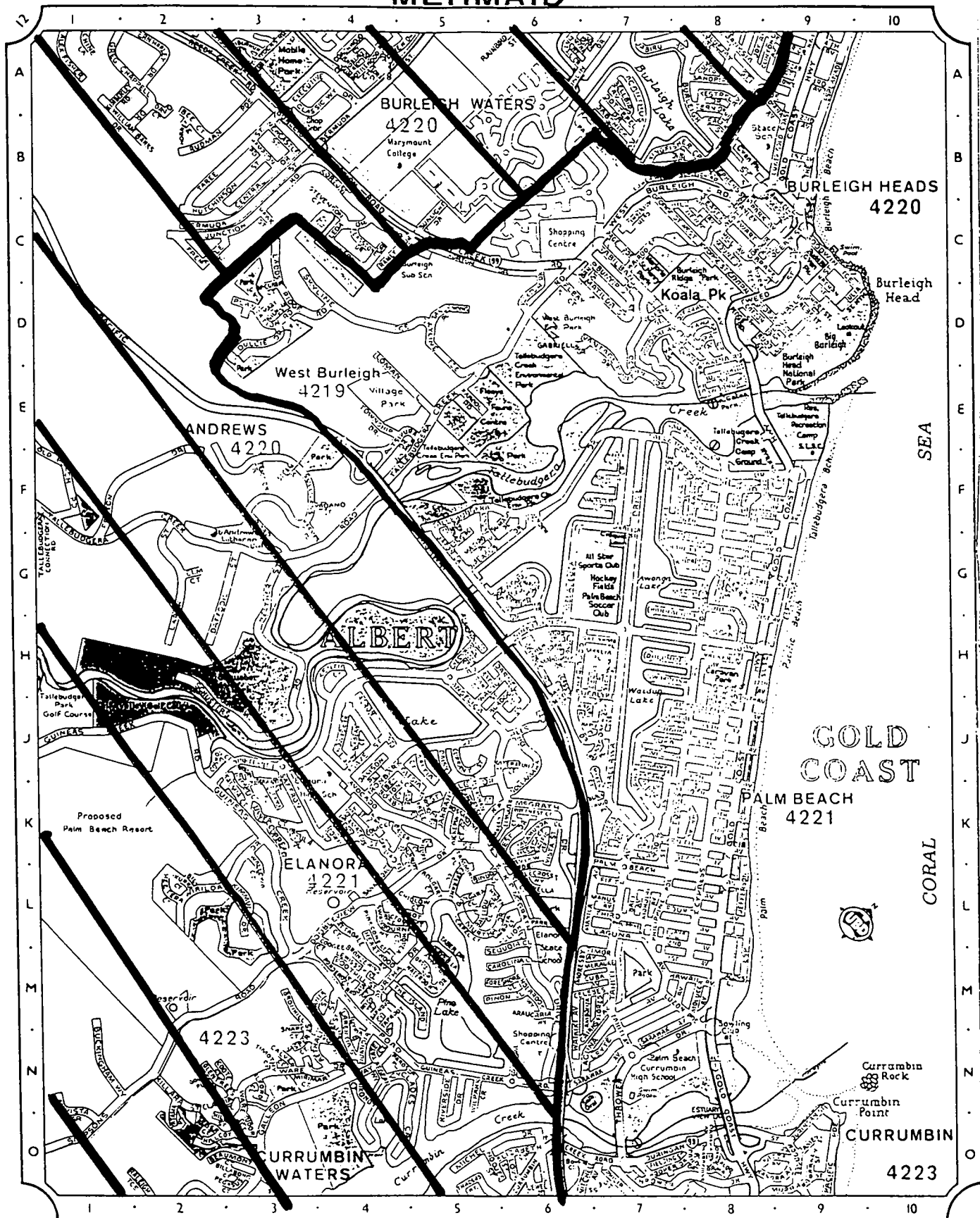
MERMAID



SEA

CORAL

MERMAID



APPENDIX D

QUESTIONNAIRE

Q1 Sex:

Female

Male

Q2 How old are you?

Q3 Are you married or living with a partner at the moment?

Yes

No

Q4 Do you have any children?

Yes

No Go to Q6

Q5 How old are your children?

Child1 _____ yrs

Child6 _____ yrs

Child2 _____ yrs

Child7 _____ yrs

Child3 _____ yrs

Child8 _____ yrs

Child4 _____ yrs

Child9 _____ yrs

Child5 _____ yrs

Child10 _____ yrs

Q6 Are you working in a paid job at the moment?

Yes

No Go to Q8

Q7 What is this job - what do you do?

Q8 Do you have any educational qualifications?

No What grade/ year did you leave school

No - still at School, TAFE, College,
University

Yes Please specify

Q9 How long have you lived at this address?

Years _____ Months _____

Q10 Is this house/ unit etc owned, being paid off, rented or leased by you or someone else in the household?

Owned

Being paid off

Rented/ Leased

Other Please specify

Q11 How many people aged 17 YEARS OR YOUNGER usually live in this household?

_____ (number)

Q12 How many people 18 YEARS OR OLDER usually live in this household?

_____ (number)

Q13 Which of the following issues is of MOST CONCERN to you personally?

Could you put a "1" in the box next to the issue of most concern to you and a "2" in the box next to the second most important issue to you, and so on **UNTIL THERE IS A NUMBER IN EVERY BOX.**

- Education
- Tourism
- Unemployment
- Local (Gold Coast) Politics
- Multiculturalism
- Crime
- The Economy
- Domestic Violence

Q14 Do you know many of your neighbours?

- Yes I know many of my neighbours
- Yes I know a few of my neighbours
- No I don't really know who my neighbours are **Go to Q16**

Q15 Do you think of your neighbours as friends or acquaintances?

- All or mostly friends
 - All or mostly acquaintances
 - Other *Please specify*
-

Q16 Do you think public transport is safe to use?

Yes, it's safe at any time

Yes, but only during the day

No

Other (*please specify*)

Q17 Do you think it is safe to go out for entertainment after dark?

Yes

No

Other (*please specify*)

**THE NEXT QUESTIONS ARE ABOUT CRIME IN YOUR NEIGHBOURHOOD, ON THE GOLD
COAST AND IN AUSTRALIA GENERALLY.**

Q18 Do you think vandalism and graffiti have increased or decreased over the last twelve months?

	In your neighbourhood	On the Gold Coast	In Australia generally
Increased a lot	1	1	1
Increased a little	2	2	2
Stayed about the same	3	3	3
Decreased a little	4	4	4
Decreased a lot	5	5	5

Q19 Do you think property crimes such as burglary or breaking and entering have increased or decreased over the last twelve months?

	In your neighbourhood	On the Gold Coast	In Australia generally
Increased a lot	1	1	1
Increased a little	2	2	2
Stayed about the same	3	3	3
Decreased a little	4	4	4
Decreased a lot	5	5	5

Q20 Do you think violent crimes such as assault and rape have increased or decreased over the last twelve months?

	In your neighbourhood	On the Gold Coast	In Australia generally
Increased a lot	1	1	1
Increased a little	2	2	2
Stayed about the same	3	3	3
Decreased a little	4	4	4
Decreased a lot	5	5	5

THE NEXT QUESTIONS ARE SPECIFICALLY ABOUT YOUR HOME.

Q21 How safe do you feel at home on your own during the DAY?

- Completely safe
- Fairly safe
- Fairly unsafe
- Very unsafe

Q22 Do you lock the doors and windows while you're at home during the DAY?

Always

Mostly

Sometimes

Hardly ever or never

Q23 How safe do you feel at home on your own during the NIGHT?

Completely safe

Fairly safe

Fairly unsafe

Very unsafe

Q24 Do you lock all doors and windows while you're at home at NIGHT?

Always

Mostly

Sometimes

Hardly ever or never

Q25 Do you leave outside lights on at night?

No

Yes Is this for security reasons?

Yes

No

Q26 Is there adequate street lighting in your neighbourhood?

Yes

No

Q27 How well do you think your neighbourhood is maintained?

Very well

Quite well

Not very well

Q28 How safe do you think the parks on the Gold Coast are during the day?

Very safe

Quite safe

A little unsafe

Very unsafe

Q29 How safe do you think the parks on the Gold Coast are at NIGHT?

Very safe

Quite safe

A little unsafe

Very unsafe

Q30 How safe do you think it is to use public toilets on the Gold Coast during the DAY?

- Very safe
- Quite safe
- A little unsafe
- Very unsafe

Q31 How safe do you think it is to use public toilets on the Gold Coast at NIGHT?

- Very safe
- Quite safe
- A little unsafe
- Very unsafe

Q32 How safe do you feel using car parks on the Gold Coast during the DAY?

- Very safe
- Quite safe
- A little unsafe
- Very unsafe

Q33 How safe do you feel using car parks on the Gold Coast at NIGHT?

- Very safe
- Quite safe
- A little unsafe
- Very unsafe

Q34 How safe do you feel in the car park to your house/ unit/ flat during the DAY?

Very safe

Quite safe

A little unsafe

Very unsafe

Q35 How safe do you feel in the car park to your house/ unit/ flat at NIGHT?

Very safe

Quite safe

A little unsafe

Very unsafe

Q36 How many entrances does your residence have?

_____ (number)

Q37 Does your household have any of the following security measures?

Tick as many boxes as you need.

- Burglar alarm
- Outside door with double locks or deadlocks
- Security chain/ bolts on doors
- Windows which need special keys to open them
- Bars or grilles on the windows
- A dog on the property
- Safety House signs
- External security lighting
- An intercom
- Neighbourhood Watch signs
- Other security signs
- A silent telephone number
- None of the above Go to Q39

Q38 What is the most important reason for the security device(s) you have in your household?

Could you put a "1" in the box next to the most important reason and a "2" in the box next to the second most important reason, and so on
UNTIL THERE IS A NUMBER IN EVERY BOX.

- Own past experience of break-ins
- Break-ins experienced by neighbours
- Break-ins experienced by friends/ family
- Publicity/ news/ advice
- Insurance requirement
- Put there by landlord/ previous occupant
- Other *Please specify*
-

Q39 Are you afraid to walk around YOUR NEIGHBOURHOOD alone at night because of the danger of crime in your neighbourhood?

- Very afraid
- Somewhat afraid
- Very slightly afraid
- Completely unafraid

Q40 Do you avoid certain areas IN YOUR NEIGHBOURHOOD because of the behaviour of groups of young people?

- No
- Yes *What areas?*
-

Q41 Do you avoid CERTAIN AREAS on the GOLD COAST at night because of the danger of crime in the area?

No

Yes *What areas?*

Q42 Do you avoid CERTAIN AREAS on the GOLD COAST because of the behaviour of groups of young people?

No

Yes *What areas?*

Q43 When you go out at NIGHT do you make a point of going with someone else because of the danger of crime?

Yes, usually or always

Yes, sometimes

No, not usually or never

I don't go out

Q44 Would you be worried about the safety of other people in your household aged 17 YEARS OR LESS if they were walking in your neighbourhood ALONE at night?

I would be very worried

I would be somewhat worried

I wouldn't really be worried at all

Does not apply in my household

Q45 Would you be worried about the safety of other people in your household aged 18 YEARS OR OLDER if they were walking in your neighbourhood ALONE at night?

I would be very worried

I would be somewhat worried

I wouldn't really be worried at all

Does not apply in my household

Q46 Do you have a firearm or other weapon in your household?

Yes *What do you have? _____
Is this because of the danger of crime? _____*

No

Q47 In the last 3 years, has there been an ATTEMPTED break-in to your household?

Yes How many times? _____

No Go to Q51

Q48 How many of these attempted break-ins were reported to the police?

None Go to Q50

Write number here _____

Q49 Did you tell the police about the MOST RECENT attempted break-in?

Yes Go to Q51

No

Q50 What is the **MAIN REASON** you did not tell the police about the **MOST RECENT** attempted break-in?

Only tick one box.

- Uncertain there really was an attempt to break in
- It was too trivial/ unimportant
- The Police **COULD NOT** do anything
- The Police **WOULD NOT** do anything
- It was a private matter
- I did not want offender punished
- I was too confused/ upset
- I was afraid of reprisal/ revenge
- I told someone else
- Nothing was stolen
- I was not covered by insurance
- I couldn't tell the date of the break-in
- Other reasons *Please specify*
-

Q51 Not counting **ATTEMPTED** break-ins, has your household **ACTUALLY** been broken into in the last 3 years?

*(Your household includes your garage or shed if you have one.
It does NOT include your car or garden.)*

- Yes How many times? _____
- No Go to Q57

Q52 Was anything stolen in the MOST RECENT break-in?

Yes

No Go to Q54

Q53 What was stolen in the MOST RECENT break-in?

Q54 How many of these break-ins were reported to the police?

None Go to Q56

Write number here _____

Q55 Were the police told about the MOST RECENT break-in?

Yes Go to Q57

No

Q56 What is the **MAIN REASON** the police were not told about the most recent break-in?

Only tick one box.

- It was too trivial/ unimportant
 - Police **COULD NOT** do anything
 - Police **WOULD NOT** do anything
 - It was a private matter
 - I did not want offender punished
 - I was too confused/ upset
 - I was afraid of reprisal/ revenge
 - I told someone else
 - Nothing was stolen
 - I was not covered by insurance
 - I couldn't tell the date of the break-in
 - Other reasons *Please specify*
-

THE NEXT QUESTIONS ARE ABOUT THINGS WHICH MAY HAVE HAPPENED TO YOU
PERSONALLY.

**Q57 In the past 3 years has anyone threatened you with force or attacked you?
(NOT INCLUDING SEXUAL ASSAULT)**

Yes Attacked _____ times

Yes Threatened _____ times

No Go to Q66

**Q58 The last time you were threatened or attacked, was anything used like a weapon,
club or implement?**

Yes What type? _____

No

Q59 Were you physically injured in this last incident?

Yes What was the injury? _____

No

Q60 Why do you think you were attacked or threatened?

Tick as many boxes as you need.

- I was attacked as part of a robbery
 - Because I am disabled
 - Because of my sex
 - Because of my age
 - Because of the way I dress
 - Because of my race
 - Because the attacker(s) thought/ knew I was gay/ lesbian
 - Because of something I said or did
 - I was just unlucky - wrong place/ wrong time
 - I was in an unsafe place
 - I don't know
 - Some other reason *Please specify*
-

Q61 Did you know the people or person attacking or threatening you?

- I knew the person(s) very well
- I knew the person(s) quite well
- I knew the person(s) by reputation
- The person(s) were complete strangers

Was this your partner or a member of your family?

Yes

No

Q62 Did you tell the police about this incident?

Yes Go to Q65

No

Q63 Did you report this incident to anyone else?

Yes Who? _____

No

Q64 What is the MAIN REASON this incident was not reported to the police?

Only tick one box.

Too trivial/ unimportant

Someone else told the police

Police COULD NOT do anything

Police WOULD NOT do anything

Private matter

Did not want offender punished

Not covered by insurance

Too confused/ upset

Afraid of reprisal/ revenge

Told someone else

Other reasons *Please specify*

Q65 Where were you when this incident happened?

- At home - INSIDE
- At home - OUTSIDE
- At another person's home - INSIDE
- At another person's home - OUTSIDE
- At a place where I work or study - INSIDE
- At a place where I work or study - OUTSIDE
- Inside some other building
- In a private vehicle
- In a public vehicle eg bus, train, taxi
- Outside - in the street
- Outside - in open bushland or park
- Other *Please specify*
-

THE NEXT QUESTIONS ARE ABOUT SEXUAL ASSAULT.
ALL INFORMATION IN THIS SURVEY IS COMPLETELY CONFIDENTIAL AND WILL NOT BE
PROVIDED TO ANY OTHER AGENCY OUTSIDE THE UNIVERSITY RESEARCH GROUP.

Q66 In the last 3 years have you been the victim of a SEXUAL ASSAULT OR THREATENED SEXUAL ASSAULT?

- Yes I was sexually assaulted ____ times
- Yes I was threatened with sexual assault ____ times
- No Go to Q75

Q67 The last time you were sexually assaulted or threatened with sexual assault, was anything used like a weapon, club or implement?

Yes What type? _____

No

Q68 Were you physically injured in this last incident?

Yes What was the injury? _____

No

Q69 Why do you think you were sexually assaulted or threatened with sexual assault?

Tick as many boxes as you need.

I was assaulted as part of a robbery

Because I am disabled

Because of my sex

Because of my age

Because of my race

Because of the way I dress

Because the attacker(s) thought/ knew I was gay/
lesbian

Because of something I said or did

I was just unlucky - wrong place/ wrong time

It was an unsafe place

I don't know

Some other reason Please specify

Q70 Did you know the people or person trying or threatening to sexually assault you?

I knew the person(s) very well

I knew the person(s) quite well

I knew the person(s) by reputation

The person(s) were complete strangers

Was this your partner or
a member of your family?

Yes

No

Q71 Did you tell the police about this incident?

Yes Go to Q74

No

Q72 Did you report this incident to anyone else?

Yes Who? _____

No

Q73 What is the MAIN REASON this incident was not reported to the police?

Only tick one box.

- Too trivial/ unimportant
 - Someone else told the police
 - Police COULD not do anything
 - Police WOULD not do anything
 - Private matter
 - Did not want offender punished
 - Too confused/ upset
 - Too embarrassed/ humiliated
 - Afraid of reprisal/ revenge
 - Told someone else
 - Other reasons *Please specify*
-

Q74 Where were you when this sexual assault happened?

- At home - INSIDE
 - At home - OUTSIDE
 - At another person's home - INSIDE
 - At another person's home - OUTSIDE
 - At a place where I work or study - INSIDE
 - At a place where I work or study - OUTSIDE
 - Inside some other building
 - In a private vehicle
 - In a public vehicle eg bus, train, taxi
 - Outside - in the street
 - Outside - in open bushland or park
 - Other *Please specify*
-

Q75 Have you EVER been the victim of any other crimes?

- I'm not sure
- No
- Yes

Q76 Have any of your family or friends EVER been the victim of any other crimes?

- I'm not sure
 - No
 - Yes *Please specify*
-

Type of dwelling:

- Detached house _____
- Duplex (two attached dwellings, each with private garden) _____
- Townhouse (three or more attached dwellings, each with private garden) _____
- Grouped dwellings (three storeys or less; some with no garden)
 - Number of units in block _____
 - Floor level of entrance to unit interviewed _____
- Hostel _____

Number of storeys of dwelling:

- One storey only _____
- One storey highset _____
- Two or more storeys _____

Value category of dwelling:

- Category 1 (highest value) _____
- Category 2 _____
- Category 3 (lowest value) _____

Building materials of dwelling:

- Mainly brick/ blockwork _____
- Mainly timber _____
- Other _____

Details of street position:

- Corner block _____
- Non-corner block _____

Street type:

- Main through road _____
- Cul-de-sac _____
- Suburban street _____
- Other (specify) _____

Level of maintenance of garden/ yard:

- High _____
- Medium _____
- Low _____
- N/A _____

DETACHED HOUSE AND LOT

H.1 Visible public-private boundary

1	2	3	4	5	0 (n/a)
No visible public-private boundary			Clearly visible public-private boundary		

H.2 Visible barrier to movement

1	2	3	4	5	0 (n/a)
No visible barrier to movement			Impenetrable fence, hedge etc		

H.3 Clear route from footpath to door

1	2	3	4	5	0 (n/a)
None of route visible from street			Whole route visible from street		

H.4 Doors/ windows visible from street

1	2	3	4	5	0 (n/a)
No doors/ windows visible from street			All doors/ windows visible from street		

H.5 Doors/ windows visible to neighbours

1	2	3	4	5	0 (n/a)
No doors/ windows visible to any neighbour			All doors/ windows visible to adjacent neighbours		

H.6 Concealment opportunities in yard

1	2	3	4	5	0 (n/a)
Places for people to hide in yard			No places to hide/ conceal		

H.7 Open space between houses

1	2	3	4	5	0 (n/a)
Spaces between houses cluttered and view obstructed			Spaces between houses clear and open		

H.8 Linkage garage/ carport to house

1	2	3	4	5	0 (n/a)
Garage/ carport detached and far from house			Garage/ carport has internal door to house		

H.9 Tool sheds/ lean-to

1	2	3	4	5	0 (n/a)
Tool shed visible and accessible from street			No tool shed etc visible from street		

H.10 Screens, trellises etc

1	2	3	4	5	0 (n/a)
Screens, trellises hide windows and doors			No screens, trellises		

H.11 Access to upper storeys by climbing aids

1	2	3	4	5	0 (n/a)
Easy access to upper storeys by vegetation, drains etc			No access to upper storeys by climbing aids		

H.12 Visible window security

1	2	3	4	5	0 (n/a)
No visible window security			All windows visibly secured		

H.13 Ease of access to ground floor entrances

1	2	3	4	5	0 (n/a)
No visible door security			All doors visibly secured		

H.14 Unlit projections over windows/ doors

1	2	3	4	5	0 (n/a)
Many shadowed projections at night			No unlit projections over any windows/ doors		

H.15 Security of roof

1	2	3	4	5
Roof easily accessible without ladder etc			Roof inaccessible	

0 (n/a)

H.16 Visible signs of dog ownership

Yes _____ No _____

H.17 Visible signs of alarms

Yes _____ No _____

H.18 Neighbourhood watch?

Yes _____ No _____

H.19 Safety house?

Yes _____ No _____

H.20 Security firms' signs?

Yes _____ No _____

H.21 Number of ground floor entrances for access:

_____ (number)

**ATTACHED HOUSES AND UNITS (THREE STOREYS AND LESS)
- INDIVIDUAL UNITS**

Does the unit have a ground floor entrance?

Yes _____ No _____

Does the unit have a private garden area?

Yes _____ No _____

U.1 Clear boundary between public and private space (especially for garden)

1	2	3	4	5	0 (n/a)
---	---	---	---	---	---------

No visible distinction between public and private areas	Clear distinction between public and private areas
---	--

U.2 Barriers to movement between public and private space

1	2	3	4	5	0 (n/a)
---	---	---	---	---	---------

Clear barriers to movement	No visible barriers to movement
----------------------------	---------------------------------

U.3 Adequate lighting

1	2	3	4	5	0 (n/a)
---	---	---	---	---	---------

No external lighting	Adequate external lighting
----------------------	----------------------------

U.4 Places of concealment (especially in garden)

1	2	3	4	5	0 (n/a)
---	---	---	---	---	---------

Many places of concealment	No places of concealment
----------------------------	--------------------------

U.5 Garaging facilities

1	2	3	4	5	0 (n/a)
---	---	---	---	---	---------

Garage remote (>100m) from unit, or on different floor	Direct internal access from garage to unit
--	--

U.6 Visible window security

1 2 3 4 5 0 (n/a)
Window security not visible Bars, locks visible on windows

U.7 Visible signs of alarms

Yes _____ No _____

U.8 Neighbourhood watch?

Yes _____ No _____

U.9 Safety house?

Yes _____ No _____

U.10 Security firms' signs?

Yes _____ No _____

U.11 Number of ground floor entrances for access:

_____ (number)
_____ n/a

**ATTACHED DWELLING AND UNIT (THREE STOREY WALKUP AND LESS)
- FOR INTERNAL SEMI-PUBLIC SPACE (FROM COMMON ENTRANCE)**

Do the units have an internal semipublic space or foyer? Yes ___ No ___ (If no, go to pg 7)

UI.1 Clear route from front (common) door to units

1	2	3	4	5	0 (n/a)
No clear route from common door to individual units			Clear route to all units from common door		

UI.2 Adequate lighting

1	2	3	4	5	0 (n/a)
Inadequate lighting in semi-public areas			Adequate lighting in all semi-public areas		

UI.3 Doors or windows visible to neighbours

1	2	3	4	5	0 (n/a)
Neither doors nor windows of units visible to any other units			Good visibility of doors and windows from other units		

UI.4 Places of concealment

1	2	3	4	5	0 (n/a)
Many places of concealment in semi-public space			No places of concealment in semi-public space		

UI.5 Clarity of internal design and signage to units

1	2	3	4	5	0 (n/a)
Location of individual units not clear or not signed			Signs or design make location of all units clear		

UI.6 Ease of escape for potential intruders

1	2	3	4	5	0 (n/a)
Easy escape routes for potential intruders			No escape routes for potential intruders		

UI.7 Visible window security

1	2	3	4	5	0 (n/a)
None of units visible from entrance have visible window security			All units visible from entrance have visible window security		

**ATTACHED DWELLING AND UNIT (THREE STOREY WALKUP AND LESS)
 - FOR EXTERNAL SPACE (FOOTPATH TO COMMON ENTRANCE)**

Does block/s have a common entrance?

Yes: _____ No: _____

UE.1 Visible boundaries

1	2	3	4	5	0 (n/a)
No visible distinction, street to building			Clear, visible boundary		

UE.2 Visible buffer or filter

1	2	3	4	5	0 (n/a)
No clear buffer or filter to movement			Clear buffer or filter for movement		

UE.3 Clear route from gate to front (common) door

1	2	3	4	5	0 (n/a)
No clear route from entrance to common door			Clear, distinct route from public area to common door		

UE.4 Adequate on-site lighting

1	2	3	4	5	0 (n/a)
Inadequate on-site lighting			Adequate on-site lighting		

UE.5 Doors or windows visible from street

1	2	3	4	5	0 (n/a)
No doors/ entrances visible from street			Many doors/ windows visible from street		

UE.6 Doors or windows visible to neighbours

1	2	3	4	5	0 (n/a)
Doors and windows of most units <u>not</u> visible to neighbours			Doors and windows of most units visible to neighbours		

UE.7 Places of concealment

1	2	3	4	5	0 (n/a)
Many places of concealment			No places of concealment		

UE.8 Open spaces between blocks of units

1	2	3	4	5	0 (n/a)
Open areas between blocks of units congested			Open spaces between blocks of units - clearly visible		

UE.9 Garaging facilities

1	2	3	4	5	0 (n/a)
Common garaging facilities			Individual garaging facilities for each unit		

UE.10 Tool sheds etc

1	2	3	4	5	0 (n/a)
Tool shed etc in common space			No tool shed etc		

UE.11 Screens, trellises etc

1	2	3	4	5	0 (n/a)
Screens or trellises block views of doors and/ or windows			No screens or trellises in common area		

UE.12 Access to upper storeys by climbing aids

1	2	3	4	5	0 (n/a)
Easy access to upper storeys by vegetation, drains etc			No access to upper storeys from outside		

UE.13 Security of main (common) door

1	2	3	4	5	0 (n/a)
Common door has no special security			Common door very visibly secure		

UE.14 Security of roof

1	2	3	4	5	0 (n/a)
Roof easily used to gain entry				Roof appears <u>not</u> to be able to be used for entry	

UE.15 Number of common entrances:

_____ (number)

STREET SCALE

[Note: 'Street' is strip about 50m (or 5 dwellings) on each side of particular dwelling]

S.1 Lot sized undeveloped or vacant areas (excludes parks)

1	2	3	4	5	0 (n/a)
Some such lots/ areas in street			No such areas in street		

S.2 Regional/ district parks

1	2	3	4	5	0 (n/a)
Regional/ district park or attraction in street			No such parks in street		

S.3 Level of maintenance of footpath, street

1	2	3	4	5	0 (n/a)
Public spaces poorly maintained			Public spaces well maintained		

S.4 Amount of appropriate vehicular activity in street

1	2	3	4	5	0 (n/a)
No foot or slow vehicle traffic			Considerable foot or slow vehicle movement		

S.5 Ease with which people can use or play in street

1	2	3	4	5	0 (n/a)
Prohibitive for people to play in the street			Safe and easy for people to play in the street		

S.6 Street lights

1	2	3	4	5	0 (n/a)
Very poor visibility in the street at night			Very good visibility in the street at night		

S.7 Visibility at waiting places (bus stops, etc)

1	2	3	4	5	0 (n/a)
Bus stops, waiting places dark and poorly lit			Bus stops, waiting places clearly lit		

S.8 Street visible from most house (ground floor) windows

1	2	3	4	5	0 (n/a)
No windows visible from street			At least 1 window of each house visible from street		

S.9 Houses close enough to hear from street

1	2	3	4	5	0 (n/a)
Loud noises (eg screams) from street <u>not</u> audible in majority of houses			Loud noises in street audible from house		

S.10 House numbers clear

1	2	3	4	5	0 (n/a)
More than half house numbers not visible			All house numbers visible from street		

S.11 Safe routes for pedestrians

1	2	3	4	5	0 (n/a)
All pedestrian routes are overgrown, poorly visible			At least one pedestrian route safe and visible		

S.12 Hiding places

1	2	3	4	5	0 (n/a)
Many hiding places in street			No hiding places in street		

S.13 Inappropriate uses for a residential street (list):

NEIGHBOURHOOD SCALE

[Neighbourhood boundary is defined on cover sheet]

N.1 Clearly defined boundary to neighbourhood

1	2	3	4	5	0 (n/a)
No clear boundary to neighbourhood from any direction				Clear boundaries on all sides	

N.2 Clear public sight lines

1	2	3	4	5	0 (n/a)
Not possible to see more than local street			Views across neighbourhood from many places		

N.3 Hiding places

1	2	3	4	5	0 (n/a)
Many hiding places in public places/ spaces			No hiding places in public places/ spaces		

N.4 Level of pedestrian and traffic activity

1	2	3	4	5	0 (n/a)
Many 'anonymous' pedestrians and vehicles cross neighbourhood			No through traffic for pedestrians or vehicles		

N.5 On main public transport route

1	2	3	4	5	0 (n/a)
On a number of major public transport routes with many stops			Public transport serves only this neighbourhood or terminates here		

N.6 Clear street names

1	2	3	4	5	0 (n/a)
Majority of street names not visible			All street names visible		

N.7 Clear directions to facilities

1	2	3	4	5	0 (n/a)
No directions to facilities within the neighbourhood				Clear directions to all major facilities in neighbourhood	

N.8 Maintenance of public spaces

1	2	3	4	5	0 (n/a)
Vegetation in public spaces poorly maintained				Public vegetation well looked after	

N.9 Signs of stability and pride

1	2	3	4	5	0 (n/a)
Majority of gardens and private lots poorly maintained				Almost all gardens and lots well maintained	

N.10 Number of public telephones in neighbourhood:

_____ (number)

N.11 Is neighbourhood part of Neighbourhood Watch scheme?

Yes _____ No _____

N.12 Is neighbourhood part of Safety House scheme?

Yes _____ No _____

N.13 Location of nearest Police Station (List):

N.14 Scale and purpose of parks and public spaces in neighbourhood (list):

N.15 Social focus to the neighbourhood (list):

N.16 Services provided for people from outside the neighbourhood (list):

N.17 Uses inappropriate to residential area (list):

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