



TOWN PLANNING
AND URBAN DESIGN

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN ASSESSMENT REPORT

Proposed development within the Town Centre Civic Precinct of the Warnervale Town Centre

Corner Nikko and Hakone Roads,
Warnervale

Fabcot Pty Ltd

June 2011

PROJECT NO: 210.065 CPTED

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1. INTRODUCTION

This report constitutes a detailed Crime Prevention Through Environmental Design (CPTED) Report to accompany a Project Application to the NSW Department of Planning and Infrastructure for the development proposal located at the corner of Nikko Road and Hakone Road, Warnervale.

The proposal involves:

- New “Main Street” running east-west which will act as a link between the future railway station to the west of the site to edge of the “Hill Top Park” at the eastern boundary;
- A “Civic Square”;
- Site preparation and bulk earthworks for proposed new roads, infrastructure and buildings;
- Construction of proposed buildings which specifically seeks approval for usage as a retail premises - 27,040 square metres, along with ancillary commercial - 11,155 square metres, bulky goods 2,650 square metres and leisure-entertainment uses - 6,435 square metres;
- Use and fit-out within the proposed buildings for the purposes of a Big W Discount Department Store and Woolworths Supermarket;
- Car parking for 1,949 spaces including commuter parking spaces;
- Loading dock facilities; and
- Infrastructure measures associated with the provision of road access, water, sewer, communications and energy to the proposed development.

The proposal does not seek the subdivision of the land.

The purpose of this report is to assess the proposed development against the guidelines prepared by the NSW Department of Planning titled “Crime Prevention and the assessment of development application” under Section 79C of the *Environmental Planning and Assessment Act, 1979*.

This assessment should be considered in respect to the design drawings prepared by BN Group as submitted with the Project Application.

An assessment under the Safer by Design guidelines is also attached at **Appendix A**.

It is noted that the NSW Bureau of Crime Research and Statistics has issued a summary of crime associated with Wyong Local Government Area in 2008 which indicated that the subject site is not an identified hotspot. Refer to **Appendix B**.



2. CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN PRINCIPLES (CPTED)

2.1 OVERVIEW

The following table provides a summary of the proposed development:

CPTED PRINCIPLE	DESIGN RESPONSE
Surveillance	Additional measure to enhance surveillance and maximising of sight lines need to be implemented. Sight lines in corridors between corners, lift doors and entrances need to be created to minimise hiding opportunities. This can be achieved through the provision of mirrors and dual frontage/doors addressing both sides for lifts, removal of unnecessary walls/obstructions, clear glazing of lift lobbies and car park portals, as well as maximising sight lines from inside front door of rooms to corridors.
Access Control	The use of security shutters/swipe card access to retail levels. All levels accessible via lifts and travelator, internal supermarket lift. Necessary to ensure effective use of physical and symbolic barriers to attract, channel or restrict the movement of people to minimise opportunities to commit crime.
Territorial Reinforcement	The design of the proposal will need to incorporate aspects to define and distinguish areas strictly for private use/access from the areas utilised for public and semi-public purposes.
Space Management	The creation of a well-kept and attractive space will help to attract more people, and thus reduce the likelihood of crime occurring through increased passive surveillance. The use of quality design combined with the implementation of an appropriate management, upkeep and cleaning strategies will reinforce perceptions of safety.

2.2 DESIGN CONSIDERATIONS

2.2.1 Relationship between Design and Crime

Crime Prevention: Aims to prevent crime and anti-social behaviour before it occurs.

Social prevention: Aims at addressing socio-economic causes of crime.

Situational prevention: Seeks to reduce opportunities for crime and anti-social activity through changing the environment

Examples:

- A typical offender will assess potential crime location before committing crime.
- Building design or use can create an environment that is not conducive to crime.
- Building design should seek to address both actual crime and fear of crime.
- Good design should encourage an open society, open space and freedom of movement.

A fear of crime leads to reduced participation in civil society- also leads to a self-fulfilling prophesy, that is if an area is perceived as unsafe, people retreat into homes, surveillance is reduced and crime is encouraged.

Holistic Approach

Crime Prevention for development - a holistic approach involving:

- CPTED (Crime Prevention through Environmental Design) principles
- Engineering and physical measures. Eg. CCTV, security doors, security patrols, mirrors
- Management strategies. Eg. Security Management Plan

Crime Prevention Through Environmental Design

Crime Prevention Through Environmental Design (CPTED) aims to reduce crime and change perceptions of crime through changing the physical environment.

- CPTED increases risk for criminals by increasing chance of detection, challenge and capture.



- Increases effort required to commit crime by increasing the time, energy and resources needed to be expended.
- Removes conditions that create confusion about behaviour norms.

The CPTED Principles

There are four principles that need to be used in the assessment of applications to minimise the opportunity for crime:

- Surveillance
- Access Control
- Territorial Reinforcement
- Space Management

Particular consideration has been given to the incorporation of these principles concerning entrances, lift cores (access/exit from basement and retail levels), corridors, interrelationships with existing retail and proposed retail space, lighting, legibility and accessibility, ownership and space management, security and safety, and minimisation of 'entrapment' opportunities.



3. ASSESSMENT AGAINST CPTED PRINCIPLES

3.1 SURVEILLANCE

The proposed development has been designed to provide casual surveillance to Main Street and the surrounding road network.

It is considered that, the design ensures no obstructions of sight lines from the proposed entries to the street frontages.

The design of the ground floor area provides for “air-locks” between entry points and car parking levels, thereby enabling increased surveillance from within the development to the surrounding parking.

Additional measures to enhance internal surveillance and maximising of sight lines need to be implemented. Additional sight lines in corridors between corners, lift doors and entrances need to be created to minimise hiding opportunities.

This can be achieved through the provision of mirrors, removal of unnecessary walls/obstructions, clear glazing of lift lobbies and car park portals.

Specifically, the proponent has agreed that the following measures will be included within the design:

- Lift lobbies and car park portals with clear glazing where possible rather than solid walls to provide surveillance from car parking area and to create sight lines/surveillance;
- Install mirrors in retail and car parking levels to increase visibility of possible hiding areas and to minimise hiding opportunities;
- Install mirrors to create visibility around corners on ground level when exiting lift core area and stairwell areas; and
- Provide mirrors or other means to maximise visibility of corners and to reduce hiding opportunities when accessing/exiting common open space and lobbies.

3.2 ACCESS CONTROL

The design includes measures such as physical barriers at the entry points to lifts to restrict vehicle access or blocking of the entry area. The design delineates the vehicle entry point into and from the site, and channels both pedestrian and vehicles within the car parking levels.

The design of the proposed development both in the car parking levels, internal movements such as the travelators and the entry points of the proposed buildings from Main Street to ensure that no places are available to allow entrapment.



The internal design of the proposed building includes barriers to back of house operations, signage at the entry point and cashiers points at the exit point to the DDS and supermarket.

The design, height and location of the aisles within the supermarket have been carefully selected to optimise use of floor space while at the same time allowing for staff surveillance.

The loading dock area has been designed to minimise the potential for conflict between pedestrians and motorists. The following points summarise how:

- Displays of clear signage identifying loading dock areas and associated restrictions;
- Installation of CCTV at entrance of loading dock, facing inward to loading dock;
- Any pedestrian access points through the loading dock into the shopping mall are to be locked at all times with staff having full access; and
- Loading dock areas to be differentiated with treatment through the incorporation of a different pavement/concrete finish, contrasting to the surrounding road asphalt.

3.3 TERRITORIAL REINFORCEMENT

Definition between the boundaries of the property and the road/public areas to upper level car parking are clear given the proposed location of lifts, frontages, street addresses, pavement treatments, street activation and security shutters on ramps between basement level car parking.

The proposal has clearly indicated pathways for circulation both within and outside of the building through informal and formal articulation of pathways and entrances. It is considered that treatments of passageways and thoroughfares will ensure that stakeholders who currently frequent the area will benefit from legibility of the space at the ground floor level with the amended design.

It is considered that a higher level of territorial enforcement is required at the ground floor level to each street frontage and within the mall area. In addition, Fabcot will implement surveillance through the use of CCTV within the proposed development. This is proposed to be achieved with the use of lighting and CCTV.

3.4 SPACE MANAGEMENT

Opportunities for graffiti and other forms of vandalism need to be further minimised in car parking areas, the pedestrian access frontage and mall through appropriate finishes and surveillance measures. If graffiti/vandalism was to occur at any given time, the applicant can prepare a policy in accordance with the rapid removal requirement within a 48-hour period as recommended by Council for those areas controlled and managed by the owners of the centre.



4. CONCLUSION

This report has been prepared to detail the crime minimisation design mechanisms proposed within the development and assess these mechanisms in accordance with the four (4) crime prevention through environmental design principles.

In summary, the proposed development is appropriate within the context of the subject site and is consistent with the NSW Department of Planning guidelines on minimising crime risk.

Should the NSW Police or Council consider that additional measures are required, the applicant asks to be consulted in the first instance prior to rejection of the proposal or imposition of any conditions which will alter the design.



APPENDIX A
Assessment Against Safety By Design Guidelines
NSW Police

ASSESSMENT AGAINST SAFER BY DESIGN GUIDELINES FOR CRIME PREVENTION



REQUIREMENT		CONSISTENT	COMMENT
Natural Surveillance	<i>Openings in buildings are located and designed to overlook public places to maximise casual surveillance.</i>	Yes	In accordance with BCA requirements, the openings in the buildings have been designed to allow for also casual surveillance.
	<i>The main entry to a building should face the street.</i>	Yes	Entries to the buildings are be visible from and the parking areas via lifts and travelators. All car park entrances also face the new street network.
	<i>An external entry path and the foyer to a building must be direct to avoid potential hiding places.</i>	Yes	There is a direct path to the entry of the main building from the car parking levels. Any blind corners or potential areas to hide can be mitigated with provision of mirrors.
	<i>Entry lobby areas to and from car parking areas should be transparent allowing viewing into and from these areas.</i>	Yes	Glazing/windows installed. Frontage to car park includes glazed sections to maximise surveillance.
	<i>Landscaping must not conceal the front door to a building when viewed from the street.</i>	Yes	No landscaping is proposed at main entries.
	<i>Pedestrian access should be well lit and maximise sight lines.</i>	Yes	In accordance with Australian Standard for public car parking area and surrounds
	<i>Landscaping should not inhibit sight lines.</i>	Yes	Any proposed landscaping will not impede sight lines.
	<i>ATM design and location is within direct view of pedestrian paths so that they can be overlooked from vantage points.</i>	Yes	If an ATM is proposed this can be orientated appropriately.
	<i>The street number of a building must be visible from the street and made of a reflective material to allow visitors and emergency vehicles to easily identify the location of the building.</i>	Yes	A street number can be provided on-site if required.
	<i>Landscaping should be designed to maximise sight lines.</i>	Yes	Landscaping proposed in the development will not impede sight lines.
Active surveillance	<i>A security alarm system must be installed in a building.</i>	Yes	Alarms will be installed in the buildings.

ASSESSMENT AGAINST SAFER BY DESIGN GUIDELINES FOR CRIME PREVENTION



REQUIREMENT		CONSISTENT	COMMENT
measures – security devices	<i>All windows and doors on the ground floor must be made of toughened glass to reduce the opportunities for 'smash and grab' and 'break and enter' offences.</i>	Yes	Schedule of building materials and finishes will be utilised in accordance with standards.
	<i>Unless impractical, access to an outdoor car park must be closed to the public outside of business hours via a lockable gate.</i>	No	Implementation would be impracticable for the site.
	<i>CCTV system must cover all high risk areas and including all entry areas and the laneway.</i>	Yes	CCTV surveillance will be installed.
Access Control	<i>Loading docks in the vicinity of main entry areas are secured outside business hours.</i>	Yes	The loading docks will include CCTV.
	<i>Access to a loading dock or other restricted areas in a building must only be available to tenants via a large security door with an intercom, code, or card lock system.</i>	Yes	Access to the loading docks will be restricted to only trucks providing deliveries to the stores. In addition to this, the roller shutter door for the loading docks can remain closed at all times other than during deliveries.
	<i>Clear signage should be erected indicating loading docks should not be accessed by the general public.</i>	Yes	Signage will be installed.
Territoriality/ ownership	<i>Site planning provides a clear definition of territory and ownership of all private, semi-public and public places</i>	Yes	Site planning effectively indicates the designation of parts of the development as private, semi-public and public places.
Lighting	<i>Both natural and artificial lighting is used to reduce poorly lit or dark areas and therefore deterring crime and vandalism.</i>	Yes	Lighting will be installed to comply.
	<i>Lighting must be provided to the following areas of a building to promote safety and security and night:</i> A) An external entry path, foyer, driveway and car park to a building.	Yes	
	<i>B) Shopfront. This may be in the form of motion sensitive lighting or timer lighting.</i>	Yes	

ASSESSMENT AGAINST SAFER BY DESIGN GUIDELINES FOR CRIME PREVENTION



REQUIREMENT		CONSISTENT	COMMENT
	<i>C) The underside of an awning.</i>	Yes	
	<i>Lift access to a car park that are intended for night use must be well lit using a vandal resistant, high mounted light fixture.</i>	Yes	
	<i>The lighting in a car park must conform to Australian Standards 1158.1, 1680, 2890.1.</i>	Yes	
	<i>The use of lighting fixtures, and vandal resistant, high mounted light fixtures, which are less susceptible to damage in the car park and laneway areas.</i>	Yes	
	<i>Car parking areas should be painted in light colours which will increase levels of illumination.</i>	Yes	
Vandalism and Graffiti	<i>Development minimises blank walls along all street frontages</i>	Yes	The design of the façades includes windows and doors to minimise blank walls where possible.
	<i>The exterior to a building wall on the ground floor must be painted in a graffiti resistant coating.</i>	Yes	Schedule of building materials and finishes will be utilised in accordance with standards.
	<i>Maintenance regimes should be implemented which ensure all public areas are well maintained.</i>	Yes	A cleaning and maintenance program can be implemented.
	<i>Cleaning regimes should be implemented which ensure all main public areas are free of rubbish.</i>	Yes	
	<i>Graffiti removal regimes should be implemented which ensure graffiti is promptly removed.</i>	Yes	



APPENDIX B
Wyong LGA Crime Statistics
NSW Bureau of Crime Statistics

2008

**local government area
crime report series**

wyong



**WYONG
LOCAL GOVERNMENT AREA
CRIME REPORT
2008**

Bryan Price



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INTRODUCTION

This report contains information on police-recorded crime in the Wyong Local Government Area (LGA). It includes information on:

- The spatial distribution of crime within the LGA
- Recent trends in the 17 major offence categories
- Temporal variation in crime by time of day, day of week and month
- The age and gender of victims and suspected offenders
- The premises types on which crimes occurred
- The involvement of alcohol in crime.

An important aspect of this report is the inclusion of hotspot maps showing the distribution of crime within the LGA. We have provided this information in order to both inform local crime prevention efforts and give members of the public a better understanding of crime in their local neighbourhood.

Unfortunately, the Bureau of Crime Statistics and Research is not able to explain the reasons for the distribution of crime within local areas, nor are we able to advise how to prevent crime in a local area. If you are interested in either of these issues please contact either your local police or the Crime Prevention Division of the NSW Attorney General's Department (www.lawlink.nsw.gov.au/cpd or phone 02 8688 3277).

If you have any questions about this report, or if you wish to provide feedback, please contact the Deputy Director on (02) 9231 9190 or bcsr@agd.nsw.gov.au.

Dr Don Weatherburn
Director
30 September 2009

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DEFINITIONS AND EXPLANATORY NOTES

The data in this crime report were extracted from the NSW Police Force's Computerised Operational Policing System (COPS). Because COPS is a live database, data can vary according to the time at which they are extracted.

In this report:

- The counting units are recorded *criminal incidents* rather than recorded *offences* (except for murder incidents, which count victims, see note 2) and
- Unless specifically stated, the data are categorised by date of *reporting* to police (or date of detection by police) rather than by date of *occurrence* of the incident.

1. RECORDED CRIMINAL INCIDENTS

A recorded criminal incident is defined as an activity detected by or reported to police which:

- involved the same alleged offender(s)
- involved the same alleged victim(s)
- occurred at the one location
- occurred during one uninterrupted period of time
- falls into one offence category and
- falls into one incident type (for example, 'actual', 'attempted', 'conspiracy').

One incident may involve two alleged offenders assaulting the same victim. This would be recorded as one assault incident. Alternatively, suppose a person reports to police that he found his neighbour in the process of damaging his car and, when confronted, the neighbour assaulted him. For such an event, two criminal incidents would be recorded because two distinct offence types were involved (malicious damage to property and assault) even though the same parties were involved at the same time and in the same place.

Police-recorded crime data provide a useful barometer for monitoring trends and patterns in crime in local areas. Police-recorded crime data are not as useful for estimating the overall level of crime in a particular area (crime victim surveys are more appropriate for this purpose). This is primarily because many criminal incidents are not reported to, or detected by, police. For example, some minor assaults where neither party is injured might not be reported to police.

Irrespective of the way in which recorded crime trends are presented, the administrative nature of COPS data must always be kept in mind when interpreting these trends. Because the COPS database contains only those criminal incidents that are reported to, or detected by, police, trends in recorded crime will reflect movements in the underlying factors that influence the detection, reporting and recording of crime, as well as changes in the true level of crime in the community. Most offences presented in this crime report have been selected because they are less likely to be related to policing activity or public willingness to report crime.

2. COUNTING UNITS

Because of the seriousness of murder and its relatively small numbers, it is considered to be more appropriate to count the number of victims, rather than the number of criminal incidents. Hence, where one murder incident involves a person killing six people, six murder victims are counted in this report. For every other offence, the counting units refer to the number of incidents.

3. COUNTING PERIOD

Criminal incidents are included in the counting period in which they were reported to, or detected by, police. In most cases criminal incidents are recorded on COPS on the day of reporting. It is possible for some updating of data to occur when incidents occurred in the year of interest but were reported some time after the data were extracted. That is, data extracted for a specified period of time (incidents reported in 2008, for example), may differ according to the date of extraction of the data. The data presented in this report were extracted in April 2009.

4. OFFENCE CLASSIFICATIONS

The Bureau recodes the offence categories used by the NSW Police Force to make them broadly consistent with the Australian Standard Offence Classification (ASOC, ABS 1997, *Australian Standard Offence Classification*, Cat. no. 1234.0). These classifications do not necessarily correspond exactly with offences as defined in legislation. All offence classifications presented in this report are listed in Appendix 1, including a list of all NSW Police Force incident categories that make up these offence classifications.

5. MAPS

5.1 Locating criminal incidents

To produce crime maps, criminal incident data must be geocoded. Geocoding is the process of assigning a geographic reference (longitude and latitude coordinates) to a criminal incident. The coordinates are referred to as 'geocodes' in this report. Geocodes can be determined using street addresses, place names and other landmark information. Some criminal incidents do not have adequate locational information. Such incidents cannot therefore be represented spatially. Crime maps are only produced for a particular incident type when at least 75 per cent of incidents recorded within an LGA have geocodes.

Criminal incidents that have complete street address information are accurately geocoded to the location as recorded in COPS data. Inaccuracies in determining location may arise if the police failed to record the location of an incident correctly or completely. Geocoding is also subject to data quality issues inherent in the geocoding software and in the digital street, suburb, postcode and features datasets. All data points on the maps included in this report should therefore be treated as approximate locations only.

Incidents occurring in landmarks that cover a large area, for example parks and schools, are geocoded to the geographic centre of the landmark. Recorded criminal incidents that take place in correctional, detention or remand centres are not represented spatially in this crime report.

5.2 Spatial data and software

The digital LGA and land use boundaries used in this crime report were obtained from the ABS (*Australian Standard Geographical Classification* (ASGC), Digital Boundaries, 2006, ABS July 2006, Cat. No 1259.0.30.002). Information regarding this digital data is available from the ABS at:

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/1259.0.30.0022006?OpenDocument>

All other digital spatial data used in this crime report (street networks, postcodes, suburbs, water and park boundaries, and other points of interest) were obtained from MapInfo Corporation as part of the StreetPro© Australia 12.5 software package. Information regarding this digital data is available from MapInfo at:

<http://extranet.mapinfo.com/products/Overview.cfm?productid=138>

MapMarker V14, developed by MapInfo Corporation, was used to geocode the criminal incident data. ArcMap 9.3, developed by ESRI, was used to produce the crime maps.

5.3 Hotspot (kernel density) maps

This crime report uses kernel density maps to illustrate areas of high and low crime concentration within the LGA. The relative density of crime is reflected by the colour gradation: areas with no criminal incidents are white; areas with a small number of incidents are shaded lightly and the shading becomes progressively darker as the density of criminal incidents increases. The hotspot maps were created in ArcMap 9.3 with the Kernel Density tool and have a cell size of 100 metres and a search radius of 1000 metres. The figure next to the label 'highest crime density' refers to the number of incidents geocoded within the 1000 metres search radius of the 100m² cell with the highest crime densities.

Note: crime density levels cannot be compared across the hotspot maps for the different offence categories because different scales have been used.

5.4 Privacy

When people report crimes to the police they expect that their details will be treated with confidentiality. All reasonable care has been taken in the production of this report to respect the privacy concerns of individuals, companies and other bodies who have been the victims of crime, while simultaneously providing information that will be useful for crime prevention planners. The hotspot maps provided in this crime report show the spatial distribution of crime, while minimising the likelihood of pinpointing the specific addresses at which incidents have occurred. This is to prevent the possibility of identifying the offender(s) or victim(s) involved in the incidents.

6. CRIME BY TIME, DAY AND MONTH

Each offence category for which maps have been produced also includes graphs showing (a) the proportion of incidents by the month in which the incident occurred and (b) the proportion of incidents by the time of day and day of week on which the incident occurred. While the reporting date is the usual counting rule employed in this report (see Note 2), the date on which the incident occurred is employed when estimating crime by time, day and month. This is because there is sometimes uncertainty about the time, day or month in which incidents actually occurred.

Take, for example, a family who go on holiday for two weeks over the Christmas period and who return to find their house has been broken into. Because the victims are unsure about the actual time at which the incident occurred a 'start date/time' and 'end date/time' will be recorded on the COPS database. In the example provided, the incident start and end times will be two weeks apart. In order to minimise the amount of uncertainty in our estimates of the temporal distribution of crime, only those incidents where the start date and end date were the same are included in the calculations.

7. PERSONS OF INTEREST

Table 4 shows the age and gender distribution of persons of interest (POIs) proceeded against by police for criminal incidents in the Wyong LGA. Most POIs recorded by police are alleged offenders or persons who the police suspect have been involved in a criminal incident. Police do not proceed against all POIs identified in the COPS database. However only those POIs who were proceeded against are included in Table 4. Not all of these persons were proceeded against to court. Some may have been warned, cautioned or referred to a Youth Justice Conference under the *Young Offenders Act 1997*. Others may have been cautioned for using cannabis or other drugs and others may have been given infringement notices. Infringement notices are on the spot fines that can be paid for and finalised without going to court.

8. COUNTING VICTIMS AND PERSONS OF INTEREST

As a result of the way that victim and POI data are recorded on COPS, Tables 3 and 4 are not counts of unique persons. They actually count the interaction between person-level data and incident-level data. This is because criminal incidents involving multiple victims and/or offenders can have multiple victims and/or POIs attached. On the other hand, a single POI or victim could also be associated with more than one criminal incident. These tables, while useful for highlighting the age and gender characteristics of victims and offenders, overestimate of the number of unique victims and POIs identified by police.

POI information will not usually be recorded for criminal incidents in which there are no known suspects. This is very common among incidents of property crime that have low clear up rates. A cleared criminal incident is one which, in the view of police, has been satisfactorily cleared either by the commencement of legal proceedings against an alleged offender or otherwise. Incidents such as malicious damage to property and break and enter have low clear-up rates because the offender is unknown in most cases. POI data should be treated cautiously for these offence types because we only know about the characteristics of people identified by police. The characteristics of offenders not identified by police may vary in a systematic way from the characteristics of known offenders.

9. ALCOHOL RELATED INCIDENTS

Table 5 shows the proportion of selected offences that were flagged by police as alcohol related. Incidents are only flagged as alcohol related when information is available to police which leads them to believe that alcohol was a factor associated with the incident. It is particularly important to be cautious when interpreting the relationship between alcohol and crime for criminal incidents that have low clear-up rates. When police do not know who the offender(s) are, they cannot usually make a judgement about the sobriety of the offender(s). For offences such as these it is likely that the number of incidents flagged by police as alcohol related is considerably lower than the true number.

LOCAL AREA CRIME SUMMARY

10. OVERVIEW OF RECENT TRENDS

Table 1. Number of incidents recorded in the Wyong LGA, 24- and 60-month trend change and NSW ranking (2008) for the 17 major offence types

Offence type	Jan-Dec 2004	Jan-Dec 2005	Jan-Dec 2006	Jan-Dec 2007	Jan-Dec 2008	24-month trend ^{^^}	% Change over 24 months	60-month trend ^{^^}	Av. annual change over 60 months	2008 LGA Rank*
Murder [^]	0	4	2	4	0	nc**	***	nc**	***	nc**
Assault - domestic violence related	741	753	765	833	767	Stable	***	Stable	***	41
Assault - non-domestic violence related	974	976	1,004	1,073	904	Down	15.8%	Stable	***	66
Sexual assault	123	109	119	105	115	Stable	***	Stable	***	71
Indecent assault, act of indecency and other sexual offences	146	164	169	104	116	Stable	***	Stable	***	
Robbery without a weapon	32	43	37	42	46	Stable	***	Stable	***	
Robbery with a firearm	12	17	5	1	4	nc**	***	nc**	***	52
Robbery with a weapon not a firearm	29	29	18	14	14	nc**	***	nc**	***	
Break and enter - dwelling	1,079	1,237	983	991	1,073	Stable	***	Stable	***	41
Break and enter - non-dwelling	651	587	660	435	444	Stable	***	Down	9.1%	78
Motor vehicle theft	766	781	613	558	600	Stable	***	Down	5.9%	25
Steal from motor vehicle	1,068	1,062	1,055	1,134	1,617	Up	42.6%	Up	10.9%	17
Steal from retail store	348	326	337	405	410	Stable	***	Stable	***	30
Steal from dwelling	594	615	653	516	539	Stable	***	Down	2.4%	72
Steal from person	146	140	105	96	94	Stable	***	Down	10.4%	55
Fraud	461	464	676	464	627	Up	35.1%	Up	8.0%	39
Malicious damage to property	2,963	2,669	2,658	3,040	3,039	Stable	***	Stable	***	35

[^] For murder, the data are counts of recorded victims, not criminal incidents (see Note 2, page 7).

^{^^} The trend test used was a two-tailed Kendall's rank-order correlation test with a 0.05 level of significance (see, for example, Conover, W.J. 1980, Practical Non-Parametric Statistics, 2nd ed, John Wiley and Sons, pp 256-260).

* Ranks are only calculated for LGAs with populations greater than 3000 people (n=143). Ranks are not calculated for murder due to the low number of recorded victims per LGA.

** The robbery and sex offence categories are combined because the numbers are too small within the individual categories to calculate reliable rate estimates (see Note 4, page 8). Trend information is not calculated (nc) if at least one 12-month period in the selected timeframe had less than 20 incidents.

*** No annual percentage change is given if the trend is stable or if a trend has not been calculated.

11 CRIME MAPS AND GRAPHS FOR SELECTED OFFENCES

11.1 Assault – domestic violence related

- Proportion of incidents by month
- Proportion of incidents by time of day, day of week
- Hotspot map

Figure 1. Proportion of domestic violence related assault incidents by month

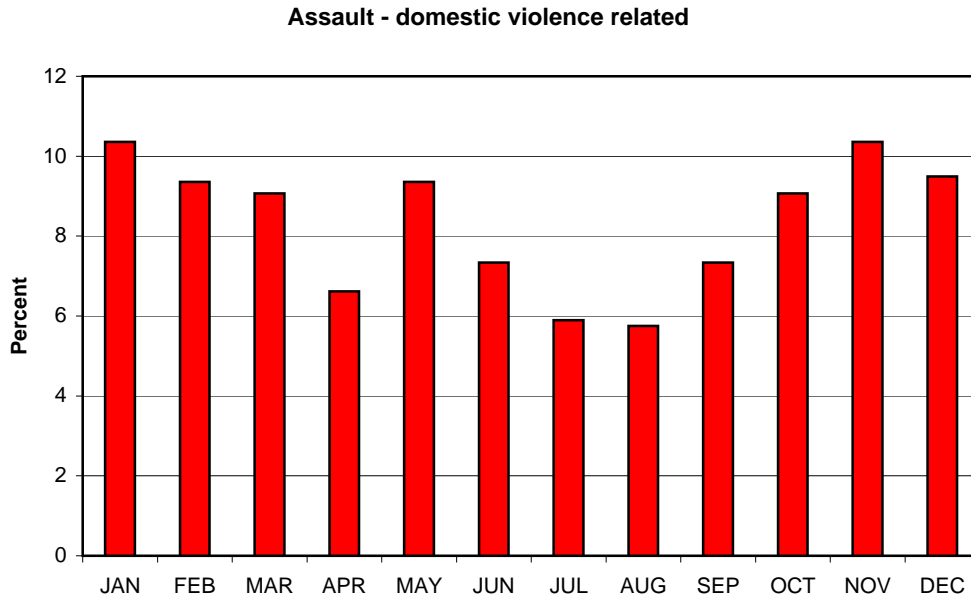


Figure 2. Proportion of domestic violence related assault incidents by time of day and day of week

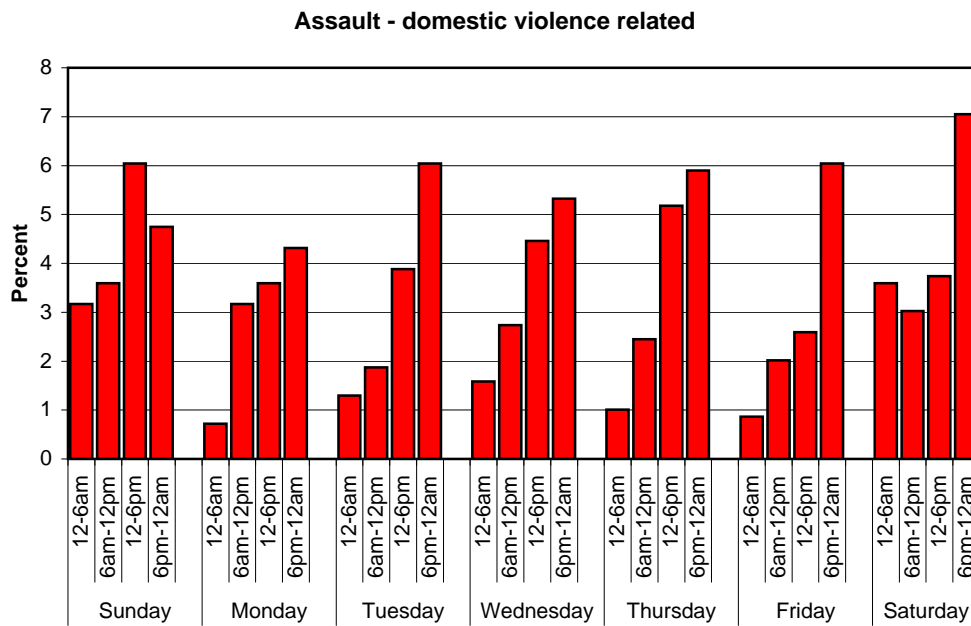


Figure 3. Hotspot map for domestic violence related assault incidents

