

CRIME AND SAFETY

NEW SOUTH WALES

EMBARGO: 11.30AM (CANBERRA TIME) FRI 10 DEC 2004

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INQUIRIES

■ For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Michael Clarke on Sydney (02) 9268 4660.

NOTES

INTRODUCTION

This publication contains results from the April 2004 survey of Crime and Safety, New South Wales (NSW). The survey covers only selected types of household and personal crimes. Household crimes include break and enter, attempted break and enter and motor vehicle theft. Personal crimes include robbery, assault and sexual assault. The terms used to describe the various types of offences in this publication may not necessarily correspond with legal or police definitions. Victims are counted once only for each type of offence, regardless of the number of incidents occurring. See the Glossary for the definitions of terms as used in this survey. Unless otherwise specified, differences between data items noted in the Summary of Findings are statistically significant. See paragraph 14 of the Technical Note for further details.

ROUNDING

Where figures have been rounded, discrepancies may occur between totals and the sums of the component items. Published percentages are calculated prior to rounding, and therefore some discrepancy may occur between these percentages and those that may be calculated from the rounded figures.

ABBREVIATIONS

ABS Australian Bureau of Statistics

MPS Monthly Population Survey

NSW New South Wales

RSE relative standard error

SE standard error

John Struik

Regional Director, New South Wales

SUMMARY OF FINDINGS

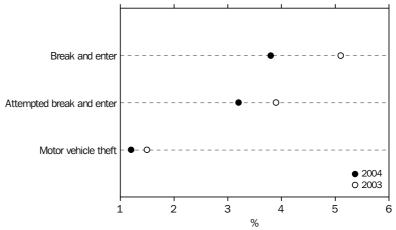
HOUSEHOLD CRIME

A total of 190,100 households (7.4% of all households in NSW) were victims of household crime in the 12 months to April 2004, a decrease from 9.4% in 2003. A decrease in the victimisation rate was recorded for break and enter (3.8% in 2004, down from 5.1% in 2003).

The household victimisation rates for Sydney and the Balance of NSW were about the same (7.4% and 7.5% respectively). This was different to the findings of previous surveys where Sydney revealed a higher household victimisation rate.

Similar to the findings of previous surveys, household victimisation rates varied according to household type. Victimisation rates ranged from a high of 11.4% for lone parent households down to 5.9% for couple only households.

VICTIMISATION RATES FOR HOUSEHOLD CRIME—2003 and 2004



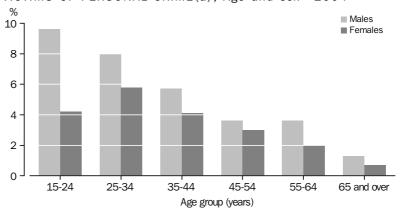
PERSONAL CRIME

There were 235,800 usual residents of NSW who were victims of personal crime in the 12 months to April 2004, a victimisation rate of 4.5%. This victimisation rate was the same as that recorded 12 months earlier. Sydney and the Balance of NSW recorded similar victimisation rates for personal crime in the 12 months to April 2004.

Males were more likely to be victims of crime than females. There were 144,800 male victims, a victimisation rate of 5.5%, and 90,900 female victims, a victimisation rate of 3.4%. Victimisation rates for personal crime varied according to sex and age. The highest victimisation rate in 2004 for males was amongst 15–24 year olds (9.6%) while the highest victimisation rate for females was amongst 25–34 year olds (5.8%).

PERSONAL CRIME continued

VICTIMS OF PERSONAL CRIME(a), Age and sex—2004



(a) Robbery, assault or sexual assault.

Of the 200,700 victims of assault, just under half (48%) stated that they knew their offender.

The victimisation rate for unemployed persons was 7.6% compared to 4.6% for employed persons and 3.9% for those persons who were not in the labour force.

MULTIPLE VICTIMS

Of those households which experienced household crime, 30% were victims on more than one occasion within the 12 month reference period. The multiple victimisation rate was highest for victims of attempted break and enter (35%).

Of those persons who were victims of personal crime, 46% experienced more than one incident in the 12 month reference period and the multiple victimisation rate was 46% for victims of assault compared with 28% for victims of robbery.

REPORTING TO POLICE

The reporting of incidents to the police varied according to the type of offence. For household crime, the proportion of victims reporting the most recent incident to police was considerably higher for break and enter (67%) than for attempted break and enter (25%). For victims of motor vehicle theft in 2004, 91% reported the most recent incident to police.

For personal crime, the most recent incident was reported to the police by 38% of robbery victims. The rate of reporting assaults to the police was 36% in 2004.

PERCEPTION OF CRIME/PUBLIC NUISANCE

In 2004, an estimated 52% of persons did not think there were any crime or public nuisance problems in their neighbourhood. This was a small increase on the 50% of persons who reported no perceived problems in 2003.

The main perceived crime or public nuisance problem reported was housebreaking/burglaries/theft from homes, with 12% of persons identifying this as the main problem. Other main problems identified in 2004 included dangerous/noisy driving (10%), vandalism/graffiti/damage to property (7%) and louts/youth gangs (6%).

VICTIMS AND NON-VICTIMS OF CRIME, Type of offence

| | 2004 | | VICTIM | VICTIMISATION RATE(a | | |
|---|-----------|---------------------|-------------|----------------------|-----------|-----------|
| | Victims | Non-victims | 2000 | 2001 | 2003 | 2004 |
| Type of Offence | '000 | '000 | % | % | % | % |
| • | • • • • • | • • • • • • • • • • | • • • • • • | | • • • • • | • • • • • |
| Households | | | | | | |
| Break and enter | 97.0 | 2 468.9 | 5.6 | 6.3 | 5.1 | 3.8 |
| Attempted break and enter | 82.1 | 2 483.7 | 3.5 | 4.4 | 3.9 | 3.2 |
| Break and enter or attempted break and enter(b) | 162.9 | 2 402.9 | 8.2 | 9.6 | 8.2 | 6.3 |
| Motor vehicle theft | 31.9 | 2 534.0 | 1.7 | 2.4 | 1.5 | 1.2 |
| Total households(b) | 190.1 | 2 375.7 | 9.4 | 11.4 | 9.4 | 7.4 |
| Persons | | | | | | |
| Robbery | 35.5 | 5 238.4 | 1.0 | 1.0 | 0.8 | 0.7 |
| Assault | 200.7 | 5 073.3 | 3.6 | 4.2 | 3.5 | 3.8 |
| Sexual assault(c) | *10.1 | 2 526.6 | *0.2 | 0.5 | *0.5 | *0.4 |
| Total persons(b) | 235.8 | 5 038.2 | 4.4 | 5.1 | 4.5 | 4.5 |

estimate has a relative standard error of 25% to 50% $\,$ (b) Figures for individual offence types do not sum to and should be used with caution

⁽a) Proportion of total households/persons.

totals, as a household or person could be a victim of more than one type of offence.

⁽c) Sexual assault questions were asked only of females aged 18 years and over.



| Selected characteristics | 2004 Victims | Non-victims | Total | VICTIMI RATE(b 2003 | |
|---|--------------------------------------|---|---|-----------------------------------|----------------------------------|
| • • • • • • • • • • • • • • • | • • • • • • | | | | |
| Major statistical region Sydney Balance of NSW | 116.8 73.3 | 1 468.3 907.4 | 1 585.2 980.7 | 9.9 8.5 | 7.4 7.5 |
| Household type Couple with child(ren) Couple only Lone parent Person living alone Other | 50.0 35.8 28.0 49.2 27.1 | 745.3 576.3 217.7 584.3 252.2 | 795.3 612.1 245.7 633.5 279.3 | 8.9 7.9 12.9 10.8 8.0 | 6.3 5.9 11.4 7.8 9.7 |
| Total | 190.1 | 2 375.7 | 2 565.8 | 9.4 | 7.4 |

⁽a) Break and enter, attempted break and enter, or motor vehicle theft.

⁽b) Proportion of total households.

| | 2004 | | | VICTIMISATION | RATE(b) |
|-------------------------------------|-------------|-----------------|---------|-----------------------------|-----------|
| | Victims | Non-victims | Total | 2003 | 2004 |
| Age group (years) | '000 | '000 | '000 | % | % |
| | | | | | |
| | | M A | LES | | |
| | | | | | |
| 15–24 | 44.2 | 416.7 | 460.9 | 11.8 | 9.6 |
| 25–34 | 39.6 | 453.1 | 492.6 | 7.0 | 8.0 |
| 35–44 | 28.0 | 462.8 | 490.8 | 5.1 | 5.7 |
| 45–54 | 16.0 | 432.8 | 448.8 | *2.5 | 3.6 |
| 55–64 | 12.3 | 332.2 | 344.5 | *2.6 | 3.6 |
| 65 and over | *4.8 | 368.0 | 372.7 | *0.8 | *1.3 |
| Total males | 144.8 | 2 465.5 | 2 610.4 | 5.3 | 5.5 |
| • • • • • • • • • • | • • • • • • | | | • • • • • • • • • • • • • • | • • • • • |
| | | FEM | ALES | | |
| 15–24 | 18.5 | 425.4 | 443.9 | 6.4 | 4.2 |
| 25–34 | 29.0 | 468.1 | 497.1 | 5.5 | 5.8 |
| 35-44 | 19.9 | 468.4 | 488.3 | 3.1 | 4.1 |
| 45–54 | 13.5 | 433.6 | 447.2 | 2.8 | 3.0 |
| 55–64 | *6.7 | 331.0 | 337.7 | *2.3 | *2.0 |
| 65 and over | *3.3 | 446.1 | 449.4 | *1.0 | *0.7 |
| Total females | 90.9 | 2 572.6 | 2 663.5 | 3.6 | 3.4 |
| • • • • • • • • • • | • • • • • • | • • • • • • • • | | • • • • • • • • • • • • • | • • • • • |
| | | PER | SONS | | |
| 15–24 | 62.7 | 842.1 | 904.8 | 9.1 | 6.9 |
| 25-34 | 68.6 | 921.1 | 989.7 | 6.2 | 6.9 |
| 35-44 | 47.9 | 931.2 | 979.1 | 4.1 | 4.9 |
| 45–54 | 29.6 | 866.4 | 896.0 | 2.7 | 3.3 |
| 55–64 | 18.9 | 663.3 | 682.2 | 2.4 | 2.8 |
| 65 and over | *8.0 | 814.1 | 822.1 | *0.9 | *1.0 |
| Total persons 235.8 5 038.2 5 273.9 | | | | | 4.5 |

^{*} estimate has a relative standard error of 25% to 50% and should be used with caution

⁽a) Robbery, assault or sexual assault.

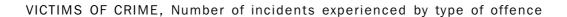
⁽b) Proportion of total persons.

| | 2004 | | | VICTIMISA RATE(b) | TION |
|---|-----------|-----------------|-----------------|----------------------|------|
| 0-1 | Victims | Non-victims | Total | 2003 | 2004 |
| Selected characteristics | '000 | '000 | '000 | % | % |
| • | • • • • • | • • • • • • • • | • • • • • • • • | • • • • • • • • • • | |
| Major statistical region | | | | | |
| Sydney | 150.1 | 3 194.1 | 3 344.2 | 4.4 | 4.5 |
| Balance of NSW | 85.7 | 1 844.1 | 1 929.7 | 4.5 | 4.4 |
| Labour force status | | | | | |
| Employed | 147.4 | 3 035.2 | 3 182.6 | 5.0 | 4.6 |
| Unemployed | 13.1 | 159.1 | 172.1 | *6.5 | 7.6 |
| Not in the labour force | 75.2 | 1 844.0 | 1 919.2 | 3.3 | 3.9 |
| Total | 235.8 | 5 038.2 | 5 273.9 | 4.5 | 4.5 |

 $^{^{\}star}$ $\,\,$ estimate has a relative standard error of 25% to 50% and should be used with caution

⁽a) Robbery, assault or sexual assault.

⁽b) Proportion of total persons.





| | One | Two | Three or more | Total | One | Two | Three or more |
|---|-----------|-----------|---------------------|-----------|-----------|-----------|---------------------|
| Type of Offence | '000 | '000 | '000 | '000 | % | % | % |
| | • • • • • | • • • • • | • • • • • • | • • • • • | • • • • • | • • • • • | • • • • • |
| Households | | | | | | | |
| Break and enter | 81.5 | *10.1 | *5.4 | 97.0 | 84.1 | *10.4 | *5.5 |
| Attempted break and enter | 53.0 | 18.3 | *10.9 | 82.1 | 64.5 | 22.2 | *13.3 |
| Break and enter or attempted break and enter(a) | 111.4 | 34.5 | 16.9 | 162.9 | 68.4 | 21.2 | 10.4 |
| Motor vehicle theft | 29.3 | np | np | 31.9 | 92.0 | np | np |
| Total household victims(a) | 133.3 | 38.6 | 18.2 | 190.1 | 70.1 | 20.3 | 9.6 |
| Persons | | | | | | | |
| Robbery | 25.6 | *5.8 | *4.1 | 35.5 | 72.1 | *16.4 | *11.6 |
| Assault | 109.0 | 30.2 | 61.5 | 200.7 | 54.3 | 15.1 | 30.6 |
| Sexual assault(b) | *5.2 | np | np | *10.1 | *52.1 | np | np |
| Total person victims(a) | 128.0 | 41.5 | 66.3 | 235.8 | 54.3 | 17.6 | 28.1 |

estimate has a relative standard error of 25% to 50% (a) Figures for individual offence types do not sum to totals, and should be used with caution

np not available for publication but included in totals where applicable, unless otherwise indicated

as a household or person could be a victim of more than one type of offence.

⁽b) Sexual assault questions were asked only of females aged 18 years and over.



| | 2004 | | POLICE | POLICE TOLD(a) | | | |
|---|----------------|--------------------|---------------|----------------|-----------|-----------|--|
| | Police told | Police not told | 2000 | 2001 | 2003 | 2004 | |
| Type of Offence | '000 | '000 | % | % | % | % | |
| • | • • • • • | • • • • • | • • • • • • • | • • • • • • | • • • • • | • • • • • | |
| Households | | | | | | | |
| Break and enter | 64.7 | 32.3 | 71.7 | 73.1 | 72.2 | 66.7 | |
| Attempted break and enter | 20.6 | 61.5 | 19.7 | 32.2 | 28.1 | 25.1 | |
| Motor vehicle theft | 28.8 | *3.0 | 95.2 | 95.3 | 93.8 | 90.5 | |
| Persons | | | | | | | |
| Robbery | 13.5 | 22.0 | 42.7 | 38.6 | 52.9 | 38.0 | |
| Assault | 72.3 | 128.4 | 34.9 | 29.8 | 39.0 | 36.0 | |
| Sexual assault(b) | np | np | np | *16.1 | **21.0 | np | |

^{*} estimate has a relative standard error of 25% to 50% and should be used with caution

^{**} estimate has a relative standard error greater than 50% and is considered too unreliable for general use

np not available for publication but included in totals where applicable, unless otherwise indicated

⁽a) Proportion of total household/person victims.

⁽b) Sexual assault questions were asked only of females aged 18 years and over.



VICTIMS OF ASSAULT, Whether offender known in most recent incident

| Whether offender known | '000 | % |
|---|-------------------------------|-----------------|
| • | • • • • • • • • • • • • • • • | • • • • • • • • |
| Offender known | | |
| Family member(a) | 18.3 | 9.1 |
| Friend(b) | *9.4 | *4.7 |
| Work/study colleague | 12.7 | 6.3 |
| Acquaintance | 17.7 | 8.8 |
| Neighbour | 17.1 | 8.5 |
| Other(c) | 21.0 | 10.4 |
| Total offender known(d) | 96.4 | 48.0 |
| Offender not known(e) | 104.3 | 52.0 |
| Total assault victims | 200.7 | 100.0 |

estimate has a relative standard error of 25% to 50% and should be used with caution

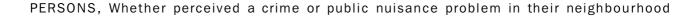
(e) Includes where respondent answered 'Don't know'.

⁽a) Includes ex-partner.

⁽b) Includes (ex)girlfriend/(ex)boyfriend and other known person.

⁽c) Includes offenders not known personally (e.g. recognised by role/uniform or known through professional association).

⁽d) Figures for individual categories do not sum to totals in this row, as an individual could be assaulted by more than one person in the most recent assault. Includes offender known but not further specified.





| Whether perceived crime or public | 2004 | 2000 | 2001 | 2003 | 2004 |
|-----------------------------------|-------------|-----------|-------------|-------------|-----------|
| nuisance problems | '000 | % | % | % | % |
| • • • • • • • • • • • • • • • • | • • • • • • | • • • • • | • • • • • • | • • • • • • | • • • • • |
| Perceived problem(s) | 2 536.4 | 51.4 | 55.4 | 49.7 | 48.1 |
| No perceived problem(s) | 2 737.6 | 48.6 | 44.6 | 50.3 | 51.9 |
| Total persons | 5 273.9 | 100.0 | 100.0 | 100.0 | 100.0 |



PERSONS WHO PERCEIVED A CRIME OR PUBLIC NUISANCE PROBLEM, Type of problem

| | Perceived to be a problem(a)(b) | | Perceived t be the mai problem(b | ain | | |
|--|---------------------------------|-------------|--|---------|--|--|
| Type of problem | '000 | % | '000 | % | | |
| • | • • • • • • • | • • • • • • | • • • • • • • | • • • • | | |
| Perceived problem(s) Housebreaking/burglaries/theft from homes | 1 418.2 | 26.9 | 653.6 | 12.4 | | |
| Dangerous/noisy driving | 1 416.2 | 27.8 | 544.2 | 10.3 | | |
| Vandalism/graffiti/damage to property | 1 300.3 | 24.7 | 360.7 | 6.8 | | |
| Louts/youth gangs | 1 085.8 | 20.6 | 301.3 | 5.7 | | |
| Illegal drugs | 757.6 | 14.4 | 194.9 | 3.7 | | |
| Drunkenness | 842.1 | 16.0 | 129.2 | 2.4 | | |
| Car theft | 827.2 | 15.7 | 91.0 | 1.7 | | |
| Problems with neighbours/domestic problems | 414.4 | 7.9 | 83.0 | 1.6 | | |
| Other theft | 530.0 | 10.0 | 54.7 | 1.0 | | |
| Prowlers/loiterers | 434.9 | 8.2 | 43.1 | 0.8 | | |
| Other assault | 301.5 | 5.7 | 26.3 | 0.5 | | |
| Sexual assault | 179.0 | 3.4 | 15.4 | 0.3 | | |
| Other | 120.7 | 2.3 | 38.8 | 0.7 | | |
| Total | | | 2 536.4 | 48.1 | | |
| NUMBER ('000) | | | | | | |
| Total persons | | | 5 273.9 | | | |
| Total persons | • • | • • | 5 213.9 | | | |
| • | • • • • • • • | • • • • • • | • • • • • • • • | • • • • | | |

^{..} not applicable

⁽a) Figures in these columns do not sum to the total for all persons, as a person could nominate more than one problem.

⁽b) Percentages (%) are calculated as a proportion of total persons.

EXPLANATORY NOTES

INTRODUCTION

- 1 This publication contains results from a survey on crime and safety which was conducted throughout NSW in April 2004 as a supplement to the Australian Bureau of Statistics (ABS) Monthly Population Survey (MPS). The survey was conducted and funded at the request of the NSW Police Service and the NSW Bureau of Crime Statistics and Research.
- 2 Information was collected from individuals and households about their experience of selected crimes, reporting behaviour and individuals' perception of crime problems in their neighbourhood.
- **3** The survey was conducted during the two weeks commencing Monday 12 April 2004.
- 4 Information was sought from approximately 12,300 persons, of whom about 8,900 (72%) responded. Data pertaining to households was sought from approximately 6,000 households and about 4,400 (73%) replied.
- **5** Examination of successive waves of responses did not indicate any significant non-response bias. Estimation procedures were employed to reduce the effect of

non-response.

- **6** The survey was conducted for all persons aged 15 years and over who were usual residents of private dwellings, except:
 - members of the permanent defence forces
 - certain diplomatic personnel of overseas governments, customarily excluded from censuses and surveys
 - overseas residents in Australia
 - members of non-Australian defence forces (and their dependents) stationed in Australia
 - private dwellings containing visitors only
 - residents of non-private dwellings such as hospitals, motels and prisons.

COVERAGE

SCOPE

- 7 Coverage rules were applied to ensure that each person was associated with only one dwelling, and hence had only one chance of selection in the survey.
- 8 Crime and safety questionnaires were mailed out to households who were included in the MPS. The questionnaires were completed by household members and returned to the ABS by mail. Each household received:
 - one questionnaire containing questions relating to the household as a whole
 - a questionnaire for each person aged 15 years or over relating to their personal experiences of crime
 - a questionnaire for each female aged 18 years or over relating to their personal experiences of sexual assault only.

COMPARISON WITH OTHER ABS SURVEYS

9 There are different crime statistics collections and these can yield differing results. Caution should be taken in comparisons across other ABS surveys that address crime and justice issues. An Information Paper: Measuring Crime Victimisation, Australia: The Impact of Different Collection Methodologies, Australia (cat. no. 4522.0.55.001) is available. This paper aims to increase community understanding of the nature of crime measurement in Australia, and why the findings from different data sources may differ.

COMPARISON WITH POLICE STATISTICS

10 Responses obtained in this survey are based on the respondent's perception of their having been the victim of an offence. The terms used summarise the wording of the questions asked of the respondent, and may not necessarily correspond with the legal or police definitions which are used for each offence.

EXPLANATORY NOTES continued

BREAK IN TIME SERIES

11 Additional questions about robbery incidents were included in the 1999 and subsequent NSW Crime and Safety Surveys. This has made it possible to collect robbery data that aligns more closely with data collected from the 1998 and 2002 National Crime and Safety Surveys. This change has caused a break in the time series for robbery estimates published from the NSW Crime and Safety Surveys conducted in 1997 and earlier years. The definition of robbery for the statistics included in this publication can be found in the Glossary. Comparisons with results from the 1998 and 2002 National Crime and Safety Surveys for all offences should be undertaken with caution. Differences in question wording and processing procedures mean that survey estimates are not directly comparable.

ACKNOWLEDGMENT

12 ABS publications draw extensively on information provided freely by individuals, businesses, government and other organisations. Their continued cooperation is very much appreciated. Without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.

RELATED PUBLICATIONS

13 The ABS produces a wide range of publications containing social and demographic statistics. Other ABS publications which relate to this survey topic include:

Australian National Classification of Offences (ANCO), 1997, cat. no. 1234.0

Crime and Safety, Australia, April 2002, cat. no. 4509.0

Crime and Safety, New South Wales, April 2003, cat. no. 4509.1

Crime and Safety, South Australia, October 2000, cat. no. 4509.4

Recorded Crime - Victims, Australia, 2003, cat. no. 4510.0

Western Australian Statistical Indicators, March 2001, cat.no. 1367.5

APPENDIX DATA AVAILABLE ON REQUEST

DATA AVAILABLE ON REQUEST

In addition to the statistics provided in this publication, the Australian Bureau of Statistics (ABS) can produce upon request customised tables to meet special data requirements. Inquiries should be made to the contact person shown on the front of this publication. Information collected in the survey included:

- Types of offences:
 - For break and enter, attempted break and enter, motor vehicle theft, robbery, assault and sexual assault:
 - whether an incident occurred in the last 12 months
 - number of incidents in the last 12 months
 - number of incidents reported to the police
 - whether the most recent incident was reported to police
 - the main reason why the most recent incident was not reported to the police.
 - For break and enter and attempted break and enter:
 - where the most recent incident occurred (previous or current address).
 - For break and enter:
 - what the offender did in the most recent incident.
 - For robbery, assault and sexual assault:
 - location of the most recent incident
 - whether a weapon was used
 - occurrence of physical injury
 - number of offenders
 - whether the offender(s) were known to the victim
 - how the offender(s) were known to the victim.
 - For robbery:
 - what happened in the most recent incident
 - whether anything was stolen in the most recent incident
 - what was stolen in the most recent incident.
- Perceived crime or public nuisance problems.

Data can be classified by the following variables:

- Age
- Sex
- Marital status
- Labour force status
- Household type
- Country of birth
- Year of arrival in Australia
- Labour force region.

TECHNICAL NOTE SAMPLING VARIABILITY

ESTIMATION PROCEDURE

- **1** Estimates derived from this survey were obtained in two stages. In the first stage the effects of non-response were investigated by analysing the demographic composition of the Monthly Population Survey sample and response patterns to the Crime and Safety Survey after reminder action had been undertaken. This information was used to determine the appropriate adjustment procedure for non-response.
- **2** The second stage was a complex ratio estimation procedure which ensured that the survey estimates for persons conformed to independent estimates of the population by age, sex, and part of state, rather than to the age, sex, and part of state distribution among respondents. A similar procedure also ensured that household estimates conformed to independent estimates of households by number of adults, number of children in the household and part of state.

RELIABILITY OF ESTIMATES

Non-sampling errors

Sampling errors

ESTIMATES OF SAMPLING ERRORS

3 Estimates in this publication are subject to non-sampling and sampling errors.

- **4** Non-sampling errors may arise as a result of errors in the reporting, recording or processing of the data and can occur even if there is a complete enumeration of the population. Non-sampling errors can be introduced through inadequacies in the questionnaire, non-response, inaccurate reporting by respondents, errors in the application of survey procedures, incorrect recording of answers and errors in data entry and processing.
- **5** It is difficult to measure the size of the non-sampling errors. The extent of these errors could vary considerably from survey to survey and from question to question. Every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of staff, and efficient data processing procedures.
- **6** Sampling errors are the errors which occur by chance because the data was obtained from a sample, rather than from the entire population.
- **7** One measure of the variability of estimates which occurs as a result of surveying only a sample of the population is the standard error (see table on page 17).
- **8** There are about 2 chances in 3 (67%) that a sample estimate will differ by less than one standard error from the number that would have been obtained if all dwellings had been included, and about 19 chances in 20 (95%) that the difference will be less than two standard errors.
- **9** Linear interpolation is used to calculate the standard error of estimates falling between the sizes of estimates listed in the table.
- **10** The standard error (SE) can also be expressed as a percentage of the estimate. This is known as the relative standard error (RSE). The relative standard error is determined by dividing the standard error of an estimate SE(x) by the estimate x and expressing it as a percentage. That is—(where x is the estimate)

$$RSE(x) = \frac{100SE(x)}{x}$$

11 An example of the calculation and use of standard errors for estimates of households follows. Table 1 shows that the estimated number of households in NSW that have been a victim of motor vehicle theft is 31,900. Since the estimate is between 30,000 and 50,000 the standard error (as shown in the table on page 17) will be between 4,379 and 5,296 and can be approximated as 4,500 (by linear interpolation). Thus there are about 2 chances in 3 that the value that would have been obtained, had all dwellings been included in the survey, lies between 27,400 and 36,400. Similarly, there are about 19 chances in 20 that the value lies between 22,900 and 40,900.

ESTIMATES OF SAMPLING ERRORS continued

12 Proportions and percentages formed from the ratio of two estimates are also subject to sampling error. This size of the error depends on the accuracy of both the numerator and the denominator. The formula for the relative standard error (RSE) of a proportion or percentage is—

$$RSE\left(\frac{x}{y}\right) = \sqrt{\left[RSE(x)\right]^2 - \left[RSE(y)\right]^2}$$

13 Only estimates with relative standard errors of 25% or less, and percentages based on such estimates, are considered sufficiently reliable for most purposes. However, estimates and percentages with a larger RSE have been included, preceded by * (RSE between 25% and 50%) or ** (RSE greater than 50%) to indicate that they are subject to high standard errors and should be used with caution.

STANDARD ERRORS OF ESTIMATES OF HOUSEHOLDS AND PERSONS—April 2004

| | | Relative |
|--------------|----------|----------|
| Size of | Standard | standard |
| estimate | error | error |
| estimate | enoi | error |
| (households | | |
| and persons) | no. | % |
| 1 000 | 732 | 73.2 |
| 1 500 | 950 | 63.3 |
| 2 000 | 1 134 | 56.7 |
| 2 500 | 1 296 | 51.8 |
| 3 000 | 1 440 | 48.0 |
| 3 500 | 1 572 | 44.9 |
| 4 000 | 1 693 | 42.3 |
| 5 000 | 1 911 | 38.2 |
| 8 000 | 2 434 | 30.4 |
| 10 000 | 2 714 | 27.1 |
| 20 000 | 3 711 | 18.6 |
| 30 000 | 4 379 | 14.6 |
| 50 000 | 5 296 | 10.6 |
| 100 000 | 6 634 | 6.6 |
| 200 000 | 8 002 | 4.0 |
| 300 000 | 8 775 | 2.9 |
| 500 000 | 9 675 | 1.9 |
| 1 000 000 | 10 690 | 1.1 |
| 2 000 000 | 11 373 | 0.6 |
| 3 000 000 | 11 588 | 0.4 |
| 4 000 000 | 11 652 | 0.3 |
| | | |

14 Where differences between data items have been noted in the Summary of Findings, they are statistically significant unless otherwise specified. In this publication a statistically significant difference is one where there are 19 chances in 20 that the difference noted reflects a true difference between population groups of interest rather than being the result of sampling variability.

GLOSSARY

Assault An incident, other than a robbery, where a person was threatened with force or

physically attacked.

Attempted break and enter An incident where an attempt was made to break into a persons' home, garage or shed.

Break and enter An incident where a persons' home had been broken into. The persons' home was also defined to include their garage or shed. Break and enter offences relating to their car or

garden were excluded.

Crime or public nuisance Anything perceived by a person to be a problem arising from crime or people creating a

public nuisance.

problems

Family member Includes Partner, Parent, Sibling, Child of victim, Other family member, Ex-partner and

Family member (not further specified).

 $Friend \qquad \hbox{Includes Girlfriend/boyfriend, Ex-girlfriend/ex-boyfriend, Other friend and Other known } \\$

person (not further specified).

Household A group of persons in a private dwelling who share common facilities and meals or who

consider themselves to be a household. It is possible for a dwelling to contain more than one household, for example, where regular provision is made for groups to take meals

separately and where persons consider their households to be separate.

Motor vehicle theft An incident where a motor vehicle was stolen from any member of the household. It

includes privately owned motor vehicles as well as business/company vehicles used exclusively by any members of the household. A motor vehicle includes cars, motorbikes

and trucks; while caravans, trailers and floats were excluded.

Neighbourhood Persons were asked about crime problems in their neighbourhood. The perception of

this term was left to the individual.

Offence Indicates crimes which persons or households reported as having been committed

against them.

Robbery An incident where individual(s) stole something from a person by threatening or

attacking them. It includes incidents of attempted robbery where individual(s) attempted to steal something from the person but nothing was actually stolen.

Sexual assault An incident which was of a sexual nature involving physical contact: includes rape,

attempted rape, indecent assault, and assault with intent to sexually assault. Sexual harassment (that did not lead to an assault) was excluded. Only females aged 18 years

and over were asked sexual assault questions.

Victim A household or person reporting at least one of the offences surveyed. Victims were

counted once only for each type of offence, regardless of the number of incidents of that

type.

Victimisation rate The number of victims of an offence in a given population expressed as a percentage of

that population.

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