

AN UPDATE OF LONG-TERM TRENDS IN PROPERTY AND VIOLENT CRIME IN NEW SOUTH WALES: 1990-2007

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This paper describes trends in the recorded incidence of 10 major categories of property and violent crime between 1990 and 2007 in New South Wales. The data presented here are an update of the property and violent crime trends reported in Bulletin Number 90. Using Kendall's trend test on the 18 annual rates for each offence category, we conclude that significant long-term upward trends are current for assault and sexual assault. Two offence types, (robbery without a weapon and other sexual offences) have moved from a significant long-term upward trend to stable during 2007. Statistically significant downward trends were observed for murder, robbery with a firearm and motor vehicle theft, with the remaining three categories robbery with a weapon not a firearm, break and enter - dwelling and break and enter - non-dwelling continuing to maintain their long term stable result.

DATA SOURCES

With the exception of murder, the data presented here refer to the number of police recorded criminal incidents per 100,000 population. For murder, rates are calculated on the numbers of murder victims per 100,000 population. Data from the NSW Police Force Computerised Operational Policing System (COPS) have been used to calculate offence rates for the period 1995-2007. Criminal incident data for 1994 and for the years prior to the introduction of COPS have been taken from the Bureau's recorded crime statistics report series, NSW Recorded Crime Statistics.

Given that recorded crime data include only crimes that come to the attention of the police and not all criminal acts are reported to the authorities, the trends in recorded crime presented here should be compared with data from crime victim surveys. A summary of these data for the period to 2004 is provided in Moffatt and Poynton (2006) and the Australian Bureau of Statistics 2007 catalogue, Crime and Safety NSW April 2007, Cat No. 4509.1, ABS, Sydney.

PERSONAL CRIME

Figure 1 shows the number of murder victims in NSW per 100,000 population from 1990 to 2007. Figures 2, 3 and 4 show the number of recorded assault, sexual offences

and robbery incidents per 100,000 population from 1990 to 2007, respectively. The major points to note from these figures are:

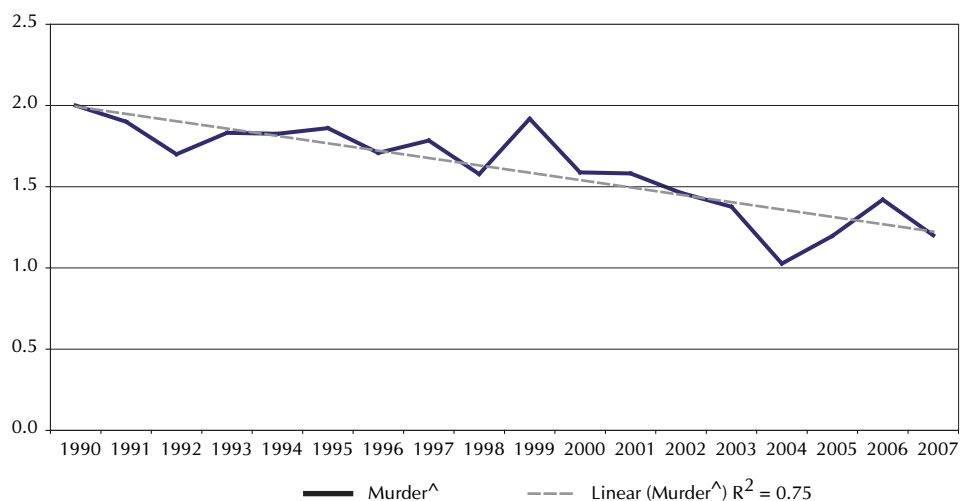
- ◆ A significant downward trend is apparent in the NSW murder rate (down 40%) over the 17-year period. Apart from the 2004 recorded rate of 1.0 murder victims per 100,000 population (which was below the long-term linear trend) the recent annual murder rates, (1.2 in 2007), have continued back on trend showing strong linearity with the r^2 measure of goodness of fit increasing slightly to 0.75. The 2006 murder rate (1.4) was slightly above trend after a spike of 21 murders in January 2006.
- ◆ A significant upward trend in the NSW assault rate (up 110%) can be seen over the 17-year period. However the last eight years are statistically stable. In the early 1990's the recorded assault rate was about 500 incidents per 100,000 population. However, by 2001 the recorded assault rate had climbed to over 1,000 incidents per 100,000 population and has remained close to that rate over the past seven years.
- ◆ Over the period 1990-2007 NSW recorded increases in the crime rate of both sexual assault (up 117%) and other sexual offences¹ (up 70%). In both cases, however, most of the increase occurred in the mid

to late 1990s and the statistical trend test for other sexual offences has changed from upward to stable in the past 12 months. After 1997 the recorded rate of sexual assault fell back from 57.4 incidents to around 50 incidents per 100,000, before slowly increasing to over 60 incidents per 100,000 persons. The recorded rate of other sexual offences, on the other hand, fell back from 98.1 to around 80 incidents per 100,000 of population in 1998, whereupon it has remained relatively stable.

- ◆ The 2006 reported upward trend for recorded rates of robbery without a weapon and robbery with a weapon not a firearm has now changed to stable. The rates have now moved back to around 1994 levels for these two offences, which was sufficient to tip the long term trend back to stable.
- ◆ A significant and consistent downward trend continues in the NSW rate of robbery with a firearm (down by 52% from 1990 to 2007).

Figure 1: Murder rate for NSW per 100,000 population 1990-2007

Victims recorded per 100,000 population



[^] Nb: Victims are recorded per 100,000 population for murder

Figure 2: Assault rate for NSW per 100,000 population 1990-2007

Incidents recorded per 100,000 population

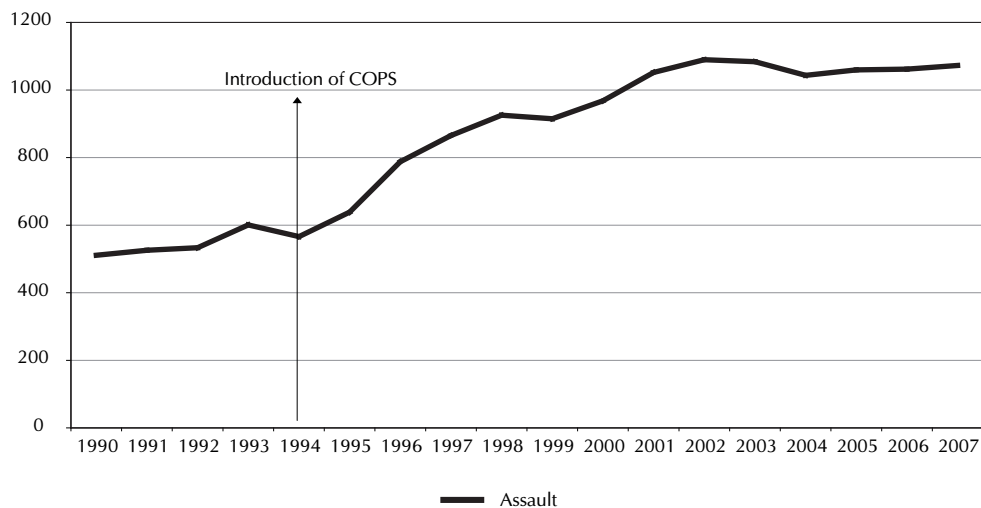


Figure 3: Sexual assault rate for NSW per 100,000 population 1990-2007

Incidents recorded per 100,000 population

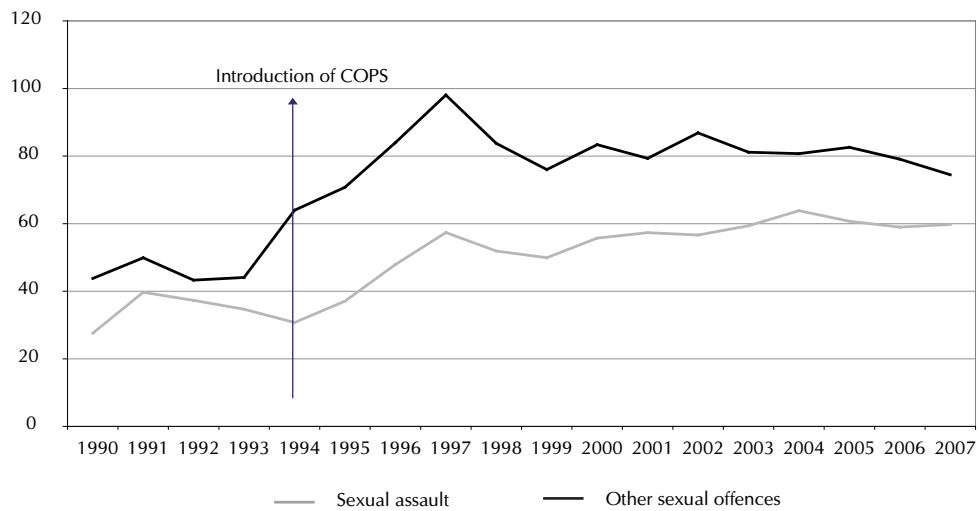
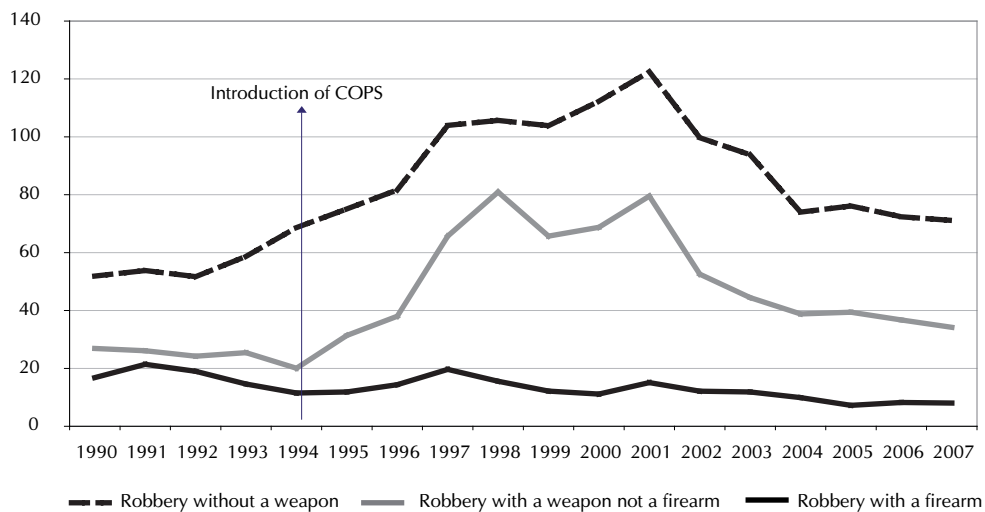


Figure 4: Robbery rate for NSW per 100,000 population 1990-2007

Incidents recorded per 100,000 population



PROPERTY CRIME

Figure 5 shows trends in the recorded rates of three major theft categories: break and enter - dwelling, break and enter - non-dwelling and motor vehicle theft. The major points to note from this figure are:

- ◆ There has been a continuation of the significant downward trend in recorded rates of motor vehicle theft (down by 58% since 1990). After a fall in this theft

category in the early part of last decade the incident rate for motor vehicle theft began to increase slightly from 1993 onwards. From about 1997, the rate of motor vehicle theft stabilised at around 800 incidents per 100,000 persons and then dropped sharply from 2001 onwards, falling by 52%. The rates of motor vehicle theft and break and enter - non-dwelling continue to track one another as has been the case since around 1999.

◆ Crime rates for burglary offences fell slightly in the early part of last decade but from about 1993 onwards began to increase. The increase was particularly marked in the case of break and enter - non-dwelling, which rose by 39% between 1993 and 2001. From 2001 onwards, however, burglary offences began to fall sharply, with break and enter - dwelling falling by 43% and break and enter - non-dwelling falling by 55%. Recorded rates of burglary and motor vehicle theft are now well below their 1990 levels.

NOTES

1. The offence category 'other sexual offences' includes recorded incidents of indecent assault, acts of indecency and other sexual offences (e.g. wilful and obscene exposure, peep or pry).

REFERENCES

Moffatt & Poynton 2006, 'Long term trends in property and violent crime in NSW: 1990-2004', Crime and Justice Bulletin, no. 90, NSW Bureau of Crime Statistics and Research, Sydney.

Figure 5: Break and enter rate for NSW per 100,000 population 1990-2007

Incidents recorded per 100,000 population

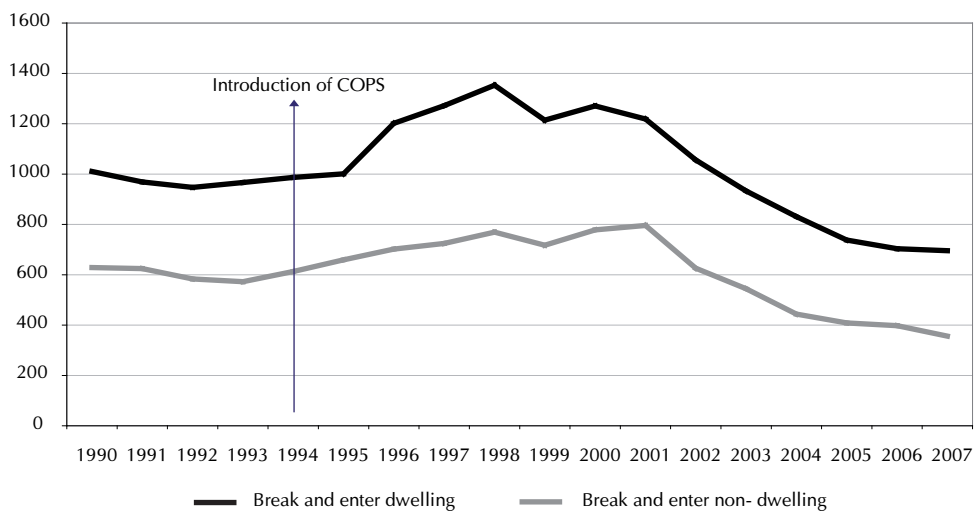
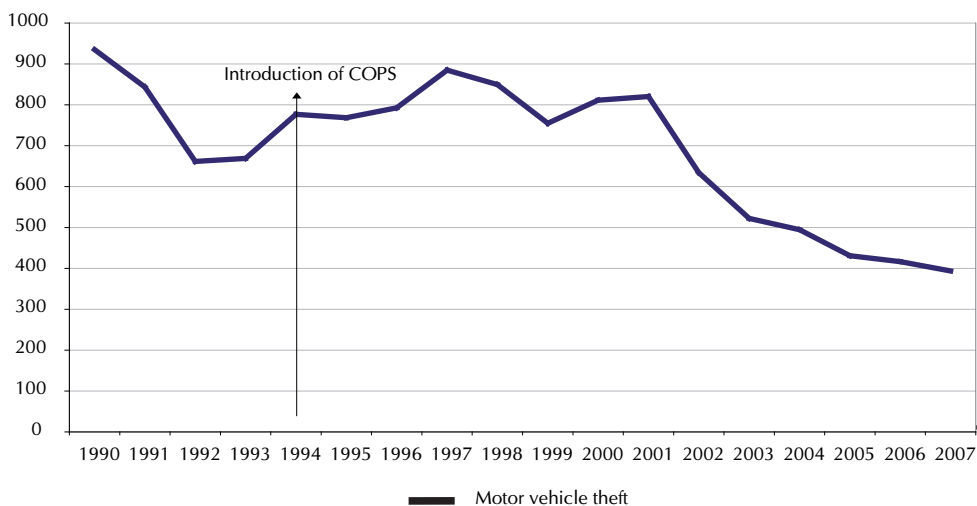


Figure 6: Motor vehicle theft rate for NSW per 100,000 population 1990-2007

Incidents recorded per 100,000 population



APPENDIX

Table A1: Number of criminal incidents recorded by NSW Police Force by year and offence type

| | <i>Murder[^]</i> | <i>Assault</i> | <i>Sexual assault</i> | <i>Other sexual offences</i> | <i>Robbery without a weapon</i> | <i>Robbery with a firearm</i> | <i>Robbery with a weapon not a firearm</i> | <i>Break and enter dwelling</i> | <i>Break and enter non-dwelling</i> | <i>Motor vehicle theft</i> |
|------|---------------------------|----------------|-----------------------|------------------------------|---------------------------------|-------------------------------|--|---------------------------------|-------------------------------------|----------------------------|
| 1990 | 119 | 29,776 | 1,606 | 2,552 | 3,022 | 981 | 1,568 | 58,862 | 36,639 | 54,488 |
| 1991 | 115 | 31,014 | 2,343 | 2,942 | 3,173 | 1,265 | 1,542 | 57,155 | 36,838 | 49,758 |
| 1992 | 101 | 31,773 | 2,220 | 2,583 | 3,080 | 1,132 | 1,444 | 56,437 | 34,754 | 39,423 |
| 1993 | 110 | 36,076 | 2,083 | 2,646 | 3,525 | 877 | 1,528 | 58,036 | 34,379 | 40,169 |
| 1994 | 83 | 25,732 | 1,397 | 2,908 | 3,120 | 522 | 912 | 44,850 | 27,858 | 35,304 |
| 1995 | 114 | 39,132 | 2,272 | 4,337 | 4,601 | 726 | 1,922 | 61,336 | 40,393 | 47,078 |
| 1996 | 106 | 48,869 | 2,973 | 5,211 | 5,067 | 892 | 2,359 | 74,546 | 43,551 | 49,187 |
| 1997 | 112 | 54,304 | 3,601 | 6,156 | 6,526 | 1,234 | 4,125 | 79,838 | 45,467 | 55,539 |
| 1998 | 100 | 58,672 | 3,291 | 5,310 | 6,700 | 987 | 5,130 | 85,768 | 48,772 | 53,851 |
| 1999 | 123 | 58,646 | 3,201 | 4,874 | 6,658 | 780 | 4,213 | 77,852 | 45,995 | 48,401 |
| 2000 | 103 | 62,797 | 3,615 | 5,408 | 7,284 | 722 | 4,459 | 82,427 | 50,470 | 52,624 |
| 2001 | 104 | 69,165 | 3,771 | 5,217 | 8,055 | 992 | 5,229 | 80,121 | 52,328 | 53,932 |
| 2002 | 97 | 72,279 | 3,758 | 5,763 | 6,614 | 805 | 3,486 | 70,042 | 41,523 | 42,078 |
| 2003 | 92 | 72,419 | 3,968 | 5,422 | 6,270 | 793 | 2,971 | 62,327 | 36,374 | 34,898 |
| 2004 | 69 | 70,122 | 4,291 | 5,426 | 4,973 | 666 | 2,609 | 55,853 | 29,833 | 33,234 |
| 2005 | 81 | 71,718 | 4,109 | 5,591 | 5,152 | 490 | 2,668 | 49,935 | 27,649 | 29,171 |
| 2006 | 97 | 72,490 | 4,028 | 5,400 | 4,941 | 562 | 2,509 | 48,038 | 27,153 | 28,441 |
| 2007 | 82 | 73,243 | 4,081 | 5,085 | 4,857 | 548 | 2,334 | 47,498 | 24,330 | 26,875 |

Table A2: Number of criminal incidents recorded by NSW Police Force per 100,000 population by year and offence type

| | <i>Murder[^]</i> | <i>Assault</i> | <i>Sexual assault</i> | <i>Other sexual offences</i> | <i>Robbery without a weapon</i> | <i>Robbery with a firearm</i> | <i>Robbery with a weapon not a firearm</i> | <i>Break and enter dwelling</i> | <i>Break and enter non-dwelling</i> | <i>Motor vehicle theft</i> |
|------|---------------------------|----------------|-----------------------|------------------------------|---------------------------------|-------------------------------|--|---------------------------------|-------------------------------------|----------------------------|
| 1990 | 2.0 | 511.0 | 27.6 | 43.8 | 51.9 | 16.8 | 26.9 | 1010.2 | 628.8 | 935.1 |
| 1991 | 1.9 | 525.8 | 39.7 | 49.9 | 53.8 | 21.4 | 26.1 | 968.9 | 624.5 | 843.5 |
| 1992 | 1.7 | 533.2 | 37.3 | 43.3 | 51.7 | 19.0 | 24.2 | 947.1 | 583.2 | 661.6 |
| 1993 | 1.8 | 600.8 | 34.7 | 44.1 | 58.7 | 14.6 | 25.4 | 966.5 | 572.5 | 668.9 |
| 1994 | 1.8 | 566.1 | 30.7 | 64.0 | 68.6 | 11.5 | 20.1 | 986.8 | 612.9 | 776.7 |
| 1995 | 1.9 | 638.7 | 37.1 | 70.8 | 75.1 | 11.8 | 31.4 | 1001.1 | 659.3 | 768.4 |
| 1996 | 1.7 | 787.6 | 47.9 | 84.0 | 81.7 | 14.4 | 38.0 | 1201.4 | 701.9 | 792.7 |
| 1997 | 1.8 | 865.1 | 57.4 | 98.1 | 104.0 | 19.7 | 65.7 | 1271.9 | 724.3 | 884.8 |
| 1998 | 1.6 | 925.6 | 51.9 | 83.8 | 105.7 | 15.6 | 80.9 | 1353.0 | 769.4 | 849.5 |
| 1999 | 1.9 | 914.7 | 49.9 | 76.0 | 103.8 | 12.2 | 65.7 | 1214.3 | 717.4 | 754.9 |
| 2000 | 1.6 | 968.2 | 55.7 | 83.4 | 112.3 | 11.1 | 68.7 | 1270.8 | 778.1 | 811.3 |
| 2001 | 1.6 | 1051.9 | 57.4 | 79.3 | 122.5 | 15.1 | 79.5 | 1218.5 | 795.8 | 820.2 |
| 2002 | 1.5 | 1089.5 | 56.6 | 86.9 | 99.7 | 12.1 | 52.5 | 1055.8 | 625.9 | 634.3 |
| 2003 | 1.4 | 1083.8 | 59.4 | 81.1 | 93.8 | 11.9 | 44.5 | 932.8 | 544.4 | 522.3 |
| 2004 | 1.0 | 1043.4 | 63.8 | 80.7 | 74.0 | 9.9 | 38.8 | 831.0 | 443.9 | 494.5 |
| 2005 | 1.2 | 1059.5 | 60.7 | 82.6 | 76.1 | 7.2 | 39.4 | 737.7 | 408.5 | 431.0 |
| 2006 | 1.4 | 1061.7 | 59.0 | 79.1 | 72.4 | 8.2 | 36.7 | 703.6 | 397.7 | 416.6 |
| 2007 | 1.2 | 1072.7 | 59.8 | 74.5 | 71.1 | 8.0 | 34.2 | 695.7 | 356.3 | 393.6 |

[^] For murder, the number shown is the number of recorded victims rather than criminal incidents