

RECORDED CRIME REJECTED INCIDENT MONITORING REPORT

RECORDED CRIME DATA TO SEPTEMBER 2011

Crime trends in NSW are based on crimes recorded by police and accepted by them as genuine. The trend in any offence can be affected by the percentage of crimes 'rejected' by police as not genuine. The Bureau monitors trends in the percentage of rejected incidents to see whether they could be affecting the trend in recorded crime. Where a significant upward trend in the number of rejected crime reports is detected, steps are taken to determine whether the police are complying with the NSW Crime Recording Standard (see below).

It bears emphasis that criminal incidents may validly be rejected, and hence not counted as crimes, when it can be proven that the alleged incident did not occur. Certain offence types may validly have relatively high levels of rejected incidents. For example, abduction and kidnappingⁱ, sexual assault and breach Apprehended Violence Order may involve false reports that can be disproved on further investigation. Stock theft may be reported when stock have wandered off rather than being stolen. A motor vehicle may be reported as stolen but then later the owner may advise that they had simply forgotten where they had left the vehicleⁱⁱ. Vehicles are also sometimes reported stolen by their owners in a bid to defraud insurance companies.

A significant increase in the percentage of crimes rejected does not in and of itself indicate that police are trying to manipulate crime figures to create the appearance of a decrease in crime. It is important to examine the scale of the increase in rejected incidents (is it large enough to have affected trends in recorded crime?), whether the level of rejection lies within acceptable bounds (does it exceed five per cent?) and whether the police can give a satisfactory explanation for the rise in rejected incidents.

SUMMARY OF FINDINGS

- No reported trend at the state level but one at the SD level and two at the metropolitan SSD level would have been less favourable if all rejected incidents had been included in the data.
- However after further testing the extra statistical evidence indicates the trend changes are more likely a result of test sensitivity. [See Part A below.]
- There was a downtrend of 12.7% in rejected incidents in the 24 months to September 2011. [Year-on-year the rejected rate decreased from 1.9% to 1.6% of all incidents.]
- Across the 17 selected offences, there were seven downtrends in rejected incidents in the 24 months to September 2011 for NSW. [See Table 2.]
- While NSW showed an upward trend of 16.2% in rejected incidents of *fraud* over the 24 months to September 2011, this did not affect the reported State trend and the rejected rate for *fraud* remains below 5%.
- Four LACs reported a significant increase in rejected incidents - three for *fraud* (Flemington, Rosehill and Macquarie Fields) and one for *motor vehicle theft*ⁱⁱ (Bankstown). Police advise that the majority of rejected *fraud* incidents in the Flemington, Rosehill and Macquarie Fields LACS involved persons inadvertently failing to pay for petrol and then paying when this was brought to their attention.
- In addition to a significant increase in rejected incidents of *fraud*, the rejection rate for the Macquarie Fields and Rosehill LACs was flagged as high.

DEFINITIONS

Rejected – The NSW Police Crime Recording Standard (Version 2.0, March 2011) states:

An Incident should only be classified as REJECTED if verifiable information is available which indicates that the crime / matter did not occur.

Where information exists to indicate the crime / incident did not occur, or has no foundation (i.e. retraction statement of person reporting, observations of independent witnesses, CCTV, etc), the Incident Classification should be recorded as REJECTED.

This Incident Status refers to instances where a crime report is considered to have no foundation because, after further police inquiries following the initial report, it is clear that the crime / incident did not occur. The reason(s) for classifying an INCIDENT as REJECTED should be described in the Event Narrative.

Selected offences – selected offences are the standard 17 major offences excluding *murder* (no rejected incidents) and *robbery with a firearm* (insufficient rejected incidents) with the addition of the two justice offences of *breach bail conditions* and *breach Apprehended Violence Order*.

Trend test - ‘Kendall’s rank-order correlation test’ is used to determine whether there has been an increasing or decreasing trend in the number of criminal incidents over the most recent 24-month period. Where the monthly counts are close together and relatively low (that is, close to our selected minimum of 20 in a year) further trend testing is undertaken. Further statistical tools include Pearson’s correlation, OLS, Poisson regression and Bartlett’s test.

ANALYSIS OF THE EFFECT OF ‘REJECTED’ INCIDENTS ON STATE-WIDE AND REGIONAL TRENDS

Trend tests were applied to total incident counts (accepted plus rejected) and the results compared with the NSW and regional (Statistical Divisions (SDs) and Metropolitan Statistical Subdivisions (SSDs)) results for the recorded crime data (which excludes rejected incidents). NSW trends for all offences and regional trends for selected offences were considered. Conflicting results were highlighted and LAC-level data investigated for these offences, so as to isolate areas where the classification of incidents as ‘Rejected’ by individual LACs had affected any state-level or regional trend.

A) NSW AND REGIONAL TRENDS AFFECTED BY REJECTED INCIDENTS

A summary of inconsistencies between reported trends (accepted incidents) and those that would result from total incidents (accepted plus rejected incidents) is given in the Appendix at Table 1.

This table shows that for the selected offences at the State, SD and Metropolitan SSD levels, where 20 or more incidents were rejected in each of the relevant two years, one trend at the SD level and two at the SSD level would have been less favourable had all rejected incidents been included in the data:

- Northern SD: *breach AVO* would have changed from a downtrend to stable if all rejected incidents had been included;
- St George-Sutherland SSD: *steal from dwelling* would have changed from a downtrend to stable if all rejected incidents had been included; and
- Central Northern Sydney SSD: *motor vehicle theft* would have changed from a downtrend to stable if all rejected incidents had been included.

Put another way, results for less than 2% of trend tests conducted at the State, SD and SSD levels would be altered by including all rejected incidents.

As we have some concerns about basing sensitivity analyses purely on Kendall’s rank-order correlation test, further testing was conducted. Note that when monthly counts are close in value,

small changes in counts (brought about by excluding rejected incidents) may lead to sufficient changes in monthly ranks to lead to a conclusion of trend significance at the 5% level as opposed to no trend or stable result. Kendall's test has the advantage of not being unduly influenced by outliers since it uses ranks, but may be over-sensitive to small changes when counts are small and close to each other.

In summary, two of the three series in question would have shown no affected trend under the Kendall's test if the 10% level of significance had been used.

Pearson's correlation which does not use ranks, showed no trend affected for the three pairs of series. Using results from OLS (ordinary least squares) and Poisson regression we remain confident the removal of rejected incidents, on weight of evidence, did not effect a change in trend for these three series. In addition, the three rejected series did not have any predictive significance when regressed on the accepted series, did not exhibit any pattern and all three were likely white noise according to Bartlett's test.

B) REJECTED INCIDENTS ACROSS ALL OFFENCES FOR NSW

Table 2 in the Appendix shows a 12.7% downward trend in rejected incidents across all 62 offence categories for NSW in the 24 months to September 2011. In the 12 months to September 2011 a total of 11,078 incidents were rejected compared with 12,690 incidents in the previous 12 months.

Where there were sufficient incidents to conduct a trend test, most offence types showed a stable or downward trend in rejected incidents¹, with the exception of *fraud*. Rejected *fraud* incidents showed a statistically significant increase (up 16.2%).

Of note was a continuing significant downward trend of 30.2% in rejected *non-domestic violence related assault* incidents.

Table 2 in the Appendix also shows that for all offences at the State level, (where more than 20 incidents were rejected over the 12 months to September 2011), the offences with a rejection rate above 5% were: *sexual assault* (5.6%), *abduction and kidnapping* (9.0%), *robbery without a weapon* (8.8%), *robbery with a weapon not a firearm* (5.2%), *motor vehicle theft* (5.4%) and *stock theft* (6.0%).

C) LAC TRENDS IN REJECTED INCIDENTS

Table 3 of the Appendix summarises the results of significant trend tests for any LAC that rejected at least 20 incidents during both the 12 months to September 2011 and the previous 12 months for all selected offences.

The table shows that there was an upward trend in rejected *fraud* incidents in the Flemington, Rosehill and Macquarie Fields LACs (up 90.6%, 69.4% and 69.0% respectively) and an upward trend in rejected *motor vehicle theft*ⁱⁱ incidents at Bankstown LAC (up 107.1%).

NSW Police have advised that the majority of rejected *fraud* incidents in the Flemington, Rosehill and Macquarie Fields LACs in the 12 months to September 2011 were "fail to pay" incidents, most of those being incidents where persons had inadvertently failed to pay for petrol and then paid when this was brought to their attention.

There were 12 downward trends in rejected incidents, including 10 LACs with a significant decrease in rejected *non-domestic violence related assault* incidents.

¹ Note that there were too few rejected incident counts to carry out trend tests for 38 of the 62 offences.

D) WATCH LIST OF OFFENCE CATEGORIES IN LACs WITH HIGHEST RATES OF REJECTED INCIDENTS

Table 4 in the Appendix contains offence incidents recorded by NSW LACs where the rejection rate was at least 9.7% in the 12 months to September 2011 and there were at least 20 incidents rejected in the same period.

From the list of 16 records in the table, only three showed an increase of 20 or more rejected incidents from the previous year. These were *fraud* in Macquarie Fields and Rosehill LACs and *other theft* in Botany Bay LAC.

Table 4 shows that, in addition to high rejection rates (17.0% and 9.7% respectively), the Macquarie Fields and Rosehill LACs had statistically significant increases in rejected incidents of *fraud* whereas all other LACs were stable or had insufficient numbers to calculate a trend.

The highest rejection rate was for *motor vehicle theft*ⁱⁱ in City Central LAC with 28.9% of all incidents rejected in the 12 months to September 2011, compared with 18.1% of incidents in the 12 months to September 2010.

CONCLUSION

One trend at the SD level (*breach AVO* in the Northern SD) and two at the metropolitan SSD level (*steal from dwelling* in St George-Sutherland and *motor vehicle theft* in Central Northern Sydney) would have been less favourable if all rejected incidents had been included in the data. However after further testing, the extra statistical evidence indicates the trend changes are more likely a result of test sensitivity rather than an actual change.

Rejected incidents across all offences for NSW continued to decline with a significant downtrend of 12.7%. *Fraud* was the only offence type for which there was an upward trend (16.2%) in rejected incidents.

There was an upward trend in rejected *fraud* incidents in the Flemington, Rosehill and Macquarie Fields LACs and an upward trend in rejected *motor vehicle theft* incidents in the Bankstown LAC.

Following the two previous Rejected Incidents audits using data to September 2010 and March 2011, there has been continued, marked improvement in recording of *non-domestic violence related assault* incidents, with a statistically significant 30.2% decrease in rejected incidents.

**NSW Bureau of Crime Statistics and Research
12 April 2012**

ⁱ Fitzgerald, J. & People, J (2006). Victims of Abduction: Patterns and Case Studies. *Crime and Justice Bulletin* (No. 64). Sydney: NSW Bureau of Crime Statistics and Research. This report showed that for seven per cent of the 238 abduction victims between January and July 2004, either no abduction took place or a false report was given to police.

ⁱⁱ A Bureau audit of rejected incidents to March 2010 showed that 95% to 100% of rejected motor vehicle theft incidents were validly rejected, usually with the owner/driver having forgotten where they had left the vehicle.