



Trends in property and illicit drug-related crime in Kings Cross: An update

Lucy Snowball, Melissa Burgess and Bryan Price

Previous studies examining the impact of Sydney's Medically Supervised Injecting Centre (MSIC) on drug-related crime in Kings Cross have found that the Centre had no adverse effects. This study examined trends in robbery, theft and drug offences in Kings Cross over a six-year period (from the commencement of MSIC in May 2001 until December 2007) and compared these to trends in the rest of Sydney. Spatial analysis of the distribution of selected drug offences and 'move-on' incidents was also conducted. The present study finds a continuation of the decline in the incidence of robbery and property crime in Kings Cross. The results for drug offences were mixed. There were increases in arrests for possession/use of cocaine and possession/use of amphetamine but decreases in arrests for dealing/trafficking in narcotics and use/possession of narcotics. Spatial analysis revealed an increase in the proportion of 'move-ons' and persons arrested for drug/use possession within 50 metres of the MSIC. It is unclear whether these trends are attributable to the MSIC itself or other factors in the Kings Cross area.

Keywords: Medically Supervised Injecting Centre (MSIC), Kings Cross, property crime, illicit drug crime, spatial analysis.

INTRODUCTION

The NSW Bureau of Crime Statistics and Research (BOCSAR) has conducted two previous analyses examining the impact of Sydney's Medically Supervised Injecting Centre (MSIC) on indicators of illicit drug-related crime, including theft and robbery offences and drug-related loitering (Freeman et al. 2005) and theft, robbery, illicit drug and 'move-on' offences (Donnelly & Snowball 2006).

The 2005 report found no significant change in the level of property crime after the commencement of the MSIC in May 2001. While changes in property crime trends occurred in the early part of 2001, these were attributed to the onset of the 'heroin shortage'.¹ There was also no evidence of the MSIC having a 'honey-pot effect' as there was no increase in drug-related loitering after the Centre opened.

The 2006 follow-up report examined the period from the extension of the MSIC

in late 2002 to June 2006 and found that, over this time, property crime had decreased or remained stable and drug offences showed no consistent trend in either direction. While the study found a substantial increase in the number of 'move-on' incidents in the Kings Cross Local Area Command (LAC), a similar increase was also observed in surrounding LACs, suggesting an increase in enforcement levels rather than an increase in criminal activity levels.

This bulletin extends the analysis carried out in the 2006 study. It examines the trends in robbery, theft and illicit drug offences in the Kings Cross area from the commencement of the MSIC (May 2001) until the end of 2007. A spatial analysis examining the distribution of selected illicit drug offences in Kings Cross between 2001 and 2007 is included. 'Move-on' incidents in Kings Cross over the same time period are also analysed to further test whether the MSIC had a 'honey-pot effect'.

VARIABLES, DATA SOURCES & METHODOLOGY

Although robbery and theft offences are not always reported to police, trends in recorded rates of robbery and theft generally provide a good guide to trends in the actual rates of these offences. Therefore, in this study, trends in robbery and theft offences are measured using police data on the numbers of recorded robbery and theft offences.

Measuring trends in drug offences is more difficult. There is a strong correlation between the frequency of arrest for injecting drug use/possession and various other indices of injecting drug use (Snowball et al. 2008; Rosenfeld & Decker 1999). This suggests that trends in injecting drug arrests may be a useful proxy for trends in injecting drug use. Police drug offence data, however, need to be treated with more caution than

police data on offences such as robbery and theft. Sudden changes in the rate of arrest for drug offences may result from intensified law enforcement activity rather than any change in drug use. In the absence of a suitable alternative, this analysis measures temporal and spatial trends in drug offences using data on (a) drug arrests and (b) police 'move-ons' (which are commonly directed at suspected drug users or dealers).

The monthly total incident numbers for robbery, theft and selected illicit drug offences were obtained from the Computerised Operating Policing System (COPS) for the 108 months from January 1999 to December 2007. January 1999 was chosen in order to gauge the trend prior to the commencement of the MSIC. December 2007 was the most recent data point available at the time of the study. The monthly totals were obtained for the Kings Cross LAC and for the rest of Sydney (Inner Metropolitan and Outer Metropolitan Police regions). The rest of Sydney series provided a comparison site.

The robbery offences included:

- robbery without a weapon;
- robbery with a firearm; and
- robbery with a weapon not a firearm.

The theft offences included:

- break and enter (dwelling and non-dwelling respectively);
- stealing (from motor vehicle; retail store; dwelling; and person respectively);
- fraud; and
- 'other theft'.

Illicit drug offences included:

- deal/traffic and use/possess amphetamines;²
- deal/traffic and use/possess narcotics; and
- deal/traffic and use/possess cocaine.

These drugs were examined because they can all be injected.

The monthly totals of recorded robbery, theft and the selected illicit drug offences were graphed over the entire period

(January 1999 – December 2007) for both the Kings Cross LAC and the rest of Sydney. Also examined were changes in the number of recorded robbery, theft and illicit drug offences between May 2001 and December 2007. A Kendall's non-parametric test for trend was applied to each of the series over the 80-month period for both the Kings Cross LAC and the rest of Sydney.

To show their spatial distribution, the total numbers of recorded use/possess narcotics, use/possess amphetamines, use/possess cocaine and 'move-on' incidents in the Kings Cross LAC between 2001 and 2007 were mapped. The crime maps were produced using ArcMap 9.2 and were designed to pinpoint the precise location of drug arrests and 'move-ons' in relation to the MSIC itself. MapMarker v11.5 was used to geocode the criminal incidents according to the available street address or landmark information recorded for each incident. Incidents were geocoded to the street centre if they did not have a street number or landmark recorded on COPS. Each criminal incident is indicated by a coloured dot on the map, with the dots increasing in size if multiple criminal incidents took place at exactly the same location. The number of incidents occurring within 50 metres of the MSIC was calculated.

RESULTS

Note in all graphs below that the Kings Cross trend is expected to be more volatile than the rest of Sydney trend because of the smaller numbers involved.

ROBBERY OFFENCES

Figure 1 shows the total monthly number of recorded robbery incidents from January 1999 to December 2007. Differently scaled (though proportional) vertical axes were used in order to compare the smaller Kings Cross area with the rest of Sydney. The 2006 report identified an increase in robbery incidents in both the Kings Cross LAC and the rest of Sydney after the onset of the heroin shortage in late 2000 and early 2001. This brief increase was attributed to a transient increase in the availability of cocaine. A similar increase occurred in September 2001 and was attributed to the same factor. Robberies continued to fall until the beginning of 2003 (in the Kings Cross LAC) and the beginning of 2005 (for the rest of Sydney) when the series stabilised.

Table 1 summarises the trends in monthly robbery offences, broken down by offence type (the annual totals are included in the Appendix). The rest of

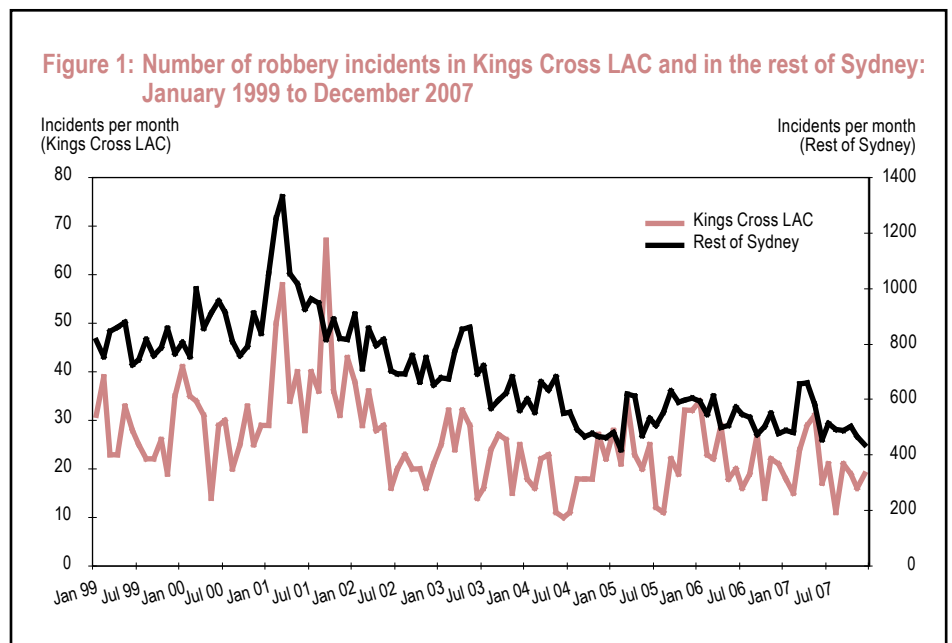


Table 1: Changes in the numbers of robbery incidents in the Kings Cross LAC and the rest of Sydney: May 2001 – December 2007

	<i>Kings Cross LAC May 01 - Dec 07</i>	<i>Rest of Sydney May 01 - Dec 07</i>
Robbery without a weapon	down	down
Robbery with a firearm	no change	down
Robbery with a weapon not a firearm	down	down
Total	down	down

Sydney experienced falls in all robbery categories across the period. Similarly, Kings Cross had falls in all categories with the exception of robbery with a firearm. It should be noted that the low incident numbers of robbery with a firearm in the Kings Cross LAC reduces the statistical power of the test to detect differences.

The 2006 report, which only considered July 2002 to June 2006, found no significant trend in any of the robbery categories for the Kings Cross LAC. The results for the rest of Sydney did not change.

THEFT OFFENCES

Figure 2 shows the total monthly number of recorded theft incidents over the period from January 1999 to December 2007. The graph shows, after mid-2001, there was a decreasing trend for both the Kings Cross LAC and the rest of Sydney. This trend had already begun in the rest of Sydney by the beginning of 2001, after the onset of the heroin shortage. However, in the Kings Cross LAC total thefts continued to increase after the heroin shortage. From the beginning of 2004, the incident numbers in the Kings Cross LAC stabilised. Stabilisation occurred a year later in the rest of Sydney. Both series were stable until the most recent data point.

Table 2 summarises the trends in monthly theft offences, broken down by offence type (again the annual totals are included in the Appendix). Similar trends were evident in both areas since the beginning of the MSIC. All theft sub-categories fell, with the exception of fraud, for which there was no change over the period. Again the low incident numbers in this category reduces the statistical power of the test to detect differences.

The 2006 analysis found similar results for the rest of Sydney (with the exception of fraud where an increase was found). For the Kings Cross LAC, the fraud result in the 2006 report was the same as found here. However the earlier report also found no trend for steal from a retail store and steal from dwelling.

Figure 2: Number of theft incidents in Kings Cross LAC and in the rest of Sydney: January 1999 to December 2007

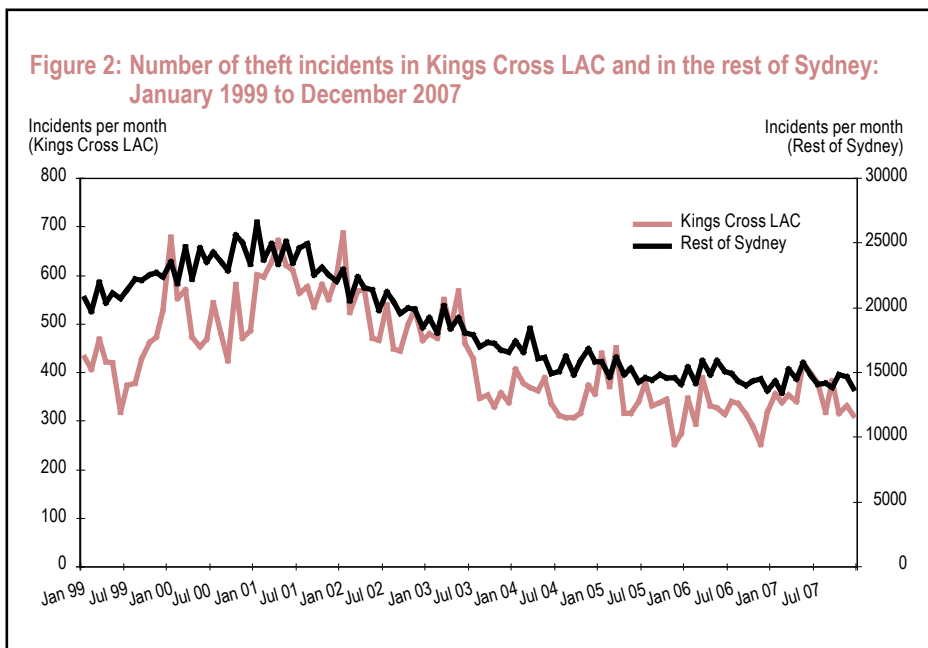


Table 2: Changes in the numbers of theft incidents in the Kings Cross LAC and the rest of Sydney: May 2001 – December 2007

	<i>Kings Cross LAC May 01 - Dec 07</i>	<i>Rest of Sydney May 01 - Dec 07</i>
Break and enter dwelling	down	down
Break and enter non-dwelling	down	down
Receiving or handling stolen goods	down	down
Motor vehicle theft	down	down
Steal from motor vehicle	down	down
Steal from retail store	down	down
Steal from dwelling	down	down
Steal from person	down	down
Fraud	no change	no change
Other theft	down	down
Total	down	down

ILLICIT DRUG OFFENCES

Figure 3 shows the total monthly number of recorded drug incidents for use/possess and deal/traffic amphetamines, narcotics and cocaine over the period from January 1999 to December 2007 for Kings Cross LAC and the rest of Sydney. Both series showed a decreasing trend prior to the heroin shortage. This trend continued in the rest of Sydney until late 2003/early 2004, after which point the series levelled off. In Kings Cross LAC, there was no overall trend in the series after the heroin shortage; however, there is some evidence of stabilisation from 2004.

Table 3 compares Kings Cross to the rest of Sydney for each of the drug offence categories examined (again the annual totals are included in the Appendix). In Kings Cross and the rest of Sydney, use/possess amphetamines increased, reflecting an Australia-wide phenomenon (McKetin et al. 2006). However, whereas in the rest of Sydney, all offences except use/possess amphetamines remained stable, in Kings Cross both narcotics categories fell and use/possess cocaine increased.

The increase in use/possess amphetamines in the Kings Cross LAC was not apparent at the time of the 2006 report. While an increasing trend in deal/traffic cocaine was significant in the 2006 report for Kings Cross LAC, over the study period of this report there was no significant trend in either direction. Whereas use/possess narcotics showed no trend in the previous report, over the current study period arrests for this offence decreased. For use/possess cocaine, the results for Kings Cross LAC (an increasing trend) mirrored those found in the 2006 report. However, for the rest of Sydney, the 2006 report also found an increasing trend, whereas over the current study period there was no trend in either direction. It should be noted that the overall numbers in Kings Cross for this offence were low (see Appendix).

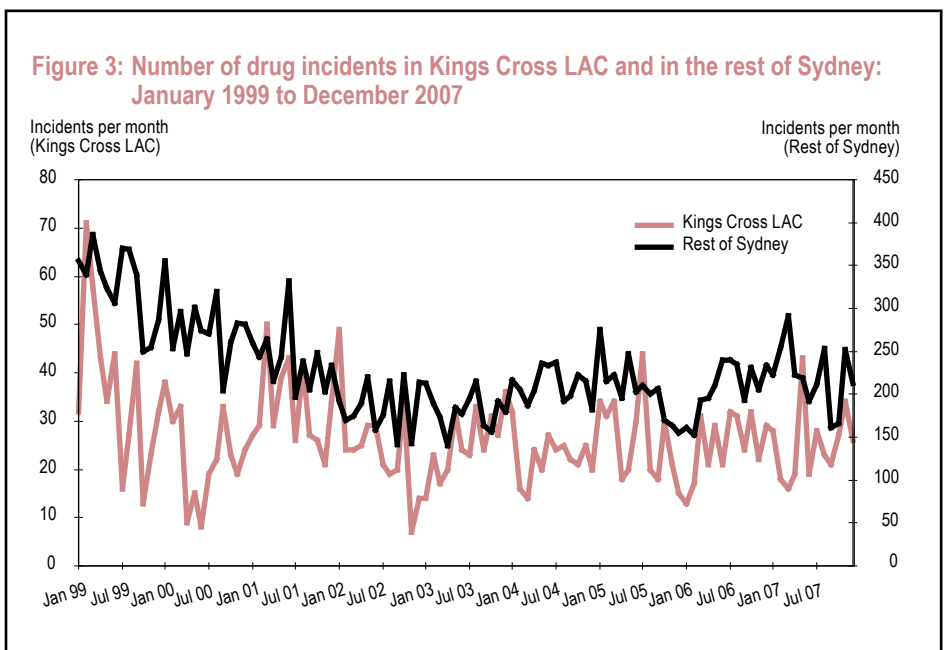


Table 3: Changes in the numbers of illicit incidents in the Kings Cross LAC and the rest of Sydney: July 2002 – December 2007

	<i>Kings Cross LAC May 01 - Dec 07</i>	<i>Rest of Sydney May 01 - Dec 07</i>
Dealing or trafficking in cocaine	no change	no change
Dealing or trafficking in narcotics	down	no change
Dealing or trafficking in amphetamines	no change	no change
Possession and/or use of cocaine	Up	no change
Possession and/or use of narcotics	down	no change
Possession and/or use of amphetamines	up	up
Total	no change	no change

SPATIAL ANALYSIS

Table 4 shows the proportion of use/possess narcotics, use/possess amphetamines, use/possess cocaine and 'move-on' incidents reported in the Kings Cross LAC that were within 50m of the MSIC. The table indicates that a relatively small proportion of incidents in the LAC took place within 50m of the MSIC. However it does suggest an increasing trend in recent years in the drug categories. The proportion of use/possess amphetamine incidents decreased between 2001 and 2004, after which time it increased from 0 per cent to 4.1 per cent in three years. The proportion

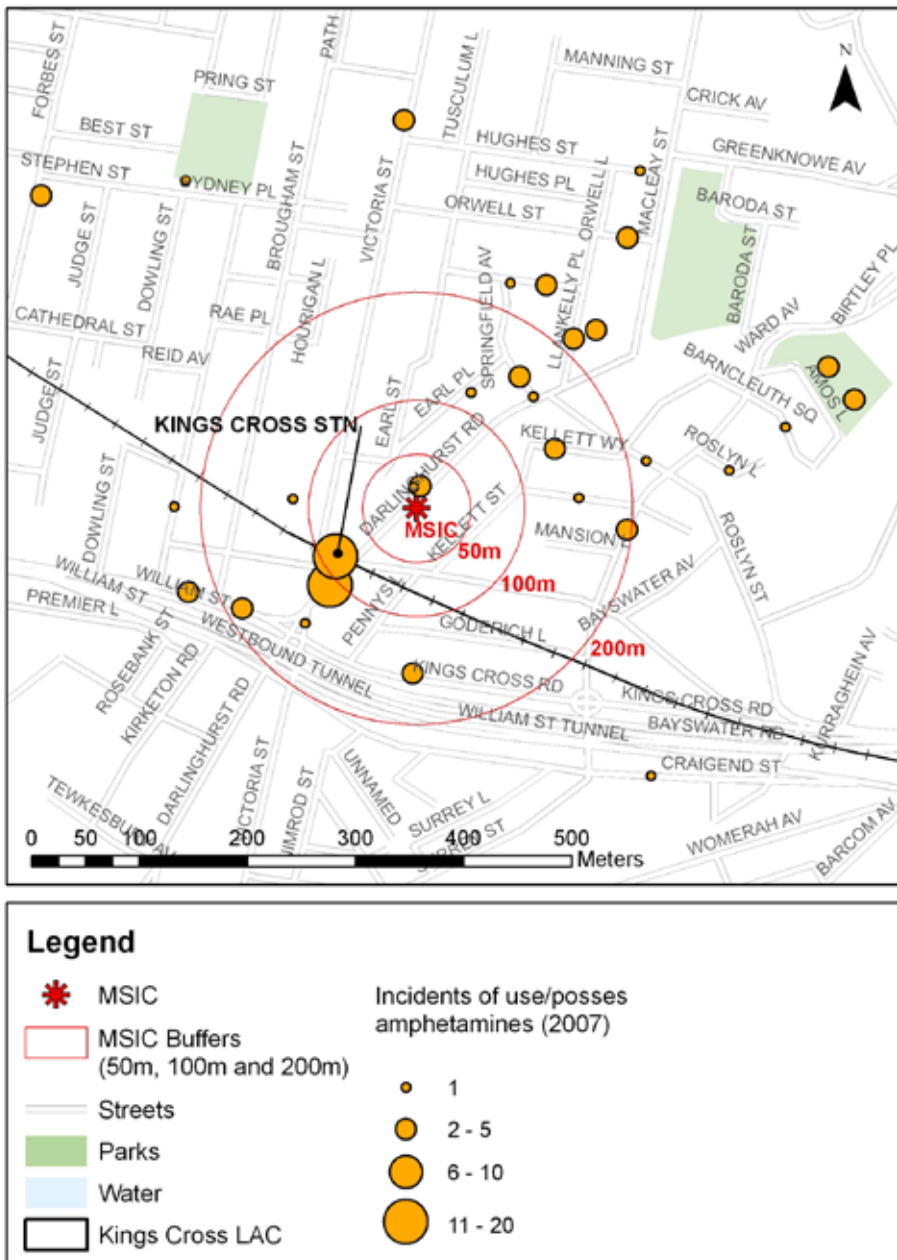
of use/possess narcotics incidents decreased from 2001 to 2002 and again from 2003 to 2005; however increased substantially between 2005 and 2007 to the highest point in the seven-year period. Cocaine incidents similarly declined early in the period and increased substantially between 2005 and 2007, again to the highest proportion in the period. The proportion of move on incidents was volatile over the period, with an increase over the last two years.

In order to assess whether this trend is a result of the MSIC it is useful to examine Figures 4 to 7 below. These maps show the distribution of the

Table 4: Proportion of use/possess amphetamines, narcotics and cocaine incidents, and ‘move-ons’, reported in the Kings Cross LAC, 2007, located within 50 metres of the MSIC

	2001	2002	2003	2004	2005	2006	2007
Use/possess amphetamines	6.9	6.0	2.1	0.0	2.1	2.6	4.1
Use/possess narcotics	5.2	0.0	2.6	1.4	0.0	1.6	7.8
Use/possess cocaine	3.6	3.4	0.0	0.0	0.0	2.2	4.1
‘Move on’ incidents	1.3	2.0	1.8	0.6	1.2	0.6	1.3

Figure 4: Repeat incident map for use/possess amphetamines in the Kings Cross LAC, 2007



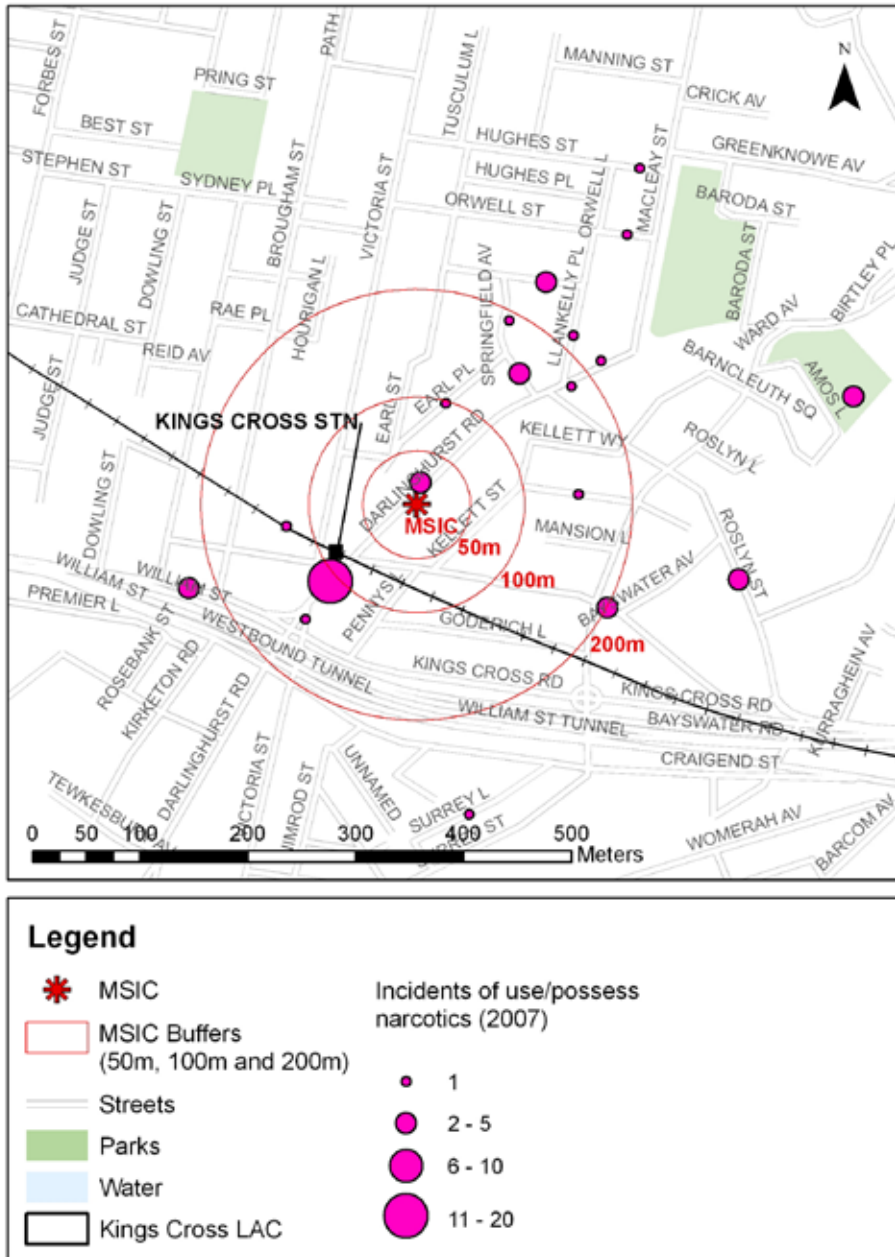
use/possess narcotics, use/possess amphetamines, use/possess cocaine and ‘move-on’ incidents in the Kings Cross LAC in 2007.³ Each map shows that the incidents are concentrated in the Kings Cross ‘entertainment district’. The density of use/possess cocaine and ‘move-on’ incidents is highest along and around the entire length of Darlinghurst Road north of William Street. The hotspots for use/possess amphetamines and use/possess narcotics incidents are centred over a slightly smaller area around Darlinghurst Road, between William Street, Kings Cross railway station and the MSIC. There are very few incidents occurring directly outside the MSIC but quite a few are centred on the train station opposite the MSIC. An examination of similar maps for the years between 2001 and 2007 shows a similar picture (see Appendix). It is impossible to tell whether those arrested for using and possessing illicit drugs around the train station were drawn to Kings Cross because of the MSIC or for other reasons. We discuss this issue in more detail later.

DISCUSSION

This study examined changes and current trends in property and illicit drug offences in the Kings Cross area since the establishment of the MSIC in May 2001. Statistical and spatial analyses were conducted to identify overall trends and provide a snapshot of offences around the MSIC.

The analysis found very little difference between the Kings Cross LAC and the rest of Sydney for trends in robbery and theft offences – both have declined since 2001 (due partly to the heroin shortage in December 2000/January 2001). In fact, the trends in robbery and theft offences actually stabilised in the Kings Cross LAC earlier than in the rest of Sydney. Both the Kings Cross LAC and the rest of Sydney experienced increases in use/possess amphetamines. Some of the other illicit drug offences, however, showed a different pattern in the Kings Cross LAC than in the rest of Sydney. Kings Cross experienced an increase in use/possess

Figure 5: Repeat incident maps for use/possess narcotics in the Kings Cross LAC, 2007

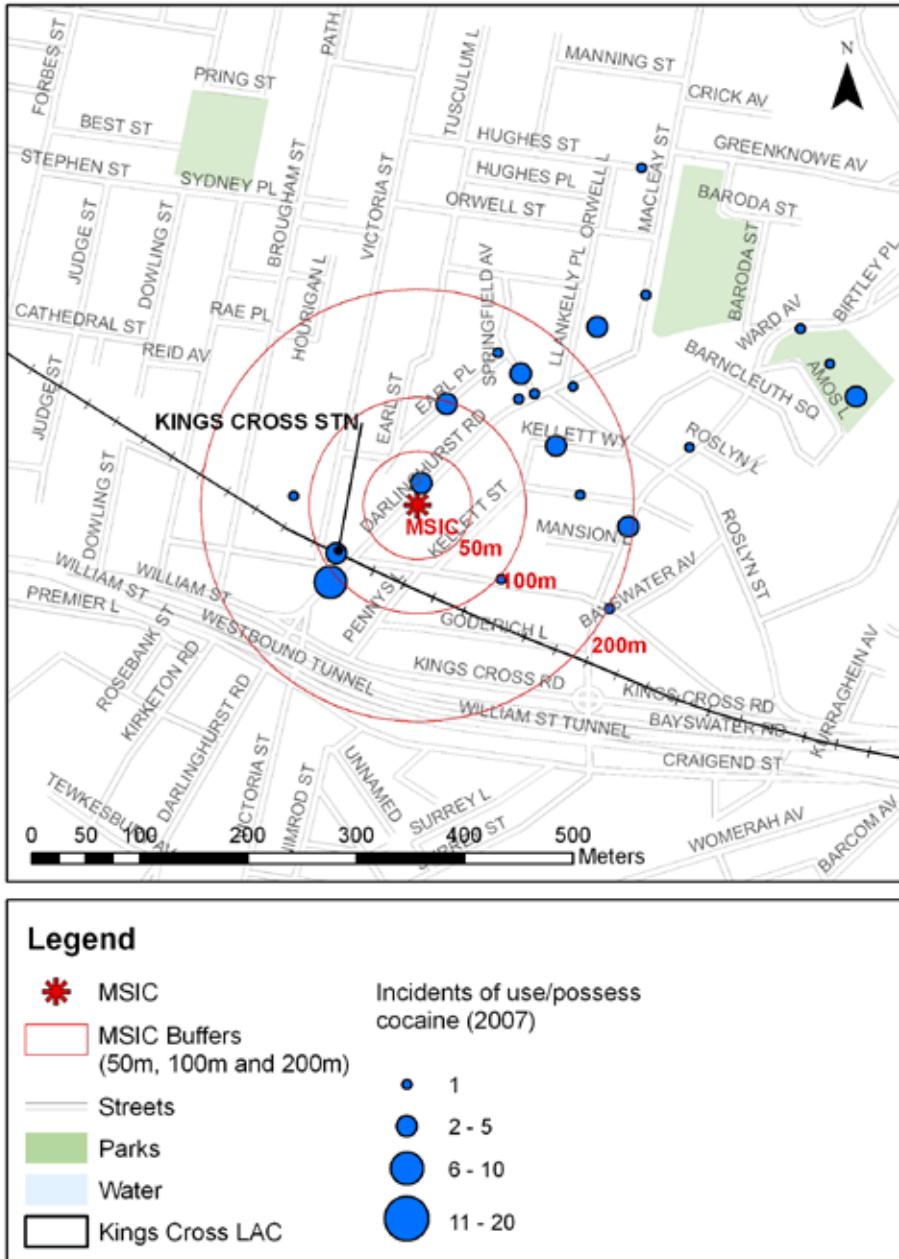


cocaine and falls in use/possess and deal/traffic narcotics. These trends were stable in the rest of Sydney.

A spatial analysis was conducted to assess whether there was any clustering of offences around the MSIC that might be suggestive of a 'honey-pot effect' (i.e. increasing the amount of drug-related loitering). The spatial analysis showed that only a small proportion of the use/possess drug offences and 'move-ons' reported in the Kings Cross LAC occurred within 50 metres of the MSIC. The proportions of persons 'moved on' or arrested for drug use/possession within 50 metres of the MSIC, however, has increased. Examination of the exact location of incidents showed, moreover, that while few were located directly outside the MSIC, a number occurred at the Kings Cross railway station about 100 metres away. It is impossible to tell whether these phenomena are related to the MSIC or to other factors in the general Kings Cross area. NSW experienced an increase in the recorded number of heroin use/possession offences in the latter half of 2007. It is possible that police in Kings Cross reacted to this increase by stepping up enforcement activity in areas where drug users are likely to be found. Future patterns of drug use in and around the MSIC need to be closely monitored.

A number of caveats must be mentioned in relation to these findings. Firstly, drug offences and 'move-on' incidents may be influenced by changes in police enforcement activity. We cannot be sure, then, that the changes we assume reflect drug use are not in fact a reflection of changes in levels of law enforcement. Similarly, the changes in numbers of recorded property crimes may reflect changes in victim willingness to report crime to police. Thirdly, because the MSIC opened around the same time as the heroin shortage began, it is difficult to disentangle any effects of the MSIC from major changes to the illicit drug market brought about by the heroin shortage.

Figure 6: Repeat incident maps for use/possess cocaine in the Kings Cross LAC, 2007.



NOTES

1. It is generally believed that the heroin shortage in began in late 2000 and early 2001 (Day et al. 2003).
2. The amphetamines categories only include arrests for drugs properly classed as amphetamines. They do not include arrests for ecstasy dealing/trafficking or use/possession.
3. Note that the Appendix includes the maps for each category for 2001-2006.

REFERENCES

Day, C, Topp, L, Rouen, D, Darke, S, Hall, W & Dolan, K 2003, 'Decreased heroin availability in Sydney in early 2001', *Addiction*, vol. 98, pp. 93-95.

Donnelly, N & Snowball, L 2006, *Recent trends in property and drug-related crime in Kings Cross*, Crime and Justice Bulletin no. 105, NSW Bureau of Crime Statistics and Research, Sydney.

Freeman, K, Jones, CGA, Weatherburn, D, Rutter, S, Spooner, CJ & Donnelly N 2005 'The impact of the Sydney Medically Supervised Injecting Centre (MSIC) on crime', *Drug and Alcohol Review*, vol. 24, pp. 173-184.

McKetin, R, McLaren, J, Riddell, S & Robins, L 2006, *The relationship between methamphetamine use and violent behaviour*, Crime and Justice Bulletin no. 97, NSW Bureau of Crime Statistics and Research, Sydney.

Rosenfeld, R & Decker, SH 1999, 'Are arrest statistics a valid measure of illicit drug use? The relationship between criminal justice and public health indicators of cocaine, heroin and marijuana use', *Justice Quarterly*, vol. 16, no. 3, pp. 685-699.

Snowball, L, Moffatt, S, Weatherburn, D & Burgess, M. 2008, *Did the heroin shortage increase amphetamine use? A time series analysis*, Crime and Justice Bulletin no. 114, NSW Bureau of Crime Statistics and Research, Sydney.

Figure 7: Repeat incident maps for 'move ons' in the Kings Cross LAC, 2007.

