

TRENDS IN PROPERTY AND ILLICIT DRUG CRIME AROUND THE MEDICALLY SUPERVISED INJECTING CENTRE IN KINGS CROSS: AN UPDATE

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Aim: The Medically Supervised Injecting Centre (MSIC) opened in Kings Cross in May 2001. This paper examines whether there have been (a) increases in the volume of robbery, property crime and drug offences in Kings Cross Local Area Command, or (b) increases in the proportion of Kings Cross drug offences occurring in the immediate vicinity of the MSIC, which could be attributed to the MSIC.

Method: The volume of crime was indicated by the number of criminal incidents of robbery, property crime and selected drug offences recorded by NSW Police between January 1999 and March 2010. We computed the trends in these offences in Kings Cross LAC from May 2001 to March 2010 and compared the results to the equivalent trends for the rest of Sydney SD. Spatial analyses were used to determine whether drug arrests were concentrated around the MSIC site. Police recorded incidents of possession and dealing of narcotics, cocaine and amphetamines were geocoded and mapped with the results inferred by descriptive statistics and visual inspection.

Results: With a few minor exceptions the incidence of robbery and property offences have fallen in the Kings Cross Local Area Command since 2001. This pattern is consistent with the rest of Sydney. Of the six drug offences considered, five have been stable in Kings Cross since 2001. The exception was cocaine possession which increased in both Kings Cross and the rest of Sydney. The spatial analyses showed no pattern of increased drug offences around the MSIC.

Conclusion: No evidence was found that the MSIC has had a negative impact on robbery, property crime or drug offences in Kings Cross LAC.

INTRODUCTION

The NSW Bureau of Crime Statistics and Research (BOCSAR) has conducted three previous analyses examining the impact of Sydney's Medically Supervised Injecting Centre (MSIC) on recorded incidents of illicit drug offences and theft and robbery in Kings Cross (Freeman et al. 2005, Donnelly & Snowball 2006 and Snowball et al. 2008).

The previous studies found no significant increase in property crime in Kings Cross after the commencement of the MSIC in May 2001. The results for illicit drug offences have been mixed. The first two reports found no impact on drug offences while the 2008 report suggested an increase in cocaine and amphetamine possession, a decrease in narcotics offences and an increase in drug use/possession within 50 metres of the MSIC.

This study repeats the analyses performed in the 2008 study. We examine trends in robbery, theft and selected illicit drug offences recorded by police in the Kings Cross Local Area Command (LAC) from the commencement of the MSIC (May 2001) until March 2010.

Spatial analyses are also used to consider whether there has been a change in the incidence of drug offences in the immediate vicinity of the MSIC since 2001.

METHOD

Although robbery and theft offences are not always reported to police, the number of recorded incidents generally provides 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 (Holmes et al. in press; 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 drug arrests for narcotics, amphetamines and cocaine.

The monthly incident numbers for robbery, theft and selected illicit drug offences were obtained from the NSW Police Computerised Operating Policing System (COPS) for the 135 months from January 1999 to March 2010. January 1999 was chosen in order to gauge the trend prior to the commencement of the MSIC in May 2001. March 2010 were the latest crime data available at the time of writing. 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 Statistical Division 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); motor vehicle theft; stealing (from motor vehicle, retail store, dwelling and person); fraud; and 'other theft'.

Illicit drug offences included: deal/traffic and use/possess amphetamines; 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 – March 2010) 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 March 2010. A Kendall's non-parametric test for trend was applied to each of the series over the 107-month period for both the Kings Cross LAC and the rest of Sydney.

To show their spatial distribution, the total numbers of deal/traffic and use/possess amphetamines, narcotics and cocaine in the Kings Cross LAC between 2001 and 2009 were mapped. The crime maps were produced using ArcMap 9.3 and were designed to pinpoint the precise location of drug arrests in relation to the MSIC itself. MapMarker v14 was used to geocode the criminal incidents according to the street address or landmark information

recorded by police for each incident. Incidents occurring at Kings Cross Railway Station were geocoded to the underground platforms rather than the street entrances. Unfortunately, many criminal incidents do not have a precise street address recorded and hence cannot be accurately geocoded. Most commonly the street name on which the incident occurred will be recorded without a street number. Only incidents geocoded to an exact street address or location/landmark were included in the analyses, excluding about half the recorded drug offences. The accuracy of the geocoding is shown in Table A1 in the Appendix.

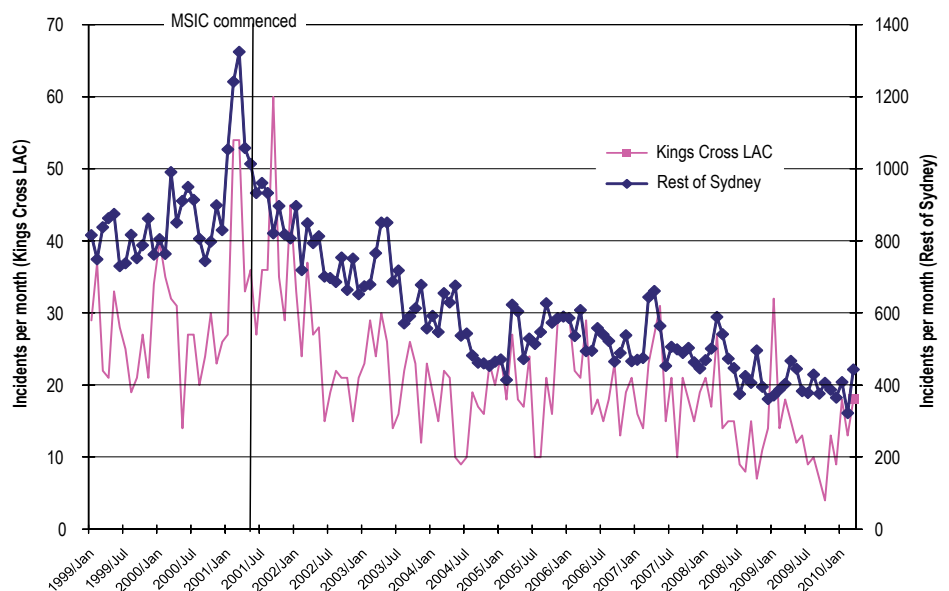
Repeat victimisation and hotspot (kernel density) maps were created. On the repeat victimisation map, each criminal incident is indicated by a coloured dot on the map, with the dots increasing in size if multiple criminal incidents took place at exactly the same location. The number of incidents occurring within 50 metres of the MSIC was calculated.

RESULTS

Robbery offences

Figure 1 shows the total monthly number of recorded robbery incidents from January 1999 to March 2010. Differently scaled (though proportional) vertical axes were used to compare the smaller Kings Cross area with the rest of Sydney. It can be seen that the Sydney and King Cross figures follow a similar trajectory. In both cases the incidence of robbery peaked in 2001. This coincides with the onset of the heroin shortage (Weatherburn et al. 2001). Robbery has fallen away considerably since then. In Sydney the trend has been decreasing at a constant rate over the eight years since 2001. In Kings Cross robbery dropped away sharply in 2002 and has been gradually trending downwards since then.

Figure 1. Number of robbery^a incidents in Kings Cross LAC and in the rest of Sydney: Jan 1999 to Mar 2010



^a Robbery includes robbery with a firearm, robbery with a weapon not a firearm and robbery without a weapon

Table 1: Changes in the numbers of robbery incidents in Kings Cross LAC and the rest of Sydney: May 2001 to March 2010

	Kings Cross	Rest of Sydney
	May 01 to Mar 10	May 01 to Mar 10
Robbery with a firearm	Stable	Down
Robbery without a weapon	Down	Down
Robbery with a weapon not a firearm	Down	Down
Total Robbery	Down	Down

Table 1 summarises the trends in monthly robbery offences broken down by offence type. The rest of Sydney experienced falls in all robbery categories across the period. Kings Cross had falls in the most prevalent robbery offences of robbery without a weapon and robbery with a weapon not a firearm. The most serious and most uncommon robbery offence, robbery with a firearm, remained stable in Kings Cross LAC. This is the same result as was reported in 2008.

Theft Offences

Figure 2 shows the total monthly number of recorded theft incidents from January 1999 to March 2010. The graph shows that from mid 2001 there was a decreasing trend in both the Kings Cross LAC and the rest of Sydney. The trend had already begun in the rest of Sydney by the beginning of 2001, after the onset of the heroin shortage. For both locations, the number of incidents recorded in the most recent year were the lowest in the whole series.

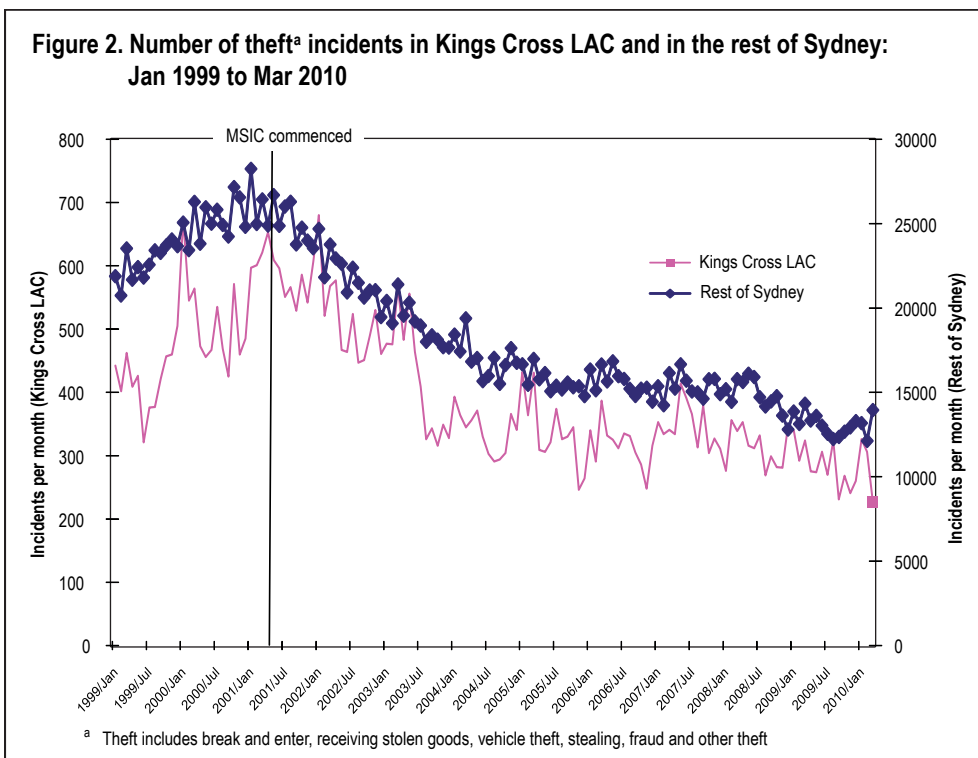


Table 2: Changes in the numbers of theft incidents in Kings Cross LAC and the rest of Sydney: May 2001 to March 2010

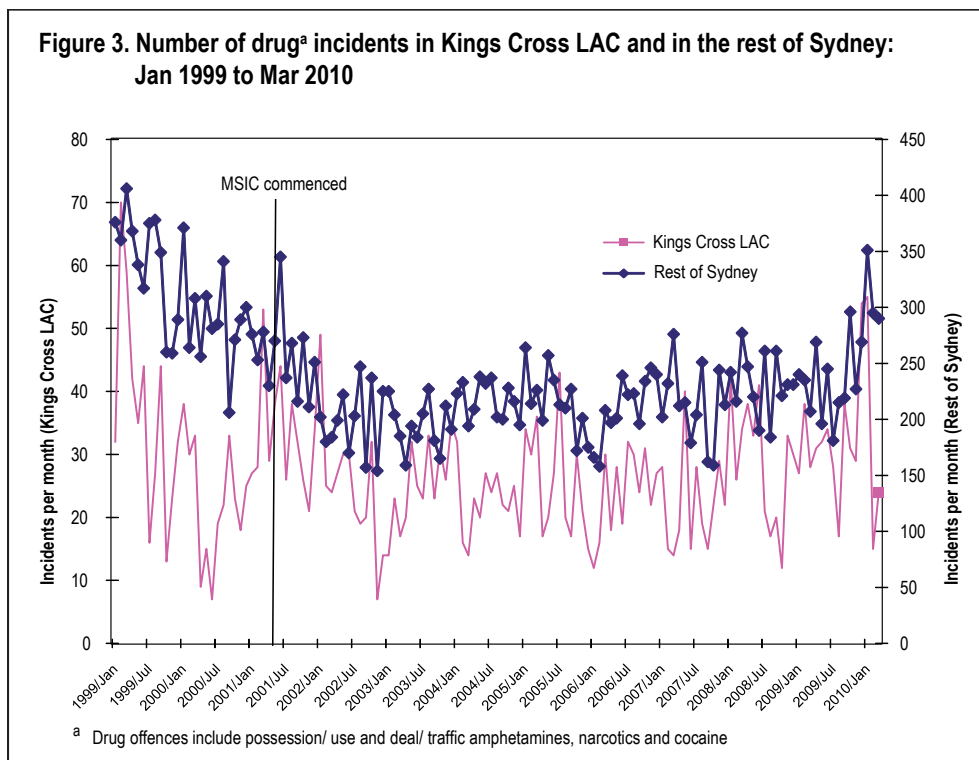
	Kings Cross	Rest of Sydney
	May 01 to Mar 10	May 01 to Mar 10
Break and enter dwelling	Down	Down
Break and enter non-dwelling	Down	Down
Receiving or handling stolen goods	Down	Down
Motor vehicle theft	Down	Down
Steal from motor vehicle	Down	Down
Steal from retail store	Up	Stable
Steal from dwelling	Down	Down
Steal from person	Down	Down
Fraud	Up	Up
Other theft	Down	Down
Total Theft	Down	Down

Table 2 summarises the trends in monthly theft offences, broken down by offence type. With the exception of retail theft the trends were identical in King Cross LAC and the rest of Sydney with almost every offence showing a downward trend. Steal from retail store, however showed an upward trend in Kings Cross LAC compared with a stable trend in the rest of Sydney. Fraud significantly increased in both Kings Cross LAC and the rest of Sydney.

Illicit Drug Offences

Figure 3 shows the monthly number of recorded drug incidents for use/possess and deal/traffic amphetamines, narcotics and cocaine from January 1999 to March 2010 for Kings Cross LAC and the rest of Sydney. The series for Kings Cross LAC shows drug arrests peaking in early 1999 with smaller spikes in 2001 and, most recently, at the end of 2009. Generally drug arrests in Kings Cross LAC appear to have fallen between 1999 and 2003 and then remained mostly stable until 2009. Given the recent higher than usual numbers it is possible that drug arrests are starting to trend upwards in King Cross. Whether or not this is a sustained pattern should become apparent in the next 12 months. The pattern of drug arrests in the rest of Sydney is similar to Kings Cross but less volatile. As with Kings Cross the number of drug arrests in the rest of Sydney fell dramatically from 1999 to 2003. The data for the rest of Sydney shows a more distinct but modest upward trend each year from 2003 to March 2010.

Figure 3. Number of drug^a incidents in Kings Cross LAC and in the rest of Sydney: Jan 1999 to Mar 2010



Spatial analysis

Figure 4 shows the proportion of deal/traffic and use/possess amphetamines, cocaine and narcotics incidents reported in the Kings Cross LAC that were known to have occurred within 50 metres of the MSIC¹. (The raw data is shown in Table A2 in the Appendix.) The table indicates that a relatively small proportion of incidents involving these drugs took place within 50 metres of the MSIC (ranging from a minimum of 1.7% of incidents in 2004 to a maximum of 8.7% of incidents in 2007). The proportion of drug incidents occurring within 50 metres of the MSIC fluctuated between 2001 and 2009 and shows no consistent trend either up or down.

Table 3: Changes in the numbers of drug offences in Kings Cross LAC and the rest of Sydney: May 2001 to March 2010

	Kings Cross	Rest of Sydney
	May 01 to Mar 10	May 01 to Mar 10
Possession and/or use of cocaine	Up	Up
Possession and/or use of narcotics	Stable	Down
Possession and/or use of amphetamines	Stable	Up
Dealing, trafficking in cocaine	Stable	Up
Dealing, trafficking in narcotics	Stable	Down
Dealing, trafficking in amphetamines	Stable	Stable
Total illicit drug offences	Stable	Up

In order to illustrate the relationship between the MSIC and drug incidents it is useful to visually examine the spatial distribution of deal/traffic and use/possess amphetamines, cocaine and narcotics incidents in Kings Cross in 2009. Figure 5 illustrates the location of drug incidents for 2009².

Figure 5 shows that the most common sites for the 135 mapped drug offences in Kings Cross LAC were on Bayswater Road, at Kings Cross station and near the corner of Darlinghurst Road and Springfield Avenue. A small number of offences (eight) occurred within 50 metres of the MSIC. It should be noted that the MSIC site is a busy pedestrian area with a high density of commercial premises and a train station, so some offending is to be expected.

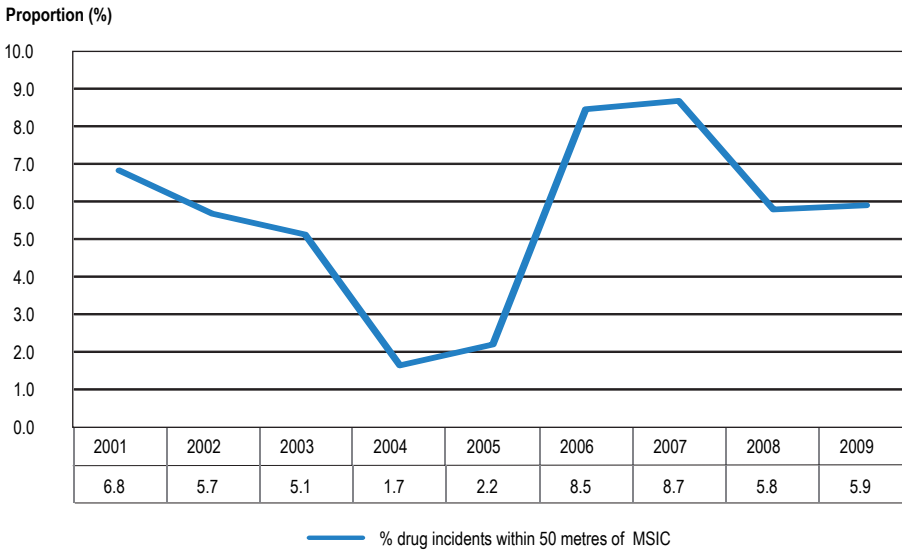
DISCUSSION

This study examined 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 trends in robbery and theft offences in the King Cross LAC are quite consistent with those in the rest of Sydney. Since 2001, robbery and theft offences have fallen dramatically across Sydney and these patterns are reflected in Kings Cross LAC. Of the three robbery and ten theft offences considered, the only two to show trends inconsistent with the rest of Sydney were robbery with a firearm (stable in King Cross but trending down in the rest of Sydney) and retail theft (up in King Cross but stable across the rest of Sydney). Fraud increased in both Kings Cross and Sydney. These results do not suggest that the MSIC has had a negative impact on crime levels.

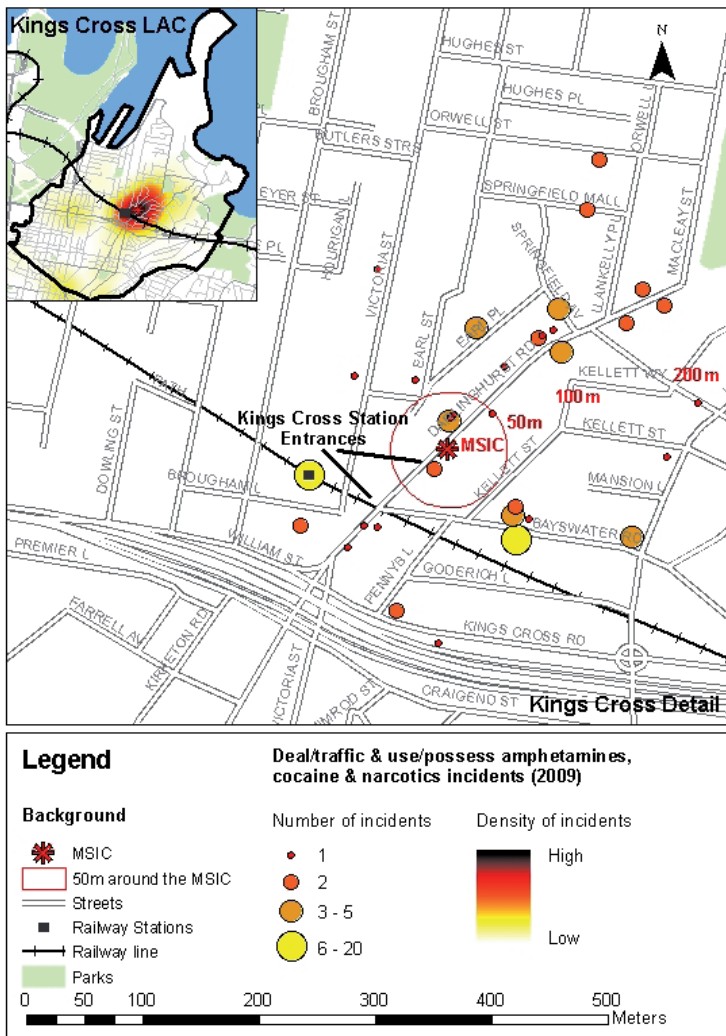
The trends shown in Figure 3 are borne out in the results in Table 3 which compares Kings Cross to the rest of Sydney for each of the drug offence categories examined. The pattern of drug arrests was more stable in Kings Cross than in the rest of Sydney. In King Cross, all trends were stable with the exception of possession/use of cocaine which has increased in Kings Cross since the opening of the MSIC (consistent with the trend for the rest of Sydney for this offence). Overall, the drug offences considered increased significantly in the rest of Sydney due to increases in possession and dealing of cocaine and possession of amphetamines. Both dealing and possession of narcotics fell and dealing amphetamines was stable.

Figure 4. Proportion of deal/traffic and use/possess amphetamines, narcotics and cocaine incidents^a reported in the Kings Cross LAC occurring within 50 metres of the MSIC, 2001-2009



^a The number of drug incidents within 50 metres of the MSIC as a percentage of drug incidents which were geocoded to the precise address or location/landmark.

Figure 5. Repeat incident map for deal/traffic and use/possess amphetamines, cocaine and narcotics incidents^a in the Kings Cross LAC, 2009



^a This figure only shows drug incidents geocoded to the precise address or location/landmark.

Five of the six specific drug offences considered have been stable in Kings Cross LAC since the opening of the MSIC. Incidents of use/possess cocaine increased over the period but the same was also true of this offence for the rest of Sydney. Again this does not suggest that the MSIC has had a negative impact on drug incidents.

Spatial analyses were 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 results showed that a small proportion of the use/possess and deal/traffic amphetamines, cocaine and narcotics incidents reported in the Kings Cross LAC were known to occur within 50 metres of the MSIC. There was no consistent trend in the proportion of incidents occurring within the immediate surrounds of the MSIC from 2001 to 2009 with the number fluctuating from year to year.

Overall these analyses show no evidence that the MSIC has had a negative impact on:

- Property crime in Kings Cross LAC
- Incidents of drug dealing or possession in Kings Cross LAC
- Incidents of drug dealing or possession in the vicinity of the MSIC.

REFERENCES

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NOTES

1. This table varies from the equivalent table in the earlier version of this bulletin (Snowball et al. 2008) which only included use/possess incidents and showed drug types separately. Also, as mentioned in the Method, only incidents which could be mapped to a precise location are considered here.
2. The map in Figure 5 displays only those incidents geocoded to the street address or to an exact location/landmark. As mentioned above, and as is shown in Appendix 1, we could only accurately geocode approximately half of the drug incidents in Kings Cross. This is because many incidents have an incomplete address which can only be mapped to a central point on the relevant street (the street centroid). For the years 2001 to 2009 inclusive, the incidents coded to the street centroid included 351 incidents on Darlinghurst Road, 29 incidents on Kellet Street, 57 incidents on Bayswater Road, 11 incidents on Earl Street, 31 incidents on Earl Place, 47 incidents on Springfield Avenue and 76 incidents on Roslyn Street. An unknown proportion of the offences occurring at an unspecified location along Darlinghurst Road, Kellett Street and Earl Street could have been within 50 metres of the MSIC.

APPENDIX

Table A1: Geocoding results for drug incidents in Kings Cross LAC, 2001 to 2009

Accuracy of Geocoding		2001	2002	2003	2004	2005	2006	2007	2008	2009
Precise Address	%	31.80%	28.60%	28.40%	27.80%	28.80%	24.80%	26.90%	26.70%	21.20%
	No.	139	92	95	87	96	76	75	106	90
Precise location/landmark	%	21.70%	20.50%	12.20%	10.90%	12.00%	13.70%	14.30%	16.60%	10.60%
	No.	95	66	41	34	40	42	40	66	45
Geocoded to the street centroid because no street number was recorded	%	41.70%	43.50%	51.30%	55.30%	55.90%	58.60%	51.30%	53.40%	65.90%
	No.	182	140	172	173	186	180	143	212	280
Not geocoded	%	4.81%	7.45%	8.06%	6.07%	3.30%	2.93%	7.53%	3.27%	2.40%
	No.	21	24	27	19	11	9	21	13	10
Total	%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	No.	437	322	335	313	333	307	279	397	425

Table A2: Number of deal/traffic and use/possess amphetamines, narcotics and cocaine incidents reported in the Kings Cross LAC occurring within 50, 100 and 200 metres of the MSIC, 2001-2009

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Drug incidents within specified radius of MSIC	within 50 mtr	16	9	7	2	3	10	10	10	8
	within 100 mtr	24	30	15	6	16	14	15	18	25
	within 200 mtr	111	73	38	34	68	50	47	69	72
Total drug incidents geocoded to an address or location/landmark		234	158	136	121	136	118	115	172	135
% incidents within 50 mtr of MSIC		6.8	5.7	5.1	1.7	2.2	8.5	8.7	5.8	5.9