ACT Recidivist Offenders

Toni Makkai Jerry Ratcliffe Keenan Veraar Lisa Collins

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Disclaimer

This research report does not necessarily reflect the policy position of either the Australian Government or the ACT Government.

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Executive summary

The primary focus of this study was to determine:

1. the key factors associated with the reduction in burglary rates in the Australian Capital Territory during 2001; and

2. to provide a profile of recidivist property offenders in the ACT.

Two primary sources of data—aggregated burglary rates and criminal histories for those persons arrested for a property offence during the first half of 2001—were analysed.

Three interrelated factors have been attributed with causing the reductions in the burglary rate:

- the targeting of repeat offenders by ACT Policing through Operation Anchorage;
- · changes to the Bail Act; and
- the heroin shortage in the ACT.

Operation Anchorage

The research found that Operation Anchorage was successful in its aim to reduce burglary crime in the ACT. Recorded crime declined during the Operation and lasted some 45 weeks after the Operation had finished. It is estimated that 2,445 offences were prevented during this 45 week period.

Operation Anchorage was successful in targeting recidivist property offenders:

- 77 per cent of persons (n=225) arrested during Operation Anchorage had at least one recorded prior offence;
- these offenders accounted for a total of 1,748 recorded prior offending episodes, amounting to an average of eight episodes per offender; and
- 18 per cent of offenders had 15 or more prior offending episodes and they account for 62 per cent of all prior episodes.

The offending rate of recidivist offenders decreased post Operation Anchorage:

- around half of the offenders had not re-offended within 100 days of their initial arrest during the Operation;
- 36 per cent of the sample had not re-offended by 31 December 2002; and
- there were 636 recorded offending episodes post the operation, amounting to an average of three offending episodes per offender.

Changes to the Bail Act

Changes to the Bail Act came into effect on 24 May 2001. This change required that bail not be granted to a person who had re-offended whilst on bail. The court records did not provide reliable information on whether this specific section of the Bail Act was used in determining bail conditions. As a result the research could not test the direct impact of the change in the Bail Act on offending.

Executive Summary

However during the Operation there were higher levels of incapacitation than had occurred prior to the Operation. Offenders were significantly more likely to be placed on remand, net of other factors, during this time.

The average number of remands per week rose from 32.34 in the six months before Operation Anchorage to 101.96 after the operation.

Further analyses showed that being placed on remand had a significant effect in delaying the time to re-offending.

Sentencing outcomes

Tracking particular offences through to sentencing outcomes was extremely difficult. Of those offences that were tracked the research found that:

- 29 per cent of offenders were placed on a probation order;
- · 20 per cent were released under a bond;
- 14 per cent had their charges dismissed without further penalty;
- 14 per cent had not been yet been finalised; and
- 11 per cent were imprisoned.

Incapacitation effects on the burglary rate

There was a significant negative correlation between the average number of weekly incapacitation days (both remand and prison) and the weekly burglary rate; as one goes up the other goes down.

The increase in remand and prison time in the six months post the Operation amounted to the effective removal of at least 15 of the 119 recidivist offending population.

Heroin shortage

At the time of the Operation a heroin shortage was reported across the country but particularly in the Sydney area. The burglary rate from a comparable Sydney district was not found to be significantly associated with the ACT burglary rate. This suggests that the ACT burglary reductions were unlikely to have been due to the heroin drought. However the analyses are based on aggregated data, which do not necessarily mean that such a finding would be replicated at the individual level. Analyses of individuals, reported below, indicate that being a heroin user is significantly associated (it is impossible to determine causation from the available data) with being a high volume offender.

There was also no significant association between the ACT burglary rate and the surrounding NSW police region (South Eastern Statistical District (SESD)). This suggests that displacement of crime into the surrounding region was unlikely to have occurred. Other research has also suggested that there was no internal displacement of crime within the ACT region during the Operation.

Recidivist offenders

The majority of offenders who were arrested for a property offence during Operation Anchorage had committed prior offences. Furthermore the majority had re-offended in the period following this arrest till the end of the follow-up period at 31 December 2002. The average time to re-offending was 311 days post their arrest.

Factors that reduced the time to re-offending were:

- high volume offender;
- breaching orders;
- being a juvenile;
- having low education levels; and
- being a heroin user;

One factor increased or delayed time to re-offending:

· being placed on remand at some point during Operation Anchorage.

The most significant factor in time to re-offending was being a high volume offender. Further analyses found four significant predictors of high volume offending:

- being a heroin user;
- being male;
- breaching orders; and
- had a violent offence.

Financial costs

Although there is some cost data the report does not provide a systematic cost benefit analysis of Operational Anchorage. It was estimated that the Operation provided a total saving in burglary costs of \$7,125,600. However these need to be set along side the costs of the Operation and the associated court and treatment and incarceration costs. It was conservatively estimated that imprisonment costs for persons arrested for a property offence during the Operation were \$3,465,822.

Methodological issues

The ACT does not have an integrated criminal justice tracking system. As a result the data was manually collated from Corrective Services files, Juvenile Justice files, and Court records. The problems found in the collation were:

- manual records are subject to enormous variation in terms of consistency of recording information;
- because of the complexity of charges and sentencing outcomes, particularly for high volume offenders, it is extremely difficult to link specific sentences with specific charges; and

Executive Summary

 case based systems are notoriously difficult from which to extract data for research/ evaluation purposes.

In particular there were significant difficulties in obtaining information on 'substance use', mental health and other health risk factors. These included:

- making a distinction between problematic use/condition and recreational or non-problematic use/condition and the specific drugs involved;
- · the extent of the problem and its direct contribution to criminal behaviour; and
- determining the age of onset, persistence and desistance of these behaviours.

It was also impossible to determine the impact of Corrective Services/youth justice programs on offending. As a result it is not possible to evaluate the effectiveness of community-based interventions. Problems encountered in the manual files included:

- in many cases this level of detail was either not available or not consistently recorded across manual case files;
- where an offender had participated it was not possible to determine whether they actually attended and/or completed the program; and
- there was no indicator of whether completion of a program was regarded as 'successful'.

Section 1. Overview

Introduction

In 2000 Australia recorded the highest rate of burglary victimisation among 17 industrialised nations (including Canada, England and Wales, and the United States of America) (van Kesteren, Mayhew & Neiuwbeetra 2000). Approximately seven per cent of Australians had been victimised once or more in the previous 12 months, while overall the average burglary victimisation rate for all countries surveyed was three per cent. Furthermore thirty-six per cent of Australians reported that they felt they were 'likely or very likely' to be a victim of burglary in the coming year. While Australia was not the highest-ranking country in terms of perception of risk in the coming year, it was above the average, which was 29 per cent (the highest was Portugal with 58%). Over time Australians have consistently reported higher levels of concern about the likelihood of burglary than many of the other countries in the study (van Kesteren, Mayhew & Neiuwbeetra 2000).

The most recent 2002 Crime and Safety survey of victims of crime in Australia confirms that burglary is still of major concern to the Australian community. Forty-four per cent reported that the most commonly perceived problem was 'housebreaking/burglaries/ theft from homes' (ABS 2003c). Furthermore this survey found that five per cent of all Australian households reported being burglary victims in the past 12 months. Property crime accounts for 86 per cent of the nine major crime categories while burglary accounts for 28 per cent. On average there are 2.2 property crimes committed every minute.

In addition the financial costs of burglary to the community are significant. Estimates of the costs of crime in Australia found that during 2001 burglary (residential and non-residential) cost Australia \$2.43 billion. Specifically for burglary the average cost was \$2,400 with the costs being \$2,000 per incident for residential burglary, and \$4,500 per incident for non-residential burglary (Mayhew 2003).

Studies have found that property offenders are more likely to re-offend and return to the criminal justice system than many other types of offenders (see for example Langan & Levin 2002). As has been stated elsewhere: 'Burglary occupies an important position in the spectrum of crime. As the statistics reveal, it is sufficiently common to touch many individuals and households yet it is also sufficiently serious to affect victims both financially and emotionally' (Tarling & Davidison cited in Mawby 2001).

The ACT experience of burglary

In the late 1990s into early 2000 the Australian Capital Territory (ACT) experienced significant increases in the burglary rate. From 1997 to 2000 the rate increased from 1,426 to 2,366 per 100,000 of the population. This increase was consistent with what was happening in other jurisdictions however the magnitude of the increased over this period was greater. Since this time levels have dropped again quite significantly. Again there were drops across other jurisdictions but the drop in the ACT tended to be greater. Only Tasmania recorded a higher decline in burglary rates between 2000 and 2002. The most recent data

on victims of crime show that the burglary rate in the ACT during 2002 was 1,960 burglaries per 100,000 people (Figure 1) (ABS 2003a). In 2002 the rate in the ACT was the fourth lowest in the country when compared with other jurisdictions—the highest was Western Australia with 3,186 burglaries per 100,000 persons and the lowest was in Victoria that recorded 1,455 burglaries per 100,000 persons.

□1993 □1994 □1995 □1996 □1997 □1998 □1999 □2000 □2001 ■2002 4000 3500 rate per 100,000 persons 3000 2500 2000 1500 1000 500 0 NSW Vic Qld WA SA Tas NT ACT

Figure 1: Rate of burglary by jurisdiction, 1993–2002 (a)

(a) Burglary refers to 'unlawful entry with intent' (which includes offences involving the taking of property and other offences) Source: Adapted from Australian Bureau of Statistics, 2003a

Plausible explanations

How can these reductions be explained? Three interrelated factors have been attributed with causing the reductions:

- the targeting of repeat offenders by ACT Policing;
- · changes to the Bail Act; and
- the heroin shortage in the ACT.

The AFP responded to the high levels of burglary with a specific operation, referred to as 'Operation Anchorage', at the end of February 2001.¹ The operation finished at the end of June 2001. Operation Anchorage was a force wide initiative that involved heavy commitments by ACT Policing to research, policy development and financial/human resource planning involving the most senior levels of management and government. A significant component of the operation involved the fortnightly targeting of offenders across the ACT with a strong emphasis on assertive prosecution and removing offenders from general community circulation to minimise the scope for these persons to continue committing property crime.

Overview

As part of the strategy amendments to the ACT Bail Act 1992 were proposed that created a presumption against bail for people accused of further serious offending whilst on bail for a serious offence (defined as an offence punishable by imprisonment of five years or more). The purpose of this legislative measure was to target offenders especially serious, repeat property offenders, who re-offended whilst on bail. The Bail Amendment Act 2001 came into effect on 24 May 2001. The relevant section (9A) states that given the above conditions the court must not grant bail to the accused unless satisfied that special circumstances exist to justify the granting of bail.

The second change was unpredicted—a heroin shortage occurred both in the ACT and across Australia. This shortage occurred first in late 2000 in specific areas within Sydney. By early 2001 the shortage was being reported across Sydney and in other major centres such as Melbourne. On-going monitoring of drug use by police detainees has shown that the shortage had spread to other locations across Australia by mid 2001 (Makkai, MacGregor & Wei 2003). Within the ACT the Illicit Drug Reporting System found that injecting drug users (IDU) and key informants reported that the 'heroin drought' began in late December 2000 in the ACT. Despite the fact that IDUs reported that price had increased and purity had decreased, 73 per cent still said it was either easy or very easy to obtain heroin during the shortage (Williams & Rushforth 2002). By July 2002 IDUs were reporting price was increasing, purity was still low and heroin was easily available and supply was stable (Rushforth 2003).

At the commencement of Operation Anchorage, there was a drop in the number of recorded burglaries within the ACT. The short-term effect on the community in Canberra was evident and it is reasonable to conclude that police were having an impact on criminal behaviour (Radcliffe 2001). The difficulty for police in these circumstances is to sustain pressure on the local criminal element and maintain gains in crime reduction in the long term. The research on targeted police operations has suggested that the effects of such operations degrade fairly quickly without further strategies focused on the problem. Figure 1 suggests that at the aggregated yearly level burglary rates have remained low for some time following Operation Anchorage. In the following section the burglary rates are examined in more detail.

Conclusion

In conclusion annual recorded crime data establishes that Operation Anchorage on the surface appears to have had relatively long term effects on the burglary rates. However there are potentially other explanations, such as the heroin drought and sentencing practices. This report will seek to document the extent of this long-term effect and the role that the changes in the Bail Act had upon recidivist offenders. The report will also for the first time provide empirical data on the characteristics of recidivist property offenders in the ACT.

¹ This was the latest in a number of police crime reduction strategies (previous operations include 'Chronicle' and 'Dilute').

Section 2. Operation Anchorage

Operation Anchorage

The Australian Federal Police (AFP) responded to the high levels of burglary with a specific operation, referred to as 'Operation Anchorage²', at the end of February 2001.³ The operation finished at the end of June 2001. Operation Anchorage was unique in the history of ACT Policing, departing significantly from the usual concept of crime operations, which tended to be highly specific, of short duration and specific to particular teams or operational units. Operation Anchorage by contrast was developed over an extended period of time and based on extensive liaison with government, which resulted in substantial increases to the ACT Policing resource base as the result of evidence-based policing practices demonstrated in Operations Chronicle and Dilute. This phase of Operation Anchorage's development involved heavy commitments by the organisation to research, policy development and financial/human resource planning involving the most senior levels of management and Government.

The actual structure of Operation Anchorage was initially based on the traditional team concept to focus police operations on property related offences in the ACT with a heavy emphasis on senior leadership, intelligence lead targeting of repeat offenders and the development of effective joint operations mechanisms to translate the operation into a whole of ACT Policing attack on property crime. This was reinforced by further policy work in relation to amending the ACT Bail Act and mobilising media resources to provide a strong profile within the community directed at not only those who were likely victims of crime but at the offenders themselves. The operation itself affected practically all areas of ACT Policing including patrols and specialist investigative areas along with a wide range of support, intelligence and forensics personnel. The Operation was heavily characterised by fortnightly targeting of offenders across the ACT whose details were widely circulated within ACT Policing and high levels of coordination in locating these people. Extensive resources were put into identifying and locating repeat offenders with a strong emphasis on assertive prosecution and removing offenders from general community circulation to minimise the scope for these persons to continue committing property crime.

Figure 2 shows weekly levels of reported burglary in the ACT from January 1999 to November 2002. The timings of previous crime reduction operations are shown along with Operation Anchorage. Figure 2 suggests that the previous operations, with their primary focus on burglary, did have an effect on the levels of burglary but that the long-term impact was not sustained. The effects of Operation Anchorage appear to be longer term.



Figure 2: Weekly frequency of recorded burglaries, ACT

Source: Australian Institute of Criminology, AFP ACT Recorded Crime, January 1999-November 2002 [computer file]

The precise experimental conditions that are a feature of the traditional scientific method are less applicable in a policing research arena where law enforcement does not occur in a vacuum, but is constantly responding to and anticipating activity in the criminal environment. There are two potentially significant influences that could account for the reductions in burglary rates that are examined in this section. The first is the potential influence of previous police operations. The second is the potential impact of external macro-level effects that might impact on burglary levels, such as the heroin drought that occurred from December 2000 (Weatherburn et al. 2001). A method that allows for both these internal and external factors to be controlled for is time series analysis. The aim of interrupted time series analysis is to model a temporal series of data (such as the ACT burglary level) prior to an intervention, and then introduce variables to represent and control for possible influential factors (Box & Jenkins 1976; Chatfield 1989), such as two previous police operations that targeted burglary in the ACT—Operations Chronicle and Dilute.

Operation Anchorage

Operations Chronicle and Dilute

Figure 2 shows that the two earlier operations, Chronicle and Dilute were shorter in duration than Operational Anchorage. The frequency of burglaries begins to rise from an average of around 115 offences per week in September 1999 to just over 200 burglaries per week at the commencement of Operation Chronicle. This operation targeted burglary offenders, employed approximately 18 officers, and ran from 8 November to 1 December 1999. After Chronicle, burglaries fell sharply before immediately rising to a pre-Chronicle level a few weeks later. Burglaries again fell after Operation Dilute before climbing back to a level close to the burglary level during most of Operation Dilute. Dilute ran from the end of April 2000 until the end of June 2000, and employed a varying number of officers on a burglary reduction campaign. At the start of Operation Anchorage, crime again fell sharply, and remained generally low throughout Anchorage. After Anchorage, crime remained at a low level for some months, before slowly rising to an average of 150 in the last four months of 2002.

By early 2001 it was evident that there was a heroin shortage. It is yet unclear if a heroin shortage has a negative or positive impact on burglary levels. Some argue that a shortage of illicit drugs will push prices up and drive an increase in property crime to compensate for increased prices, while others argue that a shortage of drugs will result in a drop in demand and associated property crime (for a more detailed discussion of these arguments see Weatherburn et al. 2001). While a definitive answer to the impact of the heroin drought eludes research at present, either way it was considered that any impact of the heroin drought (either positive or negative) would manifest not only in the ACT burglary data but also in a comparable Sydney site. The ACT is broadly comparable on a socio-economic basis with the Central North Sydney Statistical Subdivision (CNSSS). To control for macro effects beyond the boundaries of the ACT, weekly burglary totals for the CNSSS were obtained from the New South Wales Bureau of Crime Statistics and Research.⁴ The CNSSS data were used to control for potential effects on the burglary rate caused by the heroin drought.

It was also possible that there might be other macro factors operating at a broader economic and social level that might have affected the burglary trend in the ACT. The ACT is surrounded by the state of New South Wales, and more specifically by the South Eastern Statistical District (SESD). It would also be expected that if there were displacement of crime from the ACT it would manifest itself in the surrounding area. To control for this possibility the SESD data were included in the time series analysis.⁵

Analyses were conducted on the first operation through to 113 weeks of the time series to determine if there were significant effects on burglary rates from the first and second AFP operations.⁶ The individual operations were not significant during the period of the actual

operation, however testing of a number of different variables representing temporal lag periods identified that there was a residual impact from Operation Chronicle that lasted six weeks, and a residual impact from Operation Dilute that lasted 10 weeks post-operation.⁷ Parameters are shown in Table 1. All of the model parameters are significant with the exception of the CNSSS and SESD burglary rates. However, the findings should be interpreted cautiously, as the series of 78 observations prior to Operation Dilute is near the limit of acceptability regarding the number of prior observations necessary to construct a robust time series model (McDowall et al. 1980; Yaffee & McGee 2000).

Table 1: Paramete burglary ti	Parameter estimates from pre-Anchorage intervention ACT burglary time series							
	Estimate	T value	р					
MA(1)	0.40	4.15	<0.001					
MA(2)	0.27	2.89	0.00					
SESD burglary	0.03	0.20	0.84					
CNSSS burglary	-0.12	-0.83	0.41					
Chronicle 6	-55.23	-4.53	<0.001					
Dilute 10	-45.55	-3.98	<0.001					

Source: Australian Institute of Criminology, AFP ACT Recorded Crime, January 1999-November 2002 [computer file]

Operation Anchorage

The observation time frame was then extended to 131 weeks to include the whole period of Operation Anchorage.⁸ A dummy variable to represent the time period of Operation Anchorage was added to the model, and the parameters from the extended ARIMA model are shown in Table 2.

Operation Anchorage

Table 2: Paran	neter estimates from ACT bui	rglary time series (weeks 1–131)
	Estimate	T value	р
MA(1)	0.40	4.50	<0.001
MA(2)	0.29	3.37	0.001
SESD burglary	-0.03	-0.16	0.87
CNSSS burglary	-0.19	-1.52	0.13
Chronicle 6	-54.36	-4.31	<0.001
Dilute 10	-46.06	-3.91	<0.001
Anchorage	-53.41	-3.31	<0.001

Source: Australian Institute of Criminology, AFP ACT Recorded Crime, January 1999-November 2002 [computer file]

Table 2 shows that again, the CNSSS and the SESD burglary level were not predictors of burglary rates in the ACT, suggesting that they are not significantly correlated. This tells us that if macro-level influences (such as socio-economic changes or the heroin drought) were operating across the region and working to influence burglary levels in the ACT, they were not operating in the same manner on the surrounding region. It also confirms that if crime were displaced it did not manifest itself in the burglary rates for the surrounding area. The corollary of this is that it is highly unlikely that the substantial reduction in burglary during the period of Operation Anchorage was the result of large-scale influences alone. In the absence of other explanatory factors, and the statistical significance of the Anchorage dummy variable (see Table 2) it seems reasonable to assume that the burglary reduction was a result of Operation Anchorage. The parameter estimate of -53.41 suggests that about 53 burglaries per week were prevented by the police operation.

A more accurate assessment of the impact of Anchorage during the operational period can be made by comparing the actual burglary levels recorded during the operation with a projected estimate based on pre-Anchorage crime levels had no police operation taken place. This is possible, with certain caveats, by projecting the pre-Anchorage model (weeks 1–113) through to week 131. Some caution is required to extrapolate potential crime levels if no intervention had taken place. ARIMA analysis uses prior observations to predict future values, and the confidence limits of future values expand rapidly as time from the last actual observation increases. In other words, the further into the future the prediction, the less accurate the prediction.

In order to be conservative, a simple projection of the average from the six months prior to Anchorage is used as the point of comparison, as this is a more conservative (i.e. lower) number than the ARIMA model prediction. This more cautious approach recognises that there are interpretive issues with the rapid divergence of confidence limits from an ARIMA prediction. With this caveat in mind, it can be cautiously predicted from the model that the Anchorage period saw a burglary prevention of approximately 524 offences when compared to the average level of offences prior to Anchorage had the series continued at the pre-Anchorage six month mean of 146 a week. This predicted non-Anchorage level is plotted in Figure 3 and the volume of predicted crime prevented is shown as a light grey shaded area marked A.



Source: Australian Institute of Criminology, AFP ACT Recorded Crime, January 1999-November 2002 [computer file]

Post-Anchorage

Visually, it appears that in the post-operational period burglary rates remained low after the operation for a number of weeks, before this low rate decayed and the crime level returned to the pre-Anchorage level of offences at round 146 offences a week. This occurred some 45 weeks after Anchorage had finished. Choosing the more cautious of either the time series predicted values or an extrapolation of the pre-Anchorage six month mean, the difference between the six month mean and the actual burglary level can be calculated. The post-Anchorage burglary level remained below the pre-operation mean for 45 weeks, and the difference amounts to a total of 2,445 offences prevented. This is shown as Residual Impact Delay (B) in Figure 3.

The results can be summarised thus: The CNSSS and SESD burglary data do not effectively predict ACT burglary frequencies, and from this it is interpreted that neither the

heroin drought nor other macro effects were a significant factor in determining ACT burglary levels. Operation Anchorage had a statistically significant impact on burglary levels in the ACT and the police action can be cautiously estimated at having prevented approximately 524 burglary offences in an 18-week period. After Anchorage, crime levels remained low for some months before the benefits of Anchorage decayed, slowly returning to pre-Anchorage levels after 45 weeks. Had crime levels remained at the six month pre-Anchorage level of 146 burglaries a week, it is estimated that the number of offences prevented in the post-Anchorage period was 2,445. Total offences prevented are estimated at 2,969.

Financial benefits

A total costing exercise was outside the scope of this report. However, recent work conducted by the Australian Institute of Criminology adds an extra dimension to this type of study. A recent update of the estimate of the costs of crime in Australia by Mayhew (2003) can be combined with the extrapolated crime series and the crime reduction benefits of Operation Anchorage, both during the operation and afterwards. Given that the target of the operation was burglary, the Mayhew figures for burglary can be used to estimate the financial benefit to society of the crime reduction activities of Operation Anchorage. With an estimated cost to society of \$2,400 per burglary, this translates to a saving to society of \$1,257,600 during Anchorage, and \$5,868,000 in the post-operation period. A total saving in burglary costs to society of \$7,125,600.

However these savings would be offset by the costs of the policing operation, court and corrections costs. For example, the Report on Government Services (Steering Committee for the Review of Commonwealth/State Service Provision 2003) reported that the average real recurrent costs per day for a secure prisoner in the ACT was \$286.59 and for open and periodic detention \$143.94. From their arrest during Operation Anchorage until 31 December 2002 offenders were sentenced to 8341 days in prison⁹ and spent 7471 days in remand. This results in approximate imprisonment costs of \$2,390,447 and remand costs¹⁰ of \$1,075,375 with total incapacitation costs of \$3,465,822.

This simplistic cost data suggests significant savings through law enforcement activity to target recidivist offenders. However the high cost of detaining offenders suggests that alternatives to detention that effectively prevent offenders from committing further offences will significantly increase savings.

Limitations

The analysis is based on recorded crime figures and does not examine the issue of unreported offences, though from an operational perspective it is recorded offences to which the police tend to be answerable. The CNSSS and SESD burglary figures are used to control for external factors on the ACT data, but of course, no two areas will be identical. This does not control for the remote possibility that macro influences such as the heroin drought had an impact on the ACT and not the surrounding area nor the Sydney area, nor

does it control for the possibility that other unknown external influences were the cause of the ACT crime drop. Finally, the extent of crime prevented should be interpreted with caution. The future predicted crime levels originate from the most recent observed values, and extended predictions into the future are troublesome statistically.

Conclusion

In summary, evidence suggests that Operation Anchorage was successful in its aim to reduce burglary crime in the ACT. The analyses suggest that these effects are unlikely to have been due to the heroin drought. Two further explanations are that recidivist offenders were apprehended (as a result of a well targeted intervention), and were more likely to be incapacitated during this time (due to changes relating to access to bail), causing a decrease in the overall property crime rates.

The second half of the 2001/02 reporting period saw property crime in the ACT increase as seen in Figure 3.¹¹ Reflecting this position ACT Policing state: 'This resurgence in crime can be partly attributed to the re-emergence on Canberra streets of repeat property offenders who were imprisoned during Operation Anchorage and the continued dependence on heroin of many of these criminals' (Australian Federal Police 2002). The following section focuses on those offenders who were arrested for property offences during Operation Anchorage and describing their offending profile.

² This section draws heavily from one of a series of research papers the AIC is producing as part of its on-going evaluation of Operation Anchorage. More detailed findings will be presented in forthcoming Trends and Issues and academic papers.

³ This was the latest in a number of police crime reduction strategies (previous operations include 'Chronicle' and 'Dilute').

⁴ We would like to thank the ABS for its generosity in supplying these data.

The CNSSS and SESD data were differenced to align the time series with the AutoRegressive Integrated

Moving Average (ARIMA) model.

 $^{^{\}rm 6}$ The model for weeks 1 to 113 of the series was an ARIMA (0,1,2) model.

⁷ In this study, the pre-Anchorage series was isolated and modelled using an ARIMA process, with dummy variables representing both the two operations and a range of possible lag effects. A suitable model was established through repeated modelling and examination of both t-values for various parameters and by identifying the model with the lowest Schwarz Bayesian Criterion (SBC). This statistic uses Bayesian (maximum-likelihood) calculations to examine the fit of a derived model to the observed series, taking into consideration the number of parameters used in the model. It is therefore a useful tool in that it looks for both fit and parsimony.

⁸ Although the SESD burglary variable was not significant as a predictor of the ACT burglary level in the series prior to Anchorage, it was retained in the analysis in case the predictive power of the variable increased as the observational period was extended.

⁹ This data represents the total length of the prison sentence handed down by the court, however many offenders do not complete the full sentence. The cost data probably inflates the prison costs.

¹⁰ The open and periodic detention costs have been used as separate costs for remand are not available from the report. These may be an underestimate of the true costs associated with remand.

¹¹ However, the number of burglaries, thefts and theft-related offences then decreased towards the end of 2002 in the ACT. This may be as a result of a new ACT Policing intelligence-led operation called 'Operation Halite' which was officially launched on 15 November 2002 (but began on 28 October 2002) as an operation aimed at persons committing property and related drug supply offences.

Section 3. Property offenders in the ACT

Property offenders in the ACT

In their 1972 study, Wolfgang, Figlio and Sellin found that six per cent of juvenile males born in Philadelphia in 1945 were responsible for 52 per cent of the total number of arrests in the cohort sample. This work empirically demonstrated for the first time that there was a smaller sub-group of delinquent offenders who were 'chronic' offenders. This discovery is 'one of the most quoted findings in the recent history of criminology' (Blumstein, Farrington & Moitra 1985: 188).

Since then the study of recidivism has been an important focus for criminological research. Driving this research has been the attractive idea that it may be possible to identify and intervene with persistent or high-volume offenders, thereby significantly reducing crime. If the small number of high-volume offenders were to cease, or reduce their offending, the impact on the overall crime rate would be significant.

Research into recidivist offending behaviour has sought to:

- Increase our understanding of the predictors of criminal behaviour ultimately informing policy and practice in the criminal justice system (e.g. by assisting in risk prediction);
- Produce more effective and cost-effective crime control interventions and rehabilitative programs (by assisting the evaluation of criminal justice and sentencing policy¹²); and
- Reduce crime (through effective targeting of high-volume offenders, bringing about a reduction in their offending behaviours), in turn, reducing the financial and other costs of crime to the community.

Studies into recidivism vastly differ in terms of their methodology, operational definition of 'recidivism', and the offender group of focus. However underlying these studies are a number of factors commonly examined — gender, race/ethnicity, age, type of offending, age of first offence, criminal history and sanctioning. To what extent and why the factors are related to risk of recidivist behaviour, often differs and inspires debate.¹³

Gender

Many studies have found that women are less likely to recidivate than males (Langan & Levin 2002; Spier 2001; Oldfield 1996; May 1999; Lloyd, Mair & Hough 1994; Roshier 1995; Doherty 2002; Baumer 1997; Gendreau, Goggin & Little 1996). For example, in a recent study from the United States of America into intermediate sanctions and recidivism, an offender's gender was a strong predictor of rearrest (Ulmer 2001). In this study female rearrest odds were almost half those of males in the sample. Other studies have reported similar findings. A recent Canadian study that retrospectively looked at recidivism among young adults concluded that males were more likely to be recidivist offenders, with 62 per cent having a prior conviction compared to 48 per cent of female offenders (Thomas, Hurley & Grimes 2002).

However, not all studies have found major differences between males and females and their levels of recidivism. In two recent Australian studies it was found that males and females re-offended at relatively similar rates (Department of Human Services 2001; Ross & Guarnieri 1996). In addition, Carcach and Leverett (1999), in their examination of juvenile offenders, stated that they found no significant differences between male and female offenders with respect to their time to reappearance in court.

There is some evidence that differences along gender lines are more likely to be associated with other, intercorrelated variables such as previous youth imprisonment and rate of previous court appearance (Lloyd, Mair & Hough 1994). Gender differences in recidivism rates can therefore be explained largely in terms of differences in age and criminal history— in other words when these other factors were taken into account gender was weakly associated with recidivism.

Race/ethnicity

Most studies into recidivism examine differences in re-offending rates for different race/ ethnicity groups. For example in the USA it has been found that black ex-prisoners were more likely to be rearrested than white ex-prisoners (Langan & Levin 2002). In New Zealand Maori offenders were more likely to be reconvicted within two years after release than European offenders and at a faster rate (Spier 2001).

In Australia, the difference between Indigenous and non-Indigenous re-offending is significant. In a report by the Victorian Department of Human Services (2001), Indigenous juveniles recorded a recidivism rate of 65 per cent, substantially higher that the rate recorded by non-Indigenous, Vietnamese and European offenders (who recorded a recidivism rate of 47%, 48% and 38% respectively). Furthermore ATSI youths were placed on supervised orders at an earlier age than other offenders.

In a similar study, it was found that young women from a non-Indigenous background were least likely to recidivate and that young Indigenous males were most likely to do so (Department of Families, Youth and Community Care 1998). The same study noted that recidivist offenders who were from Indigenous backgrounds were younger at their earliest court appearance than those from other backgrounds. Also, young Indigenous males had, on average, more prior proven offences than any of the other population groups. This finding has been more recently supported by a study in South Australia (Doherty 2002).

Age of offender

A factor that appears to be closely related to recidivism is the age of the offender (see Spier 2002). Baumer (1997) found that the 'hazard of reconviction decreases by approximately five per cent with each additional year of age'. Several recent studies from the United Kingdom also support the relationship between age and the incidence of crime, that is,

younger offenders had a greater likelihood of re-offending or being reconvicted (Lloyd 1994; Oldfield 1996; and May 1999).

Type of offence

The type of offence for which offenders were originally convicted has been shown to influence the likelihood of rearrest—those convicted of property crimes had odds of rearrest that were well over two-and-a-half times greater than other offences, and had a 74 per cent chance of rearrest (Ulmer 2001). In Canada the most frequent occurring offences for recidivists were theft-related; furthermore recidivists convicted of property-related cases had the highest levels of prior convictions for offences of the same type, i.e. property offences (Thomas, Hurley & Grimes 2002). In Australia, a recent study found that the number of prior cases an individual had varied according to the most recent 'major proved offence': those whose major offence was burglary were more likely to have six or more prior offences compared with those before the court for traffic or drug offences (Doherty 2002). A large-scale USA-based study found that released prisoners with the highest rearrest rates were property offenders (Langan & Levin 2002). Other studies that revealed similar findings relating to property offending and the likelihood of rearrest, reappearance or reconviction include: Oldfield 1996; Office of the Legislative Auditor 1997; Baumer 1997; and May 1999.

Age at first offence

The age at which a juvenile begins his/her delinquent career has a significant effect on recidivism and related issues (Thomas, Hurley & Grimes 2002). Canadian research has found that the mean number of prior convictions for recidivists was associated with their age at the time of their first offence resulting in conviction—the younger the age-of-onset, the more extensive the offending history, the greater likelihood that the person would be reconvicted within two years. A study in Scotland highlighted several measures which they claimed were particularly useful in predicting recidivism, one of which was whether the prisoner had a childhood record at the time of their first adult conviction (Cooke & Michie 1997).

Criminal history

The strongest predictor of rearrest and its severity is prior criminal record. In one particular study the effect was cumulative and therefore 'each increase in the number of prior records was associated with a 32 per cent increase in the odds of rearrest' (Ulmer 2001). Other studies confirm this and report that offenders with extensive criminal careers and records of conviction and imprisonment are more likely to be rearrested, reconvicted or reimprisoned that those with shorter or no prior criminal records (Langan & Levin 2002; Office of the Legislative Auditor 1997; Oldfield 1996; Klein & Caggiano 1986; May 1999; Cooke &

Michie 1997; Lloyd, Mair & Hough 1994; Carcach & Leverett 1999; Ross & Guarnieri 1996; Doherty 2002; Baumer 1997).

Sanctions

A major review of different types of criminal justice interventions has found that

- Incapacitation policies prevent crime because offenders who are imprisoned do not have the opportunity to commit crimes; and
- There are a small number of offenders who commit a large number of crimes. If they
 could be incapacitated a large number of crimes would be prevented (MacKenzie
 1997).

The longer-term effect of prison sentences on recidivism levels has shown that serving time in prison produced small increases in recidivism levels and conclude that 'prisons should not be used with the expectation of reducing criminal behaviour' (Gendreau, Goggin & Cullen 1999).

Other factors

Several other factors have been identified in the literature as being related to recidivism levels:

- education levels (Ulmer 2001);
- substance abuse (Klein & Caggiano 1986; May 1999; Cooke & Michie 1997; Salmelainen 1995);
- employment status (Klein & Caggiano 1986; May 1999; Salmelainen 1995; MacKenzie & De Li 2002); and
- marital status (MacKenzie & De Li 2002).

In conclusion '...men, serious drug and property offenders, the less educated, the unmarried and unattached, those with extensive prior records, the un or underemployed, and those with criminal associates are more likely to recidivate' (Ulmer 2001).

ACT property offenders

To examine recidivism all those offenders who had been arrested at least once for a property offence during the period of Operation Anchorage were selected as a sample of property offenders. In total there were 232 offenders arrested during the five month **period.**¹⁴ Of this group 225 had criminal history records in the Magistrates Court and 171 had either a Corrective Services or Youth Justice Services file. Data on basic socio-demographic characteristics, criminal offending and sentencing, and offender programs were collected¹⁵ (Appendix 2 provides details on the methodology used to collect the data).

Table 3: Property offenders	
	Number
Arrested as a property offender during Operation Anchorage	232
Criminal history data available from court records	225
Corrective Services/YJS case management file	171

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

As the data collection required locating individuals across different administrative collections there were the inevitable problems in matching files. These issues occur as there is not an integrated criminal justice system where individuals can be tracked through the system using a unique identifier.¹⁶ As detailed in the methodology appendix there were a range of problems that can be summarised into three main points:

- manual records are subject to enormous variation in terms of consistency of recording information;
- because of the complexity of charges and sentencing outcome, particularly for high volume offenders, it is extremely difficult to link specific sentences with specific charges; and
- case based systems are notoriously difficult from which to extract data for research/ evaluation purposes.

At a more general level administrative data are based on those crimes reported to and subsequently recorded by the police. Not all crime is reported to police, and not all reported crime is solved. As a result administrative data are both 'partial and subjectively constructed' (McLaughlin & Muncie 2001). It is also the case that the discrepancy increases at each stage of the criminal justice process (Carach & Leverett 1999). As a result arrest data is usually regarded as the closest approximation to true offending while conviction data is the most likely to underestimate true recidivism rates and true times to re-offending (Carach & Leverett 1999).

The data collected for this study is jurisdiction-based but crime does not stop at jurisdictional boundaries. It was not possible to reliably capture all offending episodes and all periods of incarceration that occurred interstate. Where information was available it was recorded but it will under-estimate interstate offending and incarceration. This is an important issue as a high level of interstate mobility was noted for many offenders. When an offender's probation and parole supervision was transferred interstate it was also captured but again may under-estimate the time in supervision. In these cases the measures of recidivism and time to re-offending will be conservative estimates. The reliability of some of the other dynamic demographic variables such as accommodation, employment and marital status are also affected.

Finally, with 'substance use' there was insufficient information to be able to:

- make a distinction between problematic use and recreational or non-problematic use and the specific drugs involved;
- assess the extent of the problem and its direct contribution to criminal behaviour¹⁷; and
- · determine the age of onset, persistence and desistance of these behaviours.

The fact that substance use is noted in an offender's file suggests that they may be contributing factors to the offender's behaviour but without the consistent application of scientifically tested and validated measures of these factors we cannot rigorously assess their significance. These same problems also apply to mental health and other health risk factors.

Complete data on age and sex were provided from AFP records; all other data was collected from the other criminal justice agencies. ATSI, health, employment, accommodation, education and marital status were taken from Corrective Services/juvenile justice files (n=171).

Offenders apprehended during Operation Anchorage

The majority of offenders apprehended were males (82%), and were adults at the time of apprehension (67%) (Table 2). The proportion of females is similar for both the adults and juveniles; 19 per cent for adults and 17 per cent for juveniles.

Table 4:	Offenders by gender and age status						
	Ad	ults	Juv	eniles	Т	otal	
	n	%	n	%	n	%	
Male	126	81	63	83	189	82	
Female	30	19	13	17	43	18	
(Total)	(156)	(100)	(76)	(100)	(232)	(100)	

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

Figure 4 shows the age of offenders at the start of Operation Anchorage for juveniles and adults. In the ACT those aged up to and including 17 years are classified as juveniles. The minimum age for the sample was 10 years and the maximum 52 years. Among juveniles the mean age was 15.8 years and the mean age for adults was 27.1 years. The majority of juvenile offenders (55%) were aged either 16 or 17 years while the majority of adults were aged 18 to 29 years (67%).





The majority of offenders were non-Indigenous (80%), however the proportion of Indigenous offenders in the sample (20%) is around 20 times the percentage of Indigenous persons in the general ACT population (1%). Less than one-third of juveniles apprehended by police were Indigenous people.

Where data was available, other findings include:

- 34 per cent of offenders had a mental health issue usually in combination with substance use/abuse;
- 55 per cent of offenders had substance use/abuse issues and 30 per cent had both substance abuse and mental health issues;
- 73 per cent of offenders were unemployed;
- 49 per cent of offenders lived in government housing or in refuges/half-way-housing etc. (included in the 'other' category);
- · 25 per cent of offenders had only completed their education to Year 8 or less; and
- few offenders have been married 10 per cent.

Table	5: General	demog	raphics	s of offenders				
		Adults		Juv	Juveniles		Total	
		n	%	n	%	n	%	
ATSI*								
	No	98	85	38	70	136	80	
	Yes	17	15	16	30	33	20	
	(Total)	(115)	(100)	(54)	(100)	(169)	(100)	
Health								
	No problems	9	8	8	15	17	11	
	Mental	3	3	4	8	7	4	
	Substance	64	59	24	46	88	55	
	Mental & substa	ance 33	30	16	31	49	30	
	(Total)	(109)	(100)	(52)	(100)	(161)	(100)	
Employment*								
	Unemployed	85	75	34	68	119	73	
	Regularly emplo	yed 24	21	5	10	29	18	
	Student	4	4	11	22	15	9	
	(Total)	(113)	(100)	(50)	(100)	(163)	(100)	
Accommodation	on Status*							
	Govt. housing	40	36	8	16	48	30	
	Private rental	18	16	2	4	20	12	
	Parents	31	28	32	63	63	40	
	Other	22	20	9	18	31	19	
	(Total)	(111)	(100)	(51)	(100)	(162)	(100)	
Education - hi	ighest level*							
	Still in school	4	4	11	22	15	10	
	8 or less	21	21	16	33	37	25	
	9	18	18	17	35	35	23	
	10	41	40	5	10	46	31	
	>10	17	17	0	0	17	11	
	(Total)	(101)	(100)	(49)	(100)	(150)	(100)	
Marital status								
	Single	63	56	48	94	111	68	
	Defacto	33	29	3	6	36	22	
	Married	4	4	0	0	4	3	
	Separated	12	11	0	0	12	7	
	(Total)	(112)	(100)	(51)	(100)	(163)	(100)	

 * Statistically significant difference between adults and juveniles at p <.05

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

Information was collected on an offender's drug use history, and where possible the specific type of illicit drug was noted. Figure 5 shows that 77 per cent of adults and 67 per cent of juveniles had used or had problems with illicit drugs. The most common drug reported was cannabis for both adults and juveniles. The next most commonly reported drug was heroin although this was more likely to be the case for adults (50%) than juveniles (19%).

Figure 5: Drug use (ever used) for adults and juveniles Adults (n=90) Juveniles (n=36)



Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

Offending type

In total these offenders throughout their criminal careers had 6,345 charges. Of these 60 per cent were property charges, 10 per cent were breaches and offences against justice procedures, nine per cent violent charges and eight per cent were traffic charges. On average there were 27 charges per offender. The offending profile is similar for adults and juveniles. Offenders apprehended during Operation Anchorage primarily committed property-related offences but also occasionally violent, drug and traffic related offences. There were only 35 offenders (15%) who had only ever committed a property offence. For many of these their first arrest was during Operation Anchorage indicating that this group are either minor offenders or in the early stages of their criminal career.

Table 6: Type of o	ffence	(a)					
	Ac	lults	Juve	eniles	Т	otal	
	n	%	n	%	n	%	
Property	2701	58	1147	65	3848	60	
Breaches/justice procedures	519	11	113	6	632	10	
Violent	404	9	145	8	549	9	
Traffic	450	10	86	5	536	8	
Property damage	190	4	152	9	342	5	
Drug	209	5	27	2	236	4	
Disorder	122	3	78	4	200	3	
Other	59	1	6	1	65	1	
Total charges	(4656)	(100)	(1754)	(100)	(6345)	(100)	

(a) Offences have been grouped according to the Australian Standard Offence Classification (ABS 1997) Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

Offender programs

One of the main aims of this research was to explore the extent and nature of the offender's involvement in behavioural and/or drug and alcohol rehabilitative programs. In particular, whether programs available through Corrective Services and Youth Justice Services were associated with a reduction in the offending behaviour following apprehension during Operation Anchorage, thereby having an effect on the overall burglary rate in the ACT.

Recidivism levels are often used as one indicator of a programs' success. That is, reoffending rates can be used to test whether certain programs are effective at reducing further re-offending. With appropriate data a range of different programs can be examined in terms of their effectiveness in reducing criminal activity and achieving their aims.

For each offender who had a Corrective Services/Youth Justice Services file the following information was sought:

- specific type/s of program (including length and nature of program);
- date/s of participation; and
- whether offender successfully attended and completed program/s.

It was found that in many cases this level of detail was either not available or not consistently recorded across manual case files. In the majority of cases where an offender had participated in a specific program, it was not possible to determine whether they actually attended and/or completed the program.

When information was recorded there was no indication as to whether course/programs were successfully completed. Although this information may be known or easily obtained
by those working within Corrective Services it was very difficult to systemically document. As a result it is not possible to evaluate the effectiveness of community-based interventions in this case.

Table 6 shows that 10 per cent of charges are either for breaches or failure to comply with justice orders; on average this represents 2.8 per offender. However only 61 per cent of offenders had been breached in their criminal careers increasing the average number of breaches to be 4.6 per offender. Deciphering whether a breach related to a particular offence proved difficult let alone whether the breach was a direct result of non-attendance or unsuccessful completion of a program. This was further compounded as some magistrate/judges outlined the specific programs in sentencing some cases (for example, the offender must attend a specific drug rehabilitation program), while others issued more broad directives such as 'the offender will attend any programs as instructed by Corrective Services'.

In light of these problems, the findings presented below should be interpreted with caution and are included as an approximate indication only. It should also be noted that the data covers an offender's involvement in such programs in the ACT only. Approximately onethird of the offenders arrested during Operation Anchorage had at some stage been involved in (but not necessarily completed) one or more behavioural and/or drug and alcohol rehabilitative programs (n=64 and 63 for behavioural and drug and alcohol programs respectively) (Figure 6).



Note: where offenders did not have a Corrective Services or Youth Justice Services file it was assumed that they had not participated in any such programs through Corrective Services or Youth Justice Services and therefore have been included in the 'no' category.

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

Differences were found between male and female offenders in terms of their involvement in the programs. Less than 10 per cent of females had participated in some form of behavioural program and less that 20 per cent had been involved in drug and alcohol rehabilitation. On the other hand, one-third of male offenders had participated in a behavioural program and one-third in drug and alcohol rehabilitation (32% and 30% respectively).

Figure 7 looks at differences between Indigenous and non-Indigenous participation in offender programs in the ACT. While the proportion of Indigenous and non-Indigenous involvement in drug and alcohol rehabilitation was relatively similar (39% and 37% respectively), it was found that more Indigenous offenders had been involved in behaviour programs (54% compared with 32% of non-Indigenous offenders).

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(a) Excludes 63 offenders where ATSI status is unknown Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

Offending behaviour

From the court records every offence (i.e. charge) and the date of the offence for each offender were recorded. Multiple offences on one day for a single offender were counted as one episode. Offences on different days were counted as separate episodes. For example, if an offender was recorded as committing a burglary on 6 January 1999, then this counted as one episode. If the offender was recorded as committing a burglary on 6 January on 6 January, and vehicle crime on 7 January, then these counted as two episodes. If the offender was recorded as committing a police officer and vehicle theft on 6 January, then this counted as one episode.

Although it is possible to count the number of charges this report focuses primarily on offending episodes. This was done because the number of charges can reflect various factors. For example, the number of charges can be susceptible to the number of offences to which an offender confesses. They could also reflect the charging behaviour of the arresting officer rather than the actual offending.¹⁸

The advantage of this counting method is that what amounts to one criminal incident (for example, an offender may steal a car and smash it through a shop window to steal property) will count as one episode, even though the eventual charge record will show multiple offences. This has the added advantage that the offending episodes are most likely to be dealt with as one matter by the court. No counting system is perfect without access to full police statements, and would still require a subjective decision by the

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research team to determine the best method to determine offence behaviour. The methodology used here is simple and will allow for easy future comparison without the need for subjective rule making.

Less than one quarter of offenders had not offended prior to their first arrest during Operation Anchorage (23%); 77 per cent did have a prior offending episode (see Table 7). In total 225 offenders had at least 1,748 prior offending episodes; this amounts to an average of eight episodes per offender. In terms of the volume of offending eighteen per cent of offenders had 15 or more episodes prior to the Operation, accounting for 62 per cent of all prior offending episodes. This is consistent with other research that finds recidivist offenders account for disproportionately more of the crime.

Table 7:	Total episodes per offender			
	Pre first arrest during Operation Anchorage			
	n	%	Episodes (n)	Episodes (%)
0	51	23	0	0
1 or 2	43	19	57	3
3 to 14	91	40	600	34
15 or more	40	18	1091	62
(Total)	(225)	(100)	(1748)	(100)
Post first arrest during Operation Anchorage				
	n	%	Episodes (n)	Episodes (%)
0	80	36	0	0
1 or 2	59	26	72	11
3 to 14	83	37	510	80
15 or more	3	1	54	9
(Total)	(225)	(100)	(636)	(100)

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

In addition to the criminal history data the date of the first arrest during Operation Anchorage was recorded. This arrest may have been for offences committed prior to Operation Anchorage. However it is the first contact the offender had with the criminal justice system after the operation began and for this reason is defined as the intervention point. For the purposes of this study this arrest date represents the intervention date and is referred to throughout the report in this way. As offenders are arrested on different dates the time from when the operation started to their arrest will vary. Survival analysis is a technique that allows us to plot the length of time it took to their arrest from the start of the operation. Operation Anchorage lasted for 125 days.¹⁹ After 30 days the survival analysis for the total group found that 26 per cent of offenders had been arrested (or 74% had survived); after 60 days 52 per cent had been arrested and by 90 days 70 per cent had been arrested.

Figure 8 plots the number of days from the start of Operation Anchorage till the intervention occurred and the proportions that had not been arrested as the number of days progressed for adults and juveniles separately. The curves indicate that juveniles took slightly longer to be arrested than adults but the curves are essentially similar. After 30 days, 69 per cent of adults and 74 per cent of juveniles had managed to survive, by 60 days 43 per cent of adults and 49 per cent of juveniles had survived and by 90 days only 24 per cent of adults and 30 per cent of juveniles had survived. By 120 days all of the adults and juveniles had been arrested.

Figure 8: Time to first arrest (survival function based on elapsed time)

Wilcoxon (Gehan) statistic = 3.3, df=1, prob=.07 Source: Australian Institute of Criminology, ACT Recidivists Study 2003 [computer file]

Wilcoxon (Gehan) statistic = 3.3, df=1, prob=.07 Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

Using the criminal history data following the intervention date it is possible to determine when re-offending occurred. Offender's official criminal history was collected in the post intervention period up until 31 December 2002. Post intervention 36 per cent had not re-offended by 31 December 2002 (which could be from 12 to 18 months) (see Table 7). In total there were 636 offending episodes post the intervention representing an average of three offending episodes per offender. Twenty-six per cent had either one or two offending episodes while 37 per cent had from three to 14 episodes. The rate of offending increases

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for those who had an offending episode post the intervention to 4.4 per the 145 offenders. Figure 9 examines time to first offence post intervention—in other words how long did it take from the initial arrest during Operation Anchorage till they re-offended. It is important to keep in mind that the data are based on administrative data and will in all likelihood underestimate the level of offending and ultimately the time to re-offending. The survival curves are calculated separately for adults and juveniles; there is no statistically significant difference between the two groups.



Days to first offence after initial Anchorage arrest

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

By the end of data collection period, 31 December 2002, 33 per cent of juveniles and 40 per cent of adults had not re-offended. On average it took 133 days to the first offence for adults and 122 days for juveniles. The survival curves indicate that around half of the offenders reported committing an offence within about 100 days of the initial arrest during the operation. As some offenders were either remanded into custody or sentenced to prison during this time the elapsed time can be adjusted to calculate the 'free' time to re-offending post intervention. In total 24 people had been incarcerated—17 offenders spent time in remand, five in prison and two in both remand and prison.²⁰ Figure 10 shows the survival curve for the total sample for free time. The adjustment for free time makes little difference in the time to re-offending.

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Wilcoxon (Gehan) statistic = 1.53, df=1, prob=.22



Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

Operation Anchorage offences and outcomes

Tracking particular offences through to sentencing outcomes is extremely difficult. There were 202 of the original sample for whom sufficient information enabled them to be tracked from their original arrest during Operation Anchorage through to sentencing. In many cases the magistrate or judge gave more than one sanction. For example, an order involving 12 periods of periodic detention, 12 months probation with six months supervision. Where there was more than one sanction the most serious sanction was selected. For example, in the following tables sanctions such as periodic detention and suspended sentences are most likely an underestimation. This may result as a periodic detention may be ordered on one offence and probation on another where the offender is being sentenced for both at the same time.

Property offenders in the ACT

The problem of attempting to isolate the outcomes from a single offence is highlighted in Table 8.²¹ This data is for the outcomes that resulted from tracking the magistrate's court number that was attached to the single property offence supplied with each of the offenders. The majority of cases were dismissed (53%) and most other offenders were placed on a bond or received a period of probation (14% and 11% respectively). The cases that were 'dismissed' include cases where the particular matter was dismissed and another, related matter received a sanction (also during Operation Anchorage and often heard on the same day) as well as where matters that were actually dismissed. This category also includes cases where a sentence was not given for that particular offence, nor was it dismissed, but was taken into consideration and recorded as 'refer to CC01/**** [another matter]'.

Table 8: Specified Operation A	nchorage sentencing	outcomes
	n	%
Prison	3	2
Probation	23	11
Periodic detention	3	2
Suspended sentence	2	1
Community Service order	6	3
Bond	29	14
Supreme court	14	7
Not finalised	14	7
Dismissed	108	53
(Total) (a)	(202)	(100)

(a) Excludes 30 offenders with missing information

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

Strictly following only a specific offence over-estimates the number of dismissed offences, the number of cases sent to the Supreme Court and those cases not yet finalised. To address some of these issues other related outcomes were examined and a further 117 sentencing outcomes were identified. These were combined with the information in Table 8 to produce a measure of outcomes resulting from offences committed during Operation Anchorage. This combined information is shown in Figure 11.

The majority of offenders were placed on a probation order or were released under a bond (29% and 20% respectively). Eleven per cent of the sample was imprisoned as a result of an apprehension during Operation Anchorage (n=24), while 14 per cent had their charges dismissed without further penalty (see Figure 11). For the majority of cases categorised as 'not finalised' this simply meant that the offender had absconded on bail, failed to appear for further appearances and a warrant had been issued, or the case was still open.



(a) Excludes eight offenders who didn't have a record on the court system or whose Operation Anchorage offence was missing/could not be found

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

Predicting time to re-offending post intervention

Thirty-six per cent of property offenders who were arrested during Operation Anchorage had not re-offended by the end of the follow-up period, which was 31 December 2002. The survival curves indicated that there were no significant differences in the time to re-offending for juveniles and adults. However there are other possible factors that may help explain time to re-offending. As described at the beginning of this section the extent of data available on offenders is limited. A Cox proportional hazards model was estimated to predict time to re-offending from the initial arrest during Operation Anchorage till the next offence with a number of predictor variables.²² The predictor variables used in this model are:

- High volume recidivist offender (where a value of 1 was assigned to 15 or more offending episodes and 0 is other);
- Male (where 1 is male and 0 is female);
- Juvenile (where 1 is juvenile and 0 is adult);
- ATSI status (where 1 is ATSI and 0 is other);
- Mental health (where 1 is any mental health issues and 0 is other);
- Education (where 1 is completed Year 8 or less and 0 is other);

- Heroin user (where 1 is a heroin user and 0 is other);
- Breach (where 1 is if they have ever had a breach and 0 is no breaches);
- Drug and alcohol rehabilitation (where 1 is they have ever attended and 0 is no recorded attendance);

• Behavioural programs (where 1 is they have ever attended and 0 is no recorded attendance); and

• Remanded (where 1 is they were remanded during Operation Anchorage and 0 is no remand).

Table 9 provides estimates, standard errors, significance and odds ratios from the regression analysis.²³ Effects are most often interpreted as odds and these types of models allow us to ask how a particular factor will change the odds of re-offending. As has been noted some of the socio-demographic data was not available for some offenders. To control for this the model includes a control variable for whether the person had a Corrective Services/Youth Justice Services file or not.

Table 9: Predicting time to re-offending, Cox proportional hazards model (a)				
	Parameter estimate	Standard error	Sig	Odds ratio
Male	0.40	0.25	0.11	1.50
Juvenile	0.46	0.21	0.03	1.58
ATSI	0.12	0.25	0.64	1.13
Mental health problems	-0.17	0.20	0.38	0.84
Completed Year 8 or less	0.38	0.22	0.08	1.46
Heroin user	0.40	0.21	0.06	1.49
Breach	1.09	0.26	0.00	2.97
Attended D&A rehabilitation program	ms -0.11	0.21	0.57	0.89
Attended behavioural programs	0.31	0.21	0.15	1.36
Was remanded during Operation	-0.46	0.23	0.05	0.63
High volume offender	0.83	0.22	0.00	2.30

Number of observations=232, model chi-square=134.37, df=12, sig=.00

(a) Model controls for record availability

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

The model indicates that after adjusting for the differences in the other predictor variables there is a significant difference between juveniles and adults in time to re-offending. The odds ratio indicates that juveniles have an increased likelihood of re-offending. Other factors that increase the likelihood of re-offending are poor education levels, being a heroin user, having breaches and being a high volume offender. The only significant factor that reduces the likelihood of re-offending is having spent time on remand during Operation Anchorage.

On average the mean time to re-offending was 311 days for the total sample. The strongest effects in the model are for breaches (odds of re-offending are almost tripled), being a high volume offender (odds are almost two-and-one-half times) and being on remand (odds are reduced by almost half). The mean days to re-offending in Table 10 indicates that on average the shortest time to re-offending is 115 days for high volume offenders. Although the mean time to re-offending indicates that those who have spent time in remand reoffend quicker the multivariate model shows that when the characteristics of offenders, particularly their serious offending history and drug use are taken into account, then remand will significantly delay the time to re-offending.

	Number	Mean days to re-offending
Total sample	232	311
Male	189	291
Female	43	399
Juvenile	76	279
Adult	156	327
ATSI	33	171
Non-ATSI	199	335
Mental health problems	56	234
No mental health recorded	176	336
Completed Year 8 or less	37	148
Other	195	343
Heroin user	68	167
No record of heroin use	164	371
Breaches	137	199
No breaches	95	474
Attended D&A rehabilitation programs	63	208
No record of attendance	169	350
Attended behavioural programs	64	154
No record of attendance	168	372
Remanded	56	221
Not remanded	176	340
High volume offender	65	115
Other	167	388

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

Property offenders in the ACT

Offending levels

One of the aims of the research was to examine whether there are any factors that distinguish recidivist offenders from the other offenders. In terms of the age at which they first started offending those with more offending episodes started at a younger age. On average those with 15 or more offending episodes committed their offence three years younger than those with only one or two offending episodes (see Table 11). As offending episodes increase, the proportion of males increases while females decrease (from 23% to 20% to 11%). High volume offenders have completed fewer years of school, are more likely to be in government housing, and are more likely to be a drug user and to have mental health problems.

Table 11: Demographics by offending levels (column percentages) (a)			
Number of offending episodes			pisodes
	1 or 2	3–14	15+
Mean age (median)			
Start of Operation Anchorage	22 (19)	24 (22)	25 (23)
At first offence*	21 (19)	21 (18)	18 (17)
Gender			
Male	77	80	89
Female	23	20	11
(n)	(56)	(104)	(64)
Education			
Still in school	25	12	2
Year 8 or less	17	19	34
Year 9	17	23	25
Year 10	33	32	29
More than Year 10	8	15	10
(n)	(12)	(75)	(61)
Marital status			
Single	78	68	65
Defacto	6	22	27
Married	6	3	2
Separated	11	7	6
(n)	(18)	(80)	(63)
Accommodation status*	. ,	. ,	. ,
Government housing	22	28	36
Private rental	0	10	19
Parents	61	45	24
Other	17	17	21
(n)	(17)	(80)	(62)
Health*	. ,	. ,	. ,
No problems	38	10	5
Mental health	0	6	2
Substance use	38	56	59
Mental & substance	25	28	35
(n)	(16)	(79)	(63)

(a) Excludes offenders with no Corrective Services/Youth Justice Services files (n=62) * Statistically significant differences at p <.05

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

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There are further differences between high and low volume offenders in terms of other social factors (see Table 12). High volume offenders are more likely to be:

- Indigenous;
- unemployed; and
- using illegal drugs, particularly heroin.

Table 12: Social factors by offending levels (column percentages)(a)			
	Numbe	r of offending ep	oisodes
	1 or 2	3–14	15+
Indigenous offenders			
Yes	15	17	25
No	85	83	75
(n)	(20)	(83)	(64)
Employment status*			
Unemployed	42	68	90
Employed	42	20	8
Student	16	12	2
(n)	(19)	(81)	(61)
Drug use*			
Any illicit drug	40	73	86
Cannabis	30	64	64
Heroin	5	32	61
(n)	(20)	(85)	(64)

(a) Excludes offenders with no Corrective Services/Youth Justice Services files (n=62) *Statistically significant at p<.05 $\,$

Source: Australian Institute of Criminology, ACT Recidivists Study 2003 [computer file]

Property offenders in the ACT

Predicting high volume recidivism

One of the vexatious problems in recidivism is defining what the term means. In reviewing the literature there is considerable diversity in the way in which recidivism is defined and understood. Often this diversity results from pragmatic decisions based on the available sources of data and the aim of the study. Take for example, the issue of offence specialisation. If researchers are interested only in offenders who commit the same type of offence (i.e. burglars with any subsequent reconvictions for burglary), then this approach would entail a more narrow definition of recidivism than one that defines recidivism as any offending post a conviction.

Likewise the definition adopted by researchers interested in the severity of offending will dictate the focus and definition of the research. If the focus is on serious offenders, a releasee who is charged with a minor offence would not be classified as a recidivist (Ross & Guarnieri 1996). Under these circumstances a more narrow definition of recidivism will apply and researchers may choose to exclude good order offences for example, or look only at further offending if it is of equal or greater seriousness.

As the working definition of recidivism can vary, so too can the information used to measure recidivist behaviour. Recidivism is commonly measured by using the following, or a combination of the following, data sources:

- Arrest data;
- · Conviction data;
- Imprisonment data; and
- Self-report data.

Recidivism studies based on self-report information have some advantages over using officially recorded information, as well as some limitations. Guarnieri (1993) discusses this method of data collection and states that the main benefit of self-report information is the ability to obtain information otherwise not available through official means, specifically relating to frequency of offending (including unrecorded offending) and various motivations for offending. In this respect the method overcomes some of the limitations of administrative data.

However, the main disadvantage to this approach is that the data are more difficult to obtain. Not only are willing participants difficult to find, the validity of their responses may also be questionable. In self-report studies problems of recall error and non-response can occur and lead to biases in the sampling process (Blumstein et al. 1986). These and other methodological issues are explored further in the work of Maltz (1984), Lloyd, Mair and Hough (1994), Carcach and Leverett (1999) and Makkai (2000).

This study relies on administrative data and as a result under-estimates the true level of offending. A logistic regression model was estimated to predict high volume offenders. High volume offenders are defined as those who had 15 or more offending episodes,

which represents 18 per cent of the sample. In the previous analyses high volume offenders were found to have a very high likelihood of re-offending and the number of days from the original arrest during Operation Anchorage to the next offence is the shortest at 115 days.

A number of socio-demographic factors have been shown to be associated with high volume offenders. The predictor variables used in this model were:

- Male (where 1 is male and 0 is female);
- Juvenile (where 1 is juvenile and 0 is adult);
- ATSI status (where 1 is ATSI and 0 is other);
- Mental health (where 1 is any mental health issues and 0 is other);
- Education (where 1 is completed year 8 or less and 0 is other);
- Heroin user (where 1 is a heroin user and 0 is other);
- · Breach (where 1 is if they have ever had a breach and 0 is no breaches); and
- Violent (where 1 is they have ever committed a violent offence and 0 is no violence).

Table 13 provides estimates, standard errors, significance and odds ratios from the regression analysis.²⁴ Effects are most often interpreted as odds. For example the odds of an offender being a high volume offender are increased by a factor of 3.21 if the offender is male, controlling for any possible effects from the other predictors. When the odds ratio is below 1 it indicates the odds of being a high volume offender are decreasing, above 1 the odds or likelihood is increasing.

Table 13: Predicting high volume offenders, logistic regression (a)				
	Parameter estimate	Standard error	Sig	Odds ratio
Males	1.17	0.54	0.03	3.21
Juvenile	0.03	0.46	0.95	1.03
ATSI	0.21	0.49	0.66	1.24
Mental health	0.20	0.40	0.62	1.22
Completed Year 8 or less education	0.53	0.44	0.23	1.69
Heroin user	1.11	0.39	0.01	3.04
Breaches	2.35	0.66	0.00	10.44
Prior violence	1.15	0.40	0.00	3.16
Constant	-4.93	0.92	0.00	0.00

Number of observations=232, model chi-square= 98.09, df=9 sig=.00; Cox & Snell R square=.35; Nagelkerke R Square=.50 (a) Model controls for record availability

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

The model is a good fit to the data. The effects for the individual coefficients show that being a juvenile, ATSI, having mental health problems recorded in the file and having completed Year 8 or less of education are not statistically significant predictors of high volume offenders. The important predictor variables are gender, drugs and criminal history. Males are more likely to be high volume offenders, as are those who are known to be heroin users, and those who have been convicted of breaches and violent offences.

It is interesting to note that:

- in neither this model nor the time to re-offending model did Indigenous status have a direct significant effect, after other factors were controlled for; and
- there is no difference in the time to re-offending for males and females, however males are significantly more likely to be high volume offenders.

Some caveats are warranted. The socio-demographic data has been taken from manual records. As a result it may not be entirely accurate (and in a small sample such as this inaccuracies can have a greater impact) and some of the characteristics, such as education status, can change over time.

In addition a measure of heroin use is not a measure of dependency nor does it allow us to assume a causal link (Makkai & McGregor 2002; Makkai & Payne 2003 for further discussions on this matter). However, these data confirm other recidivist research–drugs, gender and prior offending are important predictor variables for recidivism.

Top 20 offenders

As has been demonstrated, a relatively small number of offenders accounted for a large number of offending episodes. Are prolific offenders statistically more likely to be incarcerated? In this part we focus on the top 20 offenders who had an average of 47 offending episodes over the whole of their criminal careers, compared to an average of nine episodes for the other 205 offenders. Eighty per cent of the top 20 offenders had been in prison prior to the operation as compared to only four per cent of the other offenders. Post their first arrest during the Operation until 31 December 2002, 55 per cent of the top 20 offenders of number of days detained post intervention until 31 December 2002, the top 20 had spent an average of 131 days in prison and 108 days on average in remand; this compared to an average of 28 days in prison and 26 days in remand for the remainder of the sample.

Did offending rates vary following Operation Anchorage? As older offenders will have had more time to offend prior to the operation, the same number of days post the intervention was compared to the same number of days pre the intervention for each offender. Thus in comparing the number of offending episodes an offender who had 200 days post intervention till 31 December 2002 was compared to the 200 days pre intervention in terms of the number of offending episodes. The average number of offending episodes for the top 20 was 11.6 pre intervention and 6.8 post intervention while for the total sample it was 3.2 pre and 2.4 post. Thus there was a 41 per cent reduction in offending amongst the top 20 as compared to a 25 per cent reduction for the other 205 offenders. Unfortunately the research team were not provided with unit record data that linked the individual offender to each burglary so it was not possible to definitively state that the reduction in offending was due to the offender being detained, however it is reasonable to attribute the decline to this factor. The next section undertakes a more detailed aggregated analysis of offending behaviour and incarceration.

Conclusion

This section of the report has concentrated on property offenders and their sociodemographic and offending profile. In general the majority of offenders who were arrested for a property offence during Operation Anchorage had committed prior offences. Furthermore the majority had re-offended in the period following this arrest till the end of the follow-up period at 31 December 2002.

In terms of predicting time to re-offending the strong predictors were high volume offending, breaching previous orders and being remanded into custody at some point during Operation Anchorage. Other important factors were juvenile status, education levels and heroin use. High volume offending was the strongest predictor. Further analyses showed that drugs, gender and prior offending were important predictors of high volume offending. The analyses of the top 20 offenders indicate that offending rates declined post the operation, when their rates of being detained (either in prison or remand) increased. The effect of incarceration on burglary rates is explored further in the last section of this report.

Property offenders in the ACT

The finding of a significant effect for breaches is interesting. Research on predicting graduation from the south east Queensland drug court found that offenders with breaches were less likely to graduate (Makkai & Veraar 2003). It would appear that breaching might indicate a lack of commitment to obeying the 'rules'. In terms of interventions a continuous history of breaching may indicate the need for a 'stronger' Criminal Justice System response than might normally be warranted.

¹² For example the Productivity Commission uses recidivism rates in its Report on Government Services as one measure of the effectiveness of the overall performance of the Criminal Justice System in Australia (Steering Committee for the Review of Commonwealth/State Service Provision 2003).

¹³ Appendix 1 provides more details on relevant literature on this topic.

¹⁴ Originally there were 233 offenders, however upon further examination it was found that two offenders were in fact the same person.

¹⁵ Appendix 3 provides a complete list of the variables.

¹⁶ See Makkai & Veraar (2003) for similar issues in relation to evaluating the effectiveness of drug courts. ¹⁷ Although the majority of offenders use illegal drugs it is not necessarily the case that this is causally related to

their offending (Makkai & McGregor 2002; Williams 2002; Makkai & Veraar 2003; Makkai & Payne 2003).

¹⁸ Unlike other jurisdictions, burglary in the ACT is often charged in conjunction with theft or other offences committed during the burglary, so what would normally result in a charge of solely burglary can result in charges of burglary, theft and damage in the ACT if charges are used as the counting rule. ¹⁹ The Operation began at the end of February 2001 and concluded at the end of June 2001.

²⁰ There are difficulties in working out the exact time that a person spent in prison as they can be released early for a variety of reasons. The assumption is made that the person served the total time in prison/ remand. However in five cases there was an offence date prior to the end of their prison sentence. As we have no way of knowing when these people were released (or if there were recording errors) these five people are excluded from Figure 10.

²¹ Appendix 3 provides a series of case studies to highlight the variety of criminal careers and the difficulties in tracking such career paths.

²² The Cox proportional hazards technique models the time to re-offending rates as a log-linear function of a series of selector predictors. The regression coefficients give the relative effect of each predictor variable on the re-offending rate (Tabachnick & Fidell 2001).

²³ A series of models were estimated. This final model includes predictors thought to either be of significance for policy purposes or have been shown be important in prior research.

²⁴ A series of models were estimated. This final model includes predictors thought to either be of significance for policy purposes or have been shown to be important in prior research. In some cases some variables could not be included because of high correlations. For example prior imprisonment is not included in the model as all the high volume offenders had experienced at least one prior imprisonment, and there is a very high correlation between the education variable and unemployment status.

Section 4. Offender behaviour and incarceration over time

Offender behaviour and incarceration over time

To examine the effects of incarceration and recidivist offending before and after Operation Anchorage, a subset of offenders has been selected to examine long-term recidivism. While the complete number of offenders in the study comprised 232 individuals, this part of the project focused on a subset of 119 offenders who had committed at least one recorded offence prior to Monday 28 December 1998, and who were charged with offences during Operation Anchorage. These were defined as being long-term recidivist offenders.

This was necessary in order to understand the impact of the changing criminal justice environment on a stable offending community without the complication of new offenders being introduced to the study part way through the four-year examination period. This helps to overcome measurement issues associated with a concentrated police operation, such as Anchorage, that are likely to arrest offenders who have not come to the notice of the police before. In other words, the offending population known to the criminal justice system can be potentially swelled by the police operation.

Selecting this sub-group ensures that the analysis is concentrated on a stable group of known, recidivist offenders, and charts their experiences in the criminal justice system from 1999 to the end of 2002. The study subset remains constant at 119 throughout this part of the analysis; ensuring that increases and decreases in activity are real and not a facet of counting practices. Three components of the 119 offenders' behaviour for the fouryear period are: number of days with offences charged, days remanded into custody, and days spent in prison. The final section examines the relationship between incarceration and the burglary level before, during and after Anchorage. We start by examining the offence patterns of the offender subset. This section is based on aggregated rather than individual level data.

Recorded offending episodes per week

The following chart shows the number of offending episodes per week for the 119 offenders in this part of the study (Figure 15). The start and end dates of Operation Anchorage are shown by vertical lines, a device that continues to other graphs in this section. The high episode rate during Anchorage is to be expected, given that each offender must have been charged with an offence during that time to be included in the study. This peak during Anchorage should therefore be ignored. Of more interest is the apparent slight reduction in episodes per week by this offender group after Anchorage compared to before the operation. This apparent reduction can be tested statistically with a one-way analysis of variance test.



Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

The analysis of variance test (ANOVA) examines the hypothesis that means from the weekly episode rate prior to Anchorage and after Anchorage are equal (in other words drawn from populations with the same mean). Although ANOVA is not robust with respect to violation of heterogeneity of variances when the sample sizes within treatment groups are unequal, that is not an issue here as the sample sizes tested are identical using the same number of weeks before and after Anchorage. More usefully, ANOVA is considered to be robust with respect to violation of the assumption of normality in the underlying populations, as well as to heterogeneity of the sample variances.

Two tests were conducted to challenge the null hypothesis that the mean number of episodes per week was the same before and after Operation Anchorage. Two time periods were selected: 6 months and 12 months. The 26 observations prior to Anchorage were compared to the 26 observations after Anchorage. The results are shown in Table 14.

Table 14: Six and 12 months before an weekly mean episode rate	 Six and 12 months before and after Anchorage ANOVA test of weekly mean episode rate 		
	6 months	12 months	
Mean episode rate BEFORE Anchorage	6.57	5.84	
Mean episode rate AFTER Anchorage	4.80	4.26	
Test statistic (F)	5.46	8.87	
Significance (a)	0.023	0.003	

Source: Australian Institute of Criminology, ACT Recidivists Study 2003 [computer file]

The mean number of episodes per week in the 119 offenders dropped from 6.57 in the six months before Anchorage to 4.8 in the six months after Anchorage. With a <0.05 this difference is statistically significant, and is therefore a significant decrease that is unlikely to be due to random fluctuation. To test for a longer impact, 52 observations prior to Anchorage were compared using ANOVA to the 52 observations after Anchorage.

The mean number of episodes per week in the 119 offenders dropped from 5.84 in the twelve months before Anchorage to 4.26 in the twelve months after Anchorage. Again, with a <0.05 this difference is statistically significant, and is therefore a significant decrease that is unlikely to be due to random fluctuation. What this tells us is that the 119 offenders who are a stable population of known recidivist offenders have fewer offending episodes after Anchorage compared with before. Although the graph suggests that this decrease is not large, it is statistically significant. Furthermore it should be borne in mind that this decrease is only an indication of activity that came to the attention of police. In reality it is probable (given low burglary detection rates in Australia) that the offenders were responsible for significantly more crime than is recorded and detected by police.

The decrease in offending episodes can be potentially explained in a number of ways. First, it is possible that police detection ability for this offending group was lower after Anchorage than before. This however seems unlikely. Anchorage gave the police a good opportunity to get to know individual offender behaviour patterns and to gain valuable intelligence. If anything, police effectiveness will have increased post-Anchorage against the offenders in this part of the study, given that these are long-term recidivists and this group were a particular target of the operation. A more likely explanation is that the offender group here were simply committing less crime. This could occur through two different mechanisms that are not mutually exclusive. The effect of a significant police operation could have a deterrence effect, and increased police activity could increase incarceration rates.

Although the decrease in episode levels is low, the actual impact of this decrease on crime is likely to be much higher. Consider the hypothetical situation if detection rates for all recorded crime were at 10 per cent. This would mean that the decrease in actual criminal activity by the offending group would be of an order of magnitude greater than the modest drop in detected activity shown in the graph. This more realistic supposition is supported by both the decrease in crime after Anchorage and in the further analysis in the next two sections.

Custody days per week

This second part of the study examines the number of days that the offenders were remanded into custody. To calculate this, the histories of each offender in the 119 subset were examined to determine when they were placed in custody, and for how many days. A special computer program was written for this purpose. The program identified the start and end days of custody periods, and aggregated the counts into weekly classes for analysis against the Operation Anchorage dates.

The method is best indicated with examples. If one offender was remanded into custody for five days in that week, the total for the week shows five. If a second offender is in custody for the whole week, the weekly total is 12 (first offender's five days plus the second offender's seven days). If a total of three is indicated, among other options, this could mean that either one offender was in custody for three days, or three offenders were in custody for one day each that week. Although the graph does not distinguish between individual offenders, the aggregate behaviour is arguably more informative than fixating on individual cases.

Figure 13 shows the number of offender days remanded into custody per week for the 119 offenders in this part of the study. The start and end dates of Operation Anchorage are shown by vertical lines. Note the change in vertical scale from the earlier graph.





Figure 13: Days remanded into custody per week

As a reverse of the offence behaviour, there appears to be a significant increase in the number of days remanded into custody during and after Operation Anchorage. This apparent increase was again tested statistically. Two tests were conducted to challenge the null hypothesis that the mean number of recidivist custody days per week was the same before and after Operation Anchorage. Two time periods were selected: 6 months and 12 months. The 26 observations prior to Anchorage were compared using ANOVA to the 26 observations after Anchorage (Table 15).

Table 15:Six and 12 months before and after Anchorage ANOVA testof weekly mean remanded into custody rate

	6 months	12 months
Mean remand rate BEFORE Anchorage	32.34	25.94
Mean remand rate AFTER Anchorage	101.96	77.59
Test statistic (F)	125.87	112.35
Significance (a)	<0.001	<0.001

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

The mean number of custody episodes per week in the 119 offenders rose dramatically from 32.34 in the six months before Anchorage to 101.96 in the six months after Anchorage. With a <0.05 this difference is statistically significant, and is therefore a significant increase that is unlikely to be due to random fluctuation. To test for a longer impact, 52 observations prior to Anchorage were compared using ANOVA to the 52 observations after Anchorage.

The mean number of episodes per week in the 119 offenders rose sharply from 25.94 in the 12 months before Anchorage to 77.59 in the 12 months after Anchorage. Again, with a <0.05 this difference is statistically significant, and is therefore an increase that is not likely to be due to random fluctuation. This shows that the 119 recidivists spent considerably more time in custody during the latter half of Anchorage and beyond, compared to the pre-Anchorage period. This finding supports the hypothesis in the earlier offence episode section that offenders were not able to commit as much crime as before Anchorage. Incarceration, either through prison or being remanded into custody, reduces offending opportunity in the most obvious manner. The 119 offenders were spending on average 50 more days per week on custody in the year after Anchorage than the year before, and nearly 70 more days per week on custody in the six months after Anchorage than before. This figure amounts to the equivalent of the permanent removal of 10 recidivist offenders from the ACT for six months post-Anchorage.

Offender prison days per week

Finally, this part of the study examines the number of days that the recidivist offender group spent in prison, as measured on an aggregated weekly level. As for the remanded into custody days, counts are again aggregated to weekly frequencies of offender prison days per week, and are shown in the next chart. Note again the change in vertical scale.



Figure 14: Prison time



As before the apparent difference in the number of days in prison before and after Anchorage was tested, with a similar result. The results for the 6 and 12 month tests are shown in Table 16. The mean number of prison days per week in the 119 offenders rose dramatically from 33.88 in the six months before Anchorage to 119.5 in the six months after Anchorage. With a <0.05 this difference is statistically significant, and is therefore an increase that is unlikely to be due to random fluctuation. To test for a longer impact, 52 observations prior to Anchorage were compared using ANOVA to the 52 observations after Anchorage (see Table 16).

Table 16: Six and 12 months bef of weekly mean priso	 Six and 12 months before and after Anchorage ANOVA test of weekly mean prison rate 		
	6 months	12 months	
Mean prison rate BEFORE Anchorage	33.88	37.94	
Mean prison rate AFTER Anchorage	119.50	103.38	
Test statistic (F)	2593.41	494.86	
Significance (a)	<0.001	<0.001	

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

The mean number of prison days per week in the 119 offenders rose sharply from 37.94 in the 12 months before Anchorage to 103.38 in the 12 months after Anchorage. Again, with a <0.05 this difference is statistically significant, and is therefore an increase that is unlikely to be due to random fluctuation. As with the remanded into custody figures, the six month increase in prison days after Anchorage translates to the equivalent removal of over eight recidivist offenders from the ACT in the six months after Anchorage, purely due to the increased amount of time in prison.

Incarceration and offending behaviour

So what does this mean? A number of statements about the data, based on the statistical tests can be made.

- 1 We know that the number of times that the recidivist offenders were charged with criminal offences dropped after Operation Anchorage compared to the same time period before the operation.
- 2 The number of days that the offenders was remanded into custody and in prison rose dramatically and significantly after Operation Anchorage compared with similar periods beforehand.

Clearly all of this is likely to have an impact on the costs to the criminal justice system, but an equally relevant question to be asked is 'how does all of this impact on the crime level in the ACT'? This question will be addressed in the next section, however at this stage it can be shown that in the six months after Anchorage the increases in custody and prison time amounted to the effective removal of at least 15 of 119 recidivist offenders from the offending population of the ACT, over and above normal (pre-Anchorage) incarceration rates.

Incarceration and the burglary rate

This final section compares the incarceration rate, with the burglary level. The burglary level is the litmus test for Operation Anchorage, as the operation was designed as a burglary-reduction programme. The incarceration rate is calculated as the sum of the weekly prison rate and the weekly custody rate, given that an individual offender cannot be both remanded into custody and in prison at the same time. The burglary rate for the ACT is calculated as the total recorded burglaries for the ACT, and like the other data in this section is calculated as a weekly count with a week commencing on a Monday. The following graph shows both the weekly incarceration rate for the 119 offenders that persisted throughout the study, and the burglary rate.



Figure 15: Burglary and incarceration rate (number)

Source: Australian Institute of Criminology, ACT Recidivist Study 2003 [computer file]

Even prior to Operation Anchorage it is clear that the incarceration rate appears to increase as the burglary rate decreases. Prior to Anchorage there are two specific dips in the burglary rate—each coincides with Operations Chronicle and Dilute. At both of these times the incarceration rate increases to a degree, but fairly insignificantly compared to the dramatic incarceration rate increase that commences half way through Anchorage.

The increase in incarceration during Anchorage coincides with a decrease in the burglary level that extends for a substantial period of time. Analysis of the burglary time-series using ARIMA intervention time-series analysis techniques suggests that this decrease in the burglary rate extends for 45 weeks post-Anchorage. When the level of burglary appears to increase again near the end of the series, the incarceration rate of the 119 recidivist offenders in the study subset appears to diminish. There would appear to be a negative correlation in these data sets—as incarceration increases, burglary decreases, and vice versa. This can be tested statistically. A Pearson correlation coefficient (which can be used to assess the linear correlation between two data sets) was found to be -0.494 (n=209), a value that is statistically significant to a <0.01. This confirms the suspicion that the two data sets are closely correlated negatively.

Summary

This section has found that the offending rate of the 119 recidivist offenders studied decreased after Operation Anchorage. This decrease remained when measured at 6-month and 12-month intervals before and after Anchorage. This decrease in detected offending by the recidivist offenders was most likely caused by the increased level of incarceration, both through an increase in offender days spent in prison and offender days remanded into custody. Both of these factors increased statistically after Anchorage over the short and long term.

The increase in the incarceration rate coincided with the impact of the intelligence-led burglary reduction strategy, Operation Anchorage. This strategy involved targeting repeat property offenders who were more likely to face a period of incarceration if processed through the criminal justice system. As the incarceration rate increases the burglary level reduces. This correlation is lagged both positively and negatively with no one lag being more significant than any other. There is a statistically significant negative relationship between the recidivist incarceration rate and the burglary level.

Although the direct impact of the change to the Bail Act or the contribution of Corrective Services programs on offending were not possible to assess or be empirically verified, we know that during Operation Anchorage:

- the recidivist offending rate decreased after Anchorage;
- the recidivist incarceration rate increased at the same time;
- the burglary level reduced as incarceration increased; and
- all of these relationships are statistically significant.

It may not be possible to answer at this stage the exact degree of the crime reduction that resulted from the increased incarceration of the recidivist population. The increase in custody and prison days will have been more widespread across the ACT offending population than just the subset of the 119 offenders, but it is not possible with the data available to assess the full extent of the increase in incarceration across the ACT.

Furthermore, while there is clearly a relationship between increased incarceration and reductions in burglary, and that this relationship is likely to be theoretically causal, it is not possible to establish how much crime has been reduced through incarceration. However, the data is certainly strong enough to support a conclusion that a non-trivial amount of burglary was prevented through the increased incarceration of recidivist offenders during Operation Anchorage. The remaining decrease in crime is likely due to deterrence and the reduced opportunity for criminality resulting from increased police activity in and around crime hotspots and the increased surveillance of recidivist offenders still at large in the community during the police operation.

Conclusion

This research has sought to provide an evidence base on which to assess the key factors that had been anecdotally proposed as reasons for the strong decline in burglary rates in the ACT during 2001. In the first half of 2001 a major police operation was mounted that included as part of its strategy the regular targeting of known repeated property offenders. To provide the evidence base it was necessary to collect the criminal histories of those arrested during Operation Anchorage. Subsidiary questions relating to the impact of Corrective Services programs for offenders and changes to the Bail Act required additional material be collected from the Department of Corrective Services client files and the ACT courts. As many offenders are juveniles their files were also accessed.

The ACT does not have an integrated criminal justice tracking system. As a result the data was manually collated from Corrective Services files, Juvenile Justice files, and court records. The problems found in the collation have been documented in the appendix of this report. These difficulties meant that it was not possible to assess the contribution of Corrective Services programs or the direct impact of the changes to the Bail Act on the level of offending by recidivist offenders. It was also difficult to directly link sentence outcomes with particular offences.

In addition to criminal histories the aggregated burglary rates from the end of 1998 through to the end of 2002 were also examined. The research found that Operation Anchorage was successful in its aim to reduce burglary crime in the ACT. Recorded crime declined during the operation and lasted some 45 weeks after the operation had finished. It is estimated that 2,445 offences were prevented during this 45-week period.

Although the direct impact of the change in the Bail Act on offending could not be empirically verified, during the operation there were higher levels of incapacitation than had occurred prior to the operation. Offenders were significantly more likely to be placed in custody during this time. The average number of custody periods per week rose from 32.34 in the six months before Operation Anchorage to 101.96 after the operation. Further analyses showed that being remanded into custody had a significant effect in delaying the time to re-offending.

Furthermore there was a significant negative correlation between the average number of weekly incapacitation days (both remand and prison) and the weekly burglary rate; as one goes up the other goes down.

An alternative explanation for the decline in the burglary rate was the impact of the heroin shortage. To test for this possible effect a time-series model was estimated with the burglary rate from a comparable Sydney district included in the model. The burglary rate was not found to be significantly associated with the ACT burglary rate. This suggests that the ACT burglary reductions were unlikely to have been due to the heroin drought.

However the analyses are based on aggregated data, which do not necessarily mean that such a finding would be replicated at the individual level. Analyses of individuals indicate that being a heroin user is significantly associated (it is impossible to determine causation from the available data) with being a high volume offender.

Operation Anchorage was successful in targeting recidivist property offenders. Seventyseven per cent had at least one prior offending episode. As the majority of offenders who were arrested for a property offence during Operation Anchorage were recidivist offenders it is not surprising that the majority had re-offended in the period following this arrest. To determine what factors delayed the time to re-offending a regression model was estimated. The significant factors were:

- high volume offender;
- · breaching previous orders;
- · being a juvenile;
- having low education levels; and
- being a heroin user.

One factor increased or delayed time to re-offending:

· being placed on remand at some point during Operation Anchorage.

The most significant factor in time to re-offending was being a high volume offender. Further analyses found four significant predictors of high volume offending:

- being a heroin user;
- being male;
- · breaching previous orders; and
- a prior violent offence.

It was estimated that the ACT community were saved approximately \$7.1 million in burglary costs. However these savings need to be offset against the cost of the operation and ACT courts and corrective services interventions. Incapacitation costs were estimated to be \$3.5 million. In conclusion the evidence indicates that the criminal justice system had a significant affect on burglary rates. This was accomplished through the effective of targeting of recidivist offenders who were then incapacitated by the courts.

Appendix 1: Literature review

Literature review

Research cannot identify all casual factors of crime or re-offending. There are many complex and inter-related social and behavioural factors (including the less 'static' demographic factors such as marital status and employment status, and dynamic characteristics such as anti-social cognitions) that may influence offending behaviour. However, presented here, and in the table that follows, are some of the factors commonly thought to affect recidivism.

Research shows that in general the likelihood of re-offending can be influenced by:

Offenders' prior record:

Klein & Caggiano 1986; Spohn & Holleran 2002; Ulmer 2001; Langan & Levin 2002; Office of the Legislative Auditor 1997; Oldfield 1996; Klein & Caggiano 1986; May 1999; Cooke & Michie 1997; Lloyd, Mair & Hough 1994; Carcach & Leverett 1999; Ross & Guarnieri 1996; Doherty 2002; Baumer 1997.

Age-of-onset:

Thomas, Hurley & Grimes 2002; Klein & Caggiano 1986; Cooke & Michie 1997; Ross & Guarnieri 1996; Coumarelos 1994.

Age of offender:

Spier 2001; Langan and Levin 2002; Baumer 1997; Lloyd 1994; Oldfield 1996; May 1999.

Gender:

Ulmer 2001; Thomas, Hurley & Grimes 2002; Spier 2001; Langan & Levin 2002; Oldfield 1996; May 1999; Lloyd, Mair & Hough 1994; Roshier 1995; Doherty 2002; Baumer 1997.

Ethnicity:

Langan & Levin 2002; Spier 2001; Victorian Department of Human Services 2001; Department of Families, Youth & Community Care 1998; Doherty 2002.

Type of convicted offence:

Ulmer 2001; Langan & Levin 2002; Thomas, Hurley & Grimes 2002; Doherty 2002; Oldfield 1996; Office of the Legislative Auditor 1997; Baumer 1997; May 1999.

Employment status:

Klein & Caggiano 1986; May 1999; Salmelainen 1995; MacKenzie & De Li 2002.

Education levels: Ulmer 2001.

Substance abuse:

Klein & Caggiano 1986; May 1999; Cooke & Michie 1997; Salmelainen 1995.

Type of sanction imposed:

MacKenzie 1997; Gendreau, Goggin & Cullen 1999; Tait 2001; Spohn & Holleran 2002; Pearson, Lipton & Cleland 2002; MacKenzie & De Li 2002; Ulmer 2001; Spier 2001; Roshier 1995.

Appendix 1

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Study involved a stratified random sample of 528 offenders in Indiana. All offenders were released between 1991 and 1995 and were tracked for rearrests and probation revocations until August 1997.	The strongest predictor of rearrest (and its severity) was prior criminal record. This effect was cumulative – each increase in the prior record scale was associated with a 32 per cent increase in the odds of rearrest.
Four categories of offender were studied: 1) those sentenced to intermediate sanction programs (i.e. house arrest or work release); 2) those sentenced to traditional probation; 3) offenders sentenced to county jail; and 4) offenders sentenced to state prison. Goal was to compare the probability and severity of continued criminal activity between adult felony offenders sentenced to intermediate sanction options and those	Other predictors of rearrest (in descending order):Gender (males were more likely to re- offend). Type of offence (those convicted of property crimes had odds of rearrest that were two-and-a-half times greater than other offences and had a 74 per cent probability of rearrest). Education (was found to be associated with moderately decreased odds of rearrest for each year achieved).
sanctions (incarceration and traditional probation).	sanctions of any type may potentially reduce recidivism but only to the extent that they include a rehabilitative emphasis.
Study aimed to gauge the prevalence of recidivism in young adults (18 to 25 years) by examining the convictions histories of young adults convicted in Canadian criminal courts in 1999/2000 (n=56,774).	Sixty per cent of offenders in the sample group were recidivist offenders.Males were more likely to be recidivist offenders, with 62 per cent having a prior conviction compared to only 48 per cent of female offenders.The most frequent occurring offences for recidivists were theft.Recidivists convicted in property cases had the highest levels of prior convictions for offences of the same type. The mean number of prior convictions for recidivists appeared to be associated with their age at the time of their first offence – that is, the younger the offender at the time of first offence resulting in conviction (age of onset), the larger the number of prior
	Study involved a stratified random sample of 528 offenders in Indiana. All offenders were released between 1991 and 1995 and were tracked for rearrests and probation revocations until August 1997. Four categories of offender were studied: 1) those sentenced to intermediate sanction programs (i.e. house arrest or work release); 2) those sentenced to traditional probation; 3) offenders sentenced to county jail; and 4) offenders sentenced to state prison. Goal was to compare the probability and severity of continued criminal activity between adult felony offenders sentenced to intermediate sanction options and those sentenced to more traditional sanctions (incarceration and traditional probation). Study aimed to gauge the prevalence of recidivism in young adults (18 to 25 years) by examining the convictions histories of young adults convicted in Canadian criminal courts in 1999/2000 (n=56,774).

AIC Research and Public Series

Recidivism of Prisoners released in 1994 (USA)	The study tracked 272,111 former inmates (representing two- thirds of all prisoners released in the US that year) for three years after their release in 1994.	Approximately 68 per cent of the prisoners were rearrested for a new offence. Released prisoners with the highest rearrest rates were property offenders.Men were more likely to be rearrested than women, blacks more likely than whites, younger prisoners more likely than older ones, and prisoners with longer prior records more likely than those with shorter records.No evidence was found that spending more time in prison raises the recidivism rate. The evidence was mixed regarding whether serving more time reduces recidivism.
Recidivism Patterns for People Convicted in 1995 (NZ)	The study looks at prior and post offending histories of the 104,920 people with a convicted case in 1995. The post- offending follow-up period was two years.	The study looks at prior and post offending histories of the 104,920 people with a convicted case in 1995. The post-offending follow-up period was 2 years. Three-quarters of people convicted in 1995 had prior convictions. Approx 40 per cent of the people convicted in 1995 were reconvicted within one year, 51 per cent within two years. Males were more likely to be reconvicted in the two years after release than females, and at a faster rate. Maori offenders convicted within the two years than European offenders, and at a faster rate. Study found a relationship between age of offender and the time to reconviction: over 70 per cent of 17 to 19 year olds were reconvicted within two years, compared with only 29 per cent of people aged at least 40 years. Eighty per cent of people imprisoned in 1995 were reconvictions and the time to reconviction: the more extensive the offending history of a person, the greater the likelihood that the person would be reconvicted within two years. More than four out of every five burglars convicted in 1995 were reconvicted of an offence within two years, with 56 per cent of burglars being reconvicted for a property offence within two years.

Appendix 1

Recidivism of Adult Felons (USA)	Research tracked 1,879 offenders released from prison in 1992 and 6,791 offenders sentenced to probation in 1992.For each offender they examined recidivism for three years-from a prisoners date of release or from a probationer's date of sentencing.	 Looked at length of offenders' prior criminal history as an indicator of likelihood of re-offending. On average prisoners have longer prior criminal histories than probationers, therefore: 59 per cent of offenders were rearrested, 45 per cent were reconvicted and 28 per cent were imprisoned for a new offence (and an additional 12 per cent for technical violations of release conditions). 42 per cent of probationers were rearrested, 28 per cent were imprisoned for new offences (and a further four per cent for new offences). Prisoners and probationers with similar prior criminal records had similar rates of recidivism.Property offenders were more likely to be rearrested than violent offenders. Many offenders committed a variety of crimes.In most cases program participants had recidivism rates similar to non-participants.
The Kent Reconviction Survey (UK)	Report based on analysis of the reconvictions of 857 offenders who commenced probation supervision in Kent in 1991. Report followed offenders for five years from the start of their orders.	In the first two years 40 per cent of probationers had been reconvicted, 48 per cent in the full five-year period. Gender: men re-offended more than women. Age: younger offenders re-offended more than older ones.Offence type: offenders involved in motor vehicle theft, burglary and robbery all had the highest rates of reconviction. Factors that had a positive impact on the volume of re-offending:Offenders with previous periods of custody; those with burglary-related offences, those aged 17–20, offenders with high number of previous convictions.

AIC Research and Public Series
The Prevalence, Predictability and Policy Implications of Recidivism (USA)	This study used data collected from the Rand Inmate Survey conducted in 1978. This was used to estimate each released inmate's score on five re- offending 'prediction' models. To test the prediction models, criminal history data was obtained for those of the above offenders who had been released from prison for at least 12 months at 1984 (n=1285).	More than 50 per cent of inmates that were followed for at least 36 months were arrested after their release from prison.The study achieved little accuracy in predicting recidivism using the offending prediction models. Did find that certain variables correlated with recidivism:extent of prior record; age at first arrest, first commitment, and release from prison; history of substance abuse; and extent of employment.
Explaining Reconviction Following a Community Sentence: The Role of Social Factors (UK)	This study used data from 1993 on more than 7,000 offenders to examine reconvictions within two years of commencement of a community penalty. It examines the additional influence that a range of social factors may have on recidivism.	Type of offence: reconviction rates higher for burglars. Gender: reconviction was lower for females than for males. Age: reconviction rates were lower for older offenders. Criminal history: the reconviction rate was higher for offenders with a history of previous convictions and periods in custody. Reconviction rates were lower for community service than for probation. Drug use, employment status, and accommodation status were all related to reconviction. Also, offenders with multiple problems were more likely to be reconvicted.
Predicting Recidivism in a Scottish Sample (Scotland)	Prospective study based on a sample of prisoners who were interviewed in 1989/91, then followed up in June 1995 (n=308).	72 per cent of the sample were reconvicted within two years of release and 48 per cent were reimprisoned in the same interval. Study suggests that there are five types of measure which are particularly useful in predicting recidivism:Whether prisoner had a childhood record (age at first conviction); Frequency of offending (adult appearance rate); Criminal career length;Type of crime committed; Measure of drug use.

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A Comparative Study of Reconviction Rates in Cleveland (UK)	The study looked at four groups each of 75 offenders: those on community service; probation; probation with conditions; and those in custody. The offenders were tracked from mid-1993 for a period of 2 years. An 'expected' reconviction rate was calculated for each offender group. Reconviction rates were compared between the groups and against their 'expected' reconviction rates.	Overall, 54 per cent of offenders were reconvicted in the two years under review – the highest proportion were those in custody and those under probation with conditions. Variables most related to risk of recidivism were: Gender, age of offender and age at first conviction, number of Youth Offender Institution sentences and number of previous convictions. Looking at expected and actual reconviction rates the report concluded that in Cleveland, probation and community service achieve better results in terms of subsequent reconviction rates than custody and probation with conditions – and that the difference was greater than expected.
Explaining Reconviction Rates: A Critical Analysis (UK)	Research is a comparative study of two-year reconviction rates for offenders serving community service orders, probation orders with conditions, probation orders, and imprisonment terms (n=18,000).	Past offending was one of the best predictors of recidivism. Younger and male offenders were more likely to be reconvicted than older and female offenders. While females had much lower rates of reconvictions than males, this can be explained largely in terms of differences in age and criminal history. Reconviction rates for the four groups were very close to the rates expected for
Recidivism Among Juvenile Offenders: An Analysis of Time to Reappearance to Court (Aust.)	This study looked at 5,509 young people who recorded a proven court appearance in New South Wales courts during July 1992 and June 1993. The offenders were followed until June 1997. The primary focus of the report is on time to recidivism, rather than recidivism, rather than recidivism rates. As 'the time elapsed between consecutive proven court appearances is a measure of the intensity of delinquent careers'.	each on the basis of offender's age, criminal history and pattern of offending. There was no firm indication that community penalties outperformed custody or vice versa in preventing re- offending.
		Of the sample 37 per cent recorded a subsequent court appearance, and the average time until reappearance was just under 18 months. The study found no significant differences between males and females with respect to time to reappearance. A history of previous proven appearances contributes to reduce the time reappearance. Findings indicate that once juveniles have experienced a relatively large number of court appearances, the type of penalty imposed on them makes no impact on their times to re-offend

Recidivism Rates in a Custodial Population: The Influence of Criminal History, Offence and Gender Factors (Aust.)	This study followed the recidivism patterns of 838 offenders on their release from Victorian prisons between 1985 and 1986 for a period of seven-and-a-half years.	Of the sample 74 per cent of offenders were reconvicted of at least one offence in the seven-year period. By the end of the first year half of the offenders were reconvicted.Fifty- four per cent were re-imprisoned at least once over the seven-year period-one-third in the first year after their release. Male and female releases were equally likely to be reconvicted and re-imprisoned. Those who committed their first offence as a juvenile were more likely to be reconvicted and re- imprisoned than older, first-time offenders. Releasees with many prior offences were much more likely to be reconvicted and reimprisoned than those who only had a few priors. Those convicted of property offences were much more likely to be reconvicted and reimprisoned than those convicted of homicide.
Recidivism Among Victorian Juvenile Justice Clients 1997–2001(Aust.)	Reports recidivism rates for all young offenders in the Juvenile Justice program over a one year period from July 1997 and June 1998 (n=1527). Offenders were followed for a two year period upon release.	Just under 50 per cent of the total sample re- offended. A lower recidivism rate was found for first-time clients compared with that of previous clients – however, recidivism rates were not markedly different between the groups during the supervised period of orders. For both groups recidivism rates were three to four times higher in the first year following completion of orders than during the second year. Males and females re-offended at similar rates. Indigenous youths recorded a recidivism rate
The Correlates of Offending Frequency: A Study of Juvenile Theft Offenders in Detention (Aust.)	Study examines the factors that determine the frequency of offending among young offenders. Data was taken from interviews with 247 juveniles who were serving a control order in a NSW detention centre between Sept 1993 and March 1994. Their most services offence was either break and enter, motor vehicle theft, and shoplifting.	Factors immediately related to lifestyle of 65 per cent compared with 47 per cent for non-Indigenous clients. Factors immediately related to lifestyle of the offender were the most important influence on frequency of offending behaviour. More so than developmental, attitude and perceptual, risk and punishment, and criminal history factors. Lifestyle factors were examined such as level of school attendance, residential mobility, employment, use of drugs, poly-drug use. The need to obtain money to buy drugs was found to be a factor that influenced the frequency of offending amongst the sample. The perceived severity of legal sanctions did not appear to influence offending frequency.

Repeat Contact with the Juvenile Justice System: contact with the Youth Court (Aust.)Study uses Youth Court data to look at juveniles who had at least one case finalised in the Youth Court in 2000 and at least one of their charges was found 'proven'.For all of these people all 'proven' cases dealt with in the Youth Court between 1996 and 2000 were examined (n= 1,616 individuals).	Study uses Youth Court data to look at juveniles who had at least one case finalised in the Youth Court in 2000 and at least one of their charges was found 'proven'. For all of these people all 'proven' cases dealt with in the Youth Court	 Half of all the youth had no prior proved cases listed against them in the five year period 1996 to 2000 — approximately five per cent had six or more prior proved cases. The number of prior cases varied according to the most recent 'major proved offence': those whose major offence was burglary were more likely to have six or more prior offences compared with those before the court for traffic or drug offences (11%, 2% and 8% respectively). For the middle age group (13–15 year olds) females were substantially more likely than males to have no prior proved cases.
	2000 were examined (n= 1,616 individuals).	For both the middle and older age groups Aboriginal youth were substantially less likely than their non-Aboriginal counterparts to have 'no prior proved cases'. For Aboriginal juveniles aged 16–18, approx 30% had no prior 'proven' cases compared with 50 per cent of non- Aboriginal juveniles in the same age category.
Juvenile Offending and Recidivism in Queensland (Aust.)	Study looks at finalised court appearances involving juveniles between 1987/88 and 1992/1993 in Queensland (n=9,086 individual young people aged 10– 16 yrs).	Approx 60 per cent of young people appeared in court only once and 75 per cent only once or twice. Overall, males tend to appear in court at earlier ages than do females. As with the likelihood of re-appearing in court, young women from non-Indigenous backgrounds were the least likely group to recidivate, and young Indigenous males were those most likely to do so. Males were more likely than females to become recidivist offenders. Recidivist offenders who are from Indigenous backgrounds were younger at their earliest appearance than those who were not from Indigenous backgrounds. Young Indigenous males had, on average, more prior proven offences than any of the other population groups identified by the data. The majority of appearances by young offenders, regardless of whether the appearance was the first appearance, the second appearance of recidivist offenders or the most recent appearance of persistent offenders, involved theft and other property related offences, suggesting that these offences are those most commonly repeated by recidivist offenders. Regardless of gender, young Indigenous people tend to have higher numbers of prior proven offences than do non-Indigenous young people. Regardless of Indigenous status, male juveniles have higher recidivism rates than do females.

Juvenile Offending and Recidivism in Queensland (Aust.) cont.		Regardless of gender, young Indigenous people tend to have higher numbers of prior proven offences than do non-Indigenous young people. Regardless of Indigenous status, male juveniles have higher recidivism rates than do females.
Levels and Predictors of Recidivism: The Malta Experience (Malta)	As most research in this area has focused on Western nations the author sought to test whether results are specific to these nations or whether these patterns of recidivism apply to a wide range of social and cultural contexts. Focusing on the Republic of Malta the study looks at the likelihood and predictors of recidivism among persons released from prison between 1976 and 1994 (n=1,230). Prisoners were followed until the end of 1994, therefore the follow-up release periods vary from one month to 218 months.	Twelve per cent were reimprisoned for a new offence within one year of release, 25 per cent within three years. Fifteen per cent of offenders were reconvicted for a new crime within one year of release, 30 per cent within three years. Predictors of recidivism were nearly identical for reconviction & reimprisonment. Significantly related to the risk of recidivism were:Gender (males);Age at release (younger offenders); Number of previous convictions (extensive criminal history); Offence type (property-related offences); and Length of confinement.
The Effectiveness of Criminal Sanctions: a Natural Experiment (Aust.)	Study attempts to address whether some criminal sanctions are more effective than others in reducing recidivism. Used criminal non-traffic matters from the NSW local court system between 1992 and 1997 (n=62,045 final appearances). Compares cohorts appearing before particular magistrates.	Sentencing can make an impact on re-offending but the patterns are context-specific. For more serious offences (such as theft and assault) diversion from detention reduces re- offending. Prison is less effective than community sanctions in reducing crime though lowering recidivism.Minimal sanctions (e.g. bonds) were more effective than low-level fines in keeping a first- time offender from re-offending.
The Effects of Prison Sentences on Recidivism (Canada)	A meta-analysis was undertaken of studies that looked at prison sentences (and other interventions) and recidivism. Studies examined either: Length of time in prison and recidivism, or Serving a prison sentence versus receiving a community-based sanction.	Findings: On both length of prison sentence and recidivism, and serving a prison sentence versus receiving a community- based sanction-prison produced slight increases in recidivism. Low-risk offenders were found to be more negatively affected by the prison experience.

The Effect of Imprisonment on Recidivism Rates of Felony Offenders: a Focus on Drug Offenders (USA)	Study evaluates the deterrent effect of imprisonment on felons convicted in 1993 in Missouri (n=1530). Recidivism rates for offenders placed on probation and those sentenced to prison are compared in terms of their recidivism rates.	No evidence was found that imprisonment reduces the likelihood of recidivism. Offenders who were sentenced to prison had higher rates of recidivism and recidivate more quickly than do offenders placed on probation.Imprisonment had a more pronounced criminogenic effect on drug offenders than on other types of offences.
The Effects of Behavioural/ Cognitive Behavioural Programs on Recidivism (USA)	Meta-analysis was conducted on 69 research studies on the effectiveness of behavioural and cognitive-behavioural treatment in reducing recidivism for offenders. Including programs in prison, jail, probation or parole settings from 1968 to 1996.	Treatment was found to be associated with reduced recidivism rates. Effects were mainly due to cognitive-behavioural interventions rather than standard behaviour modification approaches. Specifically, cognitive-behavioural social skills development programs and cognitive skills (reasoning and rehabilitation) programs were shown to be effective.
The Impact of Formal and Informal Social Controls on the Criminal Activities of Probationers (USA)	The monthly self-reported criminal activities, risk behaviours and local life circumstances of offenders who began probation in Virginia were examined during the year prior to arrest, between arrest and probation, and during the first eight months of probation (n=125).	When offenders participated in high- risk behaviours such as carrying a gun, using drugs, and heavy use of alcohol, they committed more crime. When they lived with a spouse or were employed they committed fewer crimes. The decline in criminal activities after arrest and during probation appeared to be related to the formal social controls and results were interpreted as consistent with a possible deterrent effect.
Predicting Adult Offender Recidivism: What Works! (Canada)	Meta-analysis techniques were used to determine which predictor domains (dynamic or static predictors) and assessment instruments were the best predictors of recidivism. Report looked at 131 studies with 1,141 correlations with recidivism.	The strongest predictors of recidivism were: Criminogenic need; Criminal history; History of antisocial behaviour; Social achievement; Age; Gender; Race ; and Family factors. Weaker predictors were: Intellectual functioning; Anxiety/self-esteem; and Socio-economic status. Dynamic factors (e.g. antisocial personality, delinquent friends, substance abuse) predicted recidivism as well as static predictors (e.g. age, criminal history).

Appendix 2. Methodology

Methodology

To develop a data file of a group of property offenders (many thought to be recidivist offenders) 233 property offenders arrested by ACT Policing during the Operation Anchorage period were selected. ACT Policing provided details of each offender's name, gender, and date of birth. This information was then used to access and collect data regarding their criminal history records from other criminal justice agencies in the ACT. The ACT Police would not provide the arrest history for these individuals. As a result the court system and Corrective Services/Youth Justice Services departments provided access to the relevant files to facilitate the collection of basic information needed to examine the extent and scale of recidivism within the ACT. ACT Policing provided aggregated recorded crime data used to analyse trends in property crime in Canberra pre- and post-Anchorage.

The pilot phase

A pilot phase of this project was completed in November 2002, the aim of which was to test the feasibility of a larger research project into recidivist property offending in the ACT. Upon its successful completion the AIC recommended proceeding with the full research project into recidivist property offending. The steering committee, comprised of representatives from ACT Corrective Services, ACT Youth Justice Services, ACT DPP, ACT Magistrates Court, ACT Policing and JACS, agreed to go forward with the research within the broad limitations discovered during the pilot phase. Ethics approval for full research project was received on 19 November 2002, after which data collection commenced.

Data collection

As estimated in the pilot report the data collection process took approximately three to four months. During this time researchers spent a large part of a six-week period at the Magistrates Court and another six-week period at Corrective Services, while data collection at Youth Justice Services took around two to three weeks. For each offender any relevant information about that individual contained in records held at the various agencies was captured. It is important to note that the offenders studied in the pilot phase were all re-examined in this way and their information updated during the more recent data collection period.

Some offenders had both juvenile and adult Corrective Services files and in these cases attempts were made to view all relevant information. It was also quite common to find that offenders, particularly the high-volume offenders, had more than one file at a particular agency. In such cases all available files were cross-checked to enable the recording of the most up-to-date demographic information.

Where available, historical information on an offender's involvement in behavioural and/ or rehabilitative programs was also recorded. This was to assist in addressing the fifth aim of the research project. Criminal history information was collected from the Magistrates Court from an offender's first known offence through to their last offence in the ACT prior to 31 December 2002. Eventually all data relating to a particular offender from all sources was combined into a single file.

A timeline for each offender was constructed. This timeline included the date of their first offence; the date and type of all subsequent offences; punishments received; and periods of incarceration in chronological order. This information was then merged for every offender with his or her demographic information—providing, where possible, a 'case study' for each individual. This was a time consuming process.

The information collected on each offender included:

From Corrective Services and Youth Justice Services files:

- Date of birth;
- Alias;
- Gender;
- Ethnicity;
- · Health issues (i.e. physical and mental health issues, drug and alcohol issues);
- · Employment status (i.e. regularly unemployed, currently unemployed);
- · Education (i.e. highest level achieved);
- Marital status;
- · Accommodation status (i.e. stable, unstable); and
- Any additional details where available (i.e. transfer of probation and parole supervision, number of dependent children, reliance on government benefits etc.).

From the Magistrates Court records:

- Details of Anchorage offences:
 - Type of offence;
 - · Date of offence;
 - · Date of court appearance; and
 - · Court outcomes.
- Details of criminal history (including any juvenile records):
 - Type of offence;
 - · Date of offence;
 - · Date of court appearance; and
 - · Court outcomes.
- · Details of post-Operation Anchorage offences:
 - Type of offence;
 - · Date of offence;
 - · Date of court appearance; and
 - · Court outcomes.

During data collection at the Magistrates Court a small number of cases had been sent to the Supreme Court for hearing or sentencing. With the cooperation of the Supreme Court every attempt was made to view the relevant files at that location to record custody and sentencing details.

Each offender was given a unique numerical identifier that was recorded on the data collection form and in the database, this was done to ensure that the names of offenders were not located in the same database as details of their criminal history.

Issues encountered during data collection

Following the completion of the pilot phase there were three main concerns about the quality/nature of the data available:

- · the reliability and availability of demographics;
- program information; and
- the complexity of recidivist offenders' criminal histories.

These problems were still present during the main data collection phase of this project, although to a lesser extent. The amount of demographic information collected was reasonable, however with regard to involvement in behaviour modification and drug/alcohol rehabilitation programs problems (the availability and quality of the data) remain problematic. This is because there was no systematic or consistent recording of an offender's involvement in behavioural or rehabilitation programs. This situation was made more difficult by the fact that in some cases specific programs were directed by the magistrate and other times it is left open: 'the offender will participate in behavioural programs/rehabilitation as directed by Department of Corrective Services/Youth Justice Services'.

One of the main aims of the research was to identify the legal outcomes offenders received at court following apprehension during Operation Anchorage. At the Magistrates Court accurate outcome data for each offender was collected, however linking a particular offence to a sentencing outcome was problematic in some cases due to an offender's heavy involvement in the criminal justice system. For example, some offences are grouped together and are heard in court at the same time, offenders may be charged retrospectively for prior offences when arrested on an unrelated charge, and often when offenders do reoffend they may already be party to an order of court.

Another goal of the research was to assess the effects of recent changes to the Bail Act in the ACT. Originally it was hoped that DPP files would contain details of where and how much it was used, to examine whether the implementation of this particular piece of legislation had contributed to the reduction in property crime rates in the ACT. While we gratefully received the cooperation of the DPP and were able to access their files on the Operation Anchorage offenders, the files didn't contain the level of detail required to

approach the analysis this way—when this section was used by DPP it was not explicitly stated in the file. However, the offender's criminal history and custody details enabled estimates of the effect of being remanded into custody but not specifically the changes to the Bail Act to be determined.

This larger data collection process also highlighted several other issues that may impact on the quality of the data that are worth noting here.

Specifically at Corrective Services/Youth Justice Services:

- · some files contained missing and/or out-dated information;
- not all files contained pre-sentencing reports (which we found to be the richest source of data available); and
- there were three offenders for whom files could not be found.

Specifically at the Magistrates Court:

- · A small number of offenders were not on the computer system;
- As the computer system is a case-based system a new entry is created every time the identifiable information of an offender varies. The files are not necessarily linked which means information may have been missed where an offender has used a variety of addresses, names and dates of birth.

Ultimately the richness of the dataset could be enhanced if information such as partner/ peer/family involvement in crime was collected. However, collecting and up-dating a large variety of demographic information may be problematic and time consuming for staff. Overall, the understanding of recidivism would be enhanced if there were a more rigorous collection of dynamic and static factors for each offender involved with Corrective Services and/or Youth Justice Services. Much of the demographic data collected was taken from pre-sentencing reports, where these reports had not been done or were not required, for example, for first time offenders; it was impossible to access this information.

²⁵ A Care Order is made under *The Children and Young People Act* (1999). It is an application taken and applied for (usually) by the Chief Executive of the Department of Family Services in relation to the care and protection of young people. A Magistrate will make the order and it can contain issues relating to contact, residence, therapeutic needs, and other specific issues regarding the protection of the young person concerned.

Appendix 3: Selected case studies of offenders arrested during Operation Anchorage

Selected case studies of offenders arrested during Operation Anchorage

The following case studies have been selected in order to highlight the type of information available in official records across the agencies involved. The cases will also illustrate that the level of detail collected on each offender is primarily dependent upon their level of offending behaviour. On the whole the first-time or less serious offenders in our sample did not have files at Corrective Services or Youth Justice Services and as such obtaining anything more than basic information was difficult. On the other hand the difficulty with the high-volume, recidivist offenders was piecing together the large and complex amounts of data into a coherent case study in order to construct a timeline.

Some other interesting information collected regarding the sample includes:

- Eleven juveniles were (or had been) placed under a Care Order²⁵ (for issues such as self-harm behaviour, incompatibility, physical injury/sexual abuse, likely health/ psychological damage);
- One offender died during 2001;
- One offender was deported during 2001;
- Fourteen offenders had their probation or parole transferred interstate during 2001/ 2002; and
- Fifty-one offenders had upcoming court appearance dates at the ACT Magistrates or Supreme Courts at the end of 2002 (approximately 22%) (i.e. scheduled court appearances in 2003).

Case study 1

The offender was a male in his late-teens, DOB and gender were provided by ACT Policing and cross-checked at the court. He was arrested during Operation Anchorage on two property related charges, committed on the same day. There were no records of the offender at either Corrective Services or Youth Justice Services as he had never been placed on parole. Due to this we were unable to collect any additional demographic information such as ATSI or employment status. According to the court records he was arrested towards the end of March 2001 and was sentenced at the Magistrates Court towards the end of August 2001, receiving a 12-month bond for possessing stolen property, while a charge of unlawful possession was dismissed on the same day. There were no further offences recorded up to 2003.

Case study 2

The offender was a male in his late 20s. According to the file at Corrective Services the offender had been a heroin user although claimed to have ceased using during 2000. He admitted to using cannabis on a regular basis. He reported a history of casual employment but was unemployed and living in government housing at the time of Operation Anchorage. The offender was in a defacto relationship and had completed his education to the Year 10 level, the same year that he recorded his first offence (traffic and theft offences). There was no record of participation in any behavioural or rehabilitative programs.

In addition, it was found that the offender had previously committed numerous offences in Tasmania, including armed robbery and had spent considerable time in prison in that jurisdiction (at approximately 20 and 22 years of age). In the ACT the offender had 17 recorded offences committed between 2000 and 2003. During Operation Anchorage the offender was arrested on five property-related charges for which he received 12 periods of periodic detention. When he was arrested at this time the offender was already on a good behaviour bond received late-2000 for other property-related charges. Several months after being placed in periodic detention the offender breached this order and went on to commit several traffic related offences in 2002, including driving under the influence.

Case study 3

The offender was a non-Indigenous male who was a juvenile at the time of Operation Anchorage. Files showed that he was single, lived with his parents and Year 7 was the highest level of education obtained. Files also indicated that he was/is part of the Intensive Support Program and he was unemployed with a history of causal employment. He reported heroin use beginning at 16 years of age and also casual use of amphetamines and alcohol.

Files show that as a juvenile the offender had twice attended children's court in NSW on charges of theft and motor vehicle theft. On both occasions he received periods of probation. In the ACT the offender had 24 recorded offences that were primarily property-related including trespass on premises, minor theft, destroy/damage property and several breach orders. One charge of minor theft was committed prior to Operation Anchorage. During Operation Anchorage the offender was a juvenile and was charged with eight separate offences during that period on four different offence dates. With relation to these charges he was remanded in custody for approximately three weeks where upon he received 12 months probation. The remaining 16 offences recorded in the ACT were committed post-Operation Anchorage and the offender spend further time remanded into custody as an adult eventually receiving probation and supervision by Corrective Services.

In 2002 the offender attended Arcadia House for a week-long detoxification program but left before completing the course. The offender had an appearance in the Magistrates Court in 2003 relating to a breach of a bail order made towards the end of 2002, the outcome of which is unknown.

Case study 4

The offender was a female who was in her early 20s at the time of Operation Anchorage. According to the records the offender was employed during 2001 with a history of unemployment after completing Year 12. She reported being in a defacto relationship and lived with her parents. At the time of viewing the Corrective Services file her defacto partner was in the Belconnen Remand Centre.

The offender had Hepatitis C and poly-drug issues, including a heroin addiction. She had attended drug and alcohol counselling and has been a client of the methadone program. More detailed information regarding the timing, extent or success of this treatment is unknown.

The offender had four recorded offences in the ACT—three property offences and one breach order. One offence was committed prior to Operation Anchorage and she was placed on a good behaviour bond for two years. The Operation Anchorage offences were committed on the same day in April, she was released on bail and approximately five months later received probation with nine months supervision by Corrective Services. Several months later warrants of execution and commitment were issued and ultimately a breach order was issued. The breach was heard at the Magistrates Court in April 2002 and she received a further nine months probation with supervision by Corrective Services. In December 2002 she again failed to meet the conditions of the order.

The offender now resides in Victoria and her supervision was transferred to the local community Corrective Services department towards the end of 2002.

Case study 5

The offender was an Indigenous male, in his late teens at the time of apprehension during Operation Anchorage. Corrective Services files indicate that he completed Year 7 before leaving the education system and has since been mostly unemployed. He reports being in a defacto relationship and lives in government housing. Records show that the offender has physical, mental and substance abuse issues involving epilepsy, anger management issues and a history of poly-drug use (including heroin use). The offender had completed a six-month prison sentence in WA in 1998.

The offender had 23 offences recorded at the Magistrates Court mostly relating to property offences such as burglary, possess stolen property, and minor theft. The offender committed numerous offences prior, during and post Operation Anchorage. During the Operation Anchorage period the offender was remanded in custody and in December 2001 received a three month suspended sentence. The offender continued to offend during 2002 and again spent time remanded into custody. In December 2002, he was placed on probation and began 12 months of supervision with Corrective Services.

The offender is prescribed 'anti-anger' medication (Arapax) for his anger management issues. In 2002, as part of his probation order the offender was to attend the cognitive skills program, attend counselling and was to abstain from illicit drug use. The offender failed to comply with any of these conditions.

Case study 6

The offender was a male who was in his mid-twenties during Operation Anchorage. Corrective Services files state that he had substance abuse problems, was regularly unemployed, was single and lived occasionally with his mother. He left the education system after completing Year 9.

The offender had approximately 160 recorded offences in the ACT between 1993 and the beginning of 2003. Most were property-related; other offences related to offences against justice procedures, there were no violent offences in his recorded criminal history. The offender has been sentenced to numerous period of custody in remand as a juvenile and as an adult. The offender has been sentenced to the following sanctions: in 1994, 12 months juvenile detention; in 1997, a community service order; in 1997, 18 months imprisonment; in 1997, community service order; in 1998, 18 months imprisonment; in 1998, community service order; in 2000, periodic detention; in 2001, six months imprisonment.

Files indicate that in 1996 the offender was placed on a Treatment Order (under the *Drugs Of Dependence Act*) but that the order was revoked after non-compliance and the offender was formally breached. Further information regarding the offender's involvement in behavioural or rehabilitative programs was not available.

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In 2000 approximately seven per cent of Australians had been the victims of burglary once or more in the previous 12 months. The most recent 2002 Crime and Safety survey of victims of crime in Australia confirms that burglary is still of major concern to the Australian community. From 2000 to 2002 the Australian Capital Territory experienced significant declines in the rate of burglary. This report examines a number of factors that have been attributed with causing the declines. The report finds significant evidence that an ACT AFP operation targeted at repeat offenders impacted on the burglary rate along with the detention of offenders by the courts either through remand or imprisonment. The report, for the first time provides empirical data on the characteristics of recidivist property offenders in the ACT.



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