NDLERF

Developing the capacity and skills for national implementation of a drug law enforcement performance measurement framework

Monograph Series No. 34

Funded by the National Drug Law Enforcement Research Fund
An Initiative of the National Drug Strategy

Developing the capacity and skills for national implementation of a drug law enforcement performance measurement framework

Katie Willis

Peter Homel

Jessica Anderson

Australian Institute of Criminology

Funded by the National Drug Law Enforcement Research Fund, an initiative of the National Drug Strategy

Produced by the National Drug Law Enforcement Research Fund (NDLERF)
GPO Box 308, Hobart, Tasmania 7001

ISBN: 978-0-9804654-9-5

ISSN: 1449-7476

The research on which this report is based was funded by the National Drug Law Enforcement Research Fund, an initiative of the National Drug Strategy.

Table of Contents

List of Figures

Abbreviations

AFP	Australian Federal Police
AIC	Australian Institute of Criminology
APACS	Analysis of Policing and Community Safety
ATS	amphetamine-type stimulants
COPS	Office of Community Oriented Policing Services
Customs	Australian Customs and Border Protection Service
DAM	Drug Attribution Model
DHI	Drug Harm Index
DLE	drug law enforcement
DPMP	Drug Policy Modelling Program
DUMA	Drug Use Monitoring in Australia
EMI	Ecstasy Market Indicator
HIDTA	High-Intensity Drug Trafficking Areas
IDDI	Illicit Drug Data Initiative
IDDR	Illicit Drug Data Report
IDRS	Illicit Drug Reporting System
IGCD	Intergovernmental Committee on Drugs
LSA	Local Service Area
NAMSDL	National Alliance for Model State Drug Laws
NCPE	National Centre for Policing Excellence
NDARC	National Drug and Alcohol Research Centre
NDLERF	National Drug Law Enforcement Research Fund
NDSHS	National Drug Strategy Household Survey
NIDIP	National Illicit Drug Indicators Project
ONDCP	Office of National Drug Control Policy
PERF	Police Executive Research Forum
PPAF	Police Performance Assessment Framework
PSA	Police Service Area
PSU	Police Standards Unit

Acknowledgements

The report authors are grateful for the invaluable assistance of all law enforcement personnel who participated in this project. The support provided by staff within the four field locations (Tasmania Police, South Australia Police, Victoria Police and the Australian Customs and Border Protection Service) is particularly appreciated. The AIC would also like to acknowledge the expert input from key personnel within the health sector.

Disclaimer

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

Executive summary

This report summarises major findings from the second stage of a project to test the feasibility of a model performance measurement framework for Australian drug law enforcement (DLE) agencies and to provide advice on its national implementation. The first project stage involved development and preliminary testing of the initial performance measurement framework (see Willis, Homel & Gray 2006 for more detail about the initial project and its background). Both project stages were funded by the National Drug Law Enforcement Research Fund and undertaken by the Australian Institute of Criminology.

This final report is a companion piece to three supporting reports (and so is designed to be read alongside these documents). These are: *A plan for national implementation of the drug law enforcement performance measurement framework* (Willis, Homel & Anderson 2010), which outlines key steps should the performance measurement framework be nationally implemented; *Implementing a drug law enforcement (DLE) performance measurement framework in Australia* (Willis, Anderson & Davis 2010), which provides a detailed report of the technical fieldwork findings; and *Foundations for an effective performance measurement system for drug law enforcement* (Willis & Anderson 2010), which outlines better practice principles and steps to developing a rigorous performance measurement system.

The overriding reasons for undertaking both stages of the project were to:

- help provide a better accounting for the benefits from the estimated $1.7 billion expenditure on DLE in Australia
- improve the type and range of performance measures and indicators currently used by DLE agencies
- develop a measurement framework that provides DLE agencies from a local through to a national level with a consistent and systematic means of assessing and reporting performance and assessing effectiveness.

The performance measurement framework upon which the Stage 2 work is based was developed to redress the shortcomings of current DLE measurement practices. It includes a range of performance measures and indicators that are sufficiently flexible to meet local requirements and available information. As highlighted in this report, current measures of law enforcement performance typically focus on: crime rates, arrests, seizures, and clearance rates. Essentially, these measures only demonstrate the extent to which police engage in certain types of activities and how police currently decide to allocate resources.

Conventional approaches to assessing DLE performance currently say little about the complexities of law enforcement work and the broader impacts of law enforcement effort. For example, they cannot provide an assessment of the full impact of law enforcement in producing something of value for communities, such as making communities feel safer and more secure. Supply and use of illicit drugs are, by their largely clandestine nature, a hidden phenomenon that can only be monitored by indirect indicators linked to observable consequences, such as crime, drug-related morbidities and mortality (Rossi 2001).

Measures concentrating on volume of crime are but one dimension among many that could be considered in the broader assessment of the quality of work done by law enforcement. A range of appropriate measures that captures the complexities of law enforcement work would:

- permit a more rigorous assessment of the broader range of outcomes that law enforcement actually produce for their communities (and so help law enforcement agencies demonstrate impacts in real terms)
- inform communities of the depth and breadth of work in which modern law enforcement is engaged
- form the basis upon which both operational and long-term strategic decision-making can be made
- assist agencies to justify expending and seeking resources.

The framework

In brief, the framework's measures and indicators underpin four high-level outcome areas identified in Stage 1 as key outcomes of DLE effort. The four high-level outcomes are:

- **reducing drug crime and drug-related crime** – that is, measures directed at addressing specific drug crimes (for instance, the importation, supply and distribution of illicit drugs), measures for assessing drug market dynamics, as well as a measure of the crime most reliably associated with illicit drug use (Chilvers & Weatherburn 2003).
- **reducing organised crime** – that is, measures specifically directed at addressing high-level drug crime that is frequently associated with organised criminal groups that traffic illicit drugs (such as money laundering, extortion, corruption, etc.) and that has serious impacts on the community's safety and welfare.
- **improving public health** – that is, a range of measures for gauging the impact of illicit drugs on the community's health.
- **improving public amenity** – that is, measures of community safety and wellbeing.

Although the high-level outcomes and measures are essentially prescriptive, the indicators can be tailored to suit prevailing jurisdictional monitoring and reporting needs. As such, the basic intent and integrity of the core framework elements are maintained, while also allowing for local data-recording conventions.

Feasibility of the framework

Key fieldwork findings concerning feasibility and application of the framework are summarised as follows:

- The model framework developed in Stage 1 of the project is a valid performance measurement tool and the indicators remain largely unchanged (precisely which indicators have been revised and why are outlined in *Implementing a drug law enforcement (DLE) performance measurement framework in Australia* (Willis, Anderson & Davis 2010). A copy of the revised framework can be found at Appendix 3 of this report.
- In-depth testing of the model performance measurement framework in four field locations demonstrates that the framework can be applied at national and state/territory DLE levels.
- DLE agencies use many of the framework measures already (including drug-related public health measures), even if only informally and semi-regularly.
- Drug market monitoring and review takes place within existing agency accountability processes and structures (for instance, in unit and operational command review/COMPSTAT processes). This supports the recommendation from Stage 1 that the framework be embedded in existing accountability processes to facilitate its uptake.

- While fieldwork findings support broad application of the model framework, it is clear that some jurisdictions are currently better positioned than others to use the framework for regular performance monitoring, measurement and reporting.
- Findings suggest that health agencies are receptive to law enforcement agencies accessing drug-related public health data, providing there is full disclosure as to precisely why and in what way the data will (and will not) be used. One potential forum through which ongoing access to drug-related public health data could be broached is the Intergovernmental Committee on Drugs (IGCD).
- The revised framework reflects what is considered (on the basis of detailed testing in the four sites) a reasonable suite of measures and indicators upon which to assess DLE performance at this stage. Other measures and indicators could be considered for inclusion, and probably will in the future should the framework be adopted.
- In the absence of direct measures of DLE effort, the framework provides a sound basis for a more effective and systematic means of monitoring and reporting DLE performance.

Implementing the framework

The implementation plan was intended to outline the major steps needed to assist in national roll-out of the framework. Project fieldwork experiences, a review of the literature and consultation with DLE professionals assisted in the development of this plan and a series of key implementation issues were identified and discussed. These were:

- recognising the need for a new DLE performance measurement framework (including the limitations of traditional measures of DLE and the benefits of more robust measures)
- determining who is responsible for DLE performance measurement
- major steps to developing a sound measurement framework
- determining a realistic timeframe for national implementation of the framework
- resourcing the framework
- a consideration of key change management issues
- considering a future evaluation of the framework
- key challenges for national implementation.

However, there were also some general lessons learned from this work that need to be considered if national implementation of the framework is to be truly successful. These include the following:

- An effective performance measurement system must be based on a *sincere* desire to use timely and accurate data to improve performance. Where there is concern about communicating unfavourable performance data ("We can't show them that, the numbers look really bad!"), implementation of any performance measurement system will fail. As such, measurement systems designed to focus on performance improvements (as opposed to instruments of control) are much more easily accepted than systems designed exclusively for accountability purposes, particularly in hierarchical command and control organisations such as law enforcement, although ultimately they serve the same function.

- Performance measurement must take place for the purpose of supporting management decisions and not just counting for counting's sake. If performance data are not used for managing performance then the system merely becomes a costly and elaborate exercise in accounting.
- Superimposing an entirely new measurement system steeped in management jargon almost guarantees the death of that system. In any case, to be effective, the system needs to accurately reflect the culture and practices of the organisation into which it is being introduced, even if it is part of an overall organisational change process. To this end it is important to involve management through to operational staff right from the start in defining operational goals and in developing appropriate performance measurement systems. This helps to 'buy-in' staff support.
- Success in DLE performance will mean that goals and targets will probably change. Therefore the measurement system must be able to readily change and adapt to new priorities and outcomes.
- Ensuring that a performance measurement system is built into strategic planning processes helps to establish accountability for the measures and ensures that they are both reported and used for performance improvement.

Future research directions

Project fieldwork not only addressed those items outlined in the project plan, but led to further investigation of key indicator data (principally illicit drug purity data) as an extension of the framework's feasibility testing, and to permit more penetrating levels of analysis. The types of analyses undertaken by the AIC were based on a limited range of indicator data only (that is, the data relate to Victorian drug markets only), but the basic techniques used provide a possible template for future analytical work that may have practical application in short- and long-term DLE planning. Two avenues of analysis that are of potential use to DLE include:

- analysis of the difference between wholesale drug purity (that is, the purity of drugs seized by Customs/AFP) and retail drug purity (that is, the purity of drugs seized by state and territory DLE)
- analysis of the interrelationships between different drug markets within and across jurisdictions.

Analysis of the difference between wholesale and retail drug purity levels provides a useful means through which overall market conditions can be assessed. It also provides a means for systematically quantifying (and therefore better understanding) the dynamic relationship between supply and demand.

The second area that is being developed by the AIC is an analytical model (DRUGSMOD) that quantifies structural relationships, both within drug-type and between different jurisdictional drugs markets, using drug purity data (these data represent the purity of all seizures tested in a given jurisdiction). For instance, it is intended to demonstrate the potential flow-on effects from an impact in say the Victorian heroin market to the South Australian heroin and methamphetamine markets. To be of practical use to DLE in short- and longer-term strategic planning, DRUGSMOD needs to be underpinned by monthly-aggregated purity data for the major illicit drug types for each jurisdiction.

In this project, both avenues of analysis stemmed from examination of Victoria Police data only. These data were used to illustrate possible future analytical directions that could be applied within other jurisdictions. It is recognised that the collection and extent of testing of illicit drugs differs across the jurisdictions. Should these new analytical approaches be deemed sufficiently useful, they may require further investment by some jurisdictions in terms of drug analysis resources. The 'Building Illicit Drug Forensic Capacity' project, a project to improve the collection and analysis of illicit drugs across Australia, may be a means through which this could be achieved.

Summary and conclusions

The implementation trial has demonstrated that the DLE performance measurement framework can be a viable mechanism for improving the capacity of DLE agencies across Australia to better account for their effectiveness and a useful tool that contributes to Australia's National Drugs Strategy goal of reducing drug-related harm, demand and supply. In addition:

- The framework provides a way for the wider community to better understand the nature of the impacts that DLE can have upon issues such as drug-related public health and public amenity.
- The framework demonstrates that it is capable of providing a way of generating jurisdictionally and locally responsive reporting and accountability systems, with a sufficiently robust and compatible core set of components that have the potential to form the basis for an ongoing national reporting system (the design of a national DLE monitoring system was not a specific objective of the current project, although it was always anticipated that it could have the potential to point the way towards achieving such a system).
- The implementation trial demonstrates that the significant, but currently fragmented and less than optimally systematic, efforts that are going into enhancing DLE performance measurement can be strengthened, without imposing an entirely new regime of data collection and reporting on already stretched management structures.
- The framework provides a vehicle for building new, more systematic processes from within existing structures and procedures. In this way the framework has been shown to be an evolutionary and easily accepted way to generate a sustainable performance management and accountability procedure.

Taken as a whole, the project findings suggest that a number of things should occur if a decision were made to undertake national implementation of the framework. These are as follows:

- The outcomes of this project could be brought to the attention of senior law enforcement executives through mechanisms such as the Australasian and South-Western Pacific Police Commissioners Conference, as well as to the Ministerial Council on Drug Strategy and the Intergovernmental Committee on Drugs with a view to considering a plan for a national implementation program for the DLE performance framework. While the companion report *A plan for national implementation of the drug law enforcement performance measurement framework* broadly outlines a suggested approach and timeframe for national implementation of the framework, the precise processes and supporting mechanisms would need to be further developed within jurisdictions and based on local requirements.
- The national implementation plan should be conceived of as a series of jurisdictionally specific implementation strategies with an over-arching national reporting agenda. In other words, implementation should be the responsibility of specific state, territory and national DLE agencies, with a coordinated reporting mechanism capturing those core elements that would constitute the most important common elements. Application of the framework itself is considered cost-neutral because many of the indicator data are already collected by law enforcement agencies; however, it is recognised that further work may need to be undertaken

in some jurisdictions in relation to administrative arrangements, IT systems and training should the framework be implemented nationally.

- To facilitate the framework's national implementation, future detailed research could be undertaken to determine precisely how implementation of the framework could be staged, and what processes would be employed to report against the framework at the national level.
- Should a decision be taken to undertake national implementation of the framework, it should be evaluated at an agreed point in the future to assess whether and how well the framework is being adopted by jurisdictional law enforcement agencies.
- Consideration should be given to engaging the AIC to provide the necessary ongoing technical assistance to ensure continuity, sustainability and quality assurance for the national performance measurement program.

Chapter one: Background to the project

Introduction

In December 2006, the National Drug Law Enforcement Research Fund (NDLERF) published Monograph 18: *Developing and implementing a performance measurement framework for drug law enforcement in Australia* (Willis, Homel & Gray, 2006). This report presented an overview of a model process for developing a viable performance measurement framework for drug law enforcement (DLE) in Australia. It was undertaken by the Australian Institute of Criminology (AIC) on behalf of NDLERF in order to help provide a better accounting for the benefits from the estimated annual expenditure of between $1.3 and $2 billion on Australian DLE in the early 2000s (the figure was recently revised to $1.7 billion – Collins & Lapsley 2008). The model encompassed both a core performance measurement framework built around four high-level outcomes and a process for adapting the framework to accommodate the specific needs of DLE agencies operating in different settings in Australia.

The four high-level outcomes identified for the framework were:

- reducing drug crime and drug-related crime
- reducing organised crime
- improving public health
- improving public amenity.

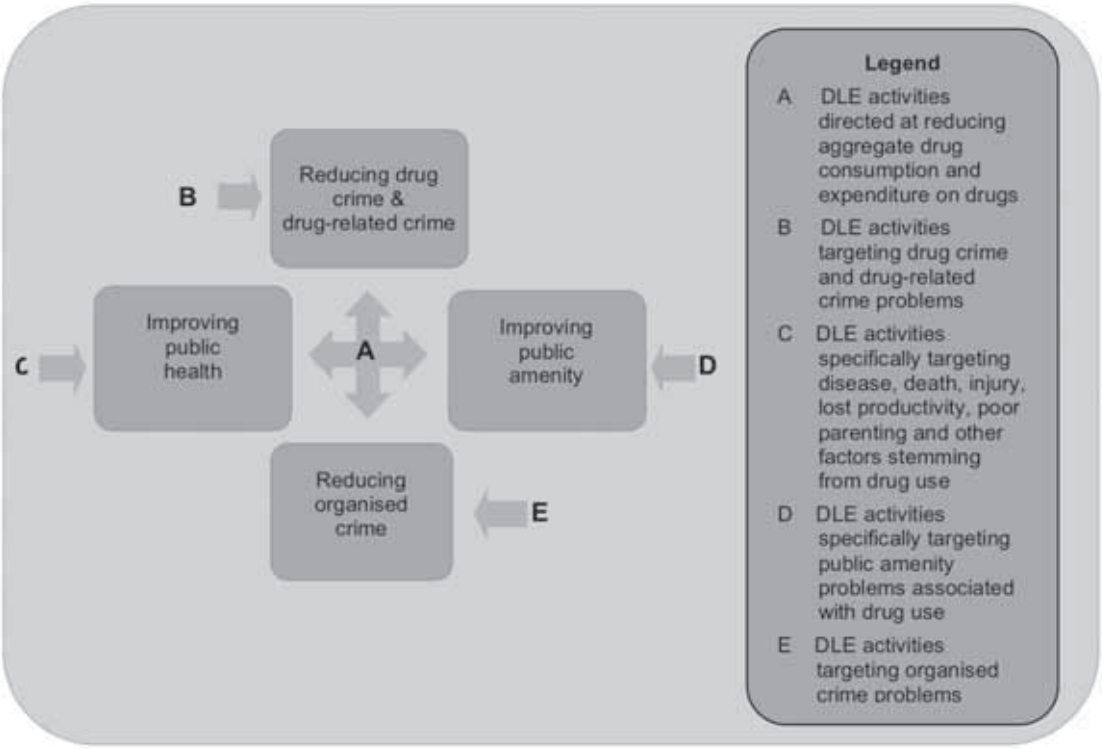
While separated for the purposes of reporting, it was emphasised that in practice these outcomes were interrelated and not discrete. For example, activities directed at reducing aggregate drug consumption and expenditure were likely to impact on all four high-level outcomes while measures specifically targeting crime problems associated with illicit drugs and precursor substances, such as money laundering and extortion, were likely to have most impact on reducing organised crime, and so on. The overall relationship between interventions and the achievement of these outcomes is represented in Figure 1.

Having identified four high-level outcomes through a process of extensive consultation and systems analysis, the model framework then described a set of specific performance measures and indicators associated with each high-level outcome, as well as appropriate underpinning data sources. These measures and indicators were developed to have the following characteristics:

- clear in their purpose (that is, who will be using the information and how and why it will be used)
- useful (in gauging the effectiveness of policies and strategies)
- valid (measure what they should measure)
- reliable (give consistent results)
- easy to interpret (make sense and reflect real events)
- easy to construct (reflect the real places they are used in)
- consistent with other performance indicators in the National Drug Strategy (that is, aligned with the wider drugs policy environment)
- easy to adapt to different settings and develop over time.

Measures and indicators were derived following consideration of existing and available data sources, regardless of whether data were collected by law enforcement agencies or other bodies such as health agencies. However, the framework was also designed to contain sufficient flexibility to enable the introduction of new measures, indicators and data sources, or allow for the adaptation of existing collections for novel purposes where necessary.

Figure 1: Relationship between DLE interventions and the achievement of outcomes



Source: Willis, Homel & Gray 2006

In developing the model framework, the AIC undertook a limited trial implementation within two DLE jurisdictions – the Australian Customs and Border Protection Service and two Local Area Commands within the NSW Police Force. The two trial sites attempted to address different aspects of the implementation process in order to assess the utility of the framework and the capacity of the model process to be adapted to different settings and requirements. This phase of the project yielded limited but encouraging evidence that the model framework and the recommended implementation processes were sufficiently relevant and robust to potentially account for the outcomes of the many different levels of DLE in Australia.

Purpose of the Stage 2 project

Following a presentation on the model DLE performance measurement framework to the 2007 Conference of Commissioners of Police for Australasia and the South Western Pacific Region, the Chair of the Commissioners' Drugs Committee wrote to the AIC inviting the AIC to consider developing an extension to the initial project that might address how to implement the framework more broadly across Australia. Ultimately, it was decided that this could best be achieved through a further collaboration between NDLERF and the AIC.

The overall purpose of the Stage 2 project was to undertake further developmental work to refine the framework's measures and indicators, as well as to assist in its national implementation through development of a set of resources to guide DLE practitioners. The framework also needed to continue to be responsive to variations in jurisdictional organisation and operation. Specific project activity was designed to:

- refine and clarify the goals and outcomes for a national DLE performance measurement system for Australia, ensuring appropriate alignment with current developments in performance measurement in law enforcement more generally
- rigorously test the appropriateness and availability of the proposed performance measures and related indicators within an indicative set of jurisdictions across the gamut of DLE activity in Australia
- identify potential training and professional development requirements necessary for systematic implementation of an appropriate framework within jurisdictions, including development of a set of resources that were suitable for use as reference and development tools to assist in the systematic implementation of locally-based performance measurement systems
- develop a detailed business plan for sustaining the long-term implementation of the national DLE performance measurement framework, including the identification of critical issues (such as potential long-term funding and reporting mechanisms).

Methodologies used in Stage 2

The activities outlined above for the project essentially fell into three groups of work in terms of the methodologies that were used. These were:

- refinement of the strategic clarity and operational precision of the performance measures
- identification of training and development requirements for implementation and the development of appropriate responses, such as resources and training packages
- development of a long-term business case for sustained implementation of the framework.

Each of the items of work required slightly different methodologies to be efficiently achieved, although they were largely undertaken simultaneously and in a cohesive manner. The following highlights the key methodological approaches.

Project Reference Group

A Project Reference Group, comprised of senior DLE personnel (nominated by NDLERF Board representatives), was established to both advise on the process for inclusion of jurisdictional issues so that a representative set of issues were included in the project, as well as to provide expert advice when needed. The Project Reference Group met formally (via teleconference) an average of every eight weeks throughout most of the project. A list of representatives is provided at Attachment 1.

National planning and development workshop

Refinement of the strategic clarity and operational precision of the performance measurement framework involved detailed consultation with key people already involved in the task of measuring performance around law enforcement activity (and DLE in particular) as well as with relevant experts beyond law enforcement, such as from the health sector. As part of this process, the AIC convened a national workshop on performance measurement in DLE at which the existing framework was presented and assessed from the perspectives of:

- relevance and utility of the high-level outcomes and proposed measures and indicators
- methods for relevant data collection within specific DLE contexts and operational environments
- assessment of what was missing and methods for inclusion of missing elements based on the advice of workshop participants
- models for analysis and reporting
- requirements for routinely accessing the recommended non-DLE indicators and measures
- differences in recording practices
- potential changes to administrative systems to capture relevant data
- the relationship of the framework to broader law enforcement performance measurement systems, either existing or under development.

A full description of what was discussed and recommendations made can be found in Part 3 of this report. A list of workshop attendees is at Attachment 2.

Fieldwork

To further develop work undertaken at the national workshop, an AIC-based research analyst and research assistant worked with representatives from four DLE jurisdictions (Customs, Victoria Police, South Australia Police and Tasmania Police) to examine in detail the proposed measures and available data sources, as well as to refine implementation requirements for the reporting systems. A full description of fieldwork findings can be found in the technical report *Implementing a drug law enforcement (DLE) performance measurement framework in Australia: detailed fieldwork findings* (Willis, Anderson & Davis 2010), while a summary of findings is located in Part 3 of this report. The revised framework is at Attachment 3.

Training and development requirements and resources

Built into the information gathering, implementation trialling and consultation processes described above was a specific task to identify a set of professional development and training requirements necessary for facilitating the successful implementation of the performance measurement system in different DLE contexts and settings. The key product of this exercise was a better practice guide, outlining a systematic approach to developing a robust performance measurement system. A full description of the proposed training requirements can be found in the report *Foundations for an effective performance measurement system for drug law enforcement* (Willis & Anderson 2010), while a summary of findings can be found in Part 3 of this report.

A plan for long-term sustainable implementation of the framework

The implementation plan was developed by the AIC in close consultation with an expert in business process re-engineering. The plan was also informed by consultation with law enforcement professionals involved in the broader performance measurement agenda across jurisdictions, as well as the Project's Reference Group.

A full description of the implementation plan can be found in the report *A plan for national implementation of the drug law enforcement performance measurement framework* (Willis, Anderson & Homel 2010), while a summary of findings can be found in Part 3 of this report.

Report format

The body of this report is divided into a number of different parts. An overview of recent developments in law enforcement performance measurement is provided in Part 2 of the report, while a summary of the project's three major work components are covered in Part 3. These cover:

- refinement of the strategic clarity and operational precision of the performance measures, including a summary of fieldwork findings from the four field locations
- identification of training and development requirements for implementation and the development of appropriate responses, such as resources and training packages
- development of a long-term business case for sustained implementation of the framework.

As noted above, full discussion of each of these work components can be found in the associated technical reports.

Part 4 of the report outlines some additional analytical work undertaken by the AIC to further develop aspects of the framework. This work provides a template for future, detailed analytical work that has real, practical application in short- and long-term DLE planning.

Chapter two: Recent developments in law enforcement performance measurement

Introduction

DLE agencies, and law enforcement more generally, have collected data on their performance for many years. As outlined in Willis, Homel and Gray (2006), traditional measures of law enforcement performance focus on crime rates, arrests, seizures and clearance rates as key measures of success. Such measures are simple, visible and easily understood measures of police effort, although they can provide ambiguous results and do not tell the 'full story'. Essentially, they demonstrate the extent to which police engage in certain types of activities and how they allocate resources. They have only a small amount to say in terms of the complexities of law enforcement work and the broader impacts of law enforcement effort. For example, they say little in terms of the real impact of law enforcement in producing something of value for communities, such as making communities feel safer and more secure (Willis & Homel 2008). This was an important goal highlighted by all levels of Australian DLE personnel during detailed discussions in the first stage of this project (Willis, Homel & Gray 2006) and is increasingly reflected in the work of law enforcement agencies overseas, particularly in the UK and in the USA (PSU 2004, Osnick Milligan & Fridell 2006, Roberts 2006, Dean Lee 2007, O'Connell & Straub 2007). It is also a fundamental shift away from the former view of law enforcement personnel that supply reduction is the only outcome relevant to DLE (Sutton & James 2000).

Measures concentrating on volume of crime are but one dimension among many that could be considered in the broader assessment of the quality of work done by police. Police manage an assortment of responsibilities that may include (for instance) traffic enforcement, border security, drug interdiction, school safety programs, natural disaster responses, domestic disturbances and homicide investigations (Roberts 2006). Developing a range of appropriate measures that capture the complexities of this work would permit a more rigorous assessment of what police actually produce for their communities, as well as informing communities of the depth and breadth of work in which modern police are engaged. Moreover, a measurement system that produces comprehensive information for communities regarding the workings and results of their law enforcement agencies can also make citizens feel more accounted to and can let them assess whether agencies are making good use of public funds, something they are entitled to do as tax-paying community members (Osnick Milligan & Fridell 2006, O'Connell & Straub 2007).

Aside from addressing community expectations, measuring performance is a fundamental component of effective program management in the contemporary law enforcement landscape and has formed an important part of wider public sector reforms over the past 10 to 15 years (ANAO 1996, ANAO 2004, Coleman 2008). Both private and public sector agencies are increasingly required to demonstrate continuous improvements in their performance, which requires a sound understanding of past and present performance, so that informed action can be taken to ensure that organisational goals are achieved. If performance measurement systems are linked to key accountability structures within agencies, then they help to produce behaviours at all levels that are geared toward the achievement of goals and objectives (Osnick Milligan & Fridell 2006).

An effective performance measurement framework assists an agency to identify its desired goals, prioritise its actions and understand their impact on future performance. It does this by:

- linking strategic goals, objectives and priorities across the agency
- enabling progress against goals and objectives to be monitored
- linking individual actions and policing performance
- helping integrate national initiatives and local policing priorities (PSU 2004).

When viewed in this way, it can be seen that performance measurement goes well beyond measuring outputs for the sole purpose of providing accountability or using data for retrospective analysis and record keeping. Rather, it can be seen as a basis upon which both operational and long-range strategic decision-making can be made (Coleman 2008, O'Connell & Straub 2007).

A number of Australian law enforcement agencies have made in-roads in improving performance measurement over the past several years, which is reflected in their various jurisdictional annual reports, strategic and business plans and in moves towards implementing proactive policing techniques (such as intelligence-led policing) rather than the traditional reactive policing approaches. There has also been a considerable amount of work done, particularly overseas, to explore and improve the way law enforcement agencies measure their performance that could be applied within the Australian DLE context. Notwithstanding these improvements, there is a perception that law enforcement performance measurement has in many ways lagged behind the rest of the public sector and that there is scope for significant improvement. The Parliamentary Joint Committee on the Australian Crime Commission has noted that:

> It has always struck the committee … that we have a less informed knowledge base in one of the most important areas of social and public policy in Australia – that is, law enforcement – than in almost any other area … we do not have national benchmarking enabling the community to make intelligent, strategic, long-term judgements about the threats that face the law enforcement environment … We need to develop effective measuring devices in law enforcement that enable us to make better judgements about where limited resources should be applied … where there are very large expenditures of public resources we need to be able to better distinguish between those areas which need further enhancement and those where we will face the law of diminishing returns (House of Representatives 2007).

Similar experiences have been observed overseas in recent years (Dorn, Bucke & Goulden 2002).

The remaining discussion will outline important developments that have occurred in the past few years in this field both in Australia and overseas.

Australia

When seen as a whole, quite a bit of work has actually been undertaken in Australia recently to assist understanding of law enforcement performance measurement and/or to improve the types of performance metrics used by law enforcement agencies. This work builds on earlier efforts to better understand the impact of illicit drugs on the community; for example: Weatherburn (2000); work initiated through Australia's National Drug Strategy (such as the National Drug Strategy Household Survey (AIHW 2008), as well as the Australian Crime Commission's Illicit Drug Data Reporting System (ACC 2009)); the National Drug and Alcohol Research Centre's Illicit Drug Reporting System (2008b); and the AIC's Drug Use Monitoring in Australia program (2008).

While much of the more recent work has occurred within the research environment, in some instances the work has emanated from law enforcement agencies themselves. This work includes program-level research designed to explore and develop tools for law enforcement performance measurement over the longer term, as well as project-based work that essentially addresses one-

off research topics. Aside from the national framework for DLE performance measurement that is explored further in this report, key work that is relevant to DLE that has emerged in recent years includes:

- Australian Federal Police's Drug Harm Index
- Drug Policy Modelling Program (DPMP) at the University of New South Wales
- Ecstasy Market Indicator research project, a joint project between the University of Queensland and Queensland's Crime and Misconduct Commission
- National Illicit Drug Indicators Project
- South Australian Justice Portfolio Drug Strategy Indicators
- Victoria Police's Illicit Drug Strategy analytical tools.

This work can be separated into two major clusters of activity: the first represents work that is designed principally to inform policy-level responses (for example, the work of the DPMP), and the second is to assist, in real-time, operational law enforcement efforts (for example, Victoria Police's Illicit Drug Strategy analytical tools). Irrespective of where this work is placed in the policy-practitioner continuum, the combined research underpins one of the aims of the National Drug Strategy, which is to develop policies and strategies 'that are informed by evidence derived from rigorous research, critical evaluation, practitioner expertise and the needs and preferences of the individual client or consumer' (MCDS 2004).

AFP Drug Harm Index

The Australian Federal Police's (AFP) Drug Harm Index (DHI) was developed by the AFP to provide a single measure that encapsulated the potential value to the Australian community of AFP drug seizures. The index is intended to represent the dollar value of harm that would have ensued had the seized drugs reached the Australian community. The index includes both domestic drug seizures and international seizures destined for Australia where the AFP played a significant interdiction role. It uses estimates of the social costs of drugs and estimates of consumption to derive the social costs per kilogram for different classes of drugs. The index is used for overall performance monitoring and also as a basis for estimating return on investment in DLE (McFadden 2006). The long-term effectiveness of the DHI depends on the development and dissemination of robust methods and reliable results, improvement of data collection, building better evidence bases and attaining agreement on and compliance with national standards.

DHIs can play an important role in reporting DLE performance, particularly at a high level of reporting where what is most important is the 'big picture'. DHIs present often complex drug-related information in a relatively simple way that is (superficially at least) easy to read over time. However, for performance management purposes, indices have significant limitations. For example, their utility in examining subtle changes in local drug markets and their use in developing or improving local policing strategies is problematic. This is partly because of issues surrounding the veracity, completeness and underlying assumptions of the data. However, it is also questionable as to whether a single-figure indicator can fully explain the complex relationship between different variables, such as crime, community health and other social costs. It may also be difficult to link changes in the index to specific law enforcement actions. Similar concerns about DHIs have been raised overseas (Newcombe 2006, Reuter & Stevens 2007).

Drug Policy Modelling Program

The Drug Policy Modelling Program (DPMP) is managed through the National Drug and Alcohol Research Centre (NDARC) at the University of New South Wales. It was established to foster new drug policy insights, ideas and interventions to improve responses to illicit drug use. DPMP work is intended to focus on developing a more comprehensive approach to drug policy through exploring interactions between law enforcement, prevention, treatment and harm reduction. Areas of work include:

- developing the evidence base for policy
- developing, implementing and evaluating policy-relevant models of drug issues
- studying policy-making processes in Australia.

DPMP uses a range of models (for example, agent-based, cost-benefit and hybrid models) to explore future impacts of a range of policy options. They have undertaken a range of work to help inform research directions and to explore the dynamics of certain drug markets. In terms of performance measurement, relevant publications include Degenhardt & Dietze (2005), which outlines data sources on illicit drug use and harm in Australia. This publication summarises the more detailed work of Barker et al. (2004). Ritter (2007) highlights priority areas for DLE based on discussions with 39 senior drug policy bureaucrats across the health and police sectors. Report findings support those of Willis, Homel & Gray (2006), especially in terms of law enforcement data and information inadequacies, the need for better strategies to reduce drug-related crime and the difficulties in measuring DLE performance.

Ecstasy Market Indicator research project

Funded by NDLERF, the Ecstasy Market Indicator (EMI) research project was developed to improve Australian law enforcement's understanding of local ecstasy markets. The project was largely a response to perceived increases in ecstasy prevalence and the specific characteristics of ecstasy users. Its key goal concerned designing an analytical tool for measuring the structure and functioning of the Queensland ecstasy market that could be applied within other jurisdictions (Fowler, Kinner & Krenske 2007).

The EMI is a model that integrates both ecstasy consumption data with law enforcement seizure data. Specifically, the EMI includes data on:

- an estimation of the number of Australian ecstasy users
- their frequency of use
- their amount of use
- ecstasy price
- weight of ecstasy seized.

Like the AFP's DHI, the EMI is an important recent addition to the overall DLE performance measurement 'toolkit' in that it focuses attention on outcomes. It also provides a useful analytical tool to better understand local ecstasy markets, which when compared to other types of illicit drug markets are less well known in Australia. However, no single source of information exists in Australia on illicit drug markets and so models like the EMI perforce rely on a combination of data sources that have particular limitations that need to be recognised and addressed. For this reason, it is often necessary to use different techniques to better understand the dynamics of illicit drug markets (see discussion below).

National Illicit Drug Indicators Project

Managed by NDARC, the National Illicit Drug Indicators Project (NIDIP) was established in the early 2000s to improve the understanding of, and systematically track changes in, heroin and psychostimulant use and related harms. More specifically the NIDIP was developed to increase standardisation, quality, detail, timeliness and comprehensiveness of data collected. Data indicators were intended to cover prevalence of drug use, drug-related morbidity and mortality, treatment and crime. To date, NIDIP work has focused on drug use and prevalence patterns, as well as drug harms (for example, Barker & Degenhardt 2003, Degenhardt et al. 2006, Roxburgh, Burns & Degenhardt 2008).

South Australian Justice Portfolio Drug Strategy Indicators

The Office of Crime Statistics and Research (OCSAR) together with the Justice Strategy Unit have produced Justice Portfolio Drug Strategy Indicators (OCSAR & Justice Strategy Unit 2005) with input from all justice agencies. Eight indicators were derived to assist the Justice portfolio to measure success in achieving the strategic priority of 'protecting the community from the consequences of drug trafficking and abuse' and cover the areas of demand, harm and supply reduction. Data encompasses the police, courts, and corrections, as well as community attitudes and drug use. The primary aim of these indicators is concerned with communicating information on drug market activity to the community, rather than for law enforcement performance management purposes.

Victoria Police's Illicit Drug Strategy analytical tools

In recognition of the continuing harms caused to Victorians through illicit drug supply and use, Victoria Police developed and introduced a new Illicit Drug Strategy in 2007 to:

- coordinate a state-wide policing approach to illicit drugs
- focus efforts on the connections between illicit drugs and volume of crimes
- take action on issues over which Victoria Police could exert an influence
- develop and align systems and processes to support the strategy's principles.

The strategy emphasises the importance of being able to effectively measure the impact of its different elements. Victoria Police is attempting to achieve this through the introduction of two new tools: a Drug Harm Index (DHI) and Drug Attribution Model (DAM).

Victoria Police's DHI attempts to quantify the amount of harm being caused by drug and drug-related offending at both state and PSA levels. The DHI estimates the total quantity of harm from drug and drug-related crime using a combination of both police reports and research. The DHI is designed as a high-level strategic planning and reporting instrument that enables users (principally intelligence analysts and managers) to monitor overall harms and to determine the key drivers of these harms. This information then directs users to the DAM to examine in more detail specific local drug markets.

The DAM collects and analyses information gathered from internal and external sources and is intended to illustrate what the 'drug problem' looks like at both state and PSA levels. The model helps to establish the extent of the problem and provides the basis for trend analysis of its integrated data components. It provides a broader view of local drug issues beyond just monitoring police activity in terms of illicit drug detections and seizures. Key data sources informing the DAM include:

- law enforcement data (a range of both drug and drug-related offence data)

- coronial data
- ambulance data
- needle exchange data
- alcohol and drug treatment data
- hospital admission data
- hospital emergency department data.

Victoria Police are currently building and testing the system tools.

United Kingdom

While there are moves to address DLE performance measurement in the UK, much of the work to date centres around improving performance measurement in law enforcement more generally. There have been three important program level developments in performance management in recent years: the Police Performance Assessment Framework, Analysis of Policing and Community Safety and the Scottish Policing Performance Framework. The Home Office has also produced a number of online toolkits and other practical guides to assist law enforcement executives through to operational police improve their understanding of what performance measurement is, how it can be applied and what should be measured. In terms of DLE, the Home Office has developed a DHI, but is also in the process of developing a range of other indicators to measure DLE performance.

The following outlines major recent work in law enforcement performance measurement in the UK.

Police Performance Assessment Framework

The Police Performance Assessment Framework (PPAF) is an initiative led by the Home Office (UK Home Office n.d.a). Until PPAF, the police service was considered to have lagged behind many other public services in terms of the extent, robustness and transparency of their performance measurement. In this sense, it appears similar to the current Australian law enforcement performance measurement environment.

PPAF was designed to reflect the breadth of modern policing and include the contribution of local communities and other organisations, as well as the police service itself. In addition to focusing on operational effectiveness, PPAF provides measures of satisfaction plus overall trust and confidence in the police, as well as measures that put performance into context in terms of efficiency and organisational capability. In line with the UK Government's desire to enhance policing accountability at a local level, performance against local priorities is also assessed.

More specifically, PPAF was designed to help demonstrate success in achieving the key priorities stipulated in the UK's National Community Safety Plans. These included providing a citizen-focused service to the public, tackling antisocial behaviour and disorder, continuing to reduce crime in line with the government's Public Service Agreements, combating serious/organised crime, and narrowing the justice gap.

Data collected addressing statutory required performance indicators were used in the production of the first assessments in the financial year 2004/05. PPAF was designed as a first attempt at modernising police performance measurement. However, it was recently replaced by the Analysis of Policing and Community Safety (APACS) (see below), which is a simplified performance measurement framework that specifically includes measures of drug supply and use (UK Home Office n.d.b).

Analysis of Policing and Community Safety

APACS is a new performance assessment framework for policing and community safety that was introduced for the 2008/09 financial year in the UK (UK Home Office n.d.b). The national framework attempts to monitor and assess the crime and community safety work of the police and their partners in England and Wales.

APACS, which replaced PPAF and other Home Office assessment arrangements, is intended to simplify the performance measurement landscape and is aligned with key performance frameworks of community safety partners, such as local government and the health service (UK Home Office n.d.b). The number of national indicators has been greatly reduced under APACS, from around 1200 indicators that local authorities and their partners previously reported on, to 198. Three indicators relate specifically to the policing of illicit drugs:

- drug-related offending
- drug users in treatment
- perceptions of drug use or drug dealing as a problem.

Scottish Policing Performance Framework

The Scottish Policing Performance Framework (SPPF) was introduced in April 2007 (Scottish Executive 2007). The framework is considered a significant step forward in the way that policing performance is measured, reported and ultimately managed in Scotland. The framework is the product of significant collaboration between a range of justice agencies and fora, as well as Audit Scotland.

The framework provides a coherent national model for the measurement and reporting of performance information. It is intended to assist managers throughout the police service to provide more effective policing within Scottish communities. The framework also aims to improve accountability at local and national levels through the publication of consistent and transparent performance information, which is designed to support Scottish ministers, police authorities and the general public, in their understanding of policing performance.

The framework is divided into four areas, designed to capture the breadth of policing activity. The four areas are:

- service response
- public reassurance and community safety
- criminal justice and tackling crime
- sound governance and efficiency.

In each of the four areas, high-level objectives have been identified, which reflect national policing priorities. These objectives have been translated into specific outcome, activity and process performance measures in each of the four areas. Additionally, included in the framework are some context measures, which are not measures of performance, but are designed to provide contextual information to allow a better understanding of the environment within which a police force operates. The framework establishes, for the first time, a single national suite of performance measures. It is intended to offer a high degree of flexibility so that the range of indicators can be expanded in future years. Account is also taken of police forces' local indicators and, if there is significant commonality across forces, these will be considered as national indicators in the future. The first national performance report is expected in autumn 2008 (Scottish Executive 2007).

Drug Harm Index

The DHI was developed as an overarching measure to assist assessment of the UK Government's target to reduce the harm caused by illegal drugs, including substantially increasing the number of drug misusing offenders entering treatment through the criminal justice system (MacDonald et al. 2005). It was designed to capture the harms generated by problematic use of any illegal drug by combining several national indicators into a single figure time-series index. Harms captured in the index include drug-related crime, community perceptions of drug problems, drug nuisance and various health consequences that arise from drug abuse. The DHI does not capture all harms that illegal drugs generate because they cannot be measured consistently and/or because of conceptual difficulties (for example, the index does not include unemployment, work productivity, parenting/child issues, among others). As such, the measure represents an index indicating change over time, rather than an estimate of the absolute level of harm at any given time.

As already highlighted, DHIs are subject to a degree of criticism, especially when used beyond high-level reporting for performance management purposes. Newcombe (2006), critiquing the work of Macdonald et al. (2005), argues that their generation of DHI's harm variables has limitations at each stage of the process, including: identifying the full range of harms, selecting the most important harms, operationally defining each harm, and naming (labelling) each harm. He considers the assignment of numerical weightings to the risk/harm variables to be highly subjective and others have also argued that the assigned weightings may not reflect reality (Reuter & Stevens 2007). As raised above, Newcombe also questions the use of a single figure indicator in explaining the relationship between disparate variables, such as crime, disease, social disorder and societal costs. Aside from these criticisms, DHIs may not provide timely performance data (for example, the Home Office reported on 2005 results in 2007) and they can be highly resource expensive (S Eglington, pers. comm. 5 Dec 2007).

MacDonald et al. (2005) recognise the DHI's limitations and note that interpreting changes in the DHI requires care because it is a single measure that summarises complex information. They indicate that different categories of harm may evolve differently over time and that no single index can fully capture this diversity. However, to compensate for these limitations they recommend that the DHI should still be considered alongside a suite of individual indicators in order to determine which particular types of harm are becoming dominant or are being moderated.

Police Standards Unit

The UK Police Standards Unit (PSU) is responsible for working directly with police forces and Crime and Disorder Reduction Partnerships to support them in performance improvement. The PSU has recently undertaken work to guide police personnel in the principles and application of performance measurement and management and has produced a number of useful guides for staff. In particular, *Managing police performance: a practical guide to performance management* (PSU 2004) consolidates many of the key principles of policing performance management, with practical ideas and tips for implementing an effective performance management regime. The guide is a key document for the service in designing or developing effective performance management structures. It covers:

- the principles of performance management
- the importance of developing adequate processes
- HRM issues and accountability
- the importance of sound data and systems.

A further publication, *Police performance management: practical guidance for police authorities* (PSU 2006) is also available for police. In this instance, the PSU together with the Association of Police Authorities worked with all authorities in England and Wales during 2005 and 2006 to collate good practice and summarise key principles for authorities in carrying out their role in police performance management.

National Centre for Policing Excellence

The National Centre for Policing Excellence (NCPE) was established by the UK's *Police Reform Act 2002* and is required to develop policing doctrine, including guidance, in consultation with the Association of Police Chief Officers, the Home Office and the Police Service. Guidance produced by the NCPE is intended to be used by chief officers to shape police responses to ensure that the general public experience consistent levels of service.

The NCPE has developed some useful resources for police, particularly around improving the quality and use of police information. *Guidance on the management of police information* (NCPE 2006) provides non-technical guidance and sets out a framework for the effective management of police information. It covers the collection, recording and evaluation of information, as well as including guidelines for sharing police information internally within the force and with other agencies. The guidance provides a common national framework for the management of police information, highlighting the importance of common standards in high risk areas of activity.

Crime reduction toolkits

The Home Office has a number of useful online toolkits that provide practitioners and the general public alike with useful, practical advice to do with crime prevention (Home Office n.d.c). Of particular relevance here is the toolkit Communities Against Drugs, which brings together information on the latest developments, research findings and approaches to tackling drug supply. It includes tools for identifying problems, developing responses and monitoring progress, as well as highlighting practical measures to make communities safer. The toolkit is concerned with tackling the supply of drugs and is primarily aimed at police and community drug action teams.

The Communities Against Drugs toolkit stresses the importance of looking beyond traditional measures of police performance (arrests and seizures) to design local indicators of success. It suggests that these indicators need to be related to the multiple sources of information that are available about drug markets and derived from the various agencies involved in partnership work to tackle drugs. Some suggestions are made around the types of indicators that could be developed. For example, they suggest that informative indicators could address supply, demand and drug harms, as well as community perceptions.

United States of America

As in the UK, a lot of effort has been invested in improving performance measurement in the US's law enforcement environment in recent years. This has occurred at both national and local levels. National agencies have focused their attention on producing technical guides to aid

improved performance management, while local-level police and other agencies have begun using methodologies such as systems analysis and program logic models to develop more comprehensive approaches to performance measurement. The following is a summary of key initiatives.

Office of Community Oriented Policing Services

The Office of Community Oriented Policing Services (COPS) is an activity of the US Department of Justice. Among other things, COPS provide grants, training and technical assistance to police. COPS produces a wide range of policing resources that provide practical advice on policing issues, including in the drugs environment. For example, they have produced a large number of publications that assess the effectiveness of different types of DLE policing approaches, including crackdowns in open air drug markets, in private premises and so on.

While not specific to DLE, COPS has also recently published a useful technical guide that provides law enforcement personnel with practical guidance on developing and implementing a comprehensive performance management system. The *Law enforcement tech guide for creating performance measures that work: a guide for executives and managers* (Roberts 2006) is intended to help police develop measures that can be relied on to make improvements to individual programs and initiatives and to improve the effectiveness of an agency's overall operations. The guide emphasises that performance evaluation is more than just an academic exercise conducted at a single point in time, but that it is a complete strategic approach that can become an intrinsic component of police management.

The guide covers:

- a description of what performance measurement comprises and why it is important
- the importance of establishing an integrated performance management framework
- defining goals and objectives
- establishing accountability for performance
- developing data collection plans
- analysing, reviewing and reporting performance data
- using performance information to drive improvement
- building performance management into everyday policing.

Police Executive Research Forum

The Police Executive Research Forum (PERF) is a national membership organisation of police executives from the largest city, county and state law enforcement agencies. PERF is dedicated to improving policing and advancing professionalism through research and involvement in public policy debate. As part of this work, PERF has produced a guide, *Implementing an agency-level performance measurement system: a guide for law enforcement executives* (Osnick Milligan & Fridell 2006), that outlines key components of a model performance measurement system and provides a discussion around the importance of implementing such a system. The model is designed so that law enforcement executives can modify and adapt it to suit the needs of their individual agencies and communities. The PERF measurement system attempts to focus attention on a broader spectrum of activities than have traditionally been measured by law enforcement agencies, but that are nevertheless important to understanding what law enforcement agencies produce for their communities.

The PERF measurement system is comprised of a model of overall performance expectations (representing what law enforcement do or should produce for their communities); tools to help

measure progress toward meeting the expectations; and organisational structures to hold agencies, and the employees within them, accountable for meeting expectations. The system formalises overarching goals for law enforcement, provides systematic ways to assess an agency's progress toward meeting these goals, and structures ways in which agencies can promote behaviour in accordance with goals. The system is intended to be general enough so that it is relevant to many different types of agencies and so that law enforcement executives can choose measures and accountability structures based on the needs of their individual agencies and communities and the availability of resources.

Office of National Drug Control Policy

The Office of National Drug Control Policy (ONDCP) is a component of the Executive Office of the US President, whose principal purpose is to establish policies, priorities, and objectives for the US drug control program. The ONDCP is also responsible for evaluating, coordinating, and overseeing both the international and domestic anti-drug efforts of executive branch agencies, ensuring that such efforts sustain and complement state and local anti-drug activities (ONDCP 2007).

In 2003, the ONDCP initiated development of more robust performance measures for their 'High-Intensity Drug Trafficking Areas' (HIDTA) program. Through this work the ONDCP devised a Performance Management Process (PMP), which was intended to monitor the extent to which individual HIDTAs met performance goals they negotiated with ONDCP. The central element of the PMP is a set of required tables that standardises the collection of key data from each HIDTA. These tables require each HIDTA to identify:

- the number of drug trafficking organisations they targeted and either disrupted or dismantled
- the operational scope (for example, local, multi-state, or international) of the targeted drug trafficking organisations
- the amount and value of illegal drugs seized or destroyed
- the value of cash and other resources denied drug trafficking organisations
- other pertinent information necessary to assess the performance of a HIDTA.

The principal performance objective – disruption and dismantlement of drug trafficking organisations – was considered a reasonable proxy for reducing the supply of drugs in the US.

The PMP was designed to be flexible enough to be used for HIDTAs with very different strategies, including those that attempt to disrupt smuggling operations along the US's southwest border, methamphetamine production in the Central Valley of California, marijuana cultivation in Appalachia, or money laundering wherever it occurs (ONDCP 2007).

National Alliance for Model State Drug Laws

Congressionally funded since 1995, the National Alliance for Model State Drug Laws (NAMSDL) uses a performance-based approach and logic models to assist states in developing comprehensive state drug and alcohol laws, policies, and programs. NAMSDL's purpose is to extend the reach of federal drug control efforts, thereby ensuring a national response to the drug problem.

States have passed over 100 model laws, policies, or programs because of NAMSDL's efforts, covering a broad range of areas including (among others), precursor chemical control to combat methamphetamine use and production, prescription drug monitoring, drug free zones, penalty provisions for dealing drugs, substance abuse parity and drug dealing by gangs (Carnevale Associates 2005a).

Local drug control strategies

Work on improving performance management has also been occurring at a local level in the US. Cities like Washington DC (the District) and Rochester, New York, are addressing their substance abuse problems by combining strategic planning with performance measurement to develop comprehensive, balanced plans to reduce drug use and its consequences. Both the District and Rochester have adopted similar processes for developing comprehensive, balanced plans that include treatment, prevention and law enforcement working together to achieve long-term results (Carnevale Associates 2005b).

The District and Rochester conceived their strategies in systemic terms by linking together basic elements of their local drug control activities (prevention, treatment, and law enforcement) to form a unified approach to combat their respective substance abuse problems. Key community stakeholders, representing law enforcement, health and social service agencies and community-based organisations, have come together to conduct needs assessments. They then devised strategies to address needs, implement programs, and monitor program performance (Carnevale Associates 2005b).

Both cities adopted a performance-based planning process. This involved identifying and bringing together the community of stakeholders inside and outside of government who had program and policy interest in reducing their local substance abuse problem. Meetings were held in which stakeholders assessed the nature and extent of the substance abuse problem, set priorities, and developed a shared vision about desirable long-term outcomes. This shared vision was eventually expressed in strategic terms in each city's substance abuse strategy (Carnevale Associates 2005b).

A detailed description of Rochester's approach can be found in the Rochester drug strategy *Reclaiming our neighbourhoods, reclaiming our youth* (Rochester Drug Strategy 2002), as well as their chosen indicators of performance.

Discussion

Since Willis, Homel and Gray (2006) undertook the first stage of the DLE performance measurement project, considerable work has been undertaken in relation to law enforcement performance measurement. In Australia, focus has been on DLE performance measurement, while overseas most work has been geared towards performance measurement in law enforcement more generally. This body of work has addressed national and local level needs and priorities and has had its genesis in both research and policing environments.

Work in this area is in consensus in stressing the importance of developing measurement systems that capture information beyond the traditional realm of law enforcement performance measurement. That is, avoiding focusing narrowly on volume measures such as seizures, arrests, and in developing measures that describe the full impact of police work (such as in the areas of harm and demand reduction). Not only does this permit better scrutiny and improve overall accountability of law enforcement, but it also demonstrates to the public in a very tangible way the depth and breadth of work in which modern law enforcement personnel are engaged. It also shifts the emphasis of measurement towards focusing on future perspectives (such as the achievement of strategic goals) rather than being caught up in measuring simple police activity.

Most work in recent years appears to support the use of multiple indicators in managing performance, rather than relying on single indicators of performance (such as DHIs). The rationale behind this approach is that it helps to overcome the limitations of any particular data source, while also permitting an assessment of subtle changes over time across a range of disparate areas.

At a very basic level, keeping the approach simple allows operational police to undertake their own timely assessments rather than leaving the process to 'the experts'.

Despite this, DHIs and other similar analytical models may form useful high-level reporting tools as they can present complex time-series drug-related data in a relatively simple way – care just needs to be taken in their development and interpretation. Until such time as the reliability and accuracy of underlying data sources are improved, it may be prudent for agencies to concentrate their efforts on developing indices that rely on a smaller number of relatively robust data sources (say three to five), rather than on attempting to capture as wide a range of data as possible that may be subject to significant reliability and accuracy problems. In this way, agencies will be better able to rely upon these indices for assessing performance. In addition, it remains important that agencies develop a suite of performance measures that sit alongside any analytical model. This will assist in the examination of the subtleties of drug market changes and allow agencies to feed results back into improving overall performance in a timely manner, particularly at the local level.

Although no longer a new concept, developing a performance measurement regime in any agency has its challenges; implementing such a thing, even if its content is relatively simple, takes commitment at all levels and time. People can find organisational change very difficult or threatening. This may be particularly true for law enforcement agencies where there are established and highly structured chains of command and practices. Nevertheless, effective implementation of a new performance measurement system requires an agency to create an organisational culture that values performance management and provides ways for all levels of staff to participate. This commitment needs to come from an agency's executive and be filtered down through senior staff, to middle managers and on to operational staff. All staff should be actively engaged in performance management planning and development processes, as well as in analysis and reporting. This helps to ensure that performance measurement systems are grounded in reality, are credible and meet the needs of staff. It also helps all staff to accept accountability for their work performance.

Experience demonstrates that, without adequate executive endorsement and commitment, any new performance measurement system that is implemented within an agency is destined to fail (Roberts 2006). A performance measurement system is also likely to fail if:

- there is inadequate strategic planning within an agency
- an agency does not hold staff or units accountable
- an agency does not build performance measurement into existing business and accountability processes
- an agency does not continue performance measurement when resources are scarce
- training is inadequate/not provided to build knowledge and skills in performance measurement, particularly in data collection and analysis
- staff collect and analyse data but ignore or manipulate the results
- staff lose momentum and do not follow up (Roberts 2006).

Building a new performance measurement system into existing business and accountability processes (such as operational reviews and staff performance appraisals) helps to emphasise the importance and credibility of such a system. It also highlights the importance of individual accountability, demonstrates management commitment and establishes a foundation for an effective performance measurement system. In turn, this promotes objective appraisal and performance monitoring, as well as the development of intelligent and proactive policing responses.

Chapter three: Implementing a national DLE performance measurement framework

Establishing the context and identifying key DLE goals

No matter how useful, relevant and reliable a set of measures and indicators may be when applied at an operational level, they will be of little use organisationally if they do not align with and reflect overall agency goals and objectives. After all, units and commands do not exist in a vacuum but are part of a larger, cohesive organisational structure. For this reason it is critical that any new performance measurement system is founded on a strong understanding of important contextual factors, such as organisational-level goals and objectives and other influencing factors that may be internal or external to an agency. Identification of these factors will determine the direction an agency takes, the tasks it needs to do to achieve its goals and the associated level of effort and attention required. It is through this process that agency executives, senior staff, middle managers and operational staff become clear about where work should be focused and what exactly should be measured.

As outlined above, Stage 1 of this project involved extensive consultation with a wide range of senior and operational DLE personnel that covered the full spectrum of DLE work in Australia. These discussions played a crucial role in informing and developing the four high-level outcomes and their associated measures and indicators (Willis, Homel & Gray 2006). An important component of the Stage 2 project was to revisit these goals to determine if they were still relevant and/or if they required further development to better reflect current DLE effort and priorities. To assist in this process, the AIC convened a national workshop to capture the views of a range of jurisdictional DLE personnel, police involved in law enforcement performance measurement more generally, as well as relevant personnel from the health sector. A summary of what was discussed and agreed upon at this workshop is provided in each key discussion item below.

Key goals of Australian DLE

The national workshop was convened by the AIC in Canberra in May 2008. Attendees reflected a range of DLE agencies in Australia from national through to more local levels. A number of senior bureaucrats from the health sector also attended. A full list of workshop participants is provided in Appendix 2 of this report.

Workshop discussions validated the four major goals (or outcome areas) that form the basis of the framework and were discussed at the workshop both in terms of Australia's harm minimisation policy, as well as DLE's specific role in fulfilling this policy's tripartite objectives (that of reducing supply, harm and demand of and for illicit drugs). Consensus around key goals of DLE was reached early in the workshop proceedings and so most of the discussion in fact centred on specific measures and indicators of DLE performance (which is what the next section outlines), particularly indicators of drug-related public health.

A major related issue identified by both police and health participants during these discussions was the mutual need for frank exchange of indicator data so that both sectors could effectively monitor changes within the illicit drug environment, including new and emerging issues.

Developing performance measures and indicators for national and local-level DLE

Having discussed important contextual influences and defined organisational goals and objectives, the next step in developing an effective performance measurement system is to develop measures and indicators of performance. As noted by Willis, Homel and Gray (2006), a performance measurement system should include a sufficient number of appropriate measures that give a balanced picture of program performance. Generally, a small set of key performance measures is likely to be more manageable and useful than a large number of measures. The suite of measures and indicators should also reflect a balance between the cost of collecting the associated data and the value of information provided and so, where possible, much of the data required should be needed for day-to-day management of the program or unit. It is also important to keep performance measures up-to-date to meet changing circumstances and needs. A balance has to be struck between having consistent information to monitor changes in performance over time, and taking advantage of new or improved data and reflecting current program priorities.

The difference between a performance measure and indicator can be briefly described as follows: a performance indicator is the specific item that an agency measures (for example, the number of incidents, drug seizures or drug-related fatalities), while a performance measure is more high level and essentially addresses an area an agency wishes to monitor (for example, changes in trafficking modes, changes in public perception about drug markets and so on). A detailed discussion of performance measurement theory and its application is outside the scope of this report, although the authors refer interested readers to Willis, Homel and Gray (2006) for a more comprehensive discussion on this topic.

The following section outlines findings from both the national workshop and project field work (respectively) in relation to refinement of the framework's indicators.

The national workshop – refining the framework's performance measures and indicators

The framework's performance measures were discussed in detail during the national workshop. Discussions centred on questions to do with the validity of the model framework's indicators, particularly the underlying data sources, but also covered potential gaps. It should be noted that resolution was not necessarily intended to have been achieved at the workshop in terms of exactly which indicators and data sources should have remained in the framework, or at least further explored – this was left for the project's fieldwork phase. The workshop's main aim was to undertake a preliminary exploration of these matters. Key areas of discussion are highlighted below under each of the four outcome areas.

Reduced drug crime and drug-related crime

The workshop discussed the possibility of including incidental drug seizures as an adjunct to measures addressing targeted DLE, as these are in fact the most common drug detection methods. For example, frequent methods of non-targeted drug detection include when police pull cars over for random breath tests, or when they are in attendance at domestic violence call outs.

Workshop participants discussed the limitation of trends in robberies as the sole indicator of drug-related crime. This indicator is a valid measure of crime in so far as it relates to the heroin market. However, it may not be as meaningful in terms of measuring the impact of DLE on other drug types, particularly stimulants. As such, the trend in assaults was flagged as a potential additional indicator of drug-related crime. At this stage there is less evidence linking assaults and stimulant use than there is for linking robberies to heroin use. It was acknowledged during the workshop that further background research is required on this issue.

The workshop discussed the validity of both actual drug price and purity (usually obtained via police drug buy/bust operations) and drug user perceptions of price and purity. The model framework includes drug user perceptions of these indicators only (based on IDRS data) as not all jurisdictions capture, manage and/or report on this data in a consistent way. However, where these data were available in the field sites, it was agreed that they should be further explored and considered for inclusion in the final framework.

Reduced organised crime

Workshop participants felt that this was not as well developed as the reduced drug crime and drug-related crime outcome area because the associated measures and indicators were only a subset of this domain. One possible addition to the framework suggested in the workshop was for there to be an equivalent measure to trends in Custom's drug trafficker typology for more local level-police; for example, a measure that targeted recidivist or 'ongoing' drug suppliers.

Improved public health

Measures and indicators supporting the improved public health outcome domain were considered by health sector workshop participants to be useful and broadly reflective of the major areas of illicit drug mortality and morbidity. Key issues that were raised included:

- using National Drug Strategy Household Survey (NDSHS) data to inform police performance. Although the NDSHS is conducted only once every three years, it was still considered useful for measuring long-term DLE performance. This is because changes in drug behaviour can occur slowly
- exploring the use of drug diversion data (such as Illicit Drug Data Initiative (IDDI) data) in the framework either in addition, or in preference, to data from the National Minimum Dataset (alcohol and other drug treatment). Although certain drug diversion programs have high non-compliance rates, drug diversion data capture clients currently in treatment. The National Minimum Dataset includes closed treatment episodes only and has a 12-month reporting time lag. Closed treatment episodes represent a fraction of those who have received treatment
- accessibility of ambulance data varies within jurisdictions. For example, the Victorian ambulance service and police have traditionally had little (if any) communication, whereas in South Australia there is a restricted capacity for the ambulance service in that state to provide data as they are small and have few resources to do so
- the link between mental illness and drug use is complex and in need of further research, particularly in terms of drug use and the development of psychosis. Once sufficient evidence becomes available linking these two issues, it may be possible to include measures in the framework that captures them.

Improved public amenity

The NDSHS could form a useful information source to measure and monitor police performance. The survey includes questions around the types of drugs that respondents fear, and whether they have personally experienced drug-related crime.

Further suggested sources of information that could inform DLE's impact on public amenity were Crime Stoppers and the Illicit Drug Reporting System (IDRS).

Fieldwork findings – refining the framework's performance measures and indicators

The framework's performance measures were further refined during fieldwork at the four field locations, – that is, at Customs, Victoria Police, South Australia Police and Tasmania Police. In particular, the experiences of staff in the fieldwork sites helped to assess the validity of each

measure and indicator, in the exploration of alternative and/or additional measures and in the refinement of these measures at a very practical, local level. A final list of the framework's measures and indicators can be found in Appendix 3 of this report. A summary of fieldwork findings relating to this project component is provided here, although a full discussion is located in the accompanying technical report for each field location (Willis, Anderson & Davis 2010).

Unsurprisingly, the major overall finding was that the performance measurement systems within each DLE field location differed. These differences were in terms of the types of performance data collected, how frequently and systematically they were used, at what level of the organisation they were used and reported, as well as the type of management information system they were located in. A summary of findings for each field location is provided below.

Australian Customs and Border Protection Service

Fieldwork interviews indicated that performance monitoring and reporting of illicit drugs within Customs occur at all organisational levels; from corporate through to program, division, branch and also regional levels. As is typical in a large agency, each level has its own reporting needs and requirements. At the branch level, indicator data tend to be largely administrative and are focused on day-to-day operational requirements, whereas, at the corporate level, indicator data are generally more outcome-focused. This is not to say that staff within branches are not concerned with high-level agency outcomes. Indeed, some branch-level staff have developed their own outcome measures in an attempt to determine agency impacts on illicit drug markets. For example, some staff within the Passengers Division use a DHI for internal performance monitoring and reporting. Based on the AFP's DHI (see Part 2 of this report for a summary of the DHI tool), this is an example of a localised attempt within Customs to grapple with the ability of the agency to attribute their DLE work to improving drug-related social harms. While different branches within Customs use a small number of illicit drug indicators to measure performance, these in fact form only one component of many branches' total performance measurement system as their work includes other forms of illicit trade that require monitoring, as well as the monitoring of legitimate movement of people and goods across Australia's border.

Most of the systematic, long-term monitoring and reporting of illicit drugs occurs within Customs' Intelligence, Planning and Corporate Statistics branches. In these branches, emphasis is placed on the importance of combining a range of internal and external information and data sources to generate a picture of the larger illicit drugs environment. For instance, both branches conduct 'gap analyses' where drug seizure data (for example, type and weight of drugs seized, as well as their means of entry into Australia) are assessed and triangulated against information such as:

- drug market intelligence
- social harms from illicit drugs (for example, overdoses and deaths from illicit drugs)
- Drug Use Monitoring in Australia (DUMA) data[1]
- IDRS data
- the Australian Crime Commission's Illicit Drug Data Report (IDDR) data.

While the small number of drug seizure indicator data form an important part of regular, formal agency monitoring and reporting processes (such as the agency's Annual Report), other drug market indicator data (for example, drug purity and price data) and social harm data are chiefly used informally and are not publicly reported. Fieldwork findings suggest that by systematising the analysis of a range of relevant and appropriate indicator data, Customs can achieve a rigorous and comprehensive assessment regime – this can then feed into regular accountability reporting and strategic management processes.

[1] Brief descriptions of DUMA (and IDRS) can be found in *Implementing a drug law enforcement(DLE) performance measurement framework in Australia: detailed fieldwork findings* (Willis, Anderson & Davis 2010).

Planning and Corporate Statistics branches indicate that there is increasing external pressure on Customs to account for resources expended on DLE and to demonstrate impacts in real terms. For example, there is a requirement in Portfolio Budget Statement reporting2 for all national agencies to report on organisational effectiveness and include contextual issues as they affect their operations. In 2009–2010, agencies are required to provide performance measures that are separated into 'deliverables' (outputs) and 'key performance indicators' (higher level outcomes). Similar reporting requirements are expected under 'Operation Sunlight', which is the Rudd government's reform agenda to improve the openness and transparency of public sector budgetary and financial management, and to promote good governance practices (Department of Finance and Deregulation website, accessed 19 May 2009).

Given these requirements, the model performance measurement framework forms an effective means through which more rigorous performance reporting is undertaken.

Tasmania Police

Tasmania Police measure, monitor and report on a range of DLE indicators at both the local and state levels. Many of these measures are mirrored in aspects of the AIC's model performance measurement framework. The range of indicators used by Tasmania Police reflects Tasmania's particular illicit drug market environment. For example, Tasmania Police reported during fieldwork that they do not have significant heroin or cocaine markets (this assertion was supported by other fieldwork findings) and so indicators that they use regularly for performance and accountability purposes focus on other more prevalent illicit drug types, such as cannabis, amphetamines and amphetamine-type stimulants (ATS).

Most of the indicators used by Tasmania Police for both performance improvement and accountability purposes are reflected in the 'drug crime and drug-related crime' outcome area of the model framework. Currently, indicators focus on the more traditional measures of DLE performance, such as detections, seizures and drug weights. Tasmania Police do not regularly or systematically incorporate drug price, purity and availability data into their performance reporting processes, although it would be possible for them to do so by including data from the IDRS.

Tasmania Police use a small amount of health data to regularly inform DLE performance – this is chiefly comprised of drug diversion data sourced from the Tasmanian Police Illicit Drug Diversion Initiative. Tasmania Police indicated during fieldwork that they do in fact use other drug-related health mortality and morbidity statistics on an ad hoc basis, although these are not included in their formal performance monitoring, improvement and reporting processes. Such data are obtained informally as no official data-sharing arrangements exist currently between the Tasmanian Department of Health and Human Services (DHHS) and Tasmania Police.

As already noted, fieldwork findings suggest that by systematising the analysis of a range of relevant and appropriate indicator data, Tasmania Police could achieve a more rigorous and comprehensive performance assessment regime. This could then feed into regular accountability reporting and strategic management processes.

It should be noted that, like their federal counterparts, state government agencies are increasingly expected to provide more rigorous and transparent means of reporting performance publicly. Typically, this takes place through jurisdictional parliamentary estimates processes. As such, the performance measurement framework outlined in this report forms a useful means through which this reporting could be achieved.

[2] Portfolio Budget Statements (PBSs) inform Senators, Members of the House of Representatives and the public of the proposed allocation of resources to government outcomes. The PBS provides an important means by which agencies remain accountable to the parliament.

South Australia Police

South Australia Police collect and monitor a range of illicit drug indicator data. The precise suite of data varies by work unit. For example, drug intelligence reports, collated by the Drug Intelligence Desk, are disseminated quarterly to key internal and external stakeholders. Indicator data incorporated within these reports include:

- drug concealment methods
- drug form
- location of drug seizures
- offender criminal histories, including the number of times an offender was convicted of property and/or violent offences
- forensic analyses of drug form and purity
- prices of drugs obtained from prisoners, undercover officers and/or informants
- overdose monitoring (police-generated data rather than data obtained from the public health sector)
- relevant DUMA and IDRS data.

The Drug Investigation Branch, which addresses high-level illicit DLE through detection and disruption of crimes involving illicit drugs, monitors and reports on similar indicator data to the above. Operational Mantle, designed to address street-level illicit drug markets, also regularly monitors and reports on a small suite of drug indicator data, including seizures, arrest reports, expiation notices and the number of people diverted into drug education and treatment programs.

Currently, public health data (overdoses and hospital admission data) are not formally accessed by South Australia Police for performance measurement purposes, although they do have access to IDDI drug diversion data. While South Australia Police's Drug Intelligence Desk monitors the number of drug overdoses, these data are police generated. That is, they are obtained from daily police journals, where a police officer has been in attendance at an overdose, rather than data obtained from the public health sector. As such, they are likely to be an under-representation of the actual number of overdoses.

South Australia Police could develop a more rigorous and comprehensive performance assessment regime by formally incorporating a wider range of measures (particularly measures of drug-related public harms), which could be fed into regular accountability reporting and strategic management processes.

Victoria Police

As already noted, the Victoria Police have put considerable effort into improving the way the agency monitors and measures DLE in the past two years. In recognition of the continuing harms caused to Victorians through illicit drug supply and use, Victoria Police developed and introduced a new Illicit Drug Strategy in 2007 to:

- coordinate a state-wide policing approach to illicit drugs
- focus efforts on the connections between illicit drugs and volume of crimes
- take action on issues over which Victoria Police could exert an influence
- develop and align systems and processes to support the strategy's principles.

The strategy emphasises the importance of being able to effectively measure the impact of its different elements. As outlined in Part 2 of this report, Victoria Police is attempting to achieve this through the introduction of a DHI and the DAM.

The DHI estimates the total quantity of harm from drug and drug-related crime using a combination of both police data (from their Law Enforcement Assistance Program (LEAP) database) and research. As such, the DHI is not designed as a tactical analytical tool; rather, it is a high-level strategic planning and reporting instrument. The DHI includes three major components. These are:

- a drug-related crime component – this includes drug attributable fractions or the proportion of major offence categories in police service areas (PSAs) that are considered drug-related
- a drug availability component – the availability of five key drug types (amphetamines, ecstasy, heroin, cocaine and cannabis) based on average purity of drugs seized
- a PSA susceptibility component – this includes an estimation of the susceptibility of a PSA's population to drug use. This is calculated using population data and rates of drug use for specific age groups (based on NDSHS data).

The DHI enables users, principally intelligence analysts and managers, to monitor overall harms and to determine the key drivers of these harms (by offence or drug types). This is intended to then direct users to the DAM to examine in more detail specific local drug markets.

The DAM collects and analyses a wide range of information gathered from internal and external sources and is intended to illustrate what the 'drug problem' looks like at both state and PSA levels – the types of indicator data underlying the DAM are similar to (although not entirely the same as) those outlined in the AIC's model framework. The model helps to establish the extent of the problem and provides the basis for trend analysis of its integrated data components. For example, it is intended to determine drug-related activity occurring locally, in neighbouring areas or elsewhere, the magnitude of that activity and how it relates to a PSA's volume of violent crime levels, drug treatment usage and public health outcomes. As such, it provides a broader view of local drug issues beyond just monitoring police activity in terms of illicit drug detections and seizures.

Integrated within Victoria Police's accountability framework, users of both the DHI and DAM are able to produce standard reports from the system. This aids consistency in their application and use. Roll-out of the tools is underway. In building and using these tools, Victoria Police have demonstrated that it is possible to implement a sound DLE performance management regime that captures a range of data better reflecting the size and extent of the drug problem in that jurisdiction.

While the DHI has been designed as a high-level analytical tool, the DAM is designed, and currently intended to be used, for largely tactical purposes. That is, to determine location and extent of local drug problems to assist local police in deciding where, and what type of resources, they need to deploy. As such, both tools are natural complements to the performance measurement framework, whose emphasis is to monitor and measure DLE *effectiveness*.

Identifying appropriate data sources

Once performance measures and indicators have been developed, the next stage in developing an effective performance measurement system is to identify appropriate data sources. The best way to ensure that this occurs systematically is to develop a 'data collection plan'. A data collection plan may include consideration of:

- information requirements (precisely what data is needed)
- information sources (the types of data available)
- data collection processes (for example, what will be collected, data sources, procedures that need to be followed in gaining access to and capturing the data and cleaning or conversion of the data)
- data collection and reporting frequencies (how often the data will be collected and reported depends on the target audience – more often for operational purposes, less often for annual reporting)
- data collection costs (as a general rule, the more comprehensive, complex and detailed the data, the greater the costs associated with its collection, processing and analysis)
- data protection/security (this is particularly important where data identify certain individuals and include sensitive personal information)
- data quality (its accuracy, completeness, timeliness and consistency)
- trial run (testing the data collection process will identify problem areas that need to be sorted out) (Roberts 2006).

The AIC developed and used a data collection plan during fieldwork for each of the framework's high-level goals and associated performance measures. This plan covered the above elements to ensure that a minimum standard of information was obtained for each data source. Appendix 4 provides an example of a data collection plan.

Data collection and analysis

As outlined above, the AIC developed and used an indicator data collection plan to ensure that a minimum set of information was obtained for each data source. It was also used to inform precisely what data, and how often that data, could be reported, as well as the underlying data limitations. Key questions relating to performance that need to be answered once appropriate data are collected and analysed include:

- How does actual performance compare to the baseline, target or expected outcome?
- If there is a significant difference, why, and what corrective action is necessary?
- Do agency programs, initiatives and activities operate properly and achieve the result intended?
- Are new goals or measures needed?
- Have existing conditions changed? (Roberts 2006).

This section provides an entrée to the above questions by providing a summary of key findings for the four field locations. A full discussion of findings for each field location can be found in Willis, Anderson and Davis (2010).

In-depth testing of the model performance measurement framework in four field locations (Customs, Victoria Police, South Australia Police and Tasmania Police) demonstrates that the framework can be feasibly applied at national and state/territory DLE levels – this is both in terms of its practical application (that is, availability of the indicator data) as well as its use as a performance measurement tool. Indeed, each of the jurisdictions that participated in the field study already use many of the framework measures, including drug-related public health measures, even if only informally and semi-regularly. In addition, where regular drug market monitoring and review does take place within jurisdictions, it occurs within prescribed agency accountability structures.

Input from key stakeholders at different points throughout the project (particularly during the national workshop and field visits) helped to refine a number of framework indicators. A discussion of the rationale of any substantive changes to framework indicators is in the relevant section of the jurisdictional technical reports. Additional indicators that could be explored for future inclusion in the framework are also discussed in the technical reports, although these are not incorporated in the revised framework at this time, but are left for future consideration.

Practical application of the framework

Fieldwork findings reveal that the various DLE agencies sometimes use different data definitions and counting methods, although the framework can accommodate these differences. This is achieved through flexibility in the framework's design. Specifically, although the high-level outcomes and measures are essentially prescriptive, the indicators can be tailored to suit prevailing jurisdictional monitoring and reporting needs. For example, where the framework suggests the use of an incidence-based count (such as the number of cannabis traffic/supply arrests), an offender-based count can be substituted (such as the number of offenders processed for cannabis traffic/supply offences). In this way the basic intent and integrity of the core framework elements are maintained, while also allowing for local data recording conventions.

Fieldwork findings also broadly support application of the model framework within agencies with a national DLE focus through to those with a local DLE focus. However, it is clear that (a) there are data limitations that need to be understood and considered when interpreting changes in market conditions, and (b) some jurisdictions are better positioned than others to use the framework for regular performance monitoring, measurement and reporting.

Data limitations

An effective performance measurement system should be built on appropriate measures of performance that are supported by high quality data. Ideally, these data should be regularly collected, accurate, reliable, accessible, and have no missing elements. In practice, such data are rarely available. Much of the data suggested as being useful to inform DLE performance in the framework come from a range of administrative collections, including from both the law enforcement and health sectors. These collections are largely designed to monitor agency outputs and can be viewed in many cases as simply a by-product of service delivery. As described in the four jurisdictional technical reports above, these data collections are also sometimes limited in scope (that is, relate to tightly prescribed elements), change over time (particularly in terms of recording practices), lack stringent quality checks for missing or incorrectly entered data, have long lags between incidence recording and reporting, among other limitations. Although survey data can assist to fill some knowledge gaps, they often reflect specific sub-populations (such as injecting drug users or police detainees) and so may not be representative of the population as a whole. In addition, they may not be collected very often and they may be of insufficient size, which impedes the detection of real changes over time (Willis, Homel & Gray 2006). For example, fieldwork testing of the DUMA indicator data found that sample sizes were sometimes too small (that is, $n<10$) to be used to interpret changes over time with any confidence, particularly changes

from quarter to quarter. Where this was the case it was more meaningful to aggregate the data to six-monthly instalments. However, in some instances even this was not all that helpful. For instance, the DUMA samples relating to cocaine and MDMA in both Victoria and South Australia were too small to be of use in monitoring and/or measuring the state of those drug markets, except to demonstrate that police detainees either rarely consume those drug types and/or are only infrequently engaged in those drug markets in other ways (such as in the supply of the drugs).

With the exception of the Alice Springs site, DUMA (and IDRS) is based exclusively in metropolitan locations and does not necessarily reflect drug markets operating in regional and rural locations. For DLE personnel operating in these areas, there is still scope for obtaining, in a systematic way, the same types of market information that DUMA and IDRS collect. Stage 1 of this project demonstrated that, by modifying standard offender debriefing practices to include questions relating to offenders' patterns of drug use and purchasing behaviour, it was possible to generate a picture of drug market activity in a broad range of locations (see Chapter 7 in Willis, Homel & Gray 2006). Enhanced offender debriefing was found to have the potential to improve both tactical and strategic responses and to monitor and assess performance on a long-term basis. Further exploration of this data-gathering technique was outside the scope of the Stage 2 project; however, given the success of this in Stage 1 it is something worthy of future investigation.

Finally, administrative and survey data do not in and of themselves address the more complex issues of performance successes and failures. Coupled with the limitations outlined above, this underscores the point that DLE agencies use multiple and appropriate measures and indicator data to minimise the risks of error in identifying emerging illicit drug market trends.

Use of the framework for regular performance monitoring, measurement and reporting

While Customs, South Australia Police and Tasmania Police use a range of information from sources external to their agencies (including drug-related public harm data), this information does not form part of formal performance measurement practices, nor do these agencies have any explicit arrangements with third parties to regularly capture this information. However, Victoria Police recently instituted DAM, a new drug market analytical tool that combines much of the same (or similar) types of indicator data as that identified in the framework as being useful for performance measurement purposes (although nothing as yet that reflects public amenity issues). Not only does DAM incorporate a range of supply-side indicator data, but it also includes key public harm indicator data obtained from a number of data sources external to Victoria Police. Victoria Police invested a considerable amount of time and energy in negotiating access to these data through the Victorian Department of Human Services, the Victorian State Coroner's Office and Turning Point Alcohol and Drug Centre. Nevertheless, this second example illustrates that it is possible for law enforcement agencies to obtain these types of data through formal arrangements, such as memoranda of understanding.

With the exception of the Tasmanian DHHS, which declined to provide drug-related public health indicator data for the project, the AIC was able to obtain with relative ease de-identifiable, quarterly or annual data from each of the field location's other health agencies via an exchange of correspondence at the executive level. Although our requirements were for a one-off research project, it suggests that health agencies may be receptive to law enforcement agencies accessing these data on a regular basis, providing they are fully informed as to precisely why and in what way the data will (and will not) be used. As already highlighted, this is supported by the views of the public health representatives at the national workshop, where they indicated that there was need for frank data exchange so that both sectors could effectively monitor changes within the illicit drug environment, including new and emerging issues.

One potential forum through which law enforcement agencies could start the process of obtaining drug-related public health data is through the Intergovernmental Committee on Drugs (IGCD). The IGCD provides policy advice to ministers on the full range of drug-related matters and is responsible for implementing the National Drug Strategic Framework. This committee consists of senior officers representing health and law enforcement in each Australian jurisdiction and also has people with expertise in identified priority areas, including representatives from Customs and a number of other agencies.

However, where DLE agencies are unable to access drug-related public health data directly from health agencies in the short-term, there are alternative sources (albeit, 'second best' sources) of data that could be used. For example, the IDRS includes annual trend data on key drug-related public harms in their annual reports that could be used to assess longer-term drug market impacts. Other sources of drug-related public health data (usually annual data) are also available on-line through the websites of the Australian Institute of Health and Welfare and the National Drug and Alcohol Research Centre.

The framework includes a small number of indicators that require the use of DUMA data. Currently, DUMA does not have a Tasmanian site and so Tasmania Police are unable to populate the relevant framework indicators with these data. However, as demonstrated in the detailed Tasmanian fieldwork findings, there are relevant IDRS data that could be used instead. Although IDRS data are annual, and so not sensitive to short-term market shifts in the way that DUMA data are, in the absence of more regularly collected drug market data of these kinds these data may be used for longer-term performance monitoring and reporting. As identified above, there is also the potential to use offender de-briefing techniques to capture relevant drug market information.

The framework as an effective performance measurement tool

The rationale behind the use of the framework as a DLE performance measurement tool is that the framework's measures address a combination of supply- and demand-side market issues. The theoretical underpinning of the framework is that DLE has an impact on both of these. In theory, illicit drug supply is reduced through things such as controls on drug production and distribution, seizures and the arrest (and ultimately incarceration) of those involved in the importation, production and distribution of illicit drugs (for a detailed summary of supply-side controls, see Willis, Homel and Gray (2006)). In essence, the aim of supply-side DLE is to disrupt the supply or availability of illicit drugs, thereby increasing the costs and risks associated with drug importation and distribution. The aim of demand-side DLE is to reduce the level of demand for illicit drugs within the general community. Demand-side DLE is primarily directed at the drug user. The rationale behind demand-side DLE is that, even if DLE agencies are unable to increase the financial cost of illicit drug use or restrict its availability, they can increase the non-monetary costs associated with its use. So, as the level of inconvenience, time, risk or cost of trying to find a drug seller increases, more drug purchasers are tempted to leave the illicit drug market (say by entering treatment) while those who remain tend to use illicit drugs less frequently (Weatherburn et al 2000). This then has clear flow-on effects in terms of reducing public harms.

The term 'market' is used loosely in this report to describe both the Australian drug market as a whole (that is, inclusive of all illicit drug types) as well as individual drug types (for example, the heroin market, or the methamphetamine market). This is a naming convention often used by DLE to distinguish different drug types because some illicit drug suppliers specialise in certain drug types (that is, there are characteristics in the supply chain of these drugs that are reasonably discrete from other drug types). However, it is recognised that some suppliers are in fact involved in the distribution of multiple drug types (as are users in the consumption of multiple drug types) and so the distinction between different drug 'markets' can become blurred.

Feasibility testing of the model framework in four DLE jurisdictions reveals that the framework provides a useful basis for monitoring and measuring key illicit drug markets at both national and state levels and that there is sufficient flexibility to accommodate local measurement needs and practices. In the absence of direct measures of DLE effectiveness, the suite of measures and indicators outlined in the framework provides a broad platform upon which the impact of drug seizures and arrests can be systematically assessed over time. To illustrate this general point, two scenarios are provided below relating to two hypothetical drug markets.

Changes over time in drug market A and drug market B

measure	drug market A	drug market B
seizures	→	↑
arrests	→	↑
purity	↑	↓
availability	↑	↓
deaths	↑	↓
hospital stays	↑	↓
public perception of drug problem	↑	→

Under the first scenario (drug market A), DLE effort (that is, seizures and arrests) is stable but public harms are increasing (that is, increasing drug purity, availability, drug-related deaths and hospitalisations, and there is an increasing concern among the community about drugs). This suggests that DLE is not performing well and needs to take remedial action by redirecting appropriate resources. Under the second scenario (drug market B), DLE effort is increasing and public harms are decreasing, although community concern is constant. This suggests that DLE is performing well, although it may also suggest that DLE needs to review current resourcing priorities and re-deploy surplus capacity to other areas of greater need.

These hypothetical examples are simplistic and do not include the full range of suggested framework measures, although they do illustrate how the framework can be practically applied and how DLE data can be interpreted within a broader context to inform performance and also strategic decision-making. Indeed, in reality (and as demonstrated in the separate individual jurisdictional technical reports) not all indicator data move in an expected direction and some can be quite perverse for no discernable reason; however, what is important is the *overall* pattern. That is, if most of the indicator data point to a market change (or lack thereof), then it increases the reliability of inferences made about that data.

While it is sometimes tempting to view recent shifts in indicator data as a sign of imminent market change, it is important to understand that short-term fluctuations are often simply normal variations in the data and not necessarily cause for immediate concern. Most important is the long-run trend information, which is more meaningful and indicative of substantive market change. This is why it is necessary to monitor and compare data over the longer term, rather than focusing on

movements between say one month and the next, or even one year and the next. To this end, the following discussion presents an overarching summary of actual findings for five key illicit drug markets, based on analysis of longer-term trends from the project's four field sites. The analysis is based on a range of indicator data that may be annual, quarterly, six-monthly or monthly aggregated (precisely how each individual indicator dataset is aggregated, is described in the report of fieldwork findings (Willis, Anderson & Davis 2010), although generally it reflects the ten year period 1998 to 2008).

Broad trends relating to five Australian illicit drug types are apparent and as follows:

Cannabis – There is a strong and stable supply of cannabis at national and local levels. Cannabis accounts for the great majority of all drug offences in each jurisdiction. In addition, because cannabis is largely domestically produced and is the most widely used and accessible illicit drug, it is unlikely that supply of, and demand for, the drug will fall dramatically in the future. This is especially the case for hydroponically cultivated cannabis where there is high potential financial gain, coupled with a relatively low risk of detection, to growers (Willis 2008). Moreover, the broad levels of use of this drug and its suggested increasing potency (particularly for hydroponic forms of the drug) make long-term containment of this drug type very important. This is especially the case at the state/territory level of DLE. Notwithstanding these findings, the indicator data suggests that DLE can have an impact on at least supply of the drug, particularly at very local levels of DLE. For example, and as outlined in the fieldwork findings (Willis, Anderson & Davis 2010), there appears to have been some local-level shocks to the cannabis markets in Victoria and South Australia at key points in the past several years, which reduced its availability for short periods.

Heroin – The heroin market at national and state levels remains reasonably stable, although with some signs of at least short-term increases in both supply and demand for the drug (most notably in Victoria). While the overall data are indicative of stability and containment of the Australian heroin market by DLE, sustaining these will require ongoing monitoring and DLE intervention, as well as adequate provision of jurisdictional prevention and treatment services. As highlighted in the detailed fieldwork findings (Willis, Anderson & Davis 2010), this is because data from overseas point to a recent and rapid expansion of opium production, particularly in Afghanistan, but also more recently in South East Asia. While the importation of heroin into Australia generally originates from South East Asia, changes in international production may see global trafficking routes shift towards Afghanistan and new transit points to Australia emerge. If increased supply of heroin into Australia does indeed occur, then consumption of the drug may also increase over the longer term.

Methamphetamine – Although there are some variations in the data, national and jurisdictional indicator data generally point to an expansion of the methamphetamine market (and the illicit amphetamine market more generally) in Australia throughout the 2000s, but that it has now more or less stabilised. This is contrary to recent media commentary that suggests a booming Australian amphetamine market linked to conflict between feuding outlaw motorcycle groups (for example, Dempster 2009). This stabilisation is probably the result of a combination of at least the following local factors including:

- aggressive pursuit of the operators of clandestine methamphetamine laboratories
- introduction in early 2006 of legislation to restrict over-the-counter sales of pharmaceuticals containing pseudoephedrine (a chemical precursor of ATS)
- active monitoring of pharmaceutical sales through Project STOP, whereby pharmacists are notified as to whether a customer is eligible to purchase pseudoephedrine-based pharmaceuticals and, where not, pass this information on to DLE.

The combined evidence suggests that national and state-level DLE has played a significant role in helping to restrict expansion of the local methamphetamine market and all of the flow-on effects to the broader community in terms of reduced public harms. However, as manufacturers and distributors find new ways of avoiding detection, it will remain important for DLE to continue to regularly monitor and intervene in market activity.

Cocaine – Data on the cocaine market are less available than for the cannabis, heroin and amphetamine markets, although data that are available consistently indicate that use of cocaine in the general population and among regular illicit drug users is low. Despite this, there are indications that the overall Australian market underwent a period of growth in the early to mid-2000s and then essentially stabilised after that time. As such, Australian DLE working at the border are probably minimising expansion of the cocaine within the country, although because the indicator data sample sizes are small (or lacking) in some instances it is difficult to say this with absolute certainty. The national situation appears to contrast with at least one local-level market. In Victoria there is clearly ongoing (and possibly increasing) supply of, and demand for, cocaine in that state. This suggests that DLE in that jurisdiction may need to focus further attention on minimising this market. Indicator data for both South Australia and Tasmania were too limited to make any similar inferences.

The apparent contradiction in the state of national and (Victorian) local-level cocaine markets (that is, the former in a period of stability and the latter in a period of possible growth) can be explained in a number of ways. For instance, it may simply be that the Victorian market is mirroring what has occurred at the national level but that there is a lag effect. It is also known that not all local markets move in the same way at the same time (Adams et al. 2008). As such, while some local markets may be in a period of downturn, it does not necessarily signify that other markets will do the same.

MDMA – MDMA-specific data are not necessarily as available/accessible as data relating to other drug types (such as cannabis, heroin, methamphetamines and even cocaine) as they are often combined with other amphetamine-based drugs data under the umbrella term 'ATS' (this is particularly the case for public health-related data), or the sample sizes are very small. However, what can be said is that:

- The global MDMA market has been relatively stable for several years (UNDOC 2008).
- Some of the largest seizures of MDMA in Australia have occurred in recent years, suggesting considerable ongoing demand for the drug.
- Among regular MDMA users, use and availability levels in 2007 were generally consistent with those over the past several years.
- The proportion of the general population reporting recent use of the drug rose steadily between 1995 and 2007. Indeed, MDMA was one of few illicit or licit drug types to undergo an increase in recent usage in the general population in that period.

The combined indicator data suggest a robust Australian market for MDMA. Some of the data suggest a period of relative stability (particularly at the border), although others a growing market (particularly in South Australia). These findings point to the need for more focused DLE effort to contain this market.

Monitoring and evaluating performance

Monitoring and evaluating performance should occur at all levels of an organisation, from the individual through to agency-wide. Without strong performance review processes embedded at all organisational levels, performance measurement runs the risk of becoming detached from day-to-day operations and of being little use in helping inform and/or drive performance improvements. While different jurisdictions use different approaches to review performance, the frequency of performance review meetings and the number and level of staff involved should be determined by need. However, reviews should (at the very least) be held on a quarterly basis.

It is important that performance review processes remain both questioning and supportive. There is a big difference between robust questioning of managers to hold them to account and what may be termed 'bullying' tactics. The 'CompStat' model, upon which current performance review meetings are based, has been criticised for this (PSU 2004). An effective agency-wide performance review process may include the following elements:

- chaired by a senior officer, preferably the Chief or Deputy
- attended by unit commanders and heads of support branches
- aligned with other agency strategic assessments
- all attendees have access to the same accurate, consistent and timely performance data under discussion
- good performance is highlighted and discussed as well as poor performance
- where poor performance is identified, a problem-solving approach is used (plans are made to tackle it, and support and assistance are offered where appropriate
- recent performance interventions are reviewed and revised where necessary
- clear actions and next steps are agreed
- actions are followed-up and progress discussed in the next meeting (PSU 2004).

To ensure consistency in approach, unit-level or other lower-level performance review processes could follow a similar format, although the number and level of staff involved would vary based on need and how formal/informal the meeting process was would have to be determined.

The following discussion outlines key project findings from the four field locations.

Australian Customs and Border Protection Service

The focus of fieldwork discussions in Customs was at the organisational level, rather than at local operational or individual levels. At this level, Customs is positioned well in terms of monitoring and assessing DLE impacts and feeding this information back into high-level strategic planning. For example, and as already outlined in the introduction, while formal performance reporting continues to focus on types of illicit drugs detected, detection weights and where drugs are detected, Customs' Corporate Statistics and intelligence and border targeting functions also undertake regular 'gap analyses' in which a range of other quantitative and qualitative information (usually that which is publicly available) is used to informally assess drug market characteristics and to triangulate with Customs' detection/seizure data to examine impacts. These information sources have been outlined earlier in this report (pp. 22–23).

Customs could improve its monitoring and assessment by formally incorporating the above-listed data sources to more regularly inform the measures of drug market impacts suggested in this report. This would be advantageous, particularly as federal agencies are increasingly required

to provide context around desired outcomes and report on impacts in real terms through the Department of Finance and Deregulation's Portfolio Budget Statement process (http://www.finance.gov.au/budget/budget-process/portfolio-budget-statements.html, accessed 13 October 2008).

As argued previously (Willis, Homel & Gray 2006), the framework measures are also designed to be monitored collectively as no single measure is considered definitive. Use of multiple measures from each of the high-level outcome areas is intended to reduce the risk of error in identifying drug market trends. This is especially important given that the framework is comprised of indirect measures of drug-related phenomena that are linked to both DLE and health and public amenity consequences.

Finally, Customs owns numerous databases and each business area within the agency typically has its own administrative systems. Regional offices also manage their own administrative systems. While these largely separate information management systems meet the day to day operational needs of Customs business areas, fieldwork discussions revealed that they can hinder the agency's ability to compare the performance of different business areas and regions because they lack consistency (for example, in terms of data definitions, availability of data fields and data entry itself) across the systems. In addition, such an arrangement makes it very difficult to aggregate data, which is particularly important where national-level reporting is required.

Tasmania Police

Tasmania Police's current performance management regime appears well placed in terms of monitoring and assessing both short- and even medium-term DLE impacts and feeding this information back into strategic planning. Tasmania Police could improve its longer-term monitoring and assessment by formally incorporating further measures of drug market impacts, as outlined above. Use of multiple measures from each of the high-level outcome areas should reduce the risk of error in identifying drug market trends. This is especially important given that the framework is comprised of indirect measures of drug-related phenomena that are linked to both DLE and health and public amenity consequences.

At the time of reporting, Tasmania Police at district and corporate levels monitored DLE activity on a monthly basis for both strategic planning and accountability purposes. Operational police enter data into a centralised, intranet-based data management system. These were then collated by Corporate Reporting Services and fed back to the four districts. The specialist Drug Investigation Service operates in the same way. A major strength of such centralised data systems is that they assist local police through to district and state-level police in Tasmania to record drug indicator data in a systematic way, thus avoiding the pitfalls of idiosyncratic recording and reporting practices often found in agencies with de-centralised, sometimes locally derived, data management systems. When information management systems are de-centralised and include local or regional differences, it makes comparisons between regions or aggregation of the data beyond regional level more difficult.

South Australia Police

South Australia Police has a suite of indicators that provide a useful illustration of the level of DLE activity regarding users, producers and sellers of illicit drugs. They could enhance longer-term monitoring and assessment by formally incorporating further measures of drug market impacts.

South Australia Police has effective performance management and evaluation strategies in place. A management program of activities is developed annually in Operation Mantle, and reporting on activities is conducted quarterly – reports are disseminated to South Australia Police's senior executives (including the Commissioner), and Corporate Reporting area. Information for these reports is sourced from Local Service Area (LSA) data and includes (for example):

- arrest reports
- expiation notices
- number of people diverted
- seizure data
- collaborative work with other agencies.

Drug market intelligence summaries are also developed by the Drug Intelligence Desk and provided to LSAs two to three times a week. These summaries alert operational staff to emerging issues. Data included in these summaries are outlined earlier in this report (p.24).

Seizure and charge data from South Australia Police's two major data information management systems 'PIMS' and 'PMS' are also used for both monitoring and evaluating performance and are collated by the Business Information Section and fed through to Corporate Reporting. The PIMS database in particular has the ability to provide daily downloads of drug reports, available in an Excel spreadsheet. Although data from each system is available on the same mainframe, the systems are not fully compatible, limiting the scope for comparisons to be made across the databases.

At South Australia Police each officer is equipped with an e-journal, which is completed daily. In the journal, officers record key events that occurred during their shift. Information from the journal is uploaded to the police mainframe. This may be a useful source of performance measurement data in the future.

Victoria Police

Victoria Police is well positioned to effectively monitor DLE impacts and feed this information into both tactical and strategic planning processes. As already outlined above, Victoria Police has recently started collecting and analysing a range of information to better determine the nature of the different drug markets at both state and local levels. The DHI provides a high-level indicator of performance interest, while the DAM helps to establish the extent of the problem and provides the basis for trend analysis of its integrated law enforcement and health data components.

Users of the DHI, and particularly the DAM, are able to produce standard reports from the system, which help to generate organisational consistency in performance monitoring, measurement and analysis. One advantage of this is that it assists Victoria Police to compare the performance of individual PSAs and police regions and to better understand not just that different trends may be occurring in different PSAs and regions but *why* they are occurring. It also allows for the tracking of displacement effects of police activity. Under the previous performance management system in which drug seizure data only were used, it was not really possible to determine this. Finally, the new system permits better aggregation of these data so that state-wide performance management is possible, which aids organisational accountability.

While the DAM draws upon many different data sources, the overarching information technology platform provides a 'one-stop-shop' or central access point where it is possible to drill down into different areas of performance interest. For example, the system allows users to produce standard tabular and graphical reports of (among other things):

- the number and location of offences committed by drug-involved offenders who live in a given PSA
- home and offending locations of drug-involved offenders who commit crimes in a PSA
- the number of local residents in drug treatment by drug type and level of abuse

- the number of local and non-local residents attending drug treatment within a PSA
- the number of heroin overdoses within a PSA, and so on.

The model does not link individuals from LEAP to the external data sources incorporated within the model.

Communicating results and accountability structures

Performance measurement results need to be disseminated within and across an agency, as well as externally, although the exact nature and frequency of what is reported varies depending on the audience and their specific needs. Results need to be communicated widely to ensure that units, commands and agencies are perceived to be open, honest and accountable. Moreover, communication of performance not only helps to reinforce the importance of performance improvement among agency staff, but validates the process.

A useful tool for ensuring that results are communicated effectively is, of course, a communications strategy. A communications strategy articulates:

- who you need to communicate with (the target audience)
- how you communicate (seminars, workshops etc.)
- when you communicate (different messages may need to be communicated to different groups in a particular order to ensure understanding)
- what you communicate (Willis, Anderson & Homel 2010).

As noted above, communication forms an important part of organisational accountability. In law enforcement agencies, communication of performance occurs through formal review mechanisms, such as operational command reviews and other COMPSTAT-like processes. In theory at least, these processes are intended to be used as forums to assess and discuss 'today's' performance against 'yesterday's', as well as the resourcing implications of this performance. They also assist agencies to demonstrate that tax-payers' money is expended in a responsible and appropriate way, according to their charters or organisational goals.

Accountability itself is best established 'top down'. This is achieved at the organisational level through department-wide strategic plans, which include articulation of agency objectives, strategies for meeting these objectives, and mechanisms and procedures that will be used to measure performance. Under these, unit-level performance plans refine and provide a more detailed description of their contribution to achieving agency-level objectives. Linking these into annual staff performance assessment processes then helps to drive accountability down to operational staff (Roberts 2006).

The following discussion outlines key project findings from the four field locations.

Australian Customs and Border Protection Service

Customs monitors and reports DLE activity (number and type of illicit drug/chemical precursor detections) within their intelligence and border targeting functions on a monthly basis; this monitoring/reporting process also includes examination of regional trends. Quarterly reviews (or 'check point' reviews as they are called in some parts of the agency) in which Customs' National Directors, managers and other relevant staff are involved are also undertaken to determine what has been achieved in the previous quarter and to aid short- to medium-term strategic planning. Similar high-level review processes occur at Customs' division and whole of organisational levels on an annual basis.

Fieldwork discussions highlighted recent overall improvements in Customs' governance arrangements, particularly in the centralising of illicit drug policy initiatives, performance measurement and long-term strategic goal setting. However, these discussions also suggested that Customs needs to further improve certain performance monitoring and reporting feedback processes. For example, while there appears to be effective quality control processes in place in central office between Corporate Statistics and Current Intelligence (the 'certification' process), some staff indicated during fieldwork discussions that feedback procedures were not as well defined, or at least functioned as well, between central and regional offices. This may suggest that Customs needs to standardise its monitoring and reporting processes to help improve information flow between central and regional offices. The model framework presented here may be the means through which this can be achieved.

Tasmania Police

Tasmania Police's *Department of Police and Emergency Management Business Plan July 2007–June 2008* (Department of Police and Emergency Management n.d.) indicates that, for its outcome area 'a reduction in crime', it will be accountable for every aspect of service delivery through (among other things) internal and external performance review and comparisons.

The most important internal performance review process occurs via the District Corporate Management Review. These reviews are held quarterly by the Corporate Management Group and are a process in which discussion of DLE performance, resourcing and strategic responses are undertaken for each district and division. Participants in these reviews include the executive, commanders, DIS and operational staff. Tasmania Police indicate that these fora are essentially roundtables where an open and frank discussion on the statistics generated by Corporate Reporting Services can take place and decisions about performance improvements are made.

South Australia Police

Approximately 30 percent of South Australia Police's drug seizures are attributable to Operation Mantle, which provides a strong accountability and communication function within South Australia Police. As noted above, Operation Mantle collects drug data covering arrests, diversions, expiation notices and seizures. Members of Operation Mantle are located across the different LSAs in South Australia; however, they are recognised as having a specific DLE function within the LSA to which they are attached. There are six metropolitan teams (with around 35 staff at any given time), and these have partnerships with regional and rural LSAs. Operation Mantle's primary DLE role is to target mid-level dealers.

As outlined above, a management program of activities for Operation Mantle is developed annually, and performance against these activities is reported to senior executives on a quarterly basis. These reports are designed to generate a picture of where the operation is placed at specific points each year.

Operation Mantle is also overseen by a coordination group that meets quarterly to review progress and best practice. This group is chaired by the Assistant Commissioner, and results from meetings (including any changes in strategic priorities) are fed back to each Operation Mantle team. More specifically, this group meets to discuss:

- any changes that have occurred in the drug markets
- good practice
- resourcing and budgets.

Information collected by Operation Mantle is uploaded to an intranet-based data collection repository, which is also stored in the mainframe that includes PIMS and PMS.

Victoria Police

Victoria Police report DLE performance in a number of different fora; however, their major internal reporting and accountability process is via COMPSTAT. COMPSTAT brings together a range of police personnel from senior management to operational staff in which thematic performance reviews are undertaken once every six months. The drug theme review includes a discussion of the market situation of each major drug type, and discussion focuses on drug market impacts on crime types and on the community. Any gaps identified in intelligence gathering are also discussed and action items are determined for each police region.

More regular reviews are also undertaken at other agency levels. For example, quarterly reviews are undertaken to determine work unit focus for Victoria Police's Drug Task Force. These reviews focus on tasking and largely include an assessment of input and process indicators. Quarterly stakeholder meetings are also held between the Clandestine Laboratory Squad, Purana team, Drug Theme Desk, Drug Task Force and other relevant personnel – these meetings focus on major issues of concern/action required in relation to given illicit drug market conditions.

The new DHI and DAM will be an important inclusion to each of the review processes highlighted above. In particular, they will inform Victoria Police's corporate performance, COMPSTAT and tasking/co-ordination functions. How and where the DHI and DAM fit into Victoria Police's accountability chain is illustrated in Figure 2. This figure illustrates that the DHI commences the operational planning cycle through identification of offences and drug types causing the most harm. It then tracks trends in harm over time. For instance, the DHI may show that in one PSA robberies and theft from motorcars are the highest harm-causing offences related to drugs. Once this harm is identified, then the DAM provides a more detailed picture of local issues contributing to the problem. It does this by:

- enabling the collection and analysis of information gathered from a range of internal and external data sources to illustrate what the drug problem looks like at both PSA and state levels
- identifying the symptoms and causes of the drug problem relevant to a geographical location
- providing tactical information including location and time of incidents.

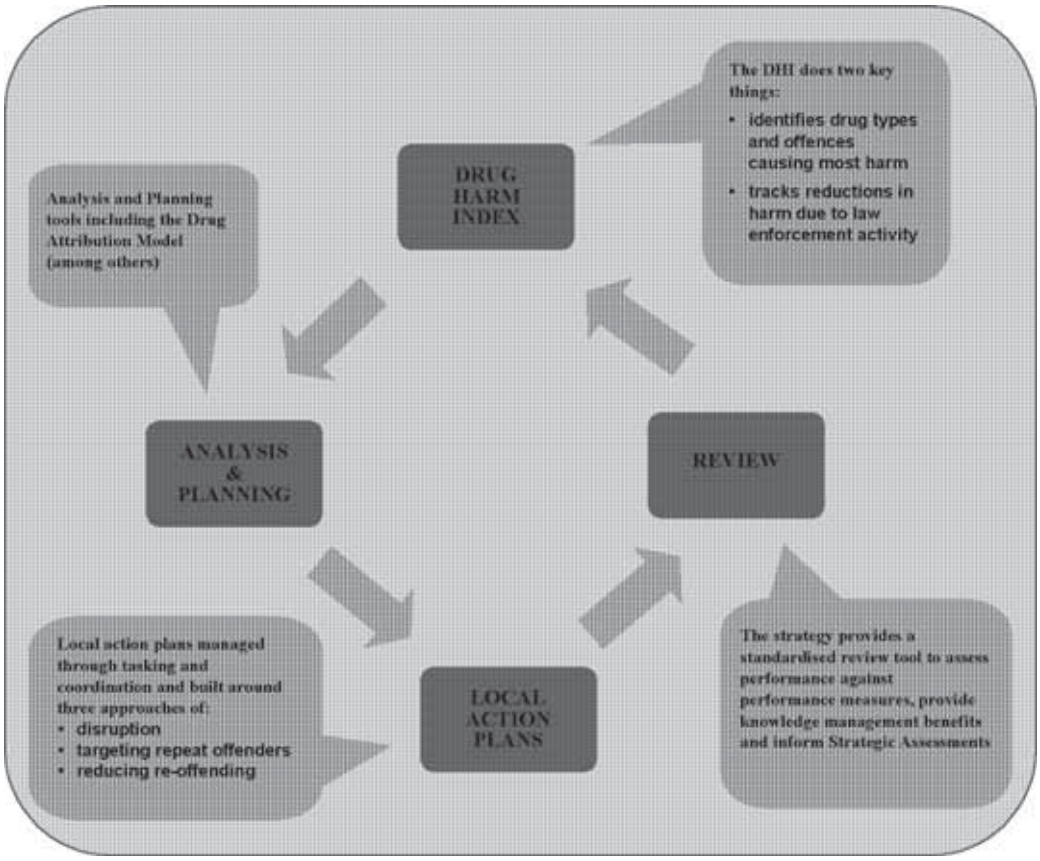
For instance, the DAM may show that a large number of illicit drug users travel into a given PSA to both commit offences and obtain drugs. Further analysis from external data then shows that there are hotspots for overdoses in a particular area and high rates of hospital admissions relating to methamphetamine use.

Information gained through the DHI and DAM inform PSA tasking and co-ordination decisions and local planning. The approach taken depends on the precise nature of the drug problem and may include:

- an operational order
- a problem profile
- a strategic assessment
- a three-year strategic plan (if the problem is severe).

After these steps have been undertaken, any operational responses developed and acted upon are reviewed to determine their success. Initially, this includes examination of the DHI for each PSA. Ideally, appropriately designed and executed local action plans should result in a decrease in a PSA's DHI. If an expected result is not achieved, then a PSA can undertake more detailed analysis to determine areas of intractability and adjust their action plans accordingly (Victoria Police Illicit Drug Strategy 2007–2011 Intelligence Practitioners' Course 2008 notes).

Figure 2: Victoria Police's accountability framework



Source: Victoria Police Illicit Drug Strategy 2007–2011, Intelligence Practitioners' Course 2008 notes

Implementation requirements

There are a number of critical steps to ensuring the successful development, implementation and uptake of a new performance measurement system. General lessons learned from fieldwork discussions include the following:

- Measurement systems designed to focus on performance improvement are much more easily accepted than systems designed exclusively for accountability purposes, particularly in hierarchical command and control organisations such as law enforcement, although ultimately they serve the same function.
- Superimposing an entirely new measurement system steeped in management jargon almost guarantees the death of that system. In any case, to be effective, the system needs to accurately reflect the culture and practices of the organisation into which it is being introduced, even if it is part of an overall organisational change process. To this end it is important to involve management through to operational staff right from the start in defining operational goals and in developing appropriate performance measurement systems. This helps to 'buy-in' staff support.
- Success in DLE performance will mean that goals and targets will probably change. Therefore the measurement system must be able to readily change and adapt to new priorities and outcomes.

- Building performance management into strategic planning processes also helps to establish accountability for the measures and ensure that they are both reported and used in performance improvement.

More specific steps to the successful implementation of a new measurement system revolve around a thorough understanding of the following issues:

- identification of the need for a new performance measurement framework
- responsibility for performance measurement
- major steps to developing a sound measurement framework
- the length of time it takes to implement a framework
- agency resourcing issues
- internal communication
- change management issues (such as the impact of organisational change, potential training requirements and organisational communication)
- evaluation
- key challenges.

Each of the above issues are explored in brief below, although they are discussed in more detail in *A plan for national implementation of the drug law enforcement performance measurement framework* (Willis, Anderson & Homel 2010) and *Foundations for an effective performance measurement system for drug law enforcement* (Willis & Anderson 2010).

Identifying the need for a new performance measurement framework

As highlighted in Part 2 of this report, DLE agencies have collected data on their performance for many years. Traditional measures of law enforcement performance focus on: crime rates, arrests, seizures, and clearance rates. These traditional measures are simple, visible and easily understood measures of police effort, although they sometimes provide ambiguous results and do not tell the 'full story'. Essentially, they demonstrate:

- the extent to which police engage in certain types of activities
- how police allocate resources.

They have only a small amount to say in terms of the complexities of law enforcement work and the broader impacts of law enforcement effort. For example, they say little in terms of the real impact of law enforcement in producing something of value for communities, such as making communities feel safer and more secure. Supply and use of illicit drugs are, by their largely clandestine nature, a hidden phenomenon that can only be monitored by indirect indicators linked to observable consequences, such as crime, drug-related morbidities and mortality (Rossi 2001).

Measures concentrating on volume of crime are but one dimension among many that could be considered in the broader assessment of the quality of work done by police. Developing a range of appropriate measures that capture the complexities of police work would permit:

- a more rigorous assessment of what police actually produce for their communities
- informing communities of the depth and breadth of work in which modern police are engaged.

Moreover, a measurement system that produces comprehensive information for communities regarding the workings and results of their law enforcement agencies can also make citizens feel more accounted to and can let them assess whether agencies are making good use of public funds, something they are entitled to do as taxpayers.

Aside from addressing community expectations, measuring performance is a fundamental component of effective program management in the contemporary law enforcement landscape and has formed an important part of wider public sector reforms over at least the past 10 to 15 years. Performance measurement goes well beyond measuring outputs for the sole purpose of providing accountability or using data for retrospective analysis and record keeping. Rather, it can be seen as a basis upon which both operational and long-range strategic decision-making can be made and as justification for seeking additional resources.

Responsibility for performance measurement

Responsibility for performance measurement lies with all DLE staff, from agency executives through to operational personnel, irrespective of whether they are performance measurement 'specialists' or not. For performance to be managed effectively, it requires everyone to understand their own particular role and contribution. Ideally, it should link agency strategic goals and objectives to the work of support departments (for example, agency intelligence functions), local-level units, and the actions of teams and individuals. It relates directly to what any member of staff is required to do in the ordinary course of their role. Individuals, teams and work units should be actively rewarded for incorporating use of the performance measurement framework in their work. For instance, this could be achieved through recognition in individual, team and unit performance assessments.

Major steps to developing a sound measurement framework

There are a number of critical steps to developing and implementing an effective law enforcement performance measurement system. These steps are outlined in detail in *Foundations for an effective performance measurement system for drug law enforcement* (Willis & Anderson 2010), although a brief summary is provided as follows:

Step 1: Review organisational mission

- A clear, direct and understandable mission statement must be developed so that specific goals can be drawn from it and linked directly to an agency's overarching mission.
- Genuine input from all levels of staff in this process helps to ensure that any new performance measurement system is valid and has the support of all internal agency stakeholders.
- Operational staff and middle managers should never have to ask: "Why are we doing this?" There should be no ambiguity as to why a new measurement system is being implemented and all staff must understand its importance.

Step 2: Ensure accountability structures are in place

- New performance measurement systems are more likely to succeed when they are integrated with existing accountability structures, such as formal review mechanisms (for example, operational command reviews).

Step 3: Identify key goals specific to drug law enforcement

- Clarify core business practices and determine the associated high-level outcomes that drug law enforcement hopes to achieve.
- Genuine input from all levels of staff is critical for ensuring validity in approach and long-term support.

Step 4: Identify an appropriate set of performance measures and indicators

- There is no single definitive measure of drug law enforcement performance.
- Managers need to assess the 'big picture' rather than a single area of performance – that is where the true story lies.
- Assess the system as a whole through development of a range of appropriate measures and indicators of performance that clearly link back to each high-level goal.
- To ensure consistency in this process and to capture all relevant information, it is useful to use an indicator data collection plan for each measure and/or indicator.

Step 5: Obtain feedback from stakeholders

- Engage operational staff and other key stakeholders to carefully consider and discuss each goal and associated measure and indicator.
- Important issues would include:
  - relevance of selected measures and indicators to goals
  - how well-defined the selected measures and indicators are
  - timeliness of indicator data
  - reliability of indicator data
  - comparability of indicator data
  - understanding the limitations of indicator data.

Step 6: Revise measures and indicators

Revise measures and indicators according to feedback acquired above and obtain agreement of all key stakeholders on final list of measures and indicators. Create and include new indicators as necessary.

Step 7: Provide staff technical training appropriate to needs

- Ensure that all staff understand the importance of performance measurement and how to do it.
- Senior management must actively support the delivery of appropriate staff training and professional development opportunities.
- Learning is an ongoing opportunity, not a one-off intervention.
- Staff learning and professional development should form a key part of an organisation's performance management framework and is not solely the responsibility of individual managers or the agency's training department.

Step 8: Collect and analyse indicator data

- Design a process for the collection and analysis of data.
- An important consideration is the arrangements concerning the collection of internal and external data. Where data are obtained from external sources, negotiate with relevant agency for access to these data; initial negotiations start at the executive level.
- In preparation for first performance assessment meeting with senior management, summarise data and findings obtained. Set reasonable and obtainable goals.

Step 9: Disseminate results to operational staff and obtain feedback

- Circulate results of initial analysis to operational staff (and other appropriate stakeholders) and obtain feedback from them. Their interpretation of the data and explanations for performance are essential.

Step 10: Disseminate results to senior management

- Provide senior management with data summaries and findings and an interpretation of these within local and broader contexts.
- Ideally, dissemination and discussion of this information should occur during an organisation's formal review mechanism.
- These discussions should be able to answer the question "How are we doing?" They can also be used to identify significant performance concerns (and successes) and assist in the preparation of baselines for future comparisons, as well as action plans for further work.

Step 11: Communicate results to key stakeholders

- Communicate results of meeting with senior management to operational staff and other relevant stakeholders. In particular, outline any new strategies that will be employed to improve performance.

Step 12: Repeat steps 5 through 11

Timeframe for framework implementation

The successful implementation of a new measurement system can take considerable time. Typical obstacles to implementation may include agency culture and lack of will, infrastructure constraints, data accessibility, and limited staff technical abilities. Most of these can be addressed through effective internal communication and training (see below), others through adequate resourcing. Given these issues, the following is a realistic timeframe for national rollout of the DLE performance measurement framework, which is based on previous similar experiences in Australia.

Key implementation components	Timeframe
In-principle support of DLE agency executives to adopt the DLE performance measurement framework	Within 3 months of report publication
Adoption and use of suggested drug law enforcement indicator data	Within 12 months of report publication
Engagement with, and support of, third party data providers (e.g. jurisdictional health agencies)	Within 24 months of report publication
Evaluation of framework in practice (e.g. internally and externally conducted)	Within 36 months of report publication

Resourcing issues

Implementation of the DLE performance measurement framework presented in this report should be cost-neutral, providing there are no significant information technology (IT) issues that need to be accommodated. It is noted that project fieldwork demonstrated that jurisdictions already capture much of the suggested indicator data, although informally and in some cases unsystematically. However, it is also recognised that DLE agencies may wish to upgrade or change current practices. Where this is the case, there may be some additional resourcing requirements.

Communication

Communication plays a central role in ensuring an agency's vision and corporate objectives are understood by staff and other key stakeholders. Effective internal communication is essential if an agency is to generate commitment to performance improvement. It is critical that the appropriate materials are used to communicate the right message, to the right people at the right time. It is also essential that each individual within an agency understands what their particular role and responsibilities are and how these contribute to the delivery of team, unit and agency-wide priorities.

Key considerations when developing a communications plan or strategy include:

- knowing the message you want to deliver to staff (for example, what the main benefits of the framework are and who will drive its implementation)
- understanding who you need to communicate with
- knowing precisely how you are going to communicate with these people
- identifying what vehicle you will use to communicate (for example, seminars, posters, team meetings, and so on). You will usually need to use several different methods of communication to reinforce the message
- determining the best time to communicate (for example, different messages sometimes need to be communicated to different groups in a particular order to ensure understanding. Similarly, some messages need to be repeated over time, or disseminated via new channels to be reinforced
- ensuring that the message has got across (that is, think about how you can assess the effectiveness of your communication and what evaluation methods might be effective with this audience and approach).

Managing for change and transition

Change management is about people – understanding how their current roles and responsibilities may be impacted upon by the intended change. While it is well recognised that imposing change within workplaces does not necessarily result in effective uptake and longer-term efficiencies, with adequate executive support (including structured input and a realistic understanding of the time taken to adopt new practices) a successful transition is more likely to occur. The key elements of effective change management include:

- understanding the impacts of change
- ensuring appropriate training is identified and implemented
- implementing effective communications that provide a clear road map forward and ensure everyone is clear about how the changes affect them, what new skills they need and how to create collective ownership of outcomes.

Evaluation

It is recommended that the DLE performance measurement framework outlined in this report be evaluated at an agreed time, once it has been fully implemented. The exact type of evaluation (for example, whether process and/or outcome focused) will be determined at a future time, once stakeholder input is provided.

Key challenges to national implementation

There are always challenges implementing a new system. While the framework articulates a formal means of reporting DLE performance and enhances the range of measures that DLE agencies already use, it is acknowledged that there may be obstacles to its national uptake. Aside from the challenges highlighted in the section on change management above, key issues that may hinder implementation and that will need careful consideration are likely to revolve around data collection, IT systems and a full understanding (particularly among senior managers) of what the framework is actually intended to achieve. Key challenges and possible solutions to those challenges are detailed in Willis, Anderson and Homel (2010).

Chapter four: Conclusions and future directions

The National Drug Law Enforcement Research Fund commissioned the AIC to undertake a detailed large-scale assessment of the practicality of implementing the model DLE performance measurement framework previously developed on behalf of NDLERF. Furthermore, if that assessment trial proved that the implementation was viable, the AIC was also requested to develop a basic business plan for how a more extensive implementation could occur and to develop some core training materials to facilitate the process.

This report (and the accompanying technical papers) documents through detailed and extensive trials, in four quite different DLE jurisdictions, that large-scale implementation of the performance measurement framework is feasible and achievable largely within existing resources. The conditions under which this can be undertaken have been outlined in some detail, as have the basic steps for bringing this about, together with advice on basic resources and training that need to be applied.

What all of this means is that the implementation trial has demonstrated that the DLE performance measurement framework is a viable mechanism for improving the capacity of DLE agencies across Australia to better account for their effectiveness, and a useful tool that contributes to Australia's goal of reducing drug-related harm, demand and supply. It also means that a set of adaptable and flexible tools exist for jurisdictional agencies to make better and more systematic decisions about the allocation of DLE resources and to better explain to their communities the extent to which they are improving drug-related public health and public amenity.

Most importantly, the implementation trial has demonstrated that the significant, but currently fragmented and less than optimally systematic, efforts that are going into enhancing DLE performance measurement can be strengthened without imposing an entirely new regime of data collection and reporting mechanisms on already stretched management structures. Rather, the framework provides a vehicle for building new, more systematic processes from within existing structures and procedures. In this way the framework has been shown to be an evolutionary and easily accepted way to generate a sustainable performance management and accountability procedure.

The framework has also been shown to be capable of providing a way of generating jurisdictionally and locally responsive reporting and accountability systems with a sufficiently robust and compatible core set of components that have the potential to form the basis for an ongoing national reporting system. The design of a national DLE monitoring system was not a specific objective of the current project, although it was always anticipated that it could have the potential to point the way towards a way of achieving such a system. But this is a question for future consideration, as are a number of other emerging issues.

For example, during the course of the Stage 2 project, it became evident that it would be possible to further develop aspects of the model performance measurement framework to permit greater, more penetrating levels of analysis. This idea was floated with the Stage 2 Project Reference Group, who agreed that further analytical work would be useful, particularly if the work produced findings that provided DLE with practical insights and guidance. To this end, the AIC undertook a series of preliminary analyses to develop one framework indicator – the median purity of illicit drugs by major drug type (excluding cannabis). This indicator was chosen principally because the underlying data were considered a useful proxy for overall conditions in a range of drug markets (in particular, high drug purity in a market is generally considered to reflect a market where there

is plentiful supply relative to demand. In contrast, low drug purity is considered to reflect a market where there is large user demand relative to supply (and so drug dealers are forced to dilute product to meet demand). While there are limitations to Australian drug purity data (see ACC 2009 for a description of these limitations), the data were considered sufficiently robust to obtain at least indicative insights in the absence of reliable information on the prices of drugs within different geographic markets.

A summary of the analytical work undertaken by the AIC is provided in Willis, Anderson and Davis (2010). A full discussion of the precise techniques used and an analysis and discussion of detailed findings was beyond the scope of the report, although what is canvassed provides DLE agencies with sufficient information to be of general interest and use, and it demonstrates future analytical possibilities that have the capacity to assist DLE in short and long term decision-making. Essentially, the work falls into two main types of analyses. These are:

- analysis of the difference between wholesale drug purity (that is, the purity of drugs seized by Customs/AFP) and retail drug purity (that is, the purity of drugs seized by state and territory DLE)
- analysis of the interrelationships between different drug markets within and across jurisdictions.

Difference between wholesale and retail drug purity

The difference between wholesale and retail drug purity levels provides a useful means through which overall market conditions can be assessed. It also provides a means for systematically quantifying (and therefore better understanding) the dynamic relationship between supply and demand. For the purposes of analysis here, wholesale purity is considered to be the purity of Customs/AFP seized illicit drugs, while retail purity is the purity of drugs seized by state DLE agencies. The main findings from this analysis are as follows:

- In late 1999 the difference between wholesale and retail heroin purity was just under 10 percent in late 1999, while in mid-2007 the difference had increased to over 50 percent. This suggests that demand for heroin was increasing (relative to supply) in this period because dealers were increasing the amount of adulterants in the drug to meet user demand. However, the trajectory also suggests that the supply/demand relationship is stabilising.
- For cocaine, the figures suggest that demand has steadily fallen (relative to supply) over the period under observation. The difference between wholesale and retail purity was around 35 percent in late 1999, while in mid-2007 the difference had decreased to below 10 percent.
- The data suggest that demand for MDMA grew (relative to supply) between late 1999 and the mid-2000s, but then more or less stabilised between early 2006 and mid-2007. The difference between wholesale and retail purity was around 10 percent in April–June 2007.

Illicit drug market relationships

Correlation and regression analysis

There are a range of analytical techniques that can be used to assess relationships in data. Correlation is one of the workhorse estimates of statistics and econometric modelling, and involves quantification of the coincidence of a relationship between the things of interest. Regression analysis is the technique for modelling the influence one variable is likely to exert over another across time. Both techniques were used by the AIC to better understand the cross-

market relationships. A regression analysis of the Victorian heroin, methamphetamine, cocaine and MDMA purity data found that there is a:

- statistically significant relationship between heroin purity 'one month ago' and heroin purity 'this month' (p = 0.00). That is, heroin purity last month influences heroin purity this month. This is true for each of the three other drug types
- statistically significant, inverse relationship between methamphetamine purity and heroin purity (coefficient = –0.06; p = 0.00) in the same period. The relationship is unidirectional, with heroin purity appearing to influence methamphetamine purity (and not the other way), suggesting the heroin market is the dominant market; as heroin purity rises, methamphetamine purity falls. Taken together, this may indicate the two markets are possibly substitute markets
- mixed statistically significant (or near to significant), inverse relationship between the cocaine and MDMA markets. Cocaine appears to have more influence over MDMA (p = 0.07), than MDMA has on cocaine (p = 0.13).

Vector auto regression analysis

Econometric modelling has developed a number of techniques for evaluating the relationships between variables – for example, between drug prices and armed robbery. One of these techniques, vector auto-regression (or VAR), is an essentially unstructured analytical approach that assumes that 'everything is linked to everything else'. VAR is a useful analytical technique for gauging what happens within and between drug markets when there is an impulse or 'shock' to one of those markets. For example, the nature and extent of the flow-on effect (in terms of changed purity levels) to other drug markets if heroin purity was to increase by a certain amount.

There were two main findings from the VAR analysis of the Victorian drug purity data:

- Perhaps unsurprisingly, the biggest and longest-lasting impacts to a drug market are where the shock occurs within that same market. This is particularly the case for the Victorian heroin market, where the model suggests that if there were an increase in one percentage point in heroin purity, this would lead to further increases in heroin purity over time. For each of the other three drug types the model suggests an initial increase in purity levels in response to a shock, but that purity stabilises thereafter.
- Illicit drug markets are reasonably robust and generally adjust to a shock after only two to three months. One could speculate that this is because suppliers either (a) stockpile their drugs so that they can re-supply the market with relative ease, and/or (b) are able to replace their supplies reasonably quickly through established supply networks.

Modelling drug markets (DRUGSMOD)

Those engaged in law enforcement have long known there are relationships between crime types and crime markets, and it is the same in modern times with illicit drugs. The demand, the supply, the price, and the purity (or otherwise) of many illicit drugs are linked to each other across drug type and across geographic markets. That is, they do not necessarily operate in isolation, but are linked to each other by common supply chains. Drug market strategists would recognise the heroin market in Queensland, for example, may well be linked to the methamphetamine market in New South Wales.

'DRUGSMOD', currently under development within the AIC, is an analytical model intended to quantify these structural relationships within drug-type and between different jurisdictional drug markets. By way of hypothetical example, if the supply of methamphetamines increases by one percent in Victoria this month, what would it mean for the supply of heroin in Victoria this month and for the remainder of the year? Moreover, what would it mean for the supply of heroin and

methamphetamines (and indeed other drug types) in New South Wales, Queensland, Western Australia or any other jurisdiction? To be of real, practical use to DLE in short- and longer-term strategic planning, DRUGSMOD will need to be underpinned by monthly-aggregated purity data for the major illicit drug types for each jurisdiction.

What these few brief examples demonstrate, taken together with the successful implementation trial of the AIC's DLE performance measurement framework, is the potential for a nationally harmonised and consistently implemented DLE performance measurement system to provide a much more systematic understanding of the impact and value of DLE action as a key component of Australia's National Drug Strategy. Furthermore, it would enhance the capacity of those involved in the DLE enterprise to better understand the effects of their own work in terms of drugs markets and to more efficiently plan future directions and resource allocation. Finally, but equally importantly, it would provide a way for the wider community to better understand the nature of the impacts that DLE can have upon issues such as drug-related public health and public amenity.

In conclusion, it is suggested that the outcomes of this project be brought to the attention of senior law enforcement executives through mechanisms such as the Australasian and Western Pacific Police Commissioners Conference as well as to the Ministerial Council on Drug Strategy and the Intergovernmental Committee on Drugs with a view to considering a plan to endorse a national implementation program for the DLE performance framework. That national implementation plan should be conceived of as a series of jurisdictionally specific implementation strategies with an overarching national reporting agenda. In other words, implementation should be the responsibility of specific state, territory and national DLE agencies with a coordinated reporting mechanism capturing those core elements that would constitute the most important common elements. The project has shown that it would be possible for the jurisdictions to have the ability to adapt the framework to meet their specific local needs, while at the same time the major elements would remain common or at least reasonably comparable. In implementing such a system, consideration might be given to engaging the AIC to provide the necessary ongoing technical assistance to ensure continuity, sustainability and quality assurance.

References

All URLs were correct at the time of publication.

Adams K, Sandy L, Smith L & Triglone B (2008). *Drug use monitoring in Australia: 2007 annual report on drug use among police detainees*. Research and public policy series No.93. Canberra: Australian Institute of Criminology.

Australian Government Department of Finance and Deregulation. *Operation Sunlight*. http://www.finance.gov.au/financial-framework/financial-management-policy-guidance/operation-sunlight/index.html, accessed 19 May 2009.

Australian Crime Commission (ACC) (2009). *Illicit drug data report 2007–08*. Canberra: Australian Crime Commission.

Australian Institute of Health and Welfare (AIHW) (2008). *2007 National drug strategy household survey: first results*. Drug Statistics Series number 20. Cat. No. PHE 98. Canberra: Australian Institute of Health and Welfare.

Australian National Audit Office (ANAO) 1996. *Better practice principles for performance information*. Canberra: Australian National Audit Office.

ANAO 2004. *Better practice in annual performance reporting*. Canberra: Australian National Audit Office.

Barker B, Conroy E, Degenhardt L, Kimber J & Dolan K 2004. *Global indicators for monitoring the illicit drug environment in NSW: catalogue of data sets and data sources*. Sydney: National Drug and Alcohol Research Centre.

Barker B & Degenhardt L 2003. *Cross-national comparisons of drug-induced deaths*. Sydney: National Drug and Alcohol Research Centre. http://ndarc.med.unsw.edu.au/NDARCWeb.nsf/resources/NIDIP_FactSheet_Misc/$file/CROSS+NATIONAL+COMPARISONS.pdf

Barker B, Degenhardt L & Breen C 2003. *Indicators of drug use, harms and treatment in Australia: preliminary findings from the National Illicit Drug Indicators Project*. Drug Trends Bulletin April 2003. Sydney: National Drug and Alcohol Research Centre.

Black E, Dunn M, Degenhardt L, Campbell G, George J, Kinner S, Matthews A, Quinn B, Roxburgh A, Urbancic-Kenny A & White N (2008a). *Australian trends in ecstasy and related drug markets 2007: findings from the Ecstasy and Related Drugs Reporting System (EDRS)*. Australian Drug Trends Series No.10. Sydney: National Drug and Alcohol Research Centre.

Black E, Roxburgh A, Degenhardt L, Bruno R, Campbell G, de Graff B, Fetherston J, Kinner S, Moon C, Quinn B, Richardson M, Sindicich N & White N (2008b). *Australian drug trends 2007: findings from the Illicit Drug Reporting System (IDRS)*. Australian Drug Trends Series No.1. Sydney: National Drug and Alcohol Research Centre.

Carnevale Associates 2005a. *Improving state drug laws*. Information Brief, May 2005. http://www.carnevaleassociates.com/CA_IB-Model_State_Drug_Law.pdf.

Carnevale Associates 2005b. *Local drug control strategies*. Information Brief, September 2005. http://www.carnevaleassociates.com/CA_IB-City_Drug_Strategies.pdf.

Caulkins J, Pacula R, Arkes J, Reuter P, Paddock S, Iguchi M & Riely J (2004) *The price and purity of illicit drugs: 1981 through the second quarter of 2003*. Washington: Office of National Drug Control Policy.

Chilvers M & Weatherburn D 2003. *The impact of heroin dependence on long-term robbery trends*. Crime and Justice Bulletin No. 79. Sydney: NSW Bureau of Crime Statistics and Research.

Coleman T G 2008. Managing strategic knowledge in policing: Do police leaders have sufficient knowledge about organisational performance to make informed decisions? *Police Practice and Research*. Vol. 9, No. 4: 307-322.

Collins D & Lapsley H 2008. *The costs of tobacco, alcohol and illicit drug abuse to Australian society in 2004/05*. Australia: Australian Government Department of Health and Ageing.

Dean Lee W 2007. Program evaluations: improving operational effectiveness and organizational efficiency. *FBI Law Enforcement Bulletin*. Nov 2007; 1-6.

Degenhardt L & Dietze P 2005. *Monograph No.10 Data sources on illicit drug use and harm in Australia*. DPMP Monograph Series. Sydney: National Drug and Alcohol Research Centre.

Degenhardt L, Roxburgh A, Black E & Dunn M 2006. *2004 Cocaine and amphetamine related drug-induced deaths in Australia*. Sydney: National Drug and Alcohol Research Centre. http://www.med.unsw.edu.au/NDARCWeb.nsf/resources/NDARCFact_Drugs8/$file/COCAINE+AMPHETAMINES+DEATH+DATA+2004.pdf

Dempster Q (2009). *Amphetamine boom behind bikie wars*. ABC News online. http://www.abc.net.au/news/stories/2009/03/27/2528432.htm

Dorn N, Bucke T & Goulden C 2002. *Traffick, transit and transaction: a conceptual framework for action against drug supply*. *The Howard Journal* Vol.42 No.4: 348-365.

Fergussen D, Horwood L, Lynskey M, Madden P (2003) Early reactions to cannabis predict later dependence. *Archives of General Psychiatry*. 60:1033-1039. (http://archpsyc.ama-assn.org/cgi/content/abstract/60/10/1033, accessed 28/1/09).

Fowler G, Kinner S & Krenske L 2007. *Containing ecstasy: analytical tools for profiling an illegal drug market*. Monograph Series No.27. Tasmania: National Drug Law Enforcement Research Fund.

House of Representatives Official Hansard No.14, Wednesday 19 September 2007, pp.106-108. http://www.aph.gov.au/hansard/reps/dailys/dr190907.pdf.

MacDonald Z, Tinsley L, Collingwood J, Jamieson P & Pudney S 2005. *Measuring the harm from illegal drugs using the Drug Harm Index*. Home Office Online Report 24/05. London: Home Office. http://www.homeoffice.gov.uk/rds.

McFadden M 2006. The Australian Federal Police Drug Harm Index: a new methodology for quantifying success in combating drug use. *Australian Journal of Public Administration*, 65 (4), 68-81.

Ministerial Council on Drug Strategy 2004. *The national drug strategy: Australia's integrated framework 2004–2009*. http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/framework0409

National Centre for Policing Excellence (NCPE) (UK) 2006. *Guidance on the management of police information*. National Centre for Policing Excellence. http://www.crimereduction.gov.uk/policing21.htm

Newcombe R 2006. *A review of the UK drug strategy PSA targets and drug harm index*. Manchester: Lifeline.

O'Connell P & Straub F 2007. *Performance-based management for police organisations*. Long Grove: Waveland Press Inc.

Office of Crime Statistics and Research (OCSAR) & Justice Strategy Unit 2005. *Justice Portfolio Drug Strategy Indicators Annual Report*. South Australia: OCSAR.

Office of National Drug Control Policy (ONDCP) (US) 2007. *HIDTA performance management process*. http://www.whitehousedrugpolicy.gov/hidta/perfinfo.html.

Osnick Milligan S & Fridell L 2006. *Implementing an agency-level performance measurement system: a guide for law enforcement executives*. Washington, DC: Police Executive Research Forum.

Police Standards Unit (PSU) (UK) 2004. *Managing police performance: a practical guide to performance management*. http://police.homeoffice.gov.uk/performance-and-measurement/managing-police-performance/?version=1.

Police Standards Unit (PSU) (UK) 2006. *Police performance management: practical guidance for police authorities*. http://police.homeoffice.gov.uk/performance-and-measurement/managing-police-performance/?version=1.

Reuter P & Stevens A 2007. *An analysis of UK drug policy: a monograph prepared for the UK Drug Policy Commission*. London: UK Drug Policy Commission.

Rochester Drug Strategy 2002. *Reclaiming our neighbourhoods, reclaiming our youth. New York*. http://www.carnevaleassociates.com/rochesterstrategy.pdf.

Ritter A 2007. *Monograph No.15: priority areas in illicit drug policy: perspectives of policy makers*. DPMP Monograph Series. Sydney: National Drug and Alcohol Research Centre.

Roberts D J 2006. *Law enforcement tech guide for creating performance measures that work: a guide for executives and managers*. Washington DC: Office of Community Oriented Policing Services. http://www.search.org/files/pdf/PMTECHGUIDE.pdf.

Rossi C 2001. Using available data with dynamic models to estimate the extent of problem drug use. In European Monitoring Centre for Drugs and Drug Addiction (ed) *Modelling drug use: methods to quantify and understand hidden processes*. Monograph No.6. Lisbon: European Monitoring Centre for Drugs and Drug Addiction.

Roxburgh A, Burns L & Degenhardt L (2008). *Drug-related hospital stays in Australia, 1993–2006*. Sydney: National Drug and Alcohol Research Centre. http://ndarc.med.unsw.edu.au/NDARCWeb.nsf/resources/NIDIP_FactSheet_Opioid/$file/HOSPITAL+DATA+2008.pdf

Scottish Executive 2007. *The Scottish policing performance framework* http://www.scotland.gov.uk/publications/2007/03/16162825/0.

Sutton A & James S 2000. Law enforcement and accountability. In Stokes G, Chalk P & Gillen K 2000 (eds) *Drugs and democracy: in search of new directions*. Carlton South: Melbourne University Press.

Tasmania Police. *Department of Police and Emergency Management Business Plan July 2007–June 2008* (Department of Police and Emergency Management n.d.)

UK Home Office n.d.a. *Policing Performance Assessment Framework (PPAF)* http://police.homeoffice.gov.uk/performance-and-measurement/assessment-methods/?version=1.

UK Home Office n.d.b. *Analysis of Policing and Community Safety (APACS)* http://police.homeoffice.gov.uk/performance-and-measurement/assess-policing-community-safety/.

UK Home Office n.d.c. Crime reduction toolkits (http://www.crimereduction.gov.uk/toolkits/index.htm).

United Nations Office on Drugs and Crime (UNDOC) (2008). *2008 World Drug Report*. Vienna: United Nations Office on Drugs and Crime.

Weatherburn, D (2000). Performance indicators for drug law enforcement. *Contemporary Issues in Crime and Justice No.48*, Bureau of Crime Statistics and Research, Sydney.

Willis K (2008). *Cannabis supply into and within Australia*. July 2008 Bulletin. Sydney: National Cannabis Prevention and Information Centre. http://ncpic.org.au/ncpic/media/aic-bulletins/.

Willis K & Anderson J 2010. *Foundations for an effective performance measurement system for drug law enforcement*. A report to the National Drug Law Enforcement Research Fund. Canberra: Australian Institute of Criminology.

Willis K, Anderson J & Davis B 2010. *Implementing a drug law enforcement (DLE) performance measurement framework in Australia: detailed fieldwork findings.* A report to the National Drug Law Enforcement Research Fund. Canberra: Australian Institute of Criminology.

Willis K, Anderson J & Homel P 2010. *A plan for national implementation of the drug law enforcement performance measurement framework.* A report to the National Drug Law Enforcement Research Fund. Canberra: Australian Institute of Criminology.

Willis K & Homel P 2008. Measuring the performance of drug law enforcement. *Policing* 2: 311-321.

Willis K, Homel P and Gray K 2006. *Developing and implementing a performance measurement framework for drug law enforcement in Australia*. National Drug Law Enforcement Research Fund Monograph Series No.18. Marsden, SA. http://www.ndlerf.gov.au/pub/Monograph_18.pdf.

Appendix 1: Project Reference Group representatives

Organisation	Name	Position/Work Area
Australian Customs and Border Protection Service	Mr Robert Byrne	A/g Manager, Illicit Drugs & Enforcement Priorities
	Mr Paul Coleman	Manager, Illicit Drugs & Enforcement Priorities
	Ms Rebecca Ellis	Illicit Drugs & Enforcement Priorities
Australian Federal Police	Ms Robyn Attewell	Senior Advisor, Research & Development
Australian Institute of Criminology	Mr Peter Homel	Manager, Crime Reduction & Review
	Dr Katie Willis	Research Analyst, Crime Reduction & Review
New South Wales Police Service	Ms Fiona Christian	Senior Research Officer Drug and Alcohol Coordination, State Crime Command
Northern Territory Police Force	Detective Senior Sergeant Louise Jorgensen	OIC Drug Enforcement Section
South Australia Police	Senior Sergeant Tim Pfitzner	Crime Prevention Sergeant, Drug & Alcohol Policy Section
Tasmania Police	Inspector Bob Gyselman	Corporate Reporting Services
	Mr Jonathan Rogers	Drug Diversion Coordinator, Drug Policy Services
Victoria Police	Detective Inspector Craig Howard	Crime Strategy Group

Appendix 2: National workshop attendees

Law enforcement agencies	Health agencies
South Australia Police Tim Pfitzner Drug and Alcohol Policy Section Tony Langley Business Information Section Doug May Drug Investigation Branch **New South Wales Police** Fiona Christian Senior Research Officer Frank Hansen Drug and Alcohol Coordination Greg Newbury Drug Squad Jim Baldwin Head Statistician **Tasmania Police** Jonathan Rogers Drug Policy Services **Victoria Police** Amelie Hunter Crime Strategy Group **Australian Customs Service** John Gibbon Intelligence & Targeting Division Chris Kordzik Intelligence & Targeting Division Anthony McLoughlin Intelligence & Targeting Division John Blake Passengers Division Craig Sommerville Passengers Division Jane Daubney Planning Branch Catherine Phillips Law Enforcement Strategy Branch **Australian Federal Police** Robyn Attewell Senior Adviser, Research and Development	**SA Department of Health** Richard Cooke Manager, Evaluation and Monitoring Clinical Services and Research Drug and Alcohol Services South Australia **NSW Department of Health** Andrew Putt Mental Health and Drug & Alcohol Programs **Tas Department of Health and Human Services** Andrew Foskett Business and Information Manager Statewide Specialist Services **ACT Health** Helene Delany Manager, Alcohol and Other Drug Policy Unit **Australian Institute of Health and Welfare** Susan Killion Head, Health and Functioning Group Amber Summerill

Appendix 3: Revised model drug law enforcement performance measurement framework

Performance measures	Performance indicators	Available data sources
High level outcome: Reduced drug crime and drug-related crime		
Trends in illicit drug detections/seizures	Number of illicit drug detections/seizures by drug type	Law enforcement databases
Trends in weight of illicit drug detections	Weight of illicit drug detections/seizures by drug type	Law enforcement databases
Trends in illicit drug arrests	Number of illicit drug traffic/supply arrests by drug type Number of illicit drug possession/use arrests by drug type	Law enforcement databases
Trends in illicit drug street prices	Median street price of illicit drugs by drug type	Law enforcement databases Illicit Drug Reporting System (IDRS)
Purity of illicit drugs	Median purity of illicit drugs by drug type and/or Number/proportion of people who perceive the purity of illicit drugs to be 'high' by drug type	Law enforcement databases IDRS
Perceived availability of illicit drugs	Number/proportion of people who perceive the availability of illicit drugs to be very easy/easy by drug type	IDRS

Performance measures	Performance indicators	Available data sources
Changes in where users obtain their drugs	Number/proportion of users who sourced their illicit drugs the last time from: • a house/flat • a public building • home delivery • on the street/outdoors Number/proportion of users who contacted their drug supplier the last time by: • calling them on a mobile • calling them on the telephone • visiting a house/flat • approaching them in public • obtaining drugs through a third party • being with them already Number/proportion of users who got their drugs the last time from: • a regular source • an occasional source • a new source Number/proportion of users who got their drugs the last time from a location different to the arrest location	Drug Use Monitoring in Australia (DUMA)
Changes in trafficking modes	Number and weight of illicit drug detections/ seizures (by drug type) that were trafficked via: • air cargo • sea cargo • air passengers/crew • sea passengers/crew • postal services	Customs' 'Druglan' database
Trends in robberies	Number of people arrested for armed/unarmed robbery	Law enforcement databases

Performance measures	Performance indicators	Available data sources
High level outcome: Reduced organised crime		
Trends in weight of illicit drug detections	Weight of illicit drug detections/seizures by drug type	Law enforcement databases
Changes in trafficking modes	Number and weight of illicit drug detections/ seizures (by drug type) that were trafficked via: • air cargo • sea cargo • air passengers/crew • sea passengers/crew • postal services	Customs' 'Druglan' database
High level outcome: Improved public health		
Trends in the frequency of illicit drugs consumed by drug type	Number/proportion of people who used illicit drugs in the past month by drug type Number/proportion of people who consumed illicit drugs more than three times a week by drug type	DUMA IDRS
Trends in drug-related deaths	Number/proportion of drug-related deaths by drug type	Jurisdictional health agencies Australian Institute of Health & Welfare (AIHW)
Trends in drug-related emergency department presentations or hospital separations	Number/proportion of drug-related emergency department presentations (or hospital separations) by drug type	Jurisdictional health agencies AIHW
Trends in ambulance attendances at overdose	Number/proportion of ambulance attendances at overdose by drug type	Jurisdictional health agencies
Trends in clients participating in drug treatment	Number/proportion of clients in drug treatment by drug type	Jurisdictional health agencies AIHW

Performance measures	Performance indicators	Available data sources
High level outcome: Improved public amenity		
Trends in level of safety felt by the community	Number/proportion of people who feel safe/very safe walking/jogging locally after dark	National Survey of Community Satisfaction with Policing (NSCSP)
Trends in community concern about the 'drug problem'	Number/proportion of people who think that illegal drugs are a major problem/somewhat of a problem in their neighbourhood	NSCSP

Note: 'illicit drugs' includes precursor chemicals, as appropriate

Appendix 4: Example of a data collection plan

Strategic goal	Reduce drug crime and drug-related crime
Performance measure(s)	Trends in illicit drug detections/seizures Trends in illicit drug arrests Trends in weight of illicit drugs Trends in armed/unarmed robberies
Data collection	Hypothetical Police Operating Data System (HPODS)
Data custodian(s)	Hypothetical Police Service
Contact details	Joe Bloggs Analyst, Statistical Unit Hypothetical Police Service Ph: (01) 12345678 Email: joe.bloggs@hps.gov.au
Data format	(for example) Unit of measurement = criminal incident; unit of time = date of reporting/detection; offences classified according to the Australian Standard Offence Classification – Second Edition (ASOC – Second Edition) issued by the Australian Bureau of Statistics (ABS, 2008, Cat. No. 1234.0)
Smallest geographic level	(for example) State, Postcode (statistical divisions & subdivisions of Hypothetical Jurisdiction as defined by ABS), Street/Building
Years referenced	(for example) HPODS introduced in 1998; previous system dates back to 1985
Data collection frequency	(for example) Data are entered daily by police officers for each criminal incident reported to, or detected by, Hypothetical Police Service
Reporting processes/ frequency	(for example) Data are saved daily at the Police Data Warehouse. Data feeds into the Recorded Crime Database maintained by the Australian Bureau of Statistics and the Australian Intelligence Database maintained by the Australian Crime Commission.
Access/security issues	(for example) Requests for recorded crime statistics should be made through Statistical Unit, Hypothetical Police Service. Statistical Unit can extract specific information according to the request made. Standard requests for data are available at the level of postcode. Standard requests have a timeframe of 10 days to process but usually take just a couple of days
Cost	(for example) There are no costs for requests made by staff within the Hypothetical Police Service. A fee of $100 per hour is charged for external data requests
Data reliability/limitations	(for example) 'Drug-related' field not consistently filled in by police officers. Drug weights are an estimate only. Building/Street level data can be unreliable because it is entered as text and subject to variability in the spelling of street names