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Appendix A: Terms of reference

Inquiry into Imprisonment and Recidivism

Context

The growth in prisoner numbers is a serious and growing public policy concern for Queensland.

- The imprisonment rate of people in Queensland prisons increased by 40 per cent in the five years from 2012 to 2017, around five times the population growth rate for Queensland.
- The imprisonment rate of Aboriginal and Torres Strait Islanders increased by 50 per cent over the same period.
- Recidivism is high with more than 60 per cent of new prisoners having been in prison before.
- Of further concern is the real increase of imprisonment of women, especially Aboriginal and Torres Strait Islander women.

The growth of prisoner numbers has major social and economic implications for affected individuals and the wider Queensland community. It also has significant financial implications for government.

Change is necessary however, the problem is complex. Prisoner numbers reflects underlying forces including long term social and economic factors and community views about criminal justice; but they also reflect the daily activity and decisions at key points within the criminal justice system, sentencing and legislative frameworks, police resourcing and decisions, sentencing practices, court workloads and access to support services including legal aid.

A system wide approach to change is essential - considering both the underlying forces and the practical operation of Queensland's criminal justice system. Potential measures must be thoroughly worked-through and rigorously tested, including comprehensive public consultation.

The Queensland Government considers that the Queensland Productivity Commission, as the State's independent public policy review body, is an excellent mechanism to undertake such innovative and evidence grounded research, investigation, testing and consultation.

Terms of Reference

The Queensland Productivity Commission is directed to undertake an Inquiry into Imprisonment and Recidivism.

The central question is, how can Government resources and policies be best used to reduce imprisonment and recidivism and improve outcomes for the community over the medium to longer term?

In the context of the Government's objective of ensuring a fair, safe and just Queensland, the Commission should consider:

- trends in the rate of imprisonment in Queensland in recent years, including comparison with other sentencing options;
- evidence about the causal factors underlying trends in the rate of imprisonment;
- the factors driving Aboriginal and Torres Strait Islander imprisonment and recidivism and options to improve matters;
- the factors driving the imprisonment and recidivism of women and options to improve matters;
- factors affecting youth offending and corresponding imprisonment rates and options to improve matters;
- measures of prisoner recidivism rates, trends in recidivism and causes of these trends;



- the benefits and costs of imprisonment, including its social effects, financial costs and effectiveness in reducing/preventing crime;
- the effectiveness of programs and services in Australia and overseas to reduce the number of people in and returning to prisons, including prevention and early intervention approaches, non-imprisonment sentencing options, and the rehabilitation and reintegration of prisoners;
- the efficacy of adopting an investment approach, where investments in prevention, early intervention and rehabilitation deliver benefits and savings over the longer term; and
- barriers to potential improvements and how these barriers could be lowered.

The Commission's recommendations should be consistent with the 'Queensland Government Policy on the Contracting-Out of Services', which provides that services currently delivered in-house, including publicly operated prisons, will not be outsourced other than in certain limited circumstances.

Consultation

The Commission must undertake public consultation in relation to the Inquiry, including with peak bodies, experts, government agencies and other key stakeholders.

The Commission must consult with the Deputy Director-General Cluster Group for the 'Keep Communities Safe Priority' of 'Our Future State: Advancing Queensland's Priorities' and the Crime Statistics and Research Unit in the Queensland Government Statistician's Office.

Reporting

The Commission must publish a draft report (including interim recommendations) for consultation by 1 February 2019.

The Final Report must be provided to the Government by 1 August 2019.



Adressing the terms of reference

Terms of reference	Relevant chapters of final report
Trends in the rate of imprisonment in Queensland in recent years, including comparison with other sentencing options; Evidence about the causal factors underlying trends in the rate of imprisonment	Chapter 3 (An overview of the system), Chapter 4 (State of play and how we got here), Chapter 6 (Pathways to prison), Chapter 11 (Diversion), Chapter 13 (Illicit drug policy reform), Chapter 15 (Increasing non-prison sentencing options), Chapter 16 (Reducing remand), Chapter 21 (Indigenous imprisonment: causal factors)
The factors driving Aboriginal and Torres Strait Islander imprisonment and recidivism and options to improve matters;	Chapter 4 (State of play and how we got here), Chapter 10 (Prevention and early intervention), Chapter 21 (Indigenous imprisonment: causal factors), Chapter 22 (Indigenous imprisonment: enabling local solutions), Chapter 23 (Strategies to reduce Indigenous imprisonment)
The factors driving the imprisonment and recidivism of women and options to improve matters; Factors affecting youth offending and corresponding imprisonment rates and options to improve matters	Chapter 6 (Pathways to prison), Chapter 10 (Prevention and early intervention), Chapter 13 (Illicit drug policy reform), Chapter 21 (Indigenous imprisonment: causal factors)
Measures of prisoner recidivism rates, trends in recidivism and causes of these trends	Chapter 5 (Recidivism – trends and measurement)
The benefits and costs of imprisonment, including its social effects, financial costs and effectiveness in reducing/preventing crime	Chapter 2 (Conceptual framework), Chapter 7 (Benefits and costs of imprisonment), Chapter 12 (The scope of crime), Chapter 13 (Illicit drug policy reform), Chapter 21 (Indigenous imprisonment: causal factors)
The effectiveness of programs and services in Australia and overseas to reduce the number of people in and returning to prisons, including prevention and early intervention approaches, non-imprisonment sentencing options, and the rehabilitation and reintegration of prisoner	Chapter 10 (Prevention and early intervention), Chapter 11 (Diversion), Chapter 12 (Reducing the scope of crime), Chapter 13 (Illicit drug policy reform), Chapter 14 (A victim-focussed system), Chapter 15 (Increasing non-prison sentencing options), Chapter 16 (Reducing the remand population), Chapter 17 (Improving throughcare), Chapter 18 (Improving in-prison rehabilitation), Chapter 19 (Reintegration), Chapter 21 (Indigenous imprisonment: causal factors), Chapter 23 (Strategies to reduce Indigenous imprisonment)
The efficacy of adopting an investment approach, where investments in prevention, early intervention and rehabilitation deliver benefits and savings over the longer term	Chapter 9 (Improving decision making), Chapter 10 (Prevention and early intervention), Chapter 13 (Illicit drug policy reform), Chapter 17 (Improving throughcare), Chapter 18 (Improving in-prison rehabilitation), Chapter 19 (Reintegration)



Terms of reference	Relevant chapters of final report
Barriers to potential improvements and how these barriers could be lowered	Chapter 8 (Decision-making), Chapter 9 (Improving decision-making), Chapter 12 (Reducing the scope of crime), Chapter 17 (Improving throughcare), Chapter 18 (Improving in-prison rehabilitation), Chapter 19 (Reintegration services), Chapter 20 (Custodial infrastructure), Chapter 22 (Indigenous imprisonment: enabling local solutions)
The Commission's recommendations should be consistent with the 'Queensland Government Policy on the Contracting-Out of Services', which provides that services currently delivered in-house, including publicly operated prisons, will not be outsourced other than in certain limited circumstances	The Commission's recommendations are consistent with the 'Queensland Government Policy on the Contracting-Out of Services'



Appendix B: Submissions

B.1 Written submissions

Individual or organisation	Sub	mission number
Balanced Justice	1	
Dr Kelly Richards, School of Justice, Queensland University of Technology	2	DR7
Professor K Carrington and Professor R Hogg, Crime, Justice and Social Democracy Research Centre, Queensland University of Technology	3	
Dr M Denton, School of Nursing, Midwifery and Social Work, University of Queensland	4	
Associate Professor A Eriksson, Imprisonment Observatory, Monash University	5	
Cape York Partnership	6	
Dr K Ellem, Dr M Denton, M O'Connor and Dr D Davidson	7	
TAFE Queensland	8	
Eddie Pearce, Lifeblood Australia	9	
Dr K McFarlane, Centre for Law and Justice, Charles Sturt University	10	
Institute of Public Affairs (IPA)	11	DR30
PricewaterhouseCoopers (PWC)	13	
Keith Hamburger AM, Knowledge Consulting	14	DR17
yourtown	15	
Qld Advocacy Incorporated (QAI)	16	
Women's Legal Service Qld (WLSQ)	17	
Queensland Homicide Victim's Support Group (QHVSG)	18	
Serco Australia	19	
Queensland Council of Social Service (QCOSS)	20	DR24
Queensland Alliance for Mental Health (QAMH)	21	
Prison Fellowship Australia	22	DR27
Family Responsibilities Commission (FRC)	23	
Jenni Pack	24	
Dr G Catalano, School of Social Science, University of Queensland	25	
Anonymous	26	
Australian Psychology Society College of Forensic Psychologists, Queensland Branch	27	
David White	28	
Together Queensland	29	DR14



Individual or organisation	Subi	mission number
Queensland Network of Alcohol and Other Drug Agencies (QNADA)	30	DR20
The Royal Australian and New Zealand College of Psychiatrists, QLD Branch (RANZCP QLD)	31	
Dr Jane Garner	32	
Dr Ian A Elliott	33	
Youth Advocacy Centre Inc (YAC)	34	
Aboriginal & Torres Strait Islander Legal Service (Qld) Ltd (ATSILS)	35	DR16
Queensland Family and Child Commission (QFCC)	36	DR34
Amnesty International Australia	37	
Queensland Mental Health Commission (QMHC)	38	
Sisters Inside Incorporated	39	DR45
Bravehearts Foundation Ltd.	40	
Change the Record Coalition	41	
Bar Association of Queensland	42	
Queensland Government	43	
Dr Mark Rallings		DR1
Matthew Cox		DR2
Andrew Hurst		DR3
Coen Justice Group		DR4
Civil Liberties Australia		DR5
John Smith		DR6
Associate Professor John Rynne, Griffith University		DR8
Mount Isa Family Support Service & Neighbourhood Centre Inc.		DR9
Sarah Tucker		DR10
John Byrne		DR11
Anti Discrimination Commission Queensland		DR13
Margaret Holm		DR15
WorkRestart		DR18
Speech Pathology Australia		DR19
Dr J. Quilter and Dr L. McNamara		DR21
Brisbane Youth Service		DR22
Mick Palmer AO		DR23
Paul Bryden		DR25
Shine for Kids		DR26



Individual or organisation	Submission number
Alcohol and Drug Foundation	DR28
PeakCare Queensland Inc	DR29
Parole Board Queensland	DR31
Professor A. Stewart and Dr T. Allard, Griffith Criminology Institute	DR32
Queensland Advocacy Incorporated	DR33
Australian Community Support Organisation	DR35
Legal Aid Queensland	DR36
Anonymous	DR37
Mick Lowcock	DR38
Cape York Institute (CYI)	DR39
Anonymous	DR40
Anonymous	DR41
Queensland Aboriginal and Islander Health Council (QAIHC)	DR42
Anonymous	DR43
Queensland Police Service	DR44
Anonymous	DR46



B.2 Presentations at public hearings

Participant	Hearing
Anne Russell, Russell Family Fetal Alcohol Disorders Association	Cairns
Mick Schuele, Cape York Partnerships	Cairns
Jeff Nelson, Clinical Psychologist	Cairns
Andrew Beck, Queensland Corrective Services	Cairns
Shane Duffy, ATSILS	Cairns
Eddie Pearce, ATSILS	Cairns
Karen Walsh, Micah Projects	Brisbane
David Cormack, Prison Fellowship	Brisbane
Paul Mazarolle, Griffith University	Brisbane
Chris Connors, Mt Isa Support and Neighbourhood Centre	Brisbane
Keith Hamburger, Knowledge Consulting	Brisbane
Marissa Dooris, Debbie Kilroy, Sisters Inside	Brisbane
Michelle Denton, University of Queensland	Brisbane
Mick Palmer, AO	Townsville
Jenni Pack	Townsville
Wayne Parker, Yinda Youth Program	Townsville
David Glasgow, Families Responsibilities Commission	Townsville
Alfred Smallgood	Townsville
Noel Pearson, Cape York Institute	Brisbane
Michael Thomas, Together Queensland	Brisbane
Sarah Tucker, Christian Heritage College	Brisbane
Brett Thompson, Homicide Victims' Support Group	Brisbane
David White	Brisbane
Tammy Solonec, Amnesty International	Brisbane
Dr Janet Hammill, University of Queensland Centre for Clinical Research	Brisbane



Appendix C: Consultations

C.1 Correctional centre visits

Site

Arthur Gorrie Correctional Centre

Brisbane Women's Correctional Centre

Capricornia Correctional Centre

Townsville Correctional Centre

Lotus Glen Correctional Centre

Helena Jones Centre

Borallon Correctional Centre

Brisbane Correctional Centre

C.2 Aboriginal and Torres Strait Islander community visits

Site

Hope Vale

Aurukun

Napranum

Yarrabah

C.3 Other site visits

Site

Drug and Alcohol Court

Murri Court

Magistrates Court

Jimaylya Topsy Harry Centre

Brisbane Temporary Accommodation Services



C.4 Consultations

Organisation or person

Aboriginal and Torres Strait Islander Legal Service (Qld) Ltd (ATSILS)

Act for Kids

Professor Alan Clough

Alfred Smallwood (Community Justice Group—Townsville)

Amaroo Aboriginal & Torres Strait Islander Elders Justice Group

Amnesty International Australia

Anna Henry

Anne Russell (Russell Family Fetal Alcohol Disorders Association)

Professor Ari Frieberg

Bar Association of Queensland

Brad Whittle (The Salvation, Australia One)

Bravehearts Foundation Ltd

Brendon McMahon

Brett Thompson (Queensland Homicide Victims Support Group)

Cairns Regional Domestic Violence Service

Cairns Sexual Assault Service (CSAS)

Cape York Partnerships

The Honourable Chief Justice Catherine Holmes

Chris Congoo (The Salvation, Australia One)

Chris Connors (Mount Isa Support and Neighbourhood Centre)

Centacare

Cleveland Fagan (Yarrabah Leaders Forum)

Community Justice Group - Palm Island

Community Justice Group - Townsville

Corrs Chambers Westgarth

Crime and Corruption Commission

Crime Statistics and Research Unit

Danika Jackson

Darryl Clark

David Cormack (Prison Fellowship)

David Glasgow (Family Responsibilities Commission)

David White



Department of Aboriginal and Torres Strait Islander Partnerships

Department of Child Safety, Youth, Justice and Women

Department of Education

Department of Housing and Public Works

Department of Justice and Attorney-General

Department of Premier and Cabinet

Deputy Director-General Cluster Group for the 'Keep Communities Safe Priority' of 'Our Future State: Advancing Queensland's Priorities'

Dr Don Weatherburn (NSW Bureau of Crime Statistics and Research)

Eddie Pearce (LifeBlood Australia)

Esme Wesser (Juwarki Kapu Lug Ltd)

Family Responsibilities Commission - Cairns/Townsville

Fiona Allison

Forensic MH Services

Griffith Criminology Institute

Professor Heather Douglas (UQ)

Hope Vale Campus of CYAA

Institute of Public Affairs

Professor James Ogloff

Jan McSweeney (Neighbourhood Watch)

Dr Jeff Nelson

Jeff Williams

Jenni Pack (Townsville Central City Mission)

Jesuit Social Services

Justice Behind Bars

Karen Kite (Yumba Meta)

Karyn Walsh (Micah Projects)

Kate Black (Sisters Inside Incorporated)

Keith Hamburger AM (Knowledge Consulting)

Professor Kerry Carrington (QUT)

Legal Aid Queensland

Lifeblood Australia

LGAQ Indigenous Leaders Forum

Associate Professor John Rynne (Griffith University)



Professor Lorraine Mazerolle (UQ)

Major General Stuart Smith – Townsville Community Champion

Professor Mark Moran (UQ)

Dr Mark Rallings

Marnie Wettenhall (Department of the Prime Minister and Cabinet)

Professor Melissa Bull (QUT)

Michael Thomas (Together Union)

Mick Palmer AO

Mick Schuele (Cape York Partnerships)

Ministerial Outcome Oversight Group

Mount Isa Stronger Communities

Mount Isa Support and Neighbourhood Centre

Napranum Aboriginal Shire Council

New South Wales Bureau of Crime Statistics and Research

New Zealand Ministry of Justice

Noel Pearson (Cape York Institute)

Office of the Chief Inspector

Office of the Chief Psychiatrist

Office of the Director of Public Prosecutions

Open Universities Queensland

His Honour Judge Orazio Rinaudo AM, Chief Magistrate

Ozcare

Parole Board of Queensland

Professor Paul Mazerolle (Griffith University)

Prison Fellowship Queensland

Queensland Alliance for Mental Health

Queensland Audit Office

Queensland Corrective Services

Queensland Family and Child Commission

Queensland Government Statistician's Office

Queensland Health - Queensland Forensic Mental Health Service

Queensland Homicide Victims Support Group

Queensland Mental Health Commission

Queensland Network of Alcohol and Other Drug Agencies



Queensland Police Service

Queensland Sentencing Advisory Council

Queensland Treasury

Rhodes Watson (Neighbourhood Watch)

Rod Sabin (New Endings Men's Program)

Roslyn Lively (Reverend Charles Diversionary Centre)

The Royal Australian and New Zealand College of Psychiatrists (RANZP)

Adjunct Professor Russell Hogg (Queensland University of Technology)

Rusty Butler (Yinda)

Dr Caroline Salom (University of Queensland)

Salvation Army Court and Prison Chaplain

Samantha Kelley (North Queensland Women's Legal Service)

Samara McPhedran (Queensland Homicide Victims Support Group)

Sarah Tucker (Christian Heritage College)

Dr Marian Shanahan, University of New South Wales

Shane Duffy (Aboriginal and Torres Strait Islander Legal Service (Qld) Ltd)

Professor Simon Bronitt (University of Sydney)

Sisters Inside Incorporated

Dr Andrew Smirnov, University of Queensland

Stanley Smith

State Penalties Enforcement Registry (SPER)

Dr Stephen King

Steven Fincham (Uniting Care Prison Ministry)

Major General Stuart Smith – Townsville Community Champion

Professor Tamara Walsh (UQ)

Tammy Solonec (Amnesty International)

Tim Braban (Queensland Alliance for Mental Health)

The Honourable Justice Tim Carmody

The Salvation Army – Australia One

Together Union

Townsville Central City Mission

Townsville Community Champion

Townsville Stronger Communities

Uniting Care Prison Ministry



Wayne Parker (Yinda)

Wendy McHugh (Uniting Care Prison Ministry)

Women's Legal Service (Qld)

Yarrabah Aboriginal Shire Council

Yarrabah Leaders Forum

Yinda

Youth Advocacy Centre

YouthPlus

Yumba Meta

Zoe Ellerman (Cape York Institute)

Note: List includes attendees at public forums.

C.5 Public hearings and forums

Locations

Brisbane

Cairns

Rockhampton

Townsville

Mt Isa



Appendix D: Pathways demographics and supplementary tables

This appendix outlines the method used to assign demographic status to Single Person Identifiers (SPIs), and provides supplementary tables. It refers to the analysis in Chapter 6.

Demographic status

As part of the demographic analysis in Chapter 6, individuals' SPIs were assigned gender, Indigenous and remoteness statuses. Where piecewise comparisons were made (for example, the imprisonment over time for males compared to females), only those with demographic data were included. However, when statements about the whole population were made, all individuals (even those without complete demographic data) were included.

Indigenous status

If a person had been to prison, their SPI was classified on whether Queensland Corrective Services (QCS) recorded them as Indigenous. QCS assigns a binary classification, which is consistent across all records, based on their self-reported Indigenous status. As stated in Chapter 6, individuals whose indigeneity is unknown was classified as non-Indigenous.

If a person had not been to prison, their classification was based on court records. Unlike QCS records, court records have five classifications (Aboriginal, Torres Strait Islander, both, neither or not-stated). Often people would be recorded as some combination of these, including a large number as all five. A person was classified as Indigenous if at least half of their recorded Indigenous statuses were Aboriginal, Torres Strait Islander or both. If not, they were classified as non-Indigenous.

Of the 1990 cohort with at least one conviction, 2,754 SPIs were classified as 'Indigenous' (12.1 per cent) and 19,906 SPIs were classified as 'non-Indigenous' (87.9 per cent).

For robustness, a second approach was employed in which a person was classified as Indigenous if they had any 'Indigenous' records—this resulted in only eight additional people being counted as Indigenous.

Gender status

Gender was coded as male or female. If a person had a QCS record, they were coded according to that record.

If a person had not been to prison (and therefore did not have a QCS record), their SPI was coded according to their court records. Entries in the courts database were flagged as male, female or missing data. A person was coded as male if they were recorded as male at least once, and never coded as female. A person was coded as female if they were recorded as female at least once, and never recorded as male.

Of the 1990 cohort with at least one conviction, 16,460 (72.6 per cent) were male, 6,125 (27 per cent) were female and 75 (0.3 per cent) were unclassified.

Remoteness status

Remoteness status was based on matching the person's most recent recorded suburb of address in the court records to entries in the Australian Bureau of Statistics (ABS) remoteness classification under the Australian Statistical Geography Standard (ABS 2018b). To allow for larger observation groups, 'remote' and 'very remote' were combined into one group (called 'remote') and 'inner regional' and 'outer regional' were combined into regional.



Of those in the 1990 cohort with at least one conviction 12,710 (56.1 per cent) were assigned as living in 'major cities', 8,555 (37.8 per cent) were assigned as 'regional', 1,168 (5.2 per cent) were assigned as remote and 227 (1.0 per cent) could not be assigned.

Table D.1 Ages of prisoners, by gender and indigeneity

	Male			Female		
Age	Non-Indigenous	Indigenous	All	Non-Indigenous	Indigenous	All
Average	36	32.2	34.8	34	31.3	33
1st quartile	28	25	27	28	24	26
Median	34	31	33	33	30	32
3rd quartile	42	38	41	40	37.25	39

Source: QCS, unpublished data.

Table D.2 Ages of first police contact of prisoners, by gender and indigeneity

	Male			Female		
Age	Non-Indigenous	Indigenous	All	Non-Indigenous	Indigenous	All
Average	21.2	15.6	19.4	21	16.2	19.1
1st quartile	14	11	13	14	13	14
Median	18	14	16	18	14	16
3rd quartile	25	17	22	25	18	22

Source: QPS, unpublished data; QCS, unpublished data.

Table D.3 Ages of first conviction of prisoners, by gender and indigeneity

	Male			Female		
Age	Non-Indigenous	Indigenous	All	Non-Indigenous	Indigenous	All
Average	26.4	21.7	24.9	25.2	21.5	23.8
1st quartile	18	16	17	19	16	18
Median	23	19	22	23	19	22
3rd quartile	32	26	30	30	26	28

Source: QCS, unpublished data; DJAG, unpublished data; QGSO unpublished data.



Appendix E: Offences to prison, Queensland 2017–18

Stage of the criminal justice process	(000s)	Components	(000s)
		Against the person	36.5
Reported offences	503.7	Against property	244.8
		Other	222.5
		Against the person (70%)	25.7
Cleared offences (% rate)	318.9	Against property (38%)	93.0
		Other (90%)	200.1
Police actions—used to clear offences		Arrest	114.9
(the difference with cleared offences		Summons and warrants	6.3
will reflect withdrawn complaints and	306.2	Notice to appear	142.1
that offences need not match		Cautions, conferences	13.9
actions—total includes 2.4 not-coded)		Other (bar to proceeding/alt process)	26.7
		Number of unique offenders associated with police actions	112.8
Arrests—can lead to remand	114.9	Remand flows to prison	6.4
Possible police actions to court— arrests, summons, warrants and notices to appear	263.3		
Proceedings		Court finalised appearances	155.5
(combines court finalised appearances with non-court proceedings)	184.4	Non-court proceedings	28.9
		Not guilty	1.7
		Withdrawn	13.2
Court finalised appearances	155.5	Guilty—plea	123.8
		Guilty—court finding	1.8
		Guilty—ex parte	14.8
		Monetary orders	89.0
		Community orders	14.1
Sentences—for the convicted	140.3	Other non-custodial orders	16.9
(excludes 277 company convictions)	140.5	Fully suspended sentence	7.7
		Custody in community	0.3
		Custody in correctional institution ^a	12.4
Prisoner inflows	13.3	Sentenced inflows ^a	6.9
THISOHET HIHOWS	13.3	Remand inflows	6.4
Average priceper numbers	0.0	Sentenced	5.9
Average prisoner numbers	8.6	Remand	2.7

a Not all custodial sentences result in prison if time on remand is considered 'time served' and/or immediate parole is ordered. Sources: QPC estimates, ABS 2019g, ABS 2018d, ABS 2019c, QGSO 2019a, 2019b.



Appendix F: Scope and definition of crime

F.1 Definition and classification of crime

This appendix provides background information on:

- how offences are defined and classified
- characteristics of offences at the Australian and New Zealand Standard Offence Classification (ANZSOC) 4-digit level, such as measures of the seriousness of the offence.

F.2 What acts are defined as a crime?

Definition of an offence

The *Criminal Code Act 1899* (Qld) (the Criminal Code) defines an offence as an act or omission which renders the person doing the act or making the omission liable to punishment. Crime is defined through the definition of offences.

Offences are divided into indictable offences, which are ordinarily punishable only after conviction on indictment, and simple offences, punishable upon conviction by justices or a magistrate in petty sessions. An indictable offence may be a crime, which ordinarily imports that an offender may be arrested without warrant, or it may be a misdemeanour.

In Queensland, offences are either regulatory offences or criminal offences.

Regulatory offences are set out in the *Regulatory Offences Act 1985* (Qld) and include acts such as: stealing goods valued at \$150 or less from a shop; leaving a hotel or restaurant without payment of a bill for goods or services valued at \$150 or less; damaging property valued at \$250 or less. Regulatory offences must be finalised in the Magistrates Court and all offences carry fines as the maximum penalty according to the Act (regulatory offences are not subject to custodial penalties).

Criminal offences comprise crimes, misdemeanours and simple offences:

- crimes and misdemeanours (indictable offences): an indictable offence must be prosecuted on an indictment (a
 written charge by a person authorised to prosecute criminal offences) before a judge and jury in the District or
 Supreme Court. In certain circumstances, a charge on indictment may be prosecuted before a judge alone,
 without a jury.
- simple (or summary) offences: these are less serious offences. Examples of simple offences include being a public nuisance or trespass. If a criminal offence is not otherwise designated (e.g. as a misdemeanour or crime), it is automatically a simple offence. Simple offences are usually heard in the Magistrates Court.

An offence classification system

Criminal offences are defined under a number of different Acts of Parliament, including:

- the Criminal Code
- Drugs Misuse Act 1986 (Qld)
- Domestic and Family Violence Protection Act 2012 (Qld)
- Summary Offences Act 2005 (Qld)
- Transport Operations (Road Use Management) Act 1995 (Qld).



A large proportion of offences that result in imprisonment are defined under the Criminal Code. In addition to the above Acts, offences are also defined in a range of other state Acts.

Queensland courts also hear cases and sentence people for offences defined under Commonwealth legislation.

ANZSOC 2011 classifications

The Australian and New Zealand Standard Offence Classification (ANZSOC) was developed for use in the compilation and analysis of crime and justice statistics in Australia and New Zealand. The objective of the ANZSOC is to provide a uniform national statistical framework for classifying criminal behaviour in the production and analysis of crime and justice statistics. The ANZSOC is used in Australian Bureau of Statistics statistical collections, Statistics New Zealand statistical collections, Australian police, criminal courts and corrective services agencies and New Zealand police and justice agencies.

There are two main purposes of ANZSOC:

- to provide a standardised statistical framework for organising key behavioural characteristics of criminal offences
- to overcome differences in legal offence definitions across states and territories.

ANZSOC has a tree structure comprised of three levels: the 2-digit Division level provides the highest level of detail; the 3-digit Subdivision level; and the 4-digit Group level. A description of each Division is provided below.

Criteria used to classify offences

The criteria used to classify offences are:

- *Violence*: Whether violence is involved. If violence is involved the nature and level of the violence is considered including whether a weapon was used, whether abduction or deprivation of liberty was involved, whether the violence was sexual in nature and the outcome of the violence (for example, whether life was taken, threatened or endangered).
- Acquisition: Whether the intent of the offence is acquisitive (for example, to obtain property).
- *Nature of Victim*: The nature and vulnerability of the victim or object offended against. Types of victims include persons, property and the community.
- Ancillary Offences: Whether the offence only exists as an extension of, or in relation to, another offence. Such offences include attempts, threats and conspiracies to commit another offence, or offences involving the intent that another offence shall take place.
- Seriousness: Seriousness can be reflected through the involvement or otherwise of a personal victim, or it can be measured as a function of factors of aggravation, such as whether the victim was vulnerable; whether the offence was committed in company; or whether a weapon was used.
- *Intent*: Whether the offence occurs as a result of a negligent or reckless act, or as a result of an intent to commit an offence. This criterion distinguishes, for example, manslaughter from murder (ABS 2011).

ANZSOC 2011 Divisions

01 Homicide and related offences: Unlawfully kill, attempt to unlawfully kill or conspiracy to kill another person. This division is further disaggregated into subdivisions based on the level of culpability involved, as reflected by: a criminal intent in the form of either an intent to kill or to commit a crime leading to the killing of another person; or the degree of involvement in the physical act of killing another person.

02 Acts intended to cause injury: Acts, excluding attempted murder and those resulting in death (Division 01), which are intended to cause non-fatal injury or harm to another person and where there is no sexual or acquisitive



element. This division is further disaggregated into subdivisions based on whether or not an act constitutes a direct assault upon a person or persons.

- **03 Sexual assault and related offences**: Acts, or intent of acts, of a sexual nature against another person, which are non-consensual or where consent is proscribed. This division is further disaggregated into subdivisions based on whether or not the sexual act involved physical contact with the person.
- **04 Dangerous or negligent acts endangering persons**: Dangerous or negligent acts which, though not intended to cause harm, actually or potentially result in injury to oneself or another person. This division is further disaggregated into subdivisions based on whether or not the dangerous or negligent act involved the operation of a vehicle.
- **05 Abduction, harassment and other offences against the person**: Acts intended to threaten or harass, or acts that unlawfully deprive another person of their freedom of movement, that are against that person's will or against the will of any parent, guardian or other person having lawful custody or care of that person. This division is further disaggregated into subdivisions based on whether the offence involved abduction, deprivation of liberty, harassment or threatening behaviour.
- **06 Robbery, extortion and related offences**: Acts intended to unlawfully gain money, property or other items of value from, or to cause detriment to, another person by using the threat of force or any other coercive measure. This division is further disaggregated into subdivisions based on whether or not the act involved the use and/or threatened use of immediate force or violence.
- **07 Unlawful entry with intent**: The unlawful entry of a structure with the intent to commit an offence, where the entry is either forced or unforced. A structure is defined as a building that is contained by walls and can be secured in some form.
- **08 Theft and related offences**: The unlawful taking or obtaining of money or goods, not involving the use of force, threat of force or violence, coercion or deception, with the intent to permanently or temporarily deprive the owner or possessor of the use of the money or goods, or the receiving or handling of money or goods obtained unlawfully. This division is further disaggregated into subdivisions based on the following elements: whether or not the property was taken from a motor vehicle; whether or not the offence involved the actual taking or obtaining of money or goods; or whether or not the intent was to permanently deprive the owner or possessor of the use of the property.
- **09 Fraud, deception and related offences**: Offences involving a dishonest act or omission carried out with the purpose of deceiving to obtain a benefit. This division is disaggregated into subdivisions based on the type of fraud or deception involved. Offences in this division are classified into the following subdivisions: Obtain benefit by deception; Forgery and counterfeiting; Deceptive business/government practices; and Other fraud and deception offences.
- **10 Illicit drug offences**: Actions resulting or intended to result in either the importation of illicit drugs or controlled substances into Australia, or the exportation of illicit drugs or controlled substances from Australia. This subdivision is disaggregated based on whether illicit drugs are imported or exported.
- **11 Prohibited and regulated weapons and explosives offences**: Offences involving prohibited or regulated weapons and explosives. Those offences also involving assault, sexual assault or robbery are coded to the relevant groups within Subdivisions 021, Assault; 031, Sexual assault; and 061, Robbery respectively. This division is further disaggregated into subdivisions based on whether or not the weapons and/or explosives are prohibited or simply regulated.
- **12 Property damage and environmental pollution**: The wilful and unlawful destruction, damage or defacement of public or private property, or the pollution of property or a definable entity held in common by the community. For this division, 'destruction' means altering the property in any way so as to render it imperfect or inoperative. This division is further disaggregated into subdivisions based on whether property was damaged by pollution or by other means.



- **13 Public order offences**: Offences relating to personal conduct that involves, or may lead to, a breach of public order or decency, or that is indicative of criminal intent, or that is otherwise regulated or prohibited on moral or ethical grounds. In general, these offences do not involve a specific victim or victims; however some offences, such as offensive language and offensive behaviour, may be directed towards a single victim. This division is further disaggregated into subdivisions based on whether or not the behaviour is regulated.
- **14 Traffic and vehicle regulatory offences**: Offences relating to vehicles and most forms of traffic, including offences pertaining to the licensing, registration, roadworthiness or use of vehicles, bicycle offences and pedestrian offences. This division is further disaggregated into subdivisions based on whether or not the offence was in breach of regulations relating to having a driver's licence, the registration or roadworthiness of a particular vehicle, or the manner in which the vehicle is operated. While some 'drink driving' offences, such as exceeding the prescribed blood alcohol limit, are included in this division, others such as driving under the influence of alcohol or other substance form part of Division 04, Dangerous or negligent acts endangering persons.
- **15 Offences against justice procedures, government security and operations**: An act or omission that is deemed to be prejudicial to the effective carrying out of justice procedures or any government operations. This includes general government operations as well as those specifically concerned with maintaining government security. This division is further disaggregated into subdivisions based on whether or not the act or omission was against justice procedures or government operations.
- **16 Miscellaneous offences**: Offences involving the breach of statutory rules or regulations governing activities that are prima facie legal, where such offences are not explicitly dealt with under any other division. If an offence is specified under regulation and involves an act that would be illegal under common law or general criminal legislation (for example, assault on Occupational Health and Safety Inspector), then this offence should be dealt with under the appropriate generic group. This division is further disaggregated into subdivisions based on whether the offence was against the individual, the collective public, business or other entity.

F.3 Classifying offences by their 'seriousness'

National Offence Index

The National Offence Index (NOI) is used to determine the most serious charge for unsentenced prisoners for all states and territories. The NOI is a tool which provides an ordinal ranking of all offences in ANZSOC according to the perceived seriousness of each offence. The purpose of the NOI is to enable the representation of a prisoner by a single offence/charge in instances where multiple offences/charges occur for the same prisoner.

The National Offence Index (NOI) was based on the Offence Seriousness Index developed by the Crime Research Centre (CRC) in Western Australia. The Offence Seriousness Index was developed based on research conducted into public perceptions of offence seriousness and consideration of legislated sentences. The Offence Seriousness Index was first developed in 1991, and subsequently reviewed in 1998 following the introduction of Australian Standard Offence Classification (ASOC).

The ABS developed NOI by building on the 1998 version of the Offence Seriousness Index, using data from the 2001–02 Higher Criminal Courts collection to refine the ordering by seriousness. The severity of sentences handed down to adjudicated finalised defendants were analysed to establish a principal offence for defendants. Consultation with practitioner and advisory groups in crime, courts and corrective services, resulted in further changes to the ranking of selected offences.

For the NOI, seriousness rankings are assigned based on an intuitive synthesis of information about maximum penalties as prescribed in legislation, sentencing practice and public and expert opinion. Because the NOI allows non-legal factors (such as public opinion) to influence offence seriousness rankings, it is less than ideal as a measure of the way in which offence seriousness (as the courts view it) influences penalty choice (MacKinnell et al. 2010).



NSW Bureau of Crime Statistics and Research MSR and MSMR indices

The NSW Bureau of Crime Statistics and Research constructs two indices:

- Median Sentence Ranking (MSR): the MSR is a measure of actual court sentencing practice. To remove the influence of prior criminal record on penalty choice, the index is based on penalties imposed upon offenders who have no prior criminal record. The index utilised a procedure which combines penalties varying in type as well as quantity. The index provides a measure of relative seriousness from the viewpoint of the judiciary.
- Median Statutory Maximum Ranking (MSMR): the MSMR is based on the statutory maximum penalty specified in legislation in New South Wales for each offence. Only imprisonment and fine penalties are considered because NSW legislation sets maximum penalties in terms of imprisonment and fines. The index provides a measure of relative seriousness from the viewpoint of legislators (MacKinnell et al. 2010, pp. 3,5).

F.4 Supporting tables

Code	Description	NOI 2018 ranking	NOI 2009 ranking	NSW BCSR MSR ranking	NSW BCSR MSMR ranking
0111	Murder	1	1	1	1
0121	Attempted murder	2	2	2	5
0131	Manslaughter	3	3	5	6
0132	Driving causing death	4	4	23	54
0130	Manslaughter and driving causing death, n.f.d	5	na	na	na
0100	Homicide and related offences, n.f.d	6	na	na	na
0311	Aggravated sexual assault	7	7	12	27
0321	Non-assaultive sexual offences against a child	8	8	11	18
0323	Sexual servitude offences	9	9	18	33
0322	Child pornography offences	10	10	17	32
0312	Non-aggravated sexual assault	11	11	20	67
0310	Sexual assault, n.f.d	12	na	na	na
0329	Non-assaultive sexual offences, n.e.c	13	12	40	61
0320	Non-assaultive sexual offences, n.f.d	14	na	na	na
0300	Sexual assault and related offences, n.f.d	15	na	na	na
1011	Import illicit drugs	16	14	3	3



Code	Description	NOI 2018 ranking	NOI 2009 ranking	NSW BCSR MSR ranking	NSW BCSR MSMR ranking
1012	Export illicit drugs	17	15	4	4
1010	Import or export illicit drugs, n.f.d	18	na	na	na
1021	Deal or traffic in illicit drugs - commercial quantity	19	17	7	2
1031	Manufacture illicit drugs	20	18	8	7
1032	Cultivate illicit drugs	21	19	54	11
1030	Manufacture or cultivate illicit drugs, n.f.d	22	na	na	na
1022	Deal or traffic in illicit drugs - non-commercial quantity	23	21	27	12
1020	Deal or traffic in illicit drugs, n.f.d	24	na	na	na
211	Serious assault resulting in injury	25	23	50	35
511	Abduction and kidnapping	26	24	9	8
611	Aggravated robbery	27	25	30	9
521	Deprivation of liberty/false imprisonment	28	26	21	55
212	Serious assault not resulting in injury	29	27	67	40
213	Common assault	30	28	94	72
210	Assault, n.f.d	31	na	na	na
299	Other acts intended to cause injury, n.e.c	32	30	39	34
291	Stalking	33	31	53	57
290	Other acts intended to cause injury, n.f.d	34	na	na	na
200	Acts intended to cause injury, n.f.d	35	na	na	na
491	Neglect or ill-treatment of persons under care	36	34	97	103
499	Other dangerous or negligent acts endangering persons, n.e.c	37	35	75	92
490	Other dangerous or negligent acts endangering persons, n.f.d	38	na	na	na



Code	Description	NOI 2018 ranking	NOI 2009 ranking	NSW BCSR MSR ranking	NSW BCSR MSMR ranking
411	Drive under the influence of alcohol or other substance	39	37	70	84
412	Dangerous or negligent operation (driving) of a vehicle	40	38	85	128
410	Dangerous or negligent operation of a vehicle, n.f.d	41	na	na	na
400	Dangerous or negligent acts endangering persons, n.f.d	42	na	na	na
612	Non-aggravated robbery	43	40	28	16
610	Robbery, n.f.d	44	na	na	na
621	Blackmail and extortion	45	41	10	24
600	Robbery, extortion and related offences, n.f.d	46	na	na	na
532	Threatening behaviour	47	42	66	44
1695	Procure or commit illegal abortion	48	43	89	102
1211	Property damage by fire or explosion	49	44	29	20
1559	Offences against government security n.e.c	50	45	60	59
1111	Import or export prohibited weapons/explosives	51	46	79	14
1112	Sell, possess and/or use prohibited weapons/explosives	52	47	80	15
1119	Prohibited weapons/explosives offences, n.e.c	53	48	78	62
1110	Prohibited weapons/explosives offences, n.f.d	54	na	na	na
1121	Unlawfully obtain or possess regulated weapons/explosives	55	50	90	36
1122	Misuse of regulated weapons/explosives	56	51	98	82
1123	Deal or traffic regulated weapons/explosives offences	57	52	43	30
1129	Regulated weapons/explosives offences, n.e.c	58	53	127	114
1120	Regulated weapons/explosives offences, n.f.d	59	na	na	na



Code	Description	NOI 2018 ranking	NOI 2009 ranking	NSW BCSR MSR ranking	NSW BCSR MSMR ranking
1100	Prohibited and regulated weapons and explosives offences, n.f.d	60	na	na	na
921	Counterfeiting of currency	61	56	38	19
1542	Bribery involving government officials	62	57	13	28
1561	Subvert the course of justice	63	58	22	31
711	Unlawful entry with intent/burglary, break and enter	64	59	35	13
911	Obtain benefit by deception	65	60	33	79
922	Forgery of documents	66	61	26	64
923	Possess equipment to make false / illegal instrument	67	62	14	53
920	Forgery and counterfeiting, n.f.d	68	na	na	na
931	Fraudulent trade practices	69	63	62	58
991	Dishonest conversion	70	64	41	23
932	Misrepresentation of professional status	71	65	72	80
999	Other fraud and deception offences, n.e.c	72	66	96	111
990	Other fraud and deception offences, n.f.d	73	na	na	na
933	Illegal non-fraudulent trade practices	74	67	128	97
930	Deceptive business/government practices, n.f.d	75	na	na	na
900	Fraud, deception and related offences, n.f.d	76	na	na	na
811	Theft of a motor vehicle	77	68	34	21
812	Illegal use of a motor vehicle	78	69	48	42
821	Theft from a person (excluding by force)	79	70	37	17
813	Theft of motor vehicle parts or contents	80	71	47	37
810	Motor vehicle theft and related offences, n.f.d	81	na	na	na



Code	Description	NOI 2018 ranking	NOI 2009 ranking	NSW BCSR MSR ranking	NSW BCSR MSMR ranking
822	Theft of intellectual property	82	73	58	56
823	Theft from retail premises	83	74	109	43
829	Theft (except motor vehicles), n.e.c	84	75	107	38
820	Theft (except motor vehicles), n.f.d	85	na	na	na
831	Receive or handle proceeds of crime	86	77	51	87
841	Illegal use of property (except motor vehicles)	87	78	131	51
800	Theft and related offences, n.f.d	88	na	na	na
1631	Commercial/industry/financial regulation	89	79	71	88
1694	Import/export regulations	90	80	56	101
1612	Offences against privacy	91	81	45	66
531	Harassment and private nuisance	92	82	46	41
530	Harassment and threatening behaviour, n.f.d	93	na	na	na
500	Abduction, harassment and other offences against the person, n.f.d	94	na	na	na
1431	Exceed the prescribed content of alcohol or other substance limit	95	83	83	83
1212	Graffiti	96	84	113	86
1219	Property damage, n.e.c.	97	85	103	39
1210	Property damage, n.f.d	98	na	na	na
1221	Air pollution offences	99	86	76	109
1222	Water pollution offences	100	87	69	98
1224	Soil pollution offences	101	88	68	99
1223	Noise pollution offences	102	89	108	113
1229	Environmental pollution, n.e.c.	103	90	102	116
1220	Environmental pollution, n.f.d	104	na	na	na



Code	Description	NOI 2018 ranking	NOI 2009 ranking	NSW BCSR MSR ranking	NSW BCSR MSMR ranking
1200	Property damage and environmental pollution, n.f.d	105	na	na	na
1621	Sanitation offences	106	92	116	108
1622	Disease prevention offences	107	93	123	106
1623	Occupational health and safety offences	108	94	57	100
1624	Transport regulation offences	109	95	126	127
1625	Dangerous substances offences	110	96	65	104
1626	Licit drug offences	111	97	114	90
1629	Public health and safety offences, n.e.c.	112	98	92	107
1620	Public health and safety offences, n.f.d	113	na	na	na
1691	Environmental regulation offences	114	100	82	94
1543	Immigration offences	115	101	6	10
1693	Quarantine offences	116	102	61	26
1569	Offences against justice procedures, n.e.c.	117	103	64	81
1549	Offences against government operations, n.e.c.	118	104	88	85
1511	Escape custody offences	119	105	49	63
1512	Breach of home detention	120	106	16	70
1513	Breach of suspended sentence	121	107	15	71
1510	Breach of custodial order offences, n.f.d	122	na	na	na
1522	Breach of parole	123	109	32	47
1521	Breach of community service order	124	110	24	46
1524	Breach of bond - probation	125	111	31	48
1523	Breach of bail	126	112	124	52
1531	Breach of violence order	127	113	86	75



Code	Description	NOI 2018 ranking	NOI 2009 ranking	NSW BCSR MSR ranking	NSW BCSR MSMR ranking
1525	Breach of bond - other	128	114	36	49
1529	Breach of community based order, n.e.c.	129	115	55	50
1520	Breach of community based order, n.f.d	130	116	25	45
1563	Prison regulation offences	131	117	74	77
1692	Bribery (excluding government officials)	132	118	19	29
1532	Breach of non-violence orders	133	119	87	76
1530	Breach of violence and non-violence orders, n.f.d	134	na	na	na
1611	Defamation and libel	135	120	44	65
1610	Defamation, libel and privacy offences, n.f.d	136	na	na	na
1323	Censorship offences	137	121	63	110
1333	Vilify or incite hatred on racial, cultural or ethnic grounds	138	122	111	93
1334	Cruelty to animals	139	123	73	89
1041	Possess illicit drugs	140	124	129	68
1042	Use illicit drugs	141	125	120	73
1040	Possess and/or use illicit drugs, n.f.d	142	na	na	na
1099	Other illicit drug offences, n.e.c	143	127	105	69
1000	Illicit drug offences, n.f.d	144	na	na	na
1313	Riot and affray	145	128	52	22
1311	Trespass	146	129	132	131
1331	Offensive language	147	130	121	130
1332	Offensive behaviour	148	131	112	95
1330	Offensive conduct, n.f.d	149	na	na	na
1312	Criminal intent	150	132	42	25



Code	Description	NOI 2018 ranking	NOI 2009 ranking	NSW BCSR MSR ranking	NSW BCSR MSMR ranking
1319	Disorderly conduct, n.e.c	151	133	77	125
1310	Disorderly conduct, n.f.d	152	na	na	na
1321	Betting and gambling offences	153	134	101	105
1322	Liquor and tobacco offences	154	135	118	112
1324	Prostitution offences	155	136	110	96
1325	Offences against public order sexual standards	156	137	81	91
1562	Resist or hinder police officer or justice official	157	138	95	78
1560	Offences against justice procedures, n.f.d	158	na	na	na
1551	Resist or hinder government officer concerned with government security	159	139	59	60
1550	Offences against government security, n.f.d	160	na	na	na
1541	Resist or hinder government official (excluding police officer, justice official or government security officer)	161	140	91	115
1540	Offences against government operations, n.f.d	162	na	na	na
1500	Offences against justice procedures, government security and government operations, n.f.d	163	na	na	na
1411	Drive while licence disqualified or suspended	164	141	93	74
1412	Drive without a licence	165	142	99	119
1419	Driver licence offences, n.e.c.	166	143	115	121
1410	Driver licence offences, n.f.d	167	na	na	na
1421	Registration offences	168	145	117	120
1422	Roadworthiness offences	169	146	119	123
1420	Vehicle registration and roadworthiness offences, n.f.d	170	na	na	na
1432	Exceed the legal speed limit	171	148	106	118



Code	Description	NOI 2018 ranking	NOI 2009 ranking	NSW BCSR MSR ranking	NSW BCSR MSMR ranking
1433	Parking offences	172	149	125	122
1439	Regulatory driving offences, n.e.c.	173	150	100	117
1430	Regulatory driving offences, n.f.d	174	na	na	na
1326	Consumption of legal substances in regulated spaces	175	151	130	132
1329	Regulated public order offences, n.e.c	176	152	122	129
1320	Regulated public order offences, n.f.d	177	na	na	na
1300	Public order offences, n.f.d	178	na	na	na
1441	Pedestrian offences	179	153	133	124
1400	Traffic and vehicle regulatory offences, n.f.d	180	na	na	na
1699	Other miscellaneous offences n.e.c.	181	155	104	126
1690	Other miscellaneous offences n.f.d	182	na	na	na
1600	Miscellaneous offences, n.f.d	183	na	na	na
9998	No data provided	184	156	134	133
9999	Inadequate data provided	185	157	135	134

Notes: The Median Sentence Ranking (MSR) was initially developed using criminal court sentences imposed in NSW between April 2000 and March 2005. The MSR was originally published in MacKinnell et al. 2010. At that time, NOI rankings were available for 155 ANZSOC four-digit offences out of a possible 185 offence codes (including codes 9998 and 9999). The MSR rankings in the above table are based on a 2016 update. MSR rankings are not available at this time for the full set of 185 codes. 'n.f.d.' stands for not further defined. 'n.e.c.' stands for not elsewhere classified.

Sources: ABS 2018j; NSW Bureau of Crime Statistics and Research 2016.



Appendix G: Cost benefit analysis of drug reform in Queensland

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G.1 Introduction

This appendix presents a cost–benefit analysis (CBA) of alternative approaches for managing illicit drug use in Queensland. It quantifies the effects of drug policy options presented in Chapter 13. The broad alternatives considered are law reform through decriminalisation or legalisation.

Illicit drug use is often referred to as a 'victimless' crime. In most cases, taking illicit drugs provides benefits to the consumer in the same way that the consumption of alcohol or gambling does. But like alcohol consumption and gambling, it can result in significant costs for some consumers, including costs to their family, friends and the wider community (Crampton et al. 2012; PC 1999, 2010). Unlike alcohol and gambling, where the adverse impacts of use are managed by regulation and expenditure policies, the policy approach to the problems of illicit drugs is primarily criminalisation.

The Parliament of Victoria 2018 inquiry report noted that there were very few Australian studies of the costs and benefits of alternative drug reform options which is why the committee recommended that the Victorian Government commission such a study (Parliament of Victoria 2018, p. 83). The Commission aims to help fill this gap by quantifying the costs and benefits of several illustrative drug reform options.

G.2 Status quo

A CBA starts with the status quo option and uses it to measure the impact of policy changes. The status quo including the current policy, usage of drugs and the illicit market, harms and law enforcement costs, is described in the following section.



Current policy—prohibition

The current policy is primarily prohibition of certain drugs, through the use of law enforcement.

The criminal law prohibits the production, supply and possession of a range of drugs. In Queensland, narcotic drugs and psychotropic substances are listed in different schedules of the *Drugs Misuse Act 1986* (Qld), differentiated by their natural or chemical ingredients and structure:

- Schedule 1 substances including amphetamine, cocaine, heroin, lysergide (LSD), methylenedioxymethamphetamine (MDMA, commonly known as ecstasy), methamphetamine, phencyclidine, paramethoxyamphetamine (PMA) and anabolic and androgenic steroids
- Schedule 2 substances including cannabis and other cannabinoids, coca, methadone, morphine, opium, carfentanil, fentanyls, oxycodone, ketamine, diazepam, codeine, psilocybin and bufotenine.

Australian Government laws define possessing, using and supplying some drugs as criminal offences. These offences are mainly concerned with conduct relating to the import and export of drugs (Schloenhardt 2015, p. 38).

The National Drug Strategy provides a policy framework for minimising health, social, cultural and economic harms from both legal drugs (alcohol, tobacco and pharmaceuticals) and illicit drugs (Department of Health 2017). There are three facets to the strategy: supply reduction, demand reduction and harm reduction.

The criminal law and the institutions that enforce it, are the primary mechanisms for reducing the demand and supply of illicit drugs. Law enforcement was estimated to constitute most (66 per cent of) drug policy expenditure in Australia (Ritter et al. 2013). Treatment (21 per cent), prevention (9.2 per cent) and harm reduction (2.1 per cent) were smaller components.

Drug usage

The analysis assumes illicit drug usage is stable relative to the population in the status quo.

Illicit drug usage in Queensland is fairly common. Almost half of Queenslanders (44.3 per cent) over the age of 18 have used illicit drugs in their lifetime (AIHW 2017c). Australian Institute of Health and Welfare (AIHW) data implies that as of 2018 about 1.7 million Queensland adults (aged 18+) have used illicit drugs, 15.9 per cent or 611,000 in the last 12 months and 5.8 per cent or 223,000 in the last week.

The most commonly recently used (in the last 12 months) illicit drugs in Queensland are cannabis (11.9 per cent of people 14 years or over), ecstasy (2.1 per cent), cocaine (2.1 per cent), methamphetamines (1.5 per cent), inhalants (1.0 per cent) and hallucinogens (0.9 per cent). Additionally, pharmaceuticals are commonly misused—4.1 per cent of Queenslanders misused prescription pain-killer, analgesics and opioids and 1.3 per cent misused tranquillisers and sleeping pills (AIHW 2017c).



Daily usage of legal drugs, alcohol and tobacco fell in Queensland between 2001 and 2016. Recent usage of any illicit drugs increased over the same period, however cannabis usage fell (Table G.1).

Table G.1 Per cent of Queensland using drugs, people aged 14 years and older

	2001	2004	2007	2010	2013	2016
Daily tobacco smoking	21.0	19.8	17.2	16.7	15.0	14.5
Daily alcohol drinking	8.4	9.6	8.3	8.3	7.4	6.4
Recent cannabis use	12.7	12.1	9.5	11.0	11.1	11.9
Recent illicit drug use	16.3	15.9	13.7	15.1	15.5	16.8

Note: Recent refers to the last 12 months. Illicit drug use includes cannabis use.

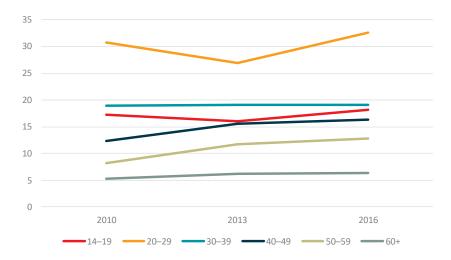
Source: AIHW 2017c.

Demographics of drug users

Lifetime drug use is common, with the majority (55.1 per cent) of Australians aged 30 to 39 and 40 to 49 (54.9 per cent) having consumed illicit drugs (AIHW 2017c). Almost half of these age groups (49.9 and 48.1 per cent) have consumed cannabis during their lifetime.

Recent illicit drug usage in Queensland is highest amongst those aged 20 to 29 and 30 to 39, followed by those aged 14 to 19 (32.6, 19.1 and 18.1 per cent respectively). Recent illicit drug use appears to have remained stable or increased between 2010 and 2016 for all age groups, except for adolescents (Figure G.1). The increase in usage was greatest for people aged 40 to 59.

Figure G.1 Proportion of population recently using illicit drugs, Queensland, by age cohort, per cent



Source: AIHW 2017c.

Australian data suggests that young people have reduced their illicit drug use significantly—lifetime use amongst persons aged 14 to 19 fell between 2001 and 2016 from 37.7 to 22.2 per cent. Recent illicit drug use appears to have decreased between 2001 and 2007 in Australia. However, usage has since risen and was 1.8 percentage points higher in 2016 than 2007.

In contrast to illicit drug trends, the proportion of the population who do not drink or smoke was stable or decreased in all age groups in Australia between 2007 and 2016 (AIHW 2017c).



Illicit drug markets

It is difficult to accurately establish the quantity and prices of a product produced and sold in an illicit market.

Prices are collected from a range of sources (Table G.2). The price of each drug used in the CBA is assumed to be towards the middle or lower end of the range.

Table G.2 Price of 1 gram of illicit drugs in Queensland

Drug	IDRS	ACIC	Price of Weed	Dovetail	Assumed price
Cannabis	20	25–50	15	15	20
Cocaine	350	350–600		300	300
Heroin	280	300–700		400	300
Amphetamines/meth	210	300–1000		300	300
MDMA		150–300		150	150
LSD		10–25		20	15
Ketamine		150–180		80	100
GHB		4–8			6

Note: LSD is per tab. GHB is per 1 to 1.5 millilitres. Prices are either 2017 or 2018 depending on the source.

Sources: ACIC 2018's Illicit Drug Report, Illicit Drug Reporting System (IDRS), drug trends report (Peacock et al. 2018b), Priceofweed.com 2019 and Dovetail 2018.

Generally Australian illicit drug prices are not increasing, with the nominal prices in 2018 of:

- Heroin being at its lowest since Illicit Drug Reporting System (IDRS) monitoring commenced (Peacock et al. 2018b, p. 2).
- Powder, base and crystal methamphetamine being generally lower than 2010 to 2017 (but not generally lower than the 2000s).
- Cocaine being lower than in several previous years, but which fluctuated considerably (and were not lower than the 2000s).
- Cannabis hydroponic and bush being consistent with previous years.
- Ecstasy pills being at their lowest since 2003 (IDRS (Peacock et al. 2018b) and Ecstasy and Related Drug Reporting System (EDRS) (Peacock et al. 2018a)).

Between 2003 and 2018, nine of ten illicit drug prices we compiled fell in real terms (Figure G.2). We assume prices are constant in real terms in the status quo scenario.





Figure G.2 Real prices of Australian illicit drugs, 2018\$

Source: QPC calculation, ABS 2019b; Peacock et al. 2018a, 2018b.

Drug consumption

Drug consumption estimates are derived from the two statistical estimates of drug usage available—the National Wastewater Drug Monitoring Program (NWDMP) and the National Drug Strategy Household Survey (NDSHS).

Police also record and publish the quantities of some drugs seized. However, it is not clear to what extent this data reflects changes in quantities in the market as opposed to the intensiveness and success of law enforcement. Therefore, this data is unlikely to provide a reliable estimate of the size of, or trends in, the market.

We use the NWDMP (ACIC 2019) to source estimates of cocaine, heroin, methamphetamines and MDMA consumption data. The NWDMP is less definitive on the quantity of cannabis consumed.

Estimates of cannabis consumption are derived using the NDSHS (AIHW 2017c). There are some limiting elements of the NDSHS:

- people are likely to underreport their illegal activity to a government survey
- the prevalence of use is collected but not the quantity consumed
- only four illicit drug types are included.

Unlike alcohol there is no standard unit for measuring consumption of cannabis (Hindocha et al. 2018). Cannabis is consumed through a variety of methods including smoking via joints, pipes or bongs, vaporizing, patches and ingesting through edibles. The most common method is through a joint, however the potency and size of a joint may vary from user to user.

In order to estimate consumption we adopt a similar method to Shanahan (Shanahan 2011, p. 70). We apply estimates of cannabis prevalence from the 2016 NDSHS to Shanahan's (2011) estimates of grams per joint (0.37) and estimates of number of joints per day of use from the 2007 NDSHS. This results in an estimated total state consumption of 42 tonnes per year.

Using different parameters from Clements & Daryal (1999) or NDSHS 2001, consumption would be around 71 or 83 tonnes annually. Colorado a state of similar population to Queensland may be a reasonable comparator. The cannabis estimates appear conservative relative to an estimated 121 tonnes of cannabis consumed in Colorado pre-legalisation (Sen & Wyonch 2018).



Market size

Market size is estimated by multiplying the quantity of drugs consumed by assumed prices. Due to a lack of data only five illicit drugs have been quantified. The Queensland market for these five commonly used illicit drugs is estimated to be over \$1.6 billion (Table G.3).

Table G.3 Estimates of the Queensland illicit drug market, 2017–18

	Price (\$ per gram)	Quantity (kg)	Market value (\$000)
Cannabis	15	41,950	839,010
Cocaine	300	577	172,980
Heroin	300	66	19,860
Meth/amphetamine	300	1,893	567,990
MDMA	150	223	33,480

Source: QPC calculations, based on ACIC 2019; AIHW 2017c; Shanahan 2011.

Production costs

Experimental estimates from the ABS in Table G.4 show that production costs for illicit drugs are very low relative to market prices. Margins to drug retailers and wholesalers varied from 46 per cent for cocaine to 91 per cent for amphetamines. In comparison, the wholesale and retail margins were estimated to contribute 4 per cent of the value of goods and services used in the Australian economy, 1.7 per cent of the value of beer manufacturing and 1.3 per cent of the value of wine, spirits and tobacco, in 2015–16 (ABS 2018a).

Table G.4 Experimental illegal drug supply and use 2010, Australia

	Domestic supply	Import	Wholesale and retail	Total use	Wholesale and retail margins	Production and import costs
	(\$million)	(\$million)	(\$million)	(\$million)	(%)	(%)
Cannabis	1,001	0	2,638	3,639	72.5	27.5
Cocaine	0	315	269	584	46.1	53.9
Heroin	0	174	343	517	66.3	33.7
Amphetamine	45	23	977	1,074	91.0	9.0
MDMA	2	30	169	201	84.1	15.9
Total	1,048	542	4,396	6,015	73.1	26.9

Source: ABS 2013.



Drug harms

The use of drugs causes significant health, social and economic burdens. These burdens occur from legal recreational drugs, prescription and other pharmaceuticals and illicit drugs. Drug usage results in both primary harms to users and secondary harms to the broader community including victims of crime and family members.

This CBA focuses on the harms from illicit drugs rather than legal drugs. Liberalisation of drug policy may also affect harms associated with legal drugs. Where available the effects from legal drugs are shown for comparison.

This section focuses on harms that are most relevant for a CBA comparing drug policy options. It focuses costs in the most recent year that might be avoided. It does not include lifetime harms from prior periods of consumption, as these are sunk costs and policy will have no impact on them.

Previous studies

Both the types and amounts of harms vary across drug types. This CBA builds on the work of previous studies that have attempted to estimate the costs of drug consumption.

Collins & Lapsley (2008, p. 3) estimated that of the total costs of drug abuse in Australia in 2004–05, the greatest cost was due to tobacco (56.2 per cent), followed by alcohol (27.3 per cent) and illicit drugs (14.6 per cent) and alcohol and illicit drugs acting together (1.9 per cent). The cost estimates included tangible costs associated with the cost of drugs consumed, reduction in workforce and absenteeism, premature death, sickness, healthcare costs, road accidents, crime and law enforcement costs and intangible social costs associated with loss of life, and pain and suffering related to road accidents (Collins & Lapsley 2008).

Focusing on policy relevant costs and analysing the work of Collins & Lapsley (2008), Crampton et al (2012) estimated that most (four–fifths) of the costs of drug use were born directly by consumers.

An Australian Institute of Criminology (AIC) report (Smith et al. 2014) estimated illicit drug abuse costs of \$3.2 billion in 2011 in Australia and that most of the cost of drug abuse is from loss of life. The estimated costs of illicit drug abuse were:

- related deaths of \$2,121 million
- medical costs of hospitalisation of \$132 million
- drug treatment costs of \$298 million
- pharmacotherapeutic treatment of \$185 million
- lost productivity of drug users in treatment of \$425 million.

A drug harm index developed for the New Zealand Ministry of Health attempted to comprehensively calculate the harm per user from each illicit drug divided into casual and dependent users. This study shows the disparity in harm between casual and dependent users (Figure G.3). The index found large differences in the harm per user. At the low end of personal costs was LSD and ecstasy from NZ\$400 and NZ\$2,200 for casual users to NZ\$4,700 for dependent users. At the high end, the cost of dependent heroin and methamphetamines users was estimated at NZ\$98,600 and NZ\$111,300 each (McFadden Consultancy 2016).

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¹⁷⁰ Collins and Lapsley (2008, p. 3) calculated costs based on an alternative population that had not used drugs in at least the previous 40 years. As a result, they include the current impact of past consumption behaviour that cannot be plausibly avoided by policy change. The study defines tobacco and illicit drug consumption as abuse regardless of amount, but not alcohol.



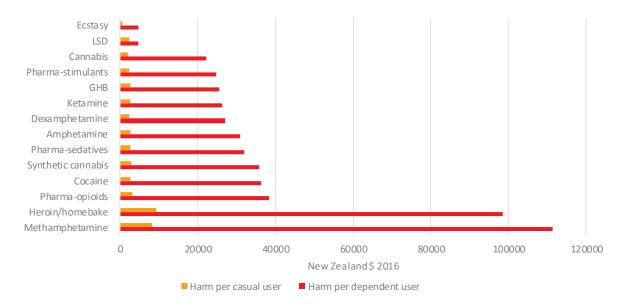


Figure G.3 New Zealand drug harm index, harm to and per user

Note: The study includes disability and loss of life costs for personal harm. For social harms it estimated violent and property crime, organised crime reinvestment in other crimes, harms to family and friends, tax avoidance and intervention (both law enforcement and health) costs.

Source: McFadden Consultancy 2016.

Harms to users

Harms to users arises from drug related deaths, injuries and hospitalisations, blood born infections such as Hepatitis C, AIDS and HIV, lower morbidity and mental illness. The CBA estimates costs from drug related deaths, disability linked to consumption and hospitalisation costs.

Accidental drug related deaths

Drug related deaths are one of the leading causes of accidental deaths. In 2016 drug overdoses were determined to have been the underlying cause for 23 per cent of accidentals deaths in Australia (Penington Institute 2018, p. 12)

The rate of drug induced accidental deaths in Queensland increased 144 percent, from 1.7 per 100,000 people in 1997 to 4.1 in 2017.¹⁷¹ The peak for the rate of accidental drug induced deaths was 5.2 in 2015 (Chrzanowska et al. 2019).

The rate of accidental drug related deaths of Aboriginal and Torres strait islander people has approximately doubled from 11.3 per 100,000 in 2006 to 20.7 in 2016 (Penington Institute 2018, p. 24). The rate of non-Indigenous accidental drug related deaths is less than a third of Indigenous people and has grown more slowly, from 4.2 per 100,000 in 2006 to 6.4 in 2016.

In recent years drug related accidental deaths have exceeded road accident deaths in Queensland (see Figure G.4).

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¹⁷¹ Data for 2017 is not finalised and is subject to revision by the ABS.



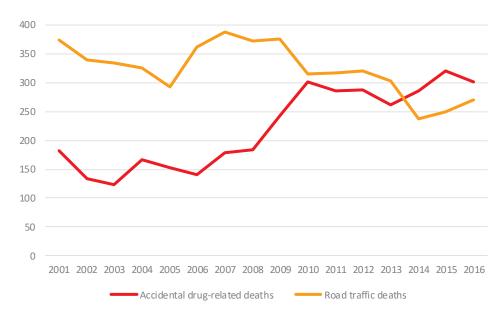


Figure G.4 Accidental drug-related and road deaths, Queensland

Source: Penington Institute 2018.

While the proportion of the population that have recently used illicit drugs was relatively stable between 2001 and 2016, per capita accidental drug deaths rose significantly in Queensland over the last 15 years.

An estimated 301 accidental deaths could be attributed to drugs (including alcohol) in 2016. Since 2003, the number of accidental drug related deaths in Queensland have increased 145 per cent (Figure G.5). The trend is similar around Australia and mirrored in many other countries. Opioids are the greatest contributor followed by benzodiazepines (usually in the context of polydrug use¹⁷²). Amphetamines related deaths also increased.

Changes in drug consumption towards more dangerous types and practices appear to have contributed to these trends (Penington Institute 2018, p. 1):

Twenty years ago, the most common drug causing accidental death was heroin, an illicit opioid. Today, it is pharmaceutical opioids that are responsible for the majority of overdose deaths, with a strong association between increases in prescription of opioids and increased mortality. Growth in deaths involving pharmaceutical opioids appears to be slowing somewhat, however, deaths involving heroin appear to be on the rise.

The increases in accidental deaths involving amphetamines (likely driven by crystal methamphetamine or 'ice') and cannabinoids (likely driven by synthetics) are particularly concerning, as fifteen years ago these drugs were implicated in significantly fewer deaths.

While drugs and overdoses are often associated with younger people, Penington Institute data shows that middle aged (30–59) Australians accounted for 68 per cent of all accidental drug overdose deaths (Penington Institute 2018, p. 1). The typical drug related death is a man aged 40+ combining pharmaceutical opioids and benzodiazepines and increasingly likely to live in regional areas (Penington Institute 2018, p. 17).

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¹⁷² Polydrug use refers to the simultaneous use of more than one drug.



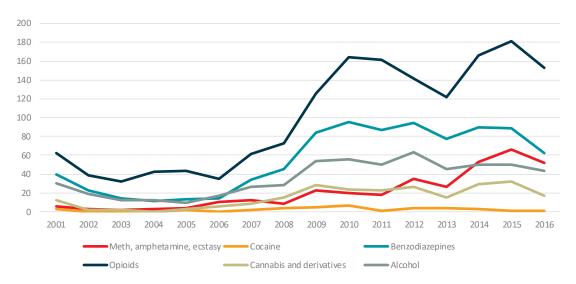


Figure G.5 Accidental drug-related deaths, Queensland

Note: 2015 and 2016 data have not been finalised. It is likely both figures will be revised upwards as more causes of death become known. Opioids includes heroin deaths.

Source: Penington Institute 2018.

Ecstasy related deaths are not reported separately from methamphetamines and other amphetamine related deaths.

Between 2001 and 2004 there were 112 ecstasy related deaths in Australia—these included motor vehicle accidents. In 51 incidents ecstasy was determined to be the primary factor. In almost all deaths the presence of other drugs contributed. Only 3 deaths related to toxicity were found to exclusively involve MDMA (Dagenhardt & Hall 2010, p. 196). Queensland's share of the national population is multiplied by national fatalities to estimate MDMA related deaths. This is increased by population growth. The result is deducted from the number of methamphetamine and other amphetamine related deaths.

Cost of accidental drug-related deaths

The contribution of each drug to deaths is based on accidental death statistics. Most drug-related accidental deaths are associated with polydrug use—that is, more than one drug is responsible. To determine accidental deaths for each type of drug it is necessary to apportion deaths to each drug. This is done by dividing the number of instances a drug is detected in accidental deaths by the total number of detections of drugs in accidental deaths.

This process doesn't necessarily attribute harms to the drug most responsible and is likely to overestimate the contribution of some drugs and underestimate the contribution of others. Deaths where cannabinoids were found include both natural cannabis and synthetic types—which are newer and may produce additional negative effects (Alcohol and Drug Foundation 2018).

The Australian Government published estimates of statistical value of a human life in 2014 to be used in policy analysis was \$4.2 million (in 2014 and inflated to 2018 dollars) (DPMC Office of Best Practice Regulation 2014). Multiplying the number of accidental deaths by this figure provides a statistical value of human accidental drugrelated deaths in 2018 in Queensland of \$1.3 billion—this includes both illicit and legal drugs.

Loss of quality of life

The cost of reduced quality of life is calculated by scaling the costs of accidental drug related deaths.



In calculating costs for the New Zealand Drug Harm Index, McFadden (2016, p. 21) found in the literature general agreement that the cost of drug-related disability ¹⁷³ was approximately equivalent to the cost of death. On average the ratio was 1.03. Applying this finding, the drug related disability costs for all drugs is estimated at \$1.3 billion in 2018.

Injury hospitalisations

The average cost per separation of alcohol/drug induced mental disorder was \$4,626 and for injuries (all causes), poisoning and toxic effects of drugs, \$5,628, in Australian public hospitals in 2016–17 (AIHW 2018a). We assume that public and private hospital separations have the same costs.

Queensland accounted for about 22 per cent of medical and other acute hospital separations. Multiplying the number of separations by the assumed average cost per separation results in costs of approximately \$44.8 million on alcohol/drug use and alcohol/drug induced mental disorders and \$274.2 million on injuries, poisoning and toxic effects of drugs.

We do not know the proportion of the injuries, poisoning and toxic effects costs attributable to drug use as opposed to other causes. We did not have sufficient evidence to accurately guide the selection of the proportion of this cost attributable to drugs. Estimates of the number of injury hospitalisations related to alcohol are taken from NDRI (2018). For the status quo we assume 10 per cent of non-alcohol related injuries is related to illicit drugs. We use a low proportion given the wide range of factors that can lead to hospitalisation for injuries. We estimate drug hospitalisation costs of \$107 million for Queensland (Table G.5).¹⁷⁴

Table G.5 Estimated health costs Queensland, 2017–18 (\$million)

Drug	Contribution to premature death	Loss of quality of life	Hospitalisations
Alcohol	183.4	188.9	63.0
Cannabinoids	72.5	74.7	3.6
Cocaine	4.3	4.4	0.2
Heroin	140.8	145.0	6.9
Methamphetamine	207.6	213.8	10.2
MDMA	14.2	14.7	0.7
Pharmaceutical opioids	622.8	641.4	30.7
Total	1,302.4	1,341.5	107.4

Source: QPC calculations.

Queensland Productivity Commission

¹⁷³ Disability refers to disability adjusted life years (DALYs) which is the loss of one year of life free from disability and disease (Moore 2007).

¹⁷⁴ An earlier study using similar methods estimated that for Australia in 2010-11 there were estimated medical costs of about \$132 million, based on13,849 public and 6,928 private hospitalisations due to principal diagnosis related to illicit drugs (Smith et al. 2014, p. 61).



Harms to others

Drugs can result in harms to others including:

- personal and domestic violence
- acquisitive property crime (such as theft, burglary and fraud)
- drug driving associated road crashes
- crime associated with controlling the drug market.

Attributing crime to drugs

Previous studies have suggested crime is one of the largest costs of drug use. Crime has been linked to drugs through the disinhibiting and psychopharmacological effects and the need obtain money to buy drugs. However, there is no consensus on the extent to which drug use causes crime. Crime is also correlated with lower education, living in unstable accommodation, limited employment prospects, inconsistent parenting and mental health problems. Problematic drug use and crime share causal roots and can also be mutually sustaining (Albery et al. 2004).

Statistics from the Drug Use Monitoring Program (DUMA—Patterson et al. 2018) suggest an overlap between crime and drug use. Three quarters of people tested in police detention tested positive to drugs. Methamphetamines was the most common illicit drug, present in 48 per cent of detainees, followed by cannabis in 44 per cent of detainees (Table G.6).

A complicating factor is that different drugs stay in users' systems for varying lengths of time. Traces of cannabis in particular can be detected in blood and urine samples for a longer period after the effects of the drug have worn off. This CBA makes an adjustment to cannabis by halving the proportion of detainees that test positive to cannabis

Table G.6 Proportion of police detainees testing positive to drugs, by offence type, Australia

Drug	Violent offences (%)	Property offences (%)	Drunk and drug driving (%)	Total (%)
Cannabis (adjusted)	41.7 (20.9)	45.1 (22.6)	21.1 (10.5)	43.8 (21.9)
Cocaine	0.9	1.0	0.0	1.1
Amphetamine	43.7	62.6	10.5	50.4
Methamphetamines				48.2
MDMA				1.9
Opiates	13.1	23.7		16.7
Heroin	4.9	10.6		6.1
Benzodiazepines	18.3	24.5		20.5
Any drug	70.9	82.2	36.8	75.2
Multiple drugs	34.4	50.0		40.1

Note: Columns do not add to 100 per cent because tests may detect more than one substance. Adjusted cannabis proportions are in brackets. Figures are for 2015 and 2016.

Source: Patterson et al. 2018.



Estimating the proportion of crime plausibly attributable to drug use requires more than the results of drug testing. A positive result for a drug does not necessarily mean the presence of the drug was a motivating influence.

When asked in surveys, about 46 per cent of Australian police detainees that responded attributed their current detention to drug use (including alcohol) (Patterson et al. 2018). Detainees were more likely to attribute property crime to the use of drugs than violent crime (Table G.7).

Table G.7 Proportion of crime detainees attribute to drug use

Drug	Violent offences (%)	Property offences (%)	Drug driving (%)
Alcohol	20.7	10.2	53.5
Illicit drugs	27.6	42.5	14.0
Any drug	43.8	48.3	65.1

Note: Columns do not add to 100 per cent because detainees may attribute their actions to more than one substance. Figures are for 2015 and 2016.

Source: Patterson et al. 2018.

We combine the data above from DUMA (Patterson et al. 2018) on the proportion of crime attributable to drugs with the types of drugs offenders test positive, to estimate attributable fractions.¹⁷⁵ Alcohol appears to be the greatest contributor to crime (16.1 per cent), followed by methamphetamines (7.2 per cent) and cannabis (6.5 per cent).

Where test results were unknown we imputed a parameter. For example, the proportion of detainees testing positive to MDMA and methamphetamines property and violent crime is unknown. Estimates of crime attributable to MDMA and methamphetamines is estimated by combining the proportion of detainees who test positive for all offences by the proportion of violent, property and drug driving detainees who test positive for amphetamines (Table G.8).

Table G.8 Estimated proportion of crime attributable to drug use, Queensland

	Violent (%)	Property (%)	Drug driving (%)
Cannabis	3.4	4.0	2.0
Cocaine	0.1	0.2	0.1
Methamphetamine	6.8	10.6	1.9
MDMA	0.3	0.4	0.1
Heroin	0.8	1.9	1.0
Other opiates	1.3	2.3	1.7
Benzodiazepines	3.0	4.3	2.0
Alcohol	18.8	9.4	51.6
Total	43.8	48.3	65.1

Source: QPC calculations.

=6 per cent.

Queensland Productivity Commission

¹⁷⁵ Detainees attributed 43.8 per cent of violent crimes to drug use, of which 20.6 per cent reported alcohol as a factor and 27.6 per cent illicit drugs as a factor. Of those tested 41 per cent tested positive but this included multiple drug users, whose crime could be attributed to multiple drugs—the total of each positive drug test is 174.3 per cent. To adjust for multiple drug use we use the following calculation for cannabis' contribution to violent crime: 27.6 per cent/(20.7 per cent +27.6 per cent)*43.8 per cent*(41.7 per cent/174.3 per cent)



Offenders may abrogate responsibility for their criminal actions by attributing them to the effects of drugs (Payne & Gaffney 2012, p. 5). Drugs may have been a partial rather than full influence. It is difficult for researchers to establish what level of crime would have existed had drug users been free from drugs (Bryan et al. 2013b, p. 78).

There are weaknesses with relying on the DUMA survey, as only certain police stations are sampled and these may not be representative of the population as a whole and the detainees. The people detained for offences may be relatively more or less serious or stable offenders and not broadly representative of offenders (Whetton et al. 2016, p. 73).

Property and violent crime

To calculate the cost of drug related property and violent crime we multiply the number of offences in Queensland by relevant costs of crime (sourced from an AIC study (Smith et al 2014)) by the proportion attributable to each drug. This is then inflated by the consumer price index (CPI).

Alcohol (\$557 million), methamphetamines (\$420 million) and cannabis (\$170 million) are estimated to contribute the most property and violent crime costs in Queensland (Table G.9).

Some research suggests the amount of crime attributed to some of the drugs below is likely to be an overestimate. Bryan et al. (2013a) in reviewing the literature, concluded that heroin use is associated with high rates of acquisitive crime but not violent crime. The study also found that there is a weaker association between cannabis use and acquisitive property crime and a link with violent crime is unlikely. It is likely that the crime attributed to some drugs below is an overestimate (likely cannabis, benzodiazepines and MDMA) and others an underestimate.

Table G.9 Estimated costs of crime attributable to drug use, Queensland, 2017-18 (\$million)

	Violent	Property	Total
Cannabis	49.5	120.8	170.3
Cocaine	2.1	5.5	7.7
Amphetamines	103.8	335.4	439.2
Methamphetamines	99.2	320.7	419.9
MDMA	3.7	12.1	15.8
Opiates	31.2	127.0	158.2
Heroin	11.5	56.6	68.1
Other opiates	19.6	70.4	90.0
Benzodiazepines	43.6	131.1	174.7
Alcohol	273.2	283.7	556.9
Total	637.4	1,463.3	2,100.7

Sources: QPC calculations; ABS 2019b; Patterson et al. 2018; QGSO 2019a; Smith et al. 2014.

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¹⁷⁶ Most of the cost Smith et al. (2014) attributes from theft is the value of lost property. Theft is technically a transfer from the victim to the criminal, rather than an absolute cost. There is trauma and inconvenience inflicted on the victim above and beyond the monetary value of the goods stolen. We include the value of goods stolen and therefore property costs may be overstated.



Drug driving

Intoxication from drugs and alcohol impairs driving, contributing to the cost of road accidents.

The National Road Safety Strategy 2011 to 2020 estimated that drink and drug driving were responsible for 30 and 7 per cent of road deaths and 9 and 2 per cent of serious injuries, respectively (Australian Transport Council 2011, p. 25). Evidence from the DUMA program is used to apportion the contributions of the various illicit drugs to drug driving.

The cost of road fatalities is estimated, by multiplying the number of Queensland fatalities in 2016 by the statistical value of life (DPMC Office of Best Practice Regulation 2014). Litchfield (2017) estimated that the cost of road crashes in Australia was \$33.2 billion in 2016, including property damage costs (\$9.4 billion) fatalities (\$10.2 billion) and injuries (\$13.6 billion). Injury and property damage figures are taken from Litchfield 2017 and it is assumed that Queensland's share of road accident costs is proportional to its share of road fatalities (about 20 per cent). This results in drug driving costs of \$205 million and drink driving costs of \$700 million.

We distribute costs to each illicit drug based on the attributable proportion estimated in Table G.8. These estimated are presented in Table G.10.

Table G.10 Estimated costs of drug driving, Queensland, 2017–18 (\$million)

	Fatalities	Serious injuries	Property damage	Total
Cannabis	16.2	8.4	5.8	30.4
Cocaine	0.8	0.4	0.3	1.5
Amphetamine	16.2	8.4	5.8	30.4
Methamphetamine	15.5	8.0	5.5	29.0
MDMA	0.6	0.3	0.2	1.1
Opiates	22.1	11.4	7.9	41.4
Heroin	8.1	4.2	2.9	15.2
Other opiates	14.0	7.2	5.0	26.2
Benzodiazepines	16.2	8.4	5.8	30.4
Alcohol	365.6	198.3	137.0	700.8
Total	475.2	255.0	176.1	906.3

Source: QPC estimates.



Organised crime

Organised crime shares both a profit motive and management approach with legitimate enterprises. The distinguishing factor is that the underlying business activity is illicit (McFadden et al. 2014). One estimate from the Australian Crime Commission put the cost of organised crime at between \$10 billion and \$15 billion (Australian Crime Commission 2011 cited in McFadden et al. 2014, p. 22). This figure would mostly include costs covered elsewhere by this CBA, such as enforcement costs. The major harms identified were:

- loss of legitimate business and taxation revenue
- expenditure on law enforcement
- expenditure on managing the social harms that compromise the health, safety and well-being of individuals and communities
- threats to the integrity of political and public institutional systems through infiltration of these systems
- loss of confidence in businesses and organisations
- emotional, physical and psychological costs to victims of organised crime, their families and communities
- community fear.

Additional crime related to settling disputes and controlling the market tend to arise in illicit markets. Organised crime tends to reinvest a proportion of their profits to further perpetuate criminal activities. A New Zealand study estimated that approximately 11 per cent of drug-related revenue is reinvested in crime other than drug trafficking (McFadden Consultancy 2016, p. 25).

There are few relevant studies estimating the rate and cost of crime attributable to violence and corruption in supplying illicit drugs. For this reason, the full costs of organised crime have not been quantified in this analysis.

Other effects

Drug use has the potential to reduce a person's productivity and employability and effect social relationships.

Conditional on being employed, cannabis use has no detectable impact on earnings, with positive impacts as common as negative impacts (Pudney 2011). However, for more harmful substances these effects are likely more substantial, particularly where the user is dependent.

The use of cannabis in youths has been linked to lower educational attainment. One study estimated that starting to use cannabis before 15 years of age reduced educational attainment by 0.8 years for boys and 1.3 years for girls. A meta-analysis estimated that early cannabis usage was responsible for 17 per cent of the failure to finish high school and 5 per cent of the failure to finish university (Shanahan & Ritter 2013, p. 180).

McFadden Consultancy (2016) estimated community harms for drugs in New Zealand, collating estimates of the effects on family and friends (willingness to pay to stop drug use) and reduced tax base.

No cost has been quantified as we have insufficient evidence to form an estimate.

Interventions

The main interventions the Queensland Government makes attempting to reduce the harms of drugs are through law enforcement and drug treatment.

Law enforcement

To enforce drug laws the Queensland Government expends resources on police to catch drug offenders, courts to prosecute offenders and prisons and community corrections to punish offenders. The Australian Government expends resources on the Australian Police Force and the Australian Border Force.



The CBA utilises the Productivity Commission's Report on Government Services (SCRGSP 2019a) estimates of total expenditure by Queensland police, courts and corrections. The report does not provide information on these costs by type of offence. We adopt a top down approach to attributing these law enforcement costs to drug offences by type of drug.¹⁷⁷

Type of drug

Only police record the type of drug an offender possesses—courts and corrections do not. Police arrest data is used to apportion possession and supply offence costs by drug type for police, courts and corrections.

Cannabis contributes the most possession offences (55 per cent) and amphetamines the most supply offences (41 per cent) in Queensland (Figure G.6).

Other NEC
Hallucinogens
Steroids
Amphetamine
Heroin
Cocaine
Cannabis

0 5,000 10,000 15,000 20,000 25,000

Figure G.6 Queensland police arrests, by drug and offence type, 2016-17

Source: ACIC 2018.

Police data does not split amphetamines arrests by type. MDMA and methamphetamines costs are disaggregated on the basis of drug testing results discussed previously.

Corrections

We apportion custodial and community supervision/work order costs on the basis of illicit drugs contributions to the number of people serving these sentences. There were 11,800 custodial and community supervision/work order sentences, finalised in 2017–18, around 15.3 per cent of each were for illicit drugs (ABS 2019e). Of the 8,800 Queensland prisoners in 2018, 16.1 per cent were imprisoned for drugs offences (ABS 2018k). We further divided costs between supply and possession offences on the basis of prisoner numbers. ¹⁷⁸

Courts

Expenditure on courts hearing drugs cases was calculated through two steps. First, the proportion of court time that possession and supply offences consume for each court (magistrates, district and supreme) was calculated based on the 2015–2018 average number of cases taken from unpublished DJAG data and the number of drug cases finalised according to ABS (2019e) data.

¹⁷⁷ Alternatively, a bottom up approach could be adopted. The difficulty with that method would be identifying each stage in the relevant process and quantifying it.

¹⁷⁸ We did not have information on the proportion of community services orders for supply and possession offences.



Second, these estimates were then multiplied by the average cost per case in each court, using Productivity Commission estimates. ¹⁷⁹ The cost of a drug case in a given court was assumed the same as all offences. ¹⁸⁰

Costs for children's and drug courts have not been included. Private costs accruing from private defence lawyers and community legal aid have not been included.

Police

The CBA estimates police costs by multiplying crime and public order police expenditure by an estimate of the proportion of resources used in policing illicit drug offences.¹⁸¹

Not all police expenditure goes towards investigating and arresting offenders, some resources are focused on community policing and traffic and safety management. Out of \$2.5 billion of police expenditure, \$2 billion went towards crime and public order (QPS 2018b, p. 28; SCRGSP 2019a). 182

We assume that the police costs associated with the average drug offence was similar to the average of all offences—\$3,759 (QPS 2017; SCRGSP 2019a). Research from Allard et al (unpublished p. 40) suggests the costs of drug offences do not vary substantially from all offences. The CBA assumes no difference in costs between adult and youth incidents. 184

However, applying the average cost to every offence is likely to overestimate the costs for frequent and relatively mundane incidents, such as many drug possession offences and underestimate complex intensive investigations such as some murder, fraud or drug trafficking cases. Court costs estimated above, are used as a proxy for complexity, to increase the cost of a supply offence and decrease the cost of a possession offence while maintaining the average cost. Those estimates suggest a supply case costs more than six times as much as a possession case.

We multiply the number of adult possession and supply arrests by the estimated costs per offence. This provides an estimated cost of policing supply offences of \$130 million and possession offences of \$168 million.

Total costs

The Queensland Government spends approximately \$500 million per year on enforcing illicit drug laws (Table G.11). We estimate most resources are expended on policing (\$299 million), and supply offences use slightly more resources than possession offences (\$278 million and \$222 million, respectively).

¹⁷⁹ There were more court finalisations reported by the PC than the ABS. This difference in denominators may downward bias court cost estimates.

¹⁸⁰ The average number days of court time between lodgement and finalisation of a drug case (52.9) was greater than all cases (46.9) (DJAG unpublished data). This suggests drug cases may impose higher court costs and so our estimates here may provide a slight under estimate.

¹⁸¹ Shanahan and Ritter et al. (2014) used a similar method to estimate drug costs—taking the proportion of total offences that are for drugs and multiplying by expenditure.

¹⁸² This is consistent with the proportion of police costs allocated to crime in other studies, for example Whetton et al. (n.d., p. 79) provides a range of 64 per cent to 87.3 per cent.

¹⁸³ Allard et al (unpublished, p. 40) estimated that each illicit drug offending police interaction in Queensland cost \$3,971 (2016-17\$). Whetton et al. (2016, p. 79) use average length of a trial as a reasonable proxy for the complexity of an offence and allocating police costs.

Court time estimates discussed earlier suggest drug offences may be slightly more resource intensive on average. This suggests our police costs may be slightly underestimated.

¹⁸⁴ Youth offending is unlikely to have a large impact on drug offence costs. Most (95 per cent) police drug offence actions are against adults rather than juveniles (QPS 2017). The use of alternative options to divert adult drug offenders away from the criminal justice system is limited in Queensland.

Most police actions for adult drug offences comprise arrests (24.1 per cent) and summons, warrants and notices to appear (60 per cent). For juveniles, alternatives options (including cautions, community conferences and drug information and counselling) are more commonly used (64.5 per cent of the time). Drug possession offences are more likely to result in alternative options than supply offences, given the severity of the crimes and established diversion practices for possession (for example a first cannabis possession offence).



Table G.11 Queensland Government net expenditure on the enforcement of drug laws, 2017-18 (\$million),

	Police	Courts	Prisons	Community Corrections	Total
Supply offences					
Cannabis	70.2	8.5	64.8	6.7	150.1
Cocaine	2.4	0.3	2.2	0.2	5.1
Heroin	1.4	0.2	1.3	0.1	2.9
Methamphetamine	28.9	3.5	26.7	2.8	61.9
MDMA	1.1	0.1	1.1	0.1	2.4
Other NEC	26.1	3.2	24.1	2.5	55.9
Possession offences					
Cannabis	92.3	8.5	18.8	1.9	121.6
Cocaine	2.0	0.2	0.4	0.0	2.6
Heroin	1.1	0.1	0.2	0.0	1.5
Methamphetamine	45.6	4.2	9.3	1.0	60.0
MDMA	1.8	0.2	0.4	0.0	2.4
Other NEC	25.6	2.4	5.2	0.5	33.7
All drugs	298.6	31.2	154.4	15.9	500.1
All offences	1,873.0	174.4	960.0	104.5	3,269.4

Note: Childrens court and juvenile detention costs are not included. Only criminal costs are included in courts costs, civil costs are excluded. Only crime and public order costs are included in police costs. Drug and alcohol costs court have not been included, these courts are also used for other offenders who happen to take drugs. Costs are net of revenues.

Source: QPC calculations; ABS 2018d, 2018k; ACIC 2018; QPS 2017, 2018b; SCRGSP 2019a; DJAG, unpublished.

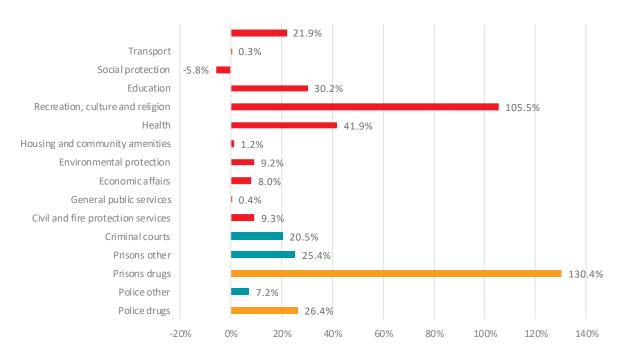


Growth in law enforcement expenditure

Law enforcement expenditure on drugs is growing faster than Queensland Government expenditure generally. Expenditure policing and imprisoning drug offenders is estimated to have grown about four times faster than expenditure on other offences. Imprisoning drug offenders was one of the fastest growing items of expenditure between 2011–12 and 2017–18 (Figure G.7).

While drug enforcement expenses have grown rapidly, we conservatively assume in the status quo that expenses only grow in line with population.

Figure G.7 Queensland general government expenditure, estimated growth between 2011-12 and 2017-18



Note: Productivity Commission estimates of expenditure are used for courts and prison. ABS Government Financial Statistics estimates are used for other purposes of expenditure. Prisons expenditure is split by prisoner number between drug and other crimes. Police expenditure is split by offender numbers between drug and other crimes. Figures are nominal.

Source: QPC calculations; ABS 2018k, 2019f, 2019g; SCRGSP 2019a.

Health interventions

Alcohol and other drug treatment (AODT) services assist people to address their drug use. Treatment aims to reduce or cease drug use, and improve social and personal functioning (AIHW 2017a). Services include detoxification, rehabilitation, counselling and pharmacotherapy, delivered in residential and non-residential settings. Services may also be provided to affected family members.

No estimate of the relative costs of various treatments is available to quantify the costs of drug treatment for each type of drug in Queensland. We outline here a proxy estimate of total treatment costs and the proportion of treatments provided for each drug.

Ritter et al. (2014, p. 66) estimated that Australian spending on AODT was about \$1,261 million or \$58.70 per person in 2012–13. State and territory governments funded about 49 per cent, the Australian Government 31 per cent and private sources 20 per cent of AOD treatments. If Queensland spent a similar amount per person, total funding would be \$324 million in 2018.

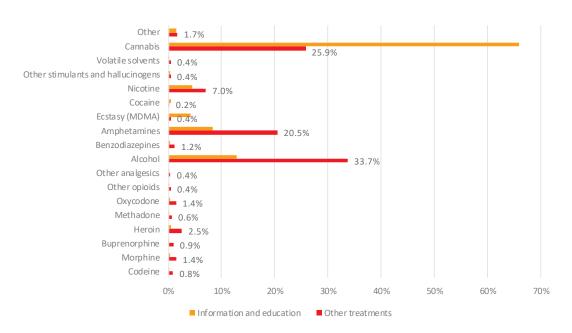


Types treatment

In 2015–16 there were 43,500 treatment episodes in southeast Queensland. Cannabis treatments were the most common (39 per cent), followed by alcohol (27 per cent) and amphetamines (16.5 per cent) (AIHW 2017a).

Costs of treatment are likely to vary substantially. We assume that information and education only episodes are the least costly and are the least representative of the actual needs of drug users. Alcohol (34 per cent), cannabis (26 per cent), amphetamines (20 per cent) and nicotine (7 per cent) were the principal drug of concern for most people being treated with non-educational services (Figure G.8).

Figure G.8 Proportion of treatments in southeast Queensland, by type of drug, 2015-16



Note: 'Not stated' is included in other.

Source: AIHW 2017a.

¹⁸⁵ Information and education only services comprise 19.5 per cent of episodes. However, for ecstasy, cannabis and cocaine the proportion is much higher (53, 42 and 40 per cent, respectively).

There may be disparities between perceived needs from the community and medical practitioners and the justice system. Almost all police referrals are for cannabis and it is the most common type of referral, contributing 14.9 per cent of all referrals. Self, medical and other sources are more likely to refer a person for alcohol than cannabis (AIHW 2017a).

Opioid referrals are far more common than ecstasy referrals (5.9 and 1.6 per cent of all episodes). Ecstasy referrals are almost exclusively at the behest of courts (1.4 per cent of all episodes). The justice system refers few people for opioid related treatment (0.7 per cent of all episodes).

Ecstasy, cocaine and cannabis had the lowest proportion of treatments completed (8.3, 18.7 and 19.5 per cent—compared to 32 per cent overall). Most cocaine, ecstasy and cannabis treatment participants ceased participating at expiation (that is the person has fulfilled their obligation to as part of a police or court order).



G.3 Reform models

Approaches to drug laws

There are many alternatives to the current arrangements for managing harmful drug use. A wide range of regimes are possible, distinguished by choices over the types of drug, the kinds of organisations allowed to provide drugs, regulation of which organisations operate, the nature of products distributed, taxes, prices and criminal and civil sanctions for non-compliance (Caulkins et al. 2015).

The alternatives range from full prohibition to full legalisation:

- *Prohibition (the current regime)*: drug use, possession and supply are criminal offences and result in a criminal record and sometimes a prison sentence.
- Depenalisation: the maintenance of sanctions but relaxation of penal sanctions provided for by the criminal law.
 Depenalization can refer to consumption related offences, which may be dealt with through referral schemes or alternative sanctions for offenders who are found to be drug dependent, and also to small-scale supply. The approach involves the reduction or elimination of custodial penalties, but crucially the specific conduct or activity remains a criminal offence.
- Decriminalisation: the elimination of a conduct or activity from criminal law. It describes a state where the sanctions associated with certain acts are of an administrative character or have been abolished altogether. In this situation, other (non-criminal or civil) laws can regulate the conduct or activity that has been decriminalized. Decriminalisation can apply to the use/possession of drugs and/or the supply of drugs (in which case it is usually referred to as legalisation).
- Legalisation: the amendment of law to eliminate any sanction, criminal or administrative, associated with the activity. Use of a drug is legal, as is drug supply. Legalisation generally includes regulations that permit use and supply but place restrictions on how those activities are undertaken (Bewley-Taylor & Jelsma 2012, p. 4; Hughes et al. 2016).

Which drugs should be considered?

Jurisdictions typically apply different regulations to different drugs. The addictiveness and harms associated with different drugs vary enormously. This is evidenced in the emerging global trend of decriminalising or legalising some but not all drugs.

Alcohol and tobacco are commonly used legal drugs. Schedule 1 and 2 drugs are illegal and attract criminal sanctions, with the law penalising schedule 1 offences more heavily. Drug scheduling and relative harms of drugs of some commonly used drugs is illustrated in Figure G.9.



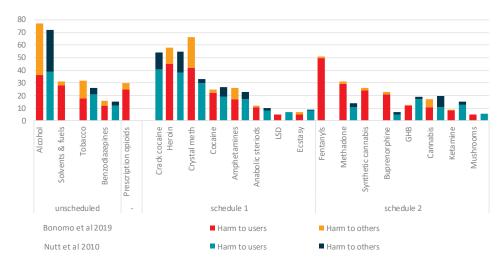


Figure G.9 Drug harm ranking, by scheduling

Notes: Rankings are out of 100. Scheduling based on Queensland regulation. Harm rankings were estimated per user and prevalence is not considered. The studies use multi-criteria analysis to collate the knowledge of subject experts.

Source: Adapted from Bonomo et al. 2019; Nutt et al. 2010.

Several studies ranking the relative harms of drugs estimated ecstasy and cannabis were both less harmful than legal drugs (alcohol and tobacco) and high harm illicit drugs (such as heroin and cocaine) (Bonomo et al. 2019; Nutt et al. 2007, 2010; Van Amsterdam et al. 2015).

Of the scheduled drugs, cannabis is the most commonly used and is lower harm than alcohol and tobacco. It has also been legalised in many jurisdictions in recent years providing an early evidence base. Ecstasy or MDMA is the least dangerous and most commonly used schedule 1 drug in Queensland.

Cannabis and ecstasy were selected to assess the costs and benefits of legal alternatives to the current drug policy regime. The Commission considers these two drugs viable legalisation options for a CBA, due to their relative harms, frequency of use and data availability.

Reform options

The Commission has considered four options for drug reform. The options to be assessed are:

- Scenario 1—decriminalisation of possession of cannabis—drugs confiscated but no penalties are applied to use and possession offences and supply remains illegal and enforced
- Scenario 2—legalisation of cannabis—possession becomes legal and supply becomes legal and regulated
- Scenario 3—MDMA legalisation—possession becomes legal and supply becomes legal and regulated
- Scenario 4—all drugs other than cannabis decriminalised—drugs confiscated but no penalties are applied to use
 and possession offences and supply remains illegal and enforced—due to data limitations only the effects from
 MDMA, methamphetamines, heroin and cocaine are quantified.

This CBA considers the most significant difference between decriminalisation and legalisation is on the supply side. Supply would remain illegal and sold by illegal unregulated criminal enterprises under decriminalisation. Under legalisation regulated legal businesses would sell drugs in a legal regulated market.

This CBA does not feature a depenalisation scenario. The direction of effects is likely to be similar to the decriminalisation scenarios, but with higher police resourcing and costs of criminal sanctions.

All decriminalised or legalisation options include a health-based alternative to law enforcement through drug treatment services.



G.4 Effects of reform

This section outlines the effects of replacing prohibition with the reform options. This includes the evidence base for the effects and describing how they are likely to flow through to the key parameters that impact our assessment of the costs and benefits of drug reform. Some impacts (such as government expenditure on law enforcement) are relatively easier to quantify than others (such as violence from organised crime and corruption). All effects are described but some are unquantified because of data or information gaps.

There is some disagreement about the impact of prohibition on drug use patterns, overall public health and safety, crime and economic productivity (Miron 2004). Experts also disagree about whether harms stem from drug use itself or the public policies of prohibition (Shepard & Blackley 2010, p. 251).

Evidence shows that the prohibition of illicit substances results in a wide variety of mostly unintended effects:

- diversion of resources into police, courts and prisons
- personal costs of imprisonment and loss of liberty, navigating the legal system, stigmatisation from criminal convictions and fines
- preventable overdoses and other harms from the consumption of substances that are higher potency, contaminated and/or contain multiple drugs
- a lack of medical supervision for most illicit drug use
- the spread of preventable disease
- stigmatisation reducing the willingness of drug users to seek help
- violence around the drug distribution trade—the fact that the most violent and ruthless people win control of the highly profitable drug trade
- corruption of law enforcement by prosperous suppliers
- secondary crime by users to enable them to purchase drugs
- a lack of funding and access to health and social services.

The benefits of the reform options lie in undoing the harms of prohibition. The benefits of the status quo, prohibition, lie in reducing consumption and therefore the associated harms.

Cross border effects

Prohibition can generate significant externalities in other countries, particularly supplier countries (see for example Palmer sub. DR23, p. 6). Legalisation would likely decrease illicit market opportunities and attendant ills in foreign supplier countries.

The options in this CBA would also present some cross-border effects. If Queensland liberalised drug laws some interstate consumers may choose to purchase products in Queensland. It is also likely that the reform options would result in sales to tourists. To the extent this occurs, it is likely to increase the benefits through additional sales and producer surplus and taxation. We do not quantify these effects.

This CBA restricts effects to Queensland.

Consumption effects

The primary rationale for prohibition is to reduce drug use. The most important parameter in assessing the costs and benefits of drug reform relative to prohibition, is whether and if so how much drug use is reduced by prohibition. To provide sensitivity each option is analysed with different elasticities of demand. We include two effects the responsiveness of drug consumption to the legal status and prices.

We consider a range of demand responses to the policy options.



For lower harm drugs (cannabis and MDMA), we assume a high response rate of 20 per cent, a moderate response of 10 per cent and a low response of no change. We assume that changes in demand would be similar for both legalisation and decriminalisation. We also assume three own price elasticities of -0.1, -0.4 and -0.7, based on reviewing the literature (Table G.12).

Table G.12 Assumed responsiveness to policy, cannabis and MDMA

	Low	Moderate	High
Own price elasticity	-0.1	-0.4	-0.7
Response to decriminalisation or legalisation	0%	10%	20%

For higher harm drugs (cocaine, heroin and meth), we assume that changes in demand would be close to zero if a health-based approach were introduced in concert with reforms. We assume three own price elasticities of -0.1, -0.4 and -0.7, as above (Table G.13).

Table G.13 Assumed responsiveness to policy, cocaine, heroin and meth

	Low	Moderate	High
Own price elasticity	-0.1	-0.4	-0.7
Response to decriminalisation or legalisation	-5%	0%	5%

This CBA does not include any substitution effects. This is due to the uncertainties of cross price elasticities for drugs and the burden of calculation. The impact of not including this effect is a likely over estimation in overall drug consumption and the costs of drug harms.

We do not assume any changes in youth drug use. There is not sufficient evidence that legalisation or decriminalisation of adult use causes increased youth drug use. The CBA assumes youth (under 18) consumption would remain illegal.

Change in consumption from legal status and deterrence

In theory, prohibition makes drugs more expensive, increases the non-monetary costs of drug use and reduces legitimate opportunities to use. All else being equal, this should provide some deterrence to drug use (Weatherburn 2014, p. 178). Any move to decriminalise or legalise drug use and/or supply is likely to reduce the risks and costs in consuming drugs. On the other hand, some argue that the 'forbidden fruit' aspect would also be removed, reducing the attractiveness (Miron 1999a, p. 22). Others accept the premise of deterrence effects but argue that, in practice, it is trivial, negligible or small.

There is limited data on the responsiveness of drug usage to changes in legality or prices due to the lack of high quality data and the few real life experiments that have been performed (Bryan et al. 2013b, p. 59).

Deterrence to supply

One argument for prohibition is that enforcement action increases the costs of producing, trafficking and selling drugs, through the risk of arrest and imprisonment. Enforcement action may reduce or disrupt economies of scale in drug production and distribution.

Some research has found that prices are likely to be higher under prohibition than they otherwise would be—that enforcement increases prices (Freeborn 2006). Kuziemko and Levitt (2001) estimated that cocaine prices are positively related to the certainty and severity of punishment.



A view held among many of those who enforce prohibition, is that it has a limited effect on supply. Former Australian Police Commissioner Mick Palmer (2018) submitted from his years of police experience:

...contrary to frequent assertions, drug law enforcement has had little impact on the Australian drug market or for that matter, on the drug markets of most, if not all, countries in the world.

....Indeed, during a period of, arguably, the most stringent prohibitionist enforcement in history, worldwide drug production has increased, drug consumption has increased, the number of new kinds of drugs has increased, drugs remain readily available to the consumer market, drug prices have decreased and the purity of street drugs has increased. If this is a recipe for success it is difficult to envisage a recipe for failure.

The NSW Crime Commission (2019) opined that:

the current law enforcement response to the importation, supply and distribution of Methyl Amphetamine in NSW is not very effective in reducing the production and supply in the State. This conclusion was made based on the exponential increase in seizures of the drug and its precursors coupled with a drop in the price of the drug. This is confirmed by the Australian Criminal Intelligence Commission's ('ACIC') Illicit Drug Data Report 2015–16, which revealed that the price of crystal methamphetamine continues to decline, despite record seizures (Australian Criminal Intelligence Commission 2016). The escalation of law enforcement activities in a well-established illicit drug market has not been positively correlated with an increase in product price (Pollack 2014).

This is supported by research funded by the National Drug Law Enforcement Research Fund (Wan, W et al. 2014, pp. 4 & 19), that found there is weak evidence that supply reduction activities affect drug supply:

Direct evidence of the effect of seizures and supplier arrests is fairly sparse. In their review, Mazerolle, Soule and Rombouts (2007) identified four studies which examined the specific impact of supply control initiatives on drug use and drug related harm (Rumbold and Fry 1999; Weatherburn and Lind 1997; Wood et al. 2003; Smithson, McFadden, Mwesigye and Casey 2004). Three of these studies (Rumbold and Fry 1999; Weatherburn and Lind 1997; Wood et al. 2003) found no effect of drug seizures on drug use patterns, drug-related deaths or overdoses, treatment enrolment or rates of crime and arrest. McFadden, Mwesigye and Casey (2004) are alone in finding substantial effects from seizures.

...on the whole our results are not especially favourable to the hypothesis that increases in seizure frequency, seizure weight and supplier arrests, within the normal range, are have an effect over the short-run on heroin, cocaine and ATS [amphetamine type stimulants] related harm.

Pollack and Reuter (2014) conclude that:

The standard model justifying vigorous law enforcement against drug sellers, from production to retailing, asserts that increases in these levels of enforcement actions will increase price. As shown, there is little evidence in support of that proposition, and a modest amount of weak evidence against it.

The research base on the positive effect of supply interdiction is not strong. It does not appear that law enforcement materially prevents supply or deters suppliers, however there is some evidence that it increases prices.

Deterrence to consumption

There is disagreement in the literature on the extent to which people would use drugs more often were it legalised or decriminalised. Of the respondents to the National Drug Survey, 7.4 per cent said they would try cannabis were it legalised (AIHW 2017c, p. 128).



The statistics show that each year police arrest a lot of people and seize a lot of drugs and courts sentence convict a lot of people and sentence many to prison. Over time, the criminal justice system has been increasingly effective at finding and punishing people for involvement with illicit drug markets. Between 2008–09 and 2017–18 the number of reported drug offenders increased 41 per cent, while the number of offenders in Queensland for all crimes decreased (ABS 2019g). Between 2010 and 2018 in Queensland, the number of sentenced prisoners with a drug offence as their most serious offences (MSO) increased 129 per cent (QCS unpublished data).

Despite this, the probability of detection remains very small and thus the deterrence effect is very low. Jiggens (2013) estimated that in Australia the probability of being prosecuted for using illicit drugs was about 1 in 30,000 actual drug offences.

In 2017–18 there were 23,000 reported drug offenders in Queensland (ABS 2019g), compared with an estimated 611,000 recent illicit drug users. Even assuming all of these offenders were drug users (as opposed to suppliers) this would put the likelihood of detection in a given year at less than 4 per cent. Relative to the percentage of offences against the person and property cleared (77 per cent and 40 per cent) the likelihood of detection for most users is quite low (QPS 2017). In 2017–18, 620 people were sentenced to imprisonment for possessing drug or drug utensils as their MSO. Less than 3 per cent of offenders are sentenced to imprisonment. Combined the probability of being caught and imprisoned for drug use is around 0.1 per cent.

Assuming a 3-month sentence and a personal cost of imprisonment of \$48,300 per annum (discussed below) the cost per user per annum would be about \$12.187 Those going to prison are likely to almost exclusively be recidivist, high frequency and/or dependent users but the average cost would still be low, dispersed over hundreds of drug consumption episodes per year. For this to represent a non-trivial deterrent, potential drug users would need to be highly risk averse.

An international study of the prevalence of the most commonly used recreational drug concluded that:

Globally, drug use is not distributed evenly and is not simply related to drug policy, since countries with stringent user-level illegal drug policies did not have lower levels of use than countries with liberal ones.

...Drug use is related to income, but does not appear to be simply related to drug policy, since countries with more stringent policies towards illegal drug use did not have lower levels of such drug use than countries with more liberal policies. (Degehardt et al. 2008)

A recent study estimated that Australia had the second highest per capita number of drug vendors on the dark net, after the Netherlands (Martin et al. 2018, p. 98). In Australia ecstasy, cocaine, methamphetamines and opioids are significantly more expensive than other western countries (Martin et al. 2018, p. 102). This does not appear to have strongly deterred Australian users. Illicit drug use in Australia is relatively high by international standards.

Recently, based on wastewater monitoring, the ACIC (2019, p. 66) estimated that Australia's consumption of methamphetamines, amphetamines, cocaine and MDMA combined was the second highest (in doses per day, per person) out of 25 nations, behind only the United States. 189 United Nations Office of Drugs and Crime (UNODC n.d.) data suggest Australia has the second highest prevalence of ecstasy use, equal highest of cocaine, fourth highest of amphetamines and fourth highest of prescription opioids.

The United States has one of the most punitive approaches to drug demand and supply. Non-violent drug offences make up 30 per cent of federal life sentences (Ingraham 2018). The United States imprisons about five

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¹⁸⁶ This is a continuation of a half century trend—reported drug offences in Queensland rose from 200 in 1969–70 to 9,450 in 1987–88, while the rate of offences per 100,000 rose from 11 to 346 (3,045 per cent) (Fitzgerald 1989, pp. 150–151). The offence rate has since grown to 533 per 100,000 in 2017-18 (ABS 2019g).

 $^{^{187}}$ \$48,300 x 0.1 per cent x 0.25 = \$12

¹⁸⁸ Ecstasy, cocaine, methamphetamines and opioids were 425 per cent, 242 per cent, 328 per cent and 197 per cent higher than the baseline price. These differences were statistically significant at the 99.9 per cent level.

¹⁸⁹ Analysis of wastewater monitoring estimates Australia is the 2nd largest consumer of methamphetamines, 17th of cocaine and 2nd of MDMA out of 25, in terms of doses per day, per person.



times more people per capita than Queensland. It imprisons a similar proportion of its adult population for drugs offences as Queensland imprisons for all offences (about 0.18 per cent) (QPC calculations).

This mass incarceration of drug users and sellers does not appear to have had a strong deterrent effect. Cannabis and cocaine consumption in the United States is far higher than other countries (with 42 and 16 per cent of adults using them in their lifetimes, respectively) than other countries (Degehardt et al. 2008). The most recent UNODC data suggests the prevalence of illicit drug use in the United States continues to lead the world or is amongst the highest users for cannabis, amphetamines, cocaine, ecstasy, opioids and prescription opioids (Figure G.10).

Figure G.10 Annual prevalence (per cent of population) of selected drugs, top 10 countries



Note: Data is from the most recent available year. Australian data is for 2016. Years vary, for example data for New Zealand is 2017, the USA 2016, Netherlands 2009 and Canada 2008. Source: UNODC n.d..



Effects of legal changes

The McMaster Health Forum concluded that systemic reviews and primary studies on jurisdictions that have legalised or decriminalised the use of recreational cannabis have generally found an increase in cannabis use (Waddell & Wilson 2017).

In Colorado adult prevalence of adults using in the past 30 days and daily, increased between 2014 and 2017 from 13.6 to 15.5 per cent and from 6 to 7.6 per cent, respectively. This would infer increases in usage of between 14 and 27 per cent. However, increasing usage predates legalisation. Amongst adults 18 to 25 and 26 or older, 30–day usage increased from 21.2 and 5 per cent respectively in 2005–06, to 32.2 and 14 per cent respectively in 2015–16 (Colorado Department of Public Safety 2018, p. 4).

Dills et al. (2016, p. 7) posits that increases in cannabis use and positive attitudes towards its risks in the United States predate legalisation and that rising use may be not be a consequence of legalisation but the cause of it. From the United States, Hall and Weier (2015) concluded that in the case of medicinal cannabis (which predates recreational legalisation):

Evaluations of the effects of medical cannabis laws have not so far found any marked increases in cannabis use or in cannabis-related harm.It is probably still too early to conclude that the legalization of medical cannabis use has had no effects on cannabis use or cannabis-related harm, especially in those states with liberal definitions of medical use and poorly regulated commercial supply of cannabis.

There is no evidence decriminalisation of possession and limited cultivation of cannabis in South Australia and Alaska substantially changed consumption (Bryan et al. 2013b, p. 60). The literature on depenalisation of cannabis possession in various US states, the Netherlands, Portugal and Australian states finds that reducing penalties has either no or very small effects on drug prevalence (MacCoun 2010). Eastwood et al. (2016) reviewing Australian decriminalisation experiences found that only one of six studies demonstrated a significant impact on the prevalence of cannabis. People are often unaware of decriminalisation occurring within their jurisdiction and some do not understand the difference to legalisation (Fetherston & Lenton 2007).

In the 1970s the Netherlands allowed recreational cannabis to be sold in coffee shops by not enforcing its laws (Bewley-Taylor et al. 2014, p. 49). The prevalence of cannabis use in the Netherlands increased from 8.5 to 11.5 per cent between 1984 and 1992, implying a 35 per cent increase (MacCoun 2010, p. 9). However these effects did not last and by 2015 prevalence had returned to 8.7 per cent (UNODC n.d.). This coincided with the Netherlands tightening regulations in the 1990s and 2000s, increasing the minimum age from 16 to 18, curtailing advertising and reducing the number of shops.

Miron & Zwiebel (1991) found that alcohol consumption fell sharply at the beginning of prohibition (to about 30 per cent of pre-prohibition level) but over the next several years increased back to 60–70 per cent. Consumption rates continued to increase and returned to pre-prohibition rates. Prohibition prices were around three times pre-prohibition prices. A later study by one of the same authors, noted that prior studies had not attempted to determine what other factors contributed to lower consumption during prohibition (Miron 1999a). It concluded that after controlling for other relevant effects, prohibition had virtually no effect on alcohol consumption.

Broadly there is mixed evidence on the effects of liberalisation on drug use. Given the uncertainty however, three parameters are used in this study for lower harm drugs, zero, 10 or 20 per cent increase. The parameters assumed are similar to those assumed by Bryan et al (2013b, p. 61), of -10, 5 and 25 per cent.



Effects on higher harm drugs

Given the health and social costs of higher harms drugs such as methamphetamines and heroin are greater, the deterrent effect of the law may be lower. It may be the risk of overdose, addiction and breakdown in employment and personal relationships that poses a greater deterrent to using these drugs, rather than the high but infrequent criminal penalties. For these criminal penalties to be effective potential drug users would need to be risk averse or at least risk neutral.

In Australia commonly used illicit drugs such as heroin, cannabis, opium and MDMA were legal in the first half of the 20th century (Gotsis et al. 2016). These drugs were gradually prohibited, but usage continued. In the 1960s, subsequent to the onset of prohibition, usage of a range of illicit drugs increased coinciding with the countercultural revolution and Vietnam War (Manderson 1993). There is no Australian evidence that prohibition lead to a long-term reduction in drug usage.

While there is no evidence that prohibition reduced drug use in Australia (drug use subsequently increased) there is also limited evidence of the effects of repealing prohibition. Apart from limited decriminalisation of cannabis and opiate maintenance treatments, including injecting rooms liberalising drugs has not been trialled in Australia.

Since the onset of prohibition internationally, there have been no experiments legalising all drugs, the evidence is mostly limited to decriminalisation experiences. The best evidence comes from Portugal. Reviews of the Portuguese experience of decriminalising all drugs have not found evidence of an increase in drug usage (Greenwald 2009; Hughes & Stevens 2010). The reforms did lead to a reduction in drug-related harms (both problematic drug use and youth drug use declined), and criminal justice system costs (Greenwald 2009; Hughes & Stevens 2010):

While small increases in drug use were reported by Portuguese adults, the regional context of this trend suggests that they were not produced solely by the 2001 decriminalization. We would argue that they are less important than the major reductions seen in opiate-related deaths and infections, as well as reductions in young people's drug use. The Portuguese evidence suggests that combining the removal of criminal penalties with the use of alternative therapeutic responses to dependent drug users offers several advantages. It can reduce the burden of drug law enforcement on the criminal justice system, while also reducing problematic drug use. (Hughes & Stevens 2010, p. 1018)

In Portugal there appears to have been a significant reduction in the use and harms of higher harm drugs after decriminalisation. An economic analysis of the effects concluded that the Portuguese approach was not harmful and if anything contributed to a reduction in seizures of heroin and cocaine, number of drug offences, drug-related deaths and the incidence of HIV among drug addicts (Portugal et al. 2017, p. 21).

Opioid substitution treatments and injecting rooms have been tried in many jurisdictions and there is no evidence to suggest they result in increased drug use.¹⁹⁰ These approaches have been associated with reduced overdose hospitalisations and deaths, public injecting and discarding of needles (EMCDDA 2018).

The available, though limited, evidence, suggests decriminalising higher harm drugs is most likely to have no effect, but may lead to a small decrease, as evidenced by Portugal, or a small increase consistent with deterrence theory.

We assume for higher harm drugs (cocaine, methamphetamines and heroin) the change in drug consumption would be -5, 0 or 5 per cent.

-

¹⁹⁰ Injecting rooms have been implemented in Sydney, Canada, United Kingdom, Spain, France, Switzerland, Norway, Greece, Belgium, Netherlands and Luxembourg.



Change in consumption due to prices

Prohibition can increase prices by making supply more risky and expensive and creating barriers to entry which protect suppliers from competition. Prices are higher than they would be if treated like a normal commodity (Rhodes et al. 2002, p. vi):

Cocaine, heroin and marijuana are basically agricultural products that require minimal inexpensive chemical processing. If it were not for law enforcement, they might sell for prices that are comparable to aspirin.

However, higher prices can equally prevail in a decriminalised or legalised market. Supply side protection or interdiction can occur under a decriminalised scheme to place upward pressure on prices. In a legal market taxes, fees and regulation can be used to set the price above the cost of supply. Ideally price effects would be disentangled from legal effects.

Over time, prohibition has become less effective as demonstrated by price falls. Like any business, illicit suppliers innovate to reduce the effectiveness of law enforcement and increase efficiency of production and distribution.

Studies have estimated the change in prevalence of drug use (that is, the number of users) and the frequency of use (that is, the number of times the user consumes) in response to drug prices or drug legality. Combined changes in the prevalence and frequency provide an overall consumption effect.

These studies suggest that drug consumption is responsive to changes in the price of drugs, although the estimated degree of responsiveness varies. In general, they find that demand is relatively inelastic—the response to a 1 per cent change in price is less than a one per cent change in the quantity demanded (Table G.14).

Bryan et al (2013, p. 60) in their analysis of cannabis legalisation in the UK conclude an elasticity of cannabis demand to price of around -0.7 is a reasonable assumption. The studies viewed in Table G.14 suggest the average elasticity is around -0.4.

On the basis of the research reviewed, we assume low, moderate and high elasticities of -0.1, -0.4 and -0.7 for lower harm drugs.



Table G.14 Elasticity of drug use with respect to price

Study	Population	Findings
Gallet 2014	USA	Cannabis elasticity –0.28 Cocaine elasticity –0.55 Heroin elasticity –0.50
Grossman 2004	USA	Cigarette consumption –0.64 Alcohol consumption –0.428 to –0.549 Cannabis elasticity –0.068 to –0.106 Cocaine elasticity –0.353 to –0.406 Heroin elasticity –0.175 to –0.016
Dave 2004	USA	Cocaine elasticity –0.27 Heroin elasticity –0.15
Clements et al. 1997	Australia, Canada, Finland, New Zealand, Norway, Sweden and UK	Cannabis consumption elasticity –0.68
Clements 1999	Australia university students	Cannabis consumption elasticity –0.64
Rhodes et al. 2002	USA	Cannabis consumption elasticity –0.33 Cocaine consumption elasticity –0.70 to –0.26 Heroin elasticity –0.19 to –0.17 Methamphetamines –1.48 to –1.42
Pacula 2010	USA literature survey	Cannabis participation elasticities –0.002 to –0.69
Ruggeri 2013	50 US states	Cannabis consumption –0.44
Cameron & Williams 2001	Australia	Cannabis participation elasticity –0.89
Williams 2004	Australia	Cannabis participation elasticity –0.18 Cannabis frequency elasticity <0
Zhao & Harris 2004	Australia	Cannabis participation elasticity –0.21 Cannabis frequency elasticity <0
Williams et al 2004	USA college students	Cannabis participation elasticity –0.2
Desimone & Farrelly 2003	USA aged 12–17 & aged 18– 39	Cannabis participation elasticity 0.00 to -0.29
Van Ours & Williams 2007	Australia aged 14–22	Cannabis risk of initiation –0.47 to –0.55
Clements & Williams 2007	Australia	Cannabis consumption elasticity –0.84
Clements & Zhao 2005	Australia	Cannabis consumption elasticity –0.69

Source: Bryan et al. 2013b; Clements & Daryal 1999; Dave 2004; Gallet 2014; Grossman 2004; Rhodes et al. 2002.



Effects on youth consumption

Currently, youths are generally not criminalised for drug use/possession in Queensland—diversion options are used and custodial sentences and convictions are generally avoided. We assume youth consumption would continue to be illegal and that the current approach would not significantly change. Suppliers of cannabis and MDMA in the legalisation options would be licenced and face fines and suspension and revocation of their licence for supplying underage customers. It is not obvious that usage under a regulated market would increase relative to the existing unregulated market.

A person or business selling a drug in a legal market to a minor (rather than an adult) shifts their behaviour from a legal to an illegal activity. In an illegal market the seller has already decided to cross a legal threshold. Selling to a minor (rather than an adult) aggravates an already illegal activity. The additional risks of selling to a minor for a person operating in a legal market are likely to be greater than in an illegal market.

Some studies have argued that legalisation or decriminalisation would increase youth consumption. There is a risk that early cannabis use will reduce cognitive abilities and therefore educational performance. There is debate over the extent of the causal nature of this correlation, as illustrated by Cobb–Clark et al. (2015):

...early marijuana use is strongly related to diminished educational attainment and achievement and that the educational penalties associated with early marijuana use are compounded by high-intensity use. We also find that the strong link between marijuana use, on the one hand, and high school completion and achieving a university entrance score, on the other, are likely to be driven by the selectivity associated with the use of marijuana.

Recent policy changes in other jurisdictions have allowed researchers to study the impact on youth drug use. Following the Portuguese decriminalisation illicit drug lifetime prevalence decreased between 2001 and 2006 for youths aged 13 to 15 and 16 to 18 years for virtually every substance. Hughes & Stevens (2010, pp. 1006–1008) found that youth lifetime prevalence of cannabis, ecstasy and all illicit drugs use was increasing up to and immediately following decriminalisation but has declined since. Another study found that prevalence decreased between 2001 and 2007 for the 15 to 19 years age group (Greenwald 2009, pp. 12–14).

Clements and Daryal (1999, pp. 41–43) found that the literature from the United States suggested youth consumption is unlikely to change and that decriminalisation has no significant effect (Johnston et al., 1981, Theis and Register, 1993, Pacula, 1997 cited).

Following legalisation in Washington researchers found a small but statistically significant drop in 8th and 10th graders use, and no change in 12th graders (Dilley et al. 2018). An Oregon study, found no change in behaviour amongst youths who had yet to use cannabis, but an increase in frequency amongst those who already used (Oregon Research Institute 2018). Another study found that past month adolescent cannabis use increased in Washington but not in Colorado following legalisation (Cerda et al. 2017). The Colorado Department of Public Safety (2018, p. 5) did not find evidence of increased youth usage after legalisation.

In Colorado, the rate of drug school suspensions decreased from 551 (per 100,000 students) in 2010–11 to 507 in 2017–18 and the rate of drug expulsions decreased from 91 to 38 (Colorado Department of Public Safety 2018, p. 6), though policy changes partly explain this. The rate of juvenile cannabis arrests also declined from 583 (per 100,000) in 2012 to 453 in 2017.

A recent review of 38 countries shows no significant increase in cannabis use amongst adolescents living in liberalised states (Stevens 2019). Consistent with the results of previous researchers, the most comprehensive empirical study to date found:

there was no evidence that the legalization of medical marijuana encourages marijuana use among youth. Moreover, the estimates reported in the Table showed that marijuana use among youth may actually decline after legalization for recreational purposes (Anderson et al. 2019).



The available evidence does not suggest that legalisation or decriminalisation would increase youth drug use. Some of the evidence suggests legalisation may reduce underage consumption. This CBA assumes that adult decriminalisation or legalisation would not affect youth drug consumption.

Substitution in consumption

Drugs may be substitutes or complements. Changes in law and its enforcement can encourage users to shift their consumption to other drugs which may be more or less dangerous. To the extent the prohibition is effective it is likely to shift consumers to legal drugs such as alcohol and tobacco and away from illicit drugs.

People switch between drugs (both legal and illicit) partially due to the price and availability. One study of drug users estimated:

that methamphetamine purchases decreased significantly as the price of methamphetamine increased (a 10% price increase led to an 18%–19% fall), as did heroin purchases in response to heroin price increases (a 10% price increase led to a 16%–27% fall). Among methamphetamine users, increases in methamphetamine prices produced some substitution into heroin. Additionally, dependent methamphetamine users purchased more pharmaceutical opioids while the non-dependent group purchased more cocaine (Chalmers et al. 2009).

In US states that have legalised medicinal cannabis, there is early evidence of substitution from opioids to cannabis and lower attendant health burdens:

In an analysis of death certificate data from 1999 to 2010, we found that states with medical cannabis laws had lower mean opioid analgesic overdose mortality rates compared with states without such laws. This finding persisted when excluding intentional overdose deaths (ie, suicide), suggesting that medical cannabis laws are associated with lower opioid analgesic overdose mortality among individuals using opioid analgesics for medical indications. Similarly, the association between medical cannabis laws and lower opioid analgesic overdose mortality rates persisted when including all deaths related to heroin, even if no opioid analgesic was present, indicating that lower rates of opioid analgesic overdose mortality were not offset by higher rates of heroin overdose mortality (Bachhuber et al. 2014).

The literature generally shows evidence of substitution between alcohol and cannabis as shown in Table G.15. However, there is a wide range of results—a literature review by Clements and Daryal (1999, p. 42) found three studies showing alcohol and cannabis to be substitutes, three to be complements and two were inconclusive. The effect of changes in the price of one drug on demand for others is not certain (Chalmers et al. 2009, p. 3).

This CBA does not include any substitution effects because the uncertainties of cross price elasticities of drugs makes it difficult to make credible calculations.



Table G.15 Cross price elasticities of drug demand

ay cannabis participation wrt tobacco price –0.34 to abis frequency wrt tobacco –0.36 to –0.84 ay cannabis participation wrt tobacco price –0.05 to
ay cannabis participation wrt tobacco price –0.05 to
bis fraguency wet tobassa price 0.44
abis frequency wrt tobacco price –0.44
ay cannabis participation wrt tobacco price 0.56 to
abis frequency wrt cannabis price 0.58
ay cannabis participation wrt beer price –0.71
abis frequency wrt beer price <0
ay cannabis participation wrt tobacco price 0.003 cco wrt cannabis price –0.13
ay cannabis participation wrt tobacco price –1.1
abis frequency wrt tobacco price <0
co participation wrt cannabis price 0.06
co frequency wrt cannabis price >0
abis participation wrt alcohol price <0
abis participation wrt cocaine price <0
abis participation wrt heroin price <0
abis participation wrt beer tax <0
abis frequency wrt beer tax <0
abis volume wrt beer, wine and spirit prices –0.33, –
wine, spirit volume wrt cannabis price –0.04, –0.08,
abis volume wrt beer, wine and spirit prices –0.38, –
wine and spirit volume wrt cannabis price –0.07, –
ol participation wrt cannabis price <0
ay alcohol participation wrt cannabis price <0
ay alcohol participation wrt cannabis price >0
Elasticity of cannabis participation cocaine price 0.05 to -0.20 , -0.19 to -0.24
ne participation wrt cannabis price –0.10 to –0.53, –

Note: 'wrt' is an abbreviation for 'with respect to'.

Source: Bryan et al. 2013b.



Justice system expenditure

This CBA assumes that for the decriminalisation options, justice system costs related to drug possession fall to zero for the relevant drug type. Costs related to supply offences are assumed to grow proportional to drug consumption.

For the legalisation options, it is assumed that justice system costs related to drug possession fall to zero for the relevant drug type. Costs related to supply offences are assumed to grow proportional to drug consumption in the illicit market.

For decriminalisation options we assume that, law enforcement costs:

- for possession, offences fall to zero in 2020
- for supply, offences remain proportional to consumption.

We assume that for the legalisation options law enforcement costs:

- for possession, offences fall to zero in 2020
- for supply, offences fall 20 percentage points each year between 2021 and 2024, and from 2025 enforcement fall to 10 per cent of the status quo.

Prohibition can divert resources away from enforcement of higher harm property and violent crime or to other useful activities. This CBA makes no judgment on how resources freed up from enforcing prohibition would be reallocated—we do not assume additional effects from, for example, heavier policing of other crimes and therefore greater deterrence or effects from redirecting expenditure to other priorities. We do though assume an increase in drug treatment, discussed later.

Possession offences

Reforming drug laws is likely to reduce government expenditure on law enforcement activities. Criminalising drug users and suppliers involves large expenditures on police, courts, community corrections and prisons that are borne by the society generally through higher taxes or lower government expenditure on other activities, including addressing other crimes.

A variety of models of decriminalisation exist. If penalties for possession were reduced or changed from criminal to civil sanctions, justice system costs associated with offences would be reduced but not eliminated. If drug offences moved to a system whereby possession offences were not substantially enforced the decrease in justice system costs would be larger.

This CBA assumes enforcement would be minimal for simple possession offences.

Supply offences

The benefits of decriminalising demand without altering supply laws would be lower than for a legal regulated market.

Trafficking offences often capture users as well:

This offence can be committed in an extraordinarily wide range of circumstances... Many of the people serving sentences for drug trafficking were involved in selling to support their own addiction. (Queensland Bar Association sub. 42, p. 4)

Decriminalisation could be extended to some trafficking and dealing offences to capture social suppliers (to friends and family without a profit motive) and those funding their own use. However, this CBA assumes trafficking thresholds remain at existing levels. As a result, the decriminalisation options generally do not reduce the costs of enforcing supply offences.



Drug suppliers may sell or traffic multiple types of drugs, complicating effects. A person arrested for cannabis supply offences may also be convicted for supplying other drugs, in which case removing the cannabis offence would not necessarily prevent the person coming into contact with the justice system. However, in the long run the removal of a drug from the illicit market removes criminal opportunities and so fewer people would be attracted to the high returns offered by the black market.

Legalisation is assumed to largely remove the justice system costs for supply offences. However, the change from an illicit market to a legal regulated market would not occur immediately. A lag is likely as illicit producers would not immediately exit. We assume that justice resources would decrease at 20 percentage points per year, commencing the year after legalisation.

Ongoing enforcement may be necessary. A legal but heavily taxed market could be undercut relatively easily if there are is no incentive to comply. We assume that supply side enforcement activities would continue indefinitely but at a much lower level than currently occurs—a 90 per cent reduction in enforcement from 2025.

Personal costs of enforcement

The personal costs of imprisonment are assumed to be proportional to the number of people in prison. Imprisonment is assumed to be a function of illicit market activity. The personal costs of imprisonment are assumed to be \$48,300 per year of imprisonment.

We assume, for the decriminalisation options, that personal imprisonment costs for offenders:

- for possession, falls to zero in 2020
- for supply, remain proportional to consumption.

We assume for the legalisation options, that personal imprisonment costs for offenders:

- for possession, fall to zero in 2020
- for supply, fall by 20 percentage points each year between 2021 and 2025.

We also assume each arrest involves a time cost to the offender of one hour at the minimum wage, for all options.

The costs of stigmatisation from a criminal record, legal, time and personal costs of navigating the criminal justice system and fines or other sanctions have not been quantified.

Personal costs of imprisonment

The costs of criminalisation and imprisonment include impacts on prisoners, their families and the broader community. They includes time costs, loss of social capital, lost productive capacity, increased risks to health and mental well-being, disqualification from some types of employment and limitations on travel (Besemer & Dennison 2017; Dennison et al. 2006; Enggist et al. 2014; McCausland et al. 2013; White & Whiteford 2006). These costs are less tangible than the direct costs of law enforcement and are therefore more difficult to estimate.

Post-release data also show that imprisonment adversely affects future outcomes including higher unemployment (Holzer 2009; Mueller-Smith 2014; Travis et al. 2014), social exclusion and homelessness (Payne et al. 2015). The literature also suggests that imprisonment has a criminogenic effect and so may contribute to later offending (Weatherburn & Ringwald 2014).

Approximately 26 per cent of Queensland prisoners were employed in the 30 days prior to entering prison in 2015 (AIHW 2019c). Morgan (2018) estimated that the cost of lost productivity averaged \$16,543 per prisoner in Victoria.

For the families of prisoners, the loss of income of a prisoner reduces family resources available for meeting everyday expenses. Besemer & Dennison (2017), for example, show an increased dependence on welfare benefits among families with experience of imprisonment. In Australia, women's imprisonment has been shown to impact on children's welfare in both the short and long term (Goulding 2007).



A survey by Donohue (2009) estimates that all indirect or 'collateral' costs could add up to around US\$25,000 per year per prisoner in 2005. Others have suggested that the total 'social' costs of imprisonment (including lost productivity) are about twice the magnitude of direct prison costs (Spelman 2000). Converting this figure to 2019 Australian dollars using purchasing power parity exchange rates and inflation, the figure from Donohue (2009) implies a cost of \$48,300 per prisoner year (ABS 2019b; OECD n.d.). We adopt this figure as our assumed cost per year of imprisonment.¹⁹¹

A more complete discussion of the costs of imprisonment can be found in Chapter 7.

Stigma of criminal records

A criminal record can impose permanent impacts on people. The stigma of a criminal record can prevent or impede people from getting jobs, applying for jobs, pursuing education and/or travelling to foreign countries. Beyond the costs to the individual this is likely to impede matching in employment markets and therefore productivity. There can also be negative impacts on relationship with friends and family.

A United Kingdom survey found 27 per cent of employers automatically reject a person with a drug conviction, 29 per cent would strongly count it against the applicant and 18 per cent count it against the applicant a bit (Metcalf et al. 2001, p. 84). The study found criminal record checking varied a lot between industries and occupations, with 7 per cent of health and social employers compared with 87 per cent of construction jobs not seeking criminal record information. For many professions criminal history checks are mandatory (for example health, legal and teaching) (Australian Health Practitioner Agency 2018; *Criminal Law (Rehabilitation of Offenders) Act 1986 Section 9A*).

Chapter 10 identifies unemployment and poverty as one of the risk factors for offending. While a criminal record may deliver some general deterrence to initiating drug use, once received it lowers the marginal costs of committing future crimes. Drug convictions contribute to a person's criminal history and so while the drug offence may not be the direct cause of imprisonment, they may add to a person's cumulative offence history or result in court orders that are later breached.

Based on willingness to pay, Shanahan (2011, p. 180) estimated the average cost per new criminal record was \$1,231. This implies an upper bound annual cost of up to \$105 million in Queensland if all possession offences were the first offence.

However, this impact is left unquantified, because we do not have data on the proportion of drug possession offences in Queensland that result in a person's first conviction.

Legal and other personal costs

The policy options would decrease time costs, legal fees and other effects associated with interacting with the justice system, for example from being arrested, facing court and being sentenced to community service. We conservatively assume that each arrest costs an offender one hour of their time, valued at the minimum wage (Australian Government 2019).

Fines

Fines are a transfer—from a net perspective the benefits and costs offset each other. However, it would impose some deadweight losses and is material to budgetary impacts.

¹⁹¹ In comparison, Morgan (2018) estimated that the costs of imprisonment were \$391 per day in Victoria in 2014–15. Other costs not related to prison net operating expenditure were \$123 per day, which equates to \$44,745 per year of imprisonment.



There are administrative costs associated with collecting fines. In Queensland the State Penalties Enforcement Registry (SPER) attempts to collect unpaid fines issued by police and the courts. Because SPER does not analyse the cost effectiveness of its finalisation activities, it is difficult to quantify this cost (QAO 2018a, p. 54).

Health effects

The CBA assumes that health costs grow in proportion to drug use. Where an option involves an increase in consumption, drug overdose deaths, disability and hospitalisation costs grow proportionally.

Offsetting benefits are then calculated for improvements in drug quality/safety and responding to drug use through the provision of health services.

The following reductions in overdose fatalities and hospitalisations per user are assumed in a regulated market:

- MDMA 80 per cent
- Cannabis 20 per cent.

Drug quality/safety

Prohibition creates quality and safety risks for drug consumption. Consumers often do not know the ingredients and purity of the drugs they purchase. In illicit drug markets, there are no mechanisms for monitoring production, labelling, standardising and testing products for health effects. Drugs can be contaminated by mould, fungi, bacteria, heavy metals, pesticides and other substances. Often manufacture takes place in clandestine laboratories by unqualified chemists. The associated safety risks and costs also extend to workers involved in the manufacturing process, though we do not attempt to quantify this effect (American Public Health Association 2014).

Prohibition also affects the potency of illicit drugs. There is opaqueness, lack of legal recourse for consumers and incentives for higher potency. In legal markets, consumers can pursue legal action against, or dispute resolution with, drug suppliers producing dangerous products. Black markets may also be characterised by lack of brand reputation and responsibility and the damage from selling product is not as great as in legal markets (Powell 2013).

Drug dealers and consumers are partially able to circumvent some of the problems of prohibition by using intermediaries (such as on the darknet), which allows users to rate their experience and function much like conventional online market places such as eBay or AirBNB (Botsman 2017). There is a positive relationship between drug dealers' average ratings, number of ratings and being able to charge a price premium on online platforms (Janetos & Tilly 2017). This is consistent with how legal markets operate and sort out low-quality sellers and products and reduce adverse selection problems. However, a minority of drugs are traded through such platforms (EMCDDA 2017), there remains no legal recourse and platforms come and go from police busts and exit scams, reducing the effectiveness of markets to improve quality.

Drug prohibition often leads to additional health harms and may result in fatalities that would not otherwise occur. In the United States, industrial alcohol that was deliberately poisoned to discourage human consumption, was estimated to have caused 10,000 deaths the during alcohol prohibition (Rosen 2010).

Impurities in illicit drugs raise several concerns, Peck et. al. (2019) reason that illicit supply increases danger:

Firstly, consumers will generally not be aware they are taking a cocktail of drugs rather than just the primary recreational drug alone. Secondly, the strength of the cocktail is likely to be inconsistent. Finally, the consumer will have little understanding of the possible outcomes resulting from taking a primary drug contaminated with active impurities. Thus, beyond simply enhancing the desired effects, there may be serious clinical consequences for consumers when pharmacologically active constituents, especially new or novel psychoactive substances (NPS), are mixed with the more commonly used recreational drugs (Brunt et al., 2017; Giné et al., 2014).

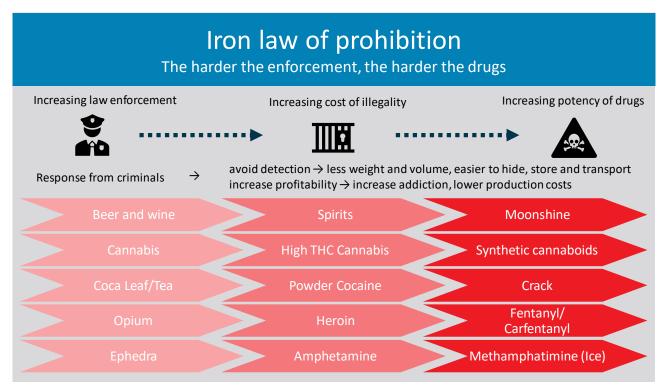


Multiple drugs were recorded in most (59 per cent) accidental drug-related deaths in Australia (Penington Institute 2018, p. 7). The United Nations Office on Drugs and Crime (2018, p.11) identified that the mixing of drugs and opaqueness of the ingredients is contributing to higher overdose deaths:

Illicit fentanyl and its analogues are reportedly mixed into heroin and other drugs, such as cocaine and MDMA, or "ecstasy", or sold as counterfeit prescription opioids. Users are often unaware of the contents of the substance they are taking, which inevitably leads to a great number of fatal overdoses.

International research suggests that efforts to increase enforcement have increased harms by encouraging the supply of more potent and addictive substances. By imposing substantial barriers and costs in the supply chain more bulky products become more expensive, creating a direct pressure to minimise volume to maximise profit. During alcohol prohibition the potency of alcohol was estimated to have increased 150 per cent as the market responded by almost exclusively supplying distilled spirits (from 40 to 90 per cent share of the market) (Beletsky & Davis 2017). A similar transition to more potent forms has been observed in the current United States opioid crisis. This mechanism described as the 'iron law of prohibition', is illustrated in Figure G.11.

Figure G.11 Prohibition encourages supply of more harmful and addictive substances



Source: Adapted from the Global Commission on Drug Policy 2018.

Internationally, the shift to more potent and dangerous forms is also evidenced in a shift to fentanyl from heroin and other opiates (EMCDDA 2015):

A significant number of deaths have been reported in the EU and USA following the ingestion of illicitly synthesised or 'designer' fentanyls, sometimes referred to as non-pharmaceutical fentanyls (NPF). In the case of NPFs, many deaths—characterised by their suddenness—have been caused by the use of heroin laced with fentanyl or with one of its more potent analogues, such as alpha-methyl fentanyl and 3-methylfentanyl. ...



A more recent report by Higashikawa and Suzuki (2008) also based on animal tests, found that the range between the effective and lethal doses of α -methylfentanyl was narrower than that of fentanyl. They suggested that this could also contribute to the deaths from the former.

Frei and Wodak (2017) argued that prohibition has paved the way for synthetic analogues over natural cannabis and methamphetamines over less potent powder forms of amphetamines in Australia.

MDMA quality

Recent fatal overdose deaths in Queensland and New South Wales illustrate the potential health harms of black-market drugs. A Townsville festival featured 61 hospitalisations and 67 drug-related offences (Scott 2019).

The variable strength and unknown presence of other drugs and harmful adulterants increases the risks associated with MDMA. Many of the small number of deaths attributable to ecstasy may be preventable. The presence of law enforcement including drug detection dogs, can scare festival goers into taking multiple doses simultaneously, increasing risks, particularly when combined with high temperatures and other risky behaviour (see for example Savage 2019; Thompson 2019).

A wide range of substances may be in the ecstasy pills. Nine per cent of ecstasy seized by Queensland Police and tested in a study was found to contain other drugs, including methamphetamines, cocaine, phenethylamine, DMAA, MDA. MDDM and sildenafil (Peck et al. 2019). Other studies have found PDA, which mimics some of the effects but is more likely to cause life-threatening elevation in temperature and cardiovascular function (Donelly 2015, p. 839). To mimic the effects of MDMA and avoid drug scheduling, new drugs have been designed, such as MDPV which carries increased risks of dependency and psychosis (Donelly 2015, p. 840). New substances are being chemically engineered at an increasing rate.

There is also some evidence that ecstasy dosages have increased in recent years (Downey & Mezrani 2016; Williams 2016). The unknown variance in dosages increases the risks of overdose. 192

Regulated MDMA would be safer than ecstasy currently available in the black market. Phase 2 clinical trials in the United States for treating Post Traumatic Stress Disorder have not found dangerous side effects for dosages of 75–125 milligrams (Mithoefer et al. 2019). This does not mean that MDMA is completely safe, excessive consumption, poly drug use, dehydration and water intoxication pose risks.

Results from pill testing at festivals in the United Kingdom found that one in five substances was not as sold or acquired. Most (two thirds) of those whose sample was mis-sold disposed of the substance (Measham 2018). The study found a reduction in hospitalisations after pill testing of 95 per cent, compared with the prior year. Regulated legal MDMA would provide a more predictable dosage product and allow accurate information to be provided at the point of sale.

The improvement in quality of drugs provided by a regulated market is likely but cannot be precisely estimated. We assume hospitalisations and overdoses could decrease by 80 per cent per user in a regulated market. We do not assume a change in the long-term effects of use.

Cannabis quality

Prohibition provides an incentive to make drugs as small and compact as possible to minimise the risk of detection by increasing the potency. Thornton (1991) estimated that 93 per cent of the increase in marijuana potency is due to increased federal (United States) expenditure on interdiction (Powell 2013).

In recent years synthetic cannabinoids have been formulated that mimic the effects of natural cannabis but increase the harms. In 2013 alone, 150 new cannabinoids were identified and these new synthetic drugs have been linked to poisonings, hospitalisations and deaths (Bannister et al. 2015). Further:

¹⁹² Testing at one festival found dosages between 20mg and 250mg of MDMA in a pill (Coldwell 2017).



Serious illnesses due to cannabis are exceedingly rare, while those due to synthetic cannabinoid use are becoming more common. A recent report by the Centers for Disease Control and Prevention stated that there were 3,572 calls to poison centers in the United States in the first half of this year due to synthetic cannabinoids, a 229% increase from the same period in 2014. More concerning is the fact that clusters of synthetic cannabinoid overdose are associated with the newest drugs (Bannister et al. 2015).

A recent study of Australian drug harms (Bonomo et al. 2019, p. 764) ranked the harm to users from synthetic cannabis as more than twice that from natural cannabis. An American study estimated synthetic cannabinoids were 30 times more likely to harm the user (White 2017).

White (2018) explains the advantages synthetic products have in a prohibited market place:

They are easy to purchase, relatively inexpensive, produce a more potent high and don't emit the typical marijuana scent. And, they are much harder to detect in the urine or blood than marijuana.

Legalisation is likely to shift users from synthetic cannabis back to natural cannabis. Regulation would also reduce contamination of natural cannabis.

In legal markets regulation can be set to reduce higher potency consumption. Taxes can be set to encourage safer consumption habits by taxing dosage, for example, higher taxes are levied on spirits relative to light beer. In illicit markets the opposite tendency exists, higher potency drugs are more efficient for evading detection and therefore are more likely to be supplied.

Between 2001 and 2007 accidental deaths related to cannabis and derivatives was less than 5 per year in Queensland. In the period since, deaths per year have increased to over 23 (Penington Institute 2018).

We assume legalisation would improve the quality of cannabis and reduce accidental deaths and hospitalisation related to cannabis by 20 per cent.

Responding to drugs as a public health issue

There are several additional ways that prohibition increases the harms to drug users, including by:

- discouraging drug users seeking or health providers providing treatment
- impeding the use of clean needles in injecting drugs, contributing to the spread of infectious diseases
- imprisonment potentially increasing mortality of drug users
- preventing health care providers from innovating and providing treatments to drug users.

Benfer et al. (2018, p. 165) estimate that in countries with relatively prohibitionist drug policies, people would be more likely to seek assistance from health services if policies were liberalised. In countries with existing liberal drug policies, further liberalisation was not estimated to make people more confident in seeking help.

Sharing needles by drug injectors potentially spreads infectious diseases, including AIDS and hepatitis to users and their sexual partners. Prohibition may impede the use of clean needles. The Global Commission on Drug Policy (2012) argue that:

The emphasis on drug law enforcement has created legal barriers to evidence-based HIV prevention measures, such as the provision of clean syringes, and evidence-based addiction treatment methods, such as methadone maintenance therapy. These public health approaches have been proven to reduce HIV risk and are widely endorsed by major international medical and public health bodies.

Following the decriminalisation of drugs in Portugal the number of new HIV and AIDS cases amongst drug users has declined substantially (Greenwald 2009, pp. 16–19).



Prison may not address users' underlying reasons for drug use or provide transitional care post-release and may increase the risk of harm. Imprisonment of drug users can enforce a significant decrease in usage and tolerance. Ex-prisoners may return to drug use upon release and have lost support networks. One study found that after imprisonment, drug users were at a three to eight–fold increased risk of drug-related death in the first two weeks after release (Merrall et al. 2010). The risk remained elevated for the next two weeks.

Prevention and treatment programs

Education and prevention programs also have a role in reducing the onset of dangerous drug use and treatment in reducing harms and transitioning from addiction. Early intervention programs aimed at crime and discussed in Chapter 10 can also help address drug use, because the population and risk factors overlap (Alcohol and Drug Foundation, sub. DR28, p. 10).

Community-based programs can help reduce youth drug consumption. Iceland's Planet Youth program was associated with larger reductions in alcohol, tobacco and cannabis use in communities with the intervention than in communities without (Kristjansson et al. 2010). Factually based mass media campaigns have shown effectiveness in reducing tobacco smoking prevalence (Das et al. 2016).

The effectiveness of drug prevention and education varies:

The most effective drug education programs provide accurate information about drugs, have a focus on social norms, and take an interactive approach which assists students in the development of interpersonal skills. A Cochrane Review found the most effective programs teach social and coping skills and comprise between 10–20 sessions. Care is needed because some education programs have been followed by increased drug use, possibly because students perceived their peers were using drugs, or rejected exaggerated claims of risk as uninformed (Alcohol and Drug Foundation, sub. DR28, p. 10).

A global study found 43 per cent of school and other drug prevention programs were effective (Agabio et al. 2015). An Australian study of school-based prevention programs founds five of seven achieved reductions in alcohol, tobacco and cannabis (Teesson et al. 2012). The study concluded there was a lack of trials of programs and insufficient evaluation. Another review found four programs had enough evidence to support use, three showed some evidence, one showed no evidence of effectiveness and two showed negative effects (Lee et al. 2014). This suggests that evidence-based education and other programs can provide benefits, but design, monitoring and evaluation matter.

A study of California drug treatment outcomes found a benefit to cost ratio of 7 to 1, largely attributable to reductions in criminal activity (Ettnar et al. 2006). A literature review of 18 cost-benefit studies found that benefit—cost ratios were greater than one—of 1.6 to 26 (Cartwright 2000). A Minnesota study found benefit-cost ratios for treatment and recovery services of between 2.4 and 16.1. For prevention and early intervention services the study found benefit-cost ratios of 0.2 to 20.4 (Merrick et al. 2017). The literature also shows that there are multiple effective treatments, not all programs work for all individuals and as programs become larger diminishing returns are likely to set in (Sense Partners 2018, pp. 29–30). In their CBA Sense Partners (2018, p. 27) assume treatment and education programs have a benefit cost ratio of 1.5 to 5.2.

There appears to be room for greater efficiency in the approach to delivering AODT services. Most cannabis, cocaine and ecstasy treatments are diversions from police or courts, most are not completed and almost all are for information and education or counselling (AIHW 2017a). It is likely that in many cases where justice institutions refer a person to treatment that the benefits do not exceed the costs, though the net cost to society is likely to be less than imprisonment.

We conservatively assume that an expansion in treatment programs would provide benefits of \$1.5 for every \$1 spent.



Harms to others

The CBA assumes that increases in the usage of cannabis and MDMA do not result in increases in violent crime. For other drugs, heroin, methamphetamines and cocaine, violence is assumed to be proportional to the quantity consumed.

The cost of property crime is assumed to be proportional to the total retail value of drugs consumed. The cost of drug driving is assumed to be proportional to the quantity of drugs consumed.

For legalisation options there would be a reduction in organised crime and corruption, however we do not quantify this impact.

Organised crime, violent crime and corruption

There are four possible mechanisms by which violent crime may change in response to a change the legal status of a drug—the direct psychotropic effects of the drug, reduced violence to control the black market, reallocation of justice resources and substitution effects (for example, a change in the use of violence inducing substances such as alcohol or methamphetamines).

There is not an extensive literature quantifying the costs of organised crime or corruption in Australia. Therefore, we discuss these effects but do not quantify them.

Crime controlling black markets

The nature of illicit markets means they can be dominated by the most ruthless and violent participants rather than the best customer offering. Other markets where commodities with similar characteristics, such as coffee, alcohol and tobacco do not exhibit the same characteristics as illicit drug markets and are not controlled by organised crime. Markets, such as gambling and prostitution have been beset with violence and organised crime when similar prohibitionist approaches were implemented.¹⁹³

Prohibition is likely to lower the marginal costs and increase the marginal benefits of using violence in commercial transactions. Participants in illicit drug markets do not have access to the legal and judicial system to resolve conflicts, increasing the marginal benefit of violence. The marginal cost of violent acts is likely to be lower because evading detection for drug dealing is complementary with evading for violent offences (Miron & Zwiebel 1995, p. 177). The cartelisation of drug markets may also increase the benefits of violence (Miron & Zwiebel 1995, p. 179).

Studies suggest that the incentives inherent in illicit market tend to induce violent crime unrelated to the commodity involved. Miron (1999b) estimated that the United States homicide rate was 25–75 per cent higher than it otherwise would be and that the rate of homicides increased during the enforcement of alcohol and drug prohibitions. Studies using data from Florida, New York and Portugal consistently show that escalations in drug enforcement are accompanied by property and violent crime rates increasing, relative to what they would have been (Benson 2009, p. 294).

It is also likely that a change in the composition of drugs would occur in a regulated market and that drugs sold would be less likely to induce violence. The Crime and Misconduct Commission (2010, p. 3) assessed the risk from ecstasy as related to the composition of the drug:

We predict that the risk will increase in the short to medium term because of an increase in the harm likely to be associated with tablets that contain a variety of stimulants and drugs other than MDMA, and an increase in the number of tablets typically taken by users in a session.

Overall it is difficult to quantitatively establish the mechanism by which drug legalisation or decriminalisation effects violent crime. Dragone et al. (2018) estimated that cannabis legalisation induced an increase in cannabis

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¹⁹³ For example, in New South Wales police attempts to crack-down on gambling led to the development of complex communications systems, standover men and enforcers and demise of small operators and concentration into a relatively small group of influential organised crime (Wood 1997, p. 28).



consumption of about 2.5 percentage points, a decrease in alcohol consumption of 2 points and a decrease in other drug consumption of about 0.5 points. This change in consumption was associated with a change in criminal behaviour, with reductions in rape of between 15 and 30 per cent and theft of between 10 and 20 per cent.

Research from McFadden Consultancy (2016, p. 25) estimated that most (56 per cent) of the revenue from drug trafficking is reinvested in criminal activity and that around 20 to 28 per cent of this funds other organised crime activities such as extortion, fraud, pornography, illegal poaching and weapons trafficking.

Corruption

A decrease in the size of the illicit drug market would likely reduce the incentives for corruption in law enforcement. The corrupting influence of black markets on the justice system has long been identified. Fitzgerald concluded that 'enforcing laws which prohibit conduct on which the community is divided, and which does not threaten the community, is questionable' (Fitzgerald 1989, p. 361). The criminalising of drugs, prostitution and gambling and the strong demand for these products was identified as a factor in police corruption in Queensland. At least ten commissions and inquiries have been held in Australia into police corruption with illicit drugs being a common element (Merrington 2017, pp. 92–93).

The Royal Commission into the New South Wales Police Service identified that there was an overwhelming body of evidence of close relationships between police and those involved in drug supply (Wood 1997, p. 13):

The corrupting influence of the trade in narcotics has been emphasised at almost every stage of the Royal Commission inquiries...

Even in environments where the need and capacity to restrict drug use are much stronger (such as prisons), black-market demand can have a corrupting influence (Rallings, sub. DR1, p. 1). Taskforce Flaxton identified that the high demand for illicit drugs, prescription drugs, drug equipment and other contraband poses a risk of corruption in prisons (Crime and Corruption Commission 2018, p. 15).

Violent crime

The idea that drug use causes crime is disputed. Some researchers find a weak link or no effect for the impact of drug use on crime (Miron 2004; Mast et al. 2000; MacCoun & Reuter 2003). There is less evidence of a causal relation between violent crime and drugs than property crime and drugs.¹⁹⁴ Except for a small sub-set of drug users, drug use and crime appear to be largely unrelated (Rasmussen & Benson 1994).

For offenders, the initiation of drug use typically occurs subsequent to the onset of offending (Menard et al. 2001). Once both crime and drug use have commenced, each appears to increase the probability that the other will continue. Crime and drug use appear related to one another in different ways across the life-course—that while some crime is caused by drug use and some drug use is caused by crime, both are also heavily influenced by a similar set of underlying factors.

Problematic drug use and crime may be the result of low self-control (Gottfredson & Hirschi 1990) and impaired functioning. The latter explanation suggests that altered physical, psychological and emotional functioning may result from drug use and can consequently lead to involvement in crime. Factors associated with involvement in crime (such as poverty, personality disorders, associations with anti-social peers and lack of pro-social support) may also associated with problematic drug use.

The links between some drugs and violence are stronger. In reviewing the classification of MDMA the Advisory Council on the Misuse of Drugs (2008, p. 20) found that:

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¹⁹⁴ From their survey of the literature, Shepard and Blackley (2010, p. 252) concluded that "[r]esearchers who have reviewed the evidence find uncertainty, a weak link or no effect for the impact of drug use on crime'. Mast et al. (2000, p. 292) also found that 'substantial research literature suggests that there is no reliable association between drug use and major non-drug crimes'.



Unlike other stimulants (especially crack cocaine and methylamphetamine), MDMA does not predispose users to violence and users do not usually present problems for policing, even when in large gatherings... MDMA differs from other stimulants in that it rarely causes paranoid feelings or aggression, both of which are significant problems in amphetamine and cocaine users.

We assume that violent crime increases proportional to methamphetamines, heroin and cocaine usage. There is assumed to be no relationship between violent crime and cannabis or MDMA usage.

Property crime to fund drug use

There is a link between property crime and drug use. Some dependent users have relatively inelastic demand and undertake property crime to fund drug consumption when they do not have sufficient income (Miron & Zwiebel 1995, p. 180). A key effect of prohibition is to increase the price of drugs and therefore the amount of acquisitive crime needed to fund drug habits.

A Federal Reserve paper analysing geospatial data for Denver Colorado found that crime fell in neighbourhoods where cannabis dispensaries were located (Brinkman & Mok-Lammer 2017). Most of the decrease (93 per cent) was in nonviolent crimes. The benefits did not extend to adjacent neighbourhoods without dispensaries.

Studies of programs in Europe and Canada have shown that heroin prescription programs have, in addition to decreasing mortality and morbidity, been associated with reducing property crime (Fischer et al. 2007; Lobmann & Verthein 2009).

The effects on property crime from drug legalisation are ambiguous. On the one hand prices may decrease leading to lower property theft, on the other consumption may increase leading to increased demand. This analysis assumes that drugs prices will be similar to prevailing prices and the impact on property crime would be proportional to the value of drugs consumed.¹⁹⁵

Drug driving

Drug intoxication is associated with impaired driving and varies by type of drug.

Driving and simulator studies have shown cannabis use is associated with slower driving, less overtaking and increased following distance. It is also was associated with slower reaction times and incorrect responses to emergency situations (Highway Loss Data Institute 2018, p. 2). Amphetamines and MDMA can lead to speeding, erratic driving, reduced vision and increased risk taking while driving. Opiates and benzodiazepines can cause drowsiness, dizziness and impaired cognitive functioning (Alcohol and Drug Foundation 2017; National Institute on Drug Abuse 2019).

Early evidence from Colorado suggests cannabis legalisation has not led to an increase in dangerous driving (Colorado Department of Public Safety 2018). While the number of fatalities with cannabinoid-only or cannabinoid-in-combination positive drivers increased 153 per cent, from 55 in 2013 to 139 in 2017, detection of any cannabinoid in blood is not an indicator of impairment but only indicates presence in the system. The total number of driving under the influence citations decreased from 5,705 in 2014 to 4,849 in 2017. The number of fatalities in which a driver tested positive for Delta-9¹⁹⁶ THC at or above the 5.0 ng/mL level declined from 52 (13 per cent of all fatalities) in 2016 to 35 in 2017.

The Highway Loss Data Institute (2018) in the United States, estimated that there was a statistically significant increase in vehicle collision claims in Colorado and Washington but not Oregon following cannabis legalisation. It estimated legalisation was associated with a 6 per cent increase in collision claim. Another study compared crash

¹⁹⁵ This may overestimate costs of property crime for drugs that are less addictive such as MDMA.

¹⁹⁶ Delta-9 THC, one of the primary psychoactive metabolites of marijuana, may be an indicator of impairment.



fatalities in Washington and Colorado with 8 other states between 2009 and 2015. It did not find statistically significant differences between states with cannabis legalisation and those without (Aydelotte et al. 2017).

Overall there is mixed evidence about whether cannabis legalisation is associated with higher or lower levels of traffic accidents and harms. However, the literature shows a relationship between drug use and impaired driving. Therefore, the CBA conservatively assumes drug driving costs are proportional to the quantity of drugs consumed.

Expenditure on health services and regulation

It is assumed that reform option is assumed will be accompanied by an increase in the provision of drug treatment services.

We also assume additional costs associated with regulating a legal market. The CBA assumes for cannabis additional regulatory costs of \$1.7 million per annum and for MDMA \$0.5 million per annum.

Health services

Stakeholders have told the Commission that there is a shortage of treatment services in Queensland (QNADA sub. DR20, p. 4, QCOSS sub. DR24, p. 11, Alcohol and Drug Foundation sub. DR28 p. 8, Palmer sub. DR23, p. 7, Denton sub. 4, p. 13).

The analysis does not assume that expenditure on treatment will rise linearly with consumption. Instead it is assumed that treatment levels are a policy choice and in choosing to prioritise a health-based response over a law enforcement response that treatment services would be increased by about 50 per cent of the Australian average—around \$162 million. Services and associated costs and benefits are assigned to each drug relative to the number of treatment episodes (excluding information only) in 2015–16 (AIHW 2017a). Only the costs and benefits applicable to that drug are counted for each option.

Regulation

A new or existing regulatory body would be required to regulate the legal MDMA or cannabis markets. Legally available drugs are subject to a range of regulations, including restrictions on sale, plain packaging, advertising, product labelling and warnings, limits on potency and ingredients, quality testing and others. To ensure regulations are complied with and give the public confidence, the regulatory agency would be required to undertake policy work, manage licensing and undertake testing and inspections.

Shanahan and Ritter (2014) estimated that the costs of a cannabis regulatory agency in New South Wales would be about \$1 million in 2007. This estimate was based on the costs of Tasmania's Poppy Advisory Control Board. In 2018 this would equate to \$1.3 million.

Tasmania's Poppy Advisory Control Board issued 450 licences in 2017–18, at a cost per licence of \$1,062 or \$478,059 in total (Department of Primary Industries, Parks, Water and Environment, 2018).¹⁹⁷

In Colorado, which has a slightly greater population ¹⁹⁸ than Queensland, the Marijuana Enforcement Division licenses and regulates medicinal and recreational cannabis industries (Colorado Department of Public Safety 2018, p. 141). It issued 1,590 retail licences for stores, cultivators, product manufacturers, testing facilities, operators and transporters and 1,511 medicinal licences. Assuming a similar number of recreational licences as Colorado and costs equivalent per licence to Tasmania the annual cost would be around \$1.7 million for cannabis. For MDMA with a market a fraction of the size and with fixed costs likely partially covered by a cannabis regulator it is assumed the regulator would cost around \$0.5 million in line with the total cost of the Poppy Advisory Control Board.

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¹⁹⁷ By comparison, the Commission (2018, p. 16) in a CBA on Establishing a Pharmacy Council estimated, based on the experiences of other jurisdictions, that the regulatory costs per pharmacy were around \$1,070 to \$1,492.

¹⁹⁸ There were 5.7 million people in Colorado in 2018 (World Population Review 2019).



Consumer and producer surpluses

The CBA assumes consumer surplus is equal to willingness to pay minus the price of drugs. Willingness to pay is assumed by projecting demand with an average elasticity of one.

We assumed production costs stay the same in a legal market as they were in the illicit market. Producer surplus is assumed to be equal to price less production and taxation costs. Illicit and legal producer surplus is assumed to be driven by market share.

For the legalisation options we assume:

- a transition to a legal regulated market would occur over five years, with illicit market share falling to zero
- profitability and margins would to fall due to competition, relative to the illicit market
- to calculate consumer surplus the elasticity of demand on average is −1
- taxes would be imposed so that prices equal 95 per cent of current prevailing prices.

Consumer surplus

In any CBA the benefits to consumers would typically be included. Often studies exploring the impacts of drug laws ignore the consumer benefits of drug use (Shanahan & Ritter 2013, p. 179). People tend to consume illicit drugs for a range of reasons. For example, cannabis is typically consumed to 'relax, get intoxicated, socialise, enhance performance, lessen boredom and aid sleep' (Shanahan & Ritter 2013, p. 179).

Consumer surplus is a measure of well-being based on an underlying principle that consumers choose goods that maximise their well-being from their perspective. It is the extra value consumers devise above the cost of purchase. If drug users are rational, fully informed and have sufficient decision-making faculties, then they would have considered the costs of drug use in their decision.

Some economists have offered models of rational consumer behaviour in relation to drug use, whereby consumers anticipate the negative future effects of drug use and trade this off against present benefits. In these models consumers only choose to consume a drug where they expect the lifetime utility of consumption is positive (Becker & Murphy 1988). Clearly though, in addictive commodities like some drugs, there is the issue of whether consumers make rational choices or are sufficiently informed. For dependent users the benefits of consumption may not be linearly related to the amount consumed—as they consume more there may be a lower or no benefit. 199

Whether all consumers behave rationally or not, they are likely to experience some benefits, even if these benefits do not exceed the harms to users or broader society costed earlier. This study assumes an increase in drug consumption and/or a fall in the prices of those drugs would provide consumer benefits.

If legalisation or decriminalisation increase the willingness of consumers to use drugs this would represent an outward shift in the demand curve. The shape of the demand curve is unknown and therefore consumer surplus cannot be accurately estimated, a proxy is required to estimate the benefits for consumers (Shanahan 2011, p. 206; Shanahan & Ritter 2014, p. 5). Miron and Zwiebel (1995, p. 186) argue that:

Casual consumers have cheap substitutes like alcohol and tobacco available and thus have relatively elastic demands for drugs, while heavy users are likely to have inelastic demands. As price rises, the latter group will make up a higher proportion of the market, leading to a convex demand curve.

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¹⁹⁹ The PC (1999) addressed the issue of excessive consumption by problem gamblers (2.1 per cent of gamblers but a third of expenditure) by reducing the benefits for this group to the level of more recreational gamblers. To the extent we have not reduced the benefit for dependent drug users consumer surplus is overestimated.



The CBA makes simplistic assumptions to calculate consumer surplus. Given that the demand function for each drug is unknown, we project willingness to pay based on an assumed elasticity of one.²⁰⁰

Producer surplus

Producer surplus refers to the price producers receive for a good above less the costs of supply. Under the status quo the producer surplus accrues to organised crime. We assume for the decriminalisation options that illicit producer surplus increases proportionally with consumption, given that prices are assumed not to change.

In the legalisation options, we assume that legal producer surplus and taxes supplant illicit producer surplus.

Competition and transition to a legal market

Freidman (1991) argued that main beneficiaries of prohibition are organised crime:

if you look at the drug war from a purely economic point of view, the role of the government is to protect the drug cartel.

In the legalisation options, existing illicit producers would have to compete with new entrants. In our CBA we assume consistent with most legal product markets, illegal producers would find it difficult to compete and gradually lose most if not all market share.²⁰¹ The greatest welfare loss is likely to accrue to illicit producers and sellers.

The nature of the illicit drug market places additional costs on producers and sellers. An important goal of reform is the elimination or significant reduction of illicit drug markets. In order to do this, a new legal market would need to outcompete existing illicit suppliers. The key competitive advantages legal suppliers would possess are in legality of the product, quality, accessibility and cost. Legal producers may be technically more efficient, through scale, access to professional labour and equipment than clandestine operations.²⁰² This analysis does not assume an improvement in technical efficiency impacts producer surplus.

Under prohibition, producers face the costs of avoiding detection and face physical and legal risks not found in other industries. They do not receive the benefit of the legal system and so absorb the costs of security and contract enforcement. Prohibition acts as a tax on suppliers by raising the costs of supply (Miron & Zwiebel 1995).

Additionally, consumers are likely to prefer legal regulated products, enabling the transition. Prohibition makes consumption riskier and costlier. Consumers face legal penalties, including imprisonment, fines, appearances at court, the stigma of conviction, uncertain and dangerous product quality and potential danger in purchasing without law enforcement or consumer protection. Prohibition therefore, may shift the demand curve downwards (Miron & Zwiebel 1995). However, this shift is likely to be small, because as discussed earlier the probability of being caught is low, as are the typical punishments.

For both suppliers and consumers, there are reductions in costs associated with operating in a legal market relative to the existing black market. It would take time for a legal market to establish itself. Immediately after legalisation black market activity would continue. The extent of illicit market activity in the longer run would depend largely on

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²⁰⁰ The slope of the demand curve is critical to the size of estimated consumer surplus. If we assumed average elasticity of demand was inelastic (as may be inferred by most elasticities at the margin found in the research), willingness to pay would be greater and therefore consumer surplus would be greater. Adopting an elasticity of 1.0 rather than an inelastic parameter provides more conservative results—the benefits for each option will be lower.

²⁰¹ The ABS (2013) estimated that underground production was approximately 1.5 per cent of GDP. KPMG (2019, pp. 35 & 92) estimated that illicit products constituted 14.1 per cent of the Australian tobacco market in 2018. The ATO (2018) estimated the illicit tobacco market to be around 5.6 per cent. Where tax rates and/or regulatory burdens are very high, illicit activity is likely to be greater.

²⁰² In the Canada the average cost of producing cannabis is around \$1 per gram—costs are falling and one producer aims to produce at 20 cents per gram.

²⁰³ A recent study estimated that festival goers willing to pay \$12 on average for pill testing, in order to reduce the risks associated with black market production (Hollett & Gately 2019).



how burdensome taxation and regulation are on the legal market as opposed to the black market. This CBA assumes policy would be designed to minimise black market activity.



The market is assumed to transition to a legal regulated market over five years:

- 2020—20 per cent legal, 80 per cent illicit
- 2021—40 per cent legal, 60 per cent illicit
- 2022—60 per cent legal, 40 per cent illicit
- 2023—80 per cent legal, 20 per cent illicit
- 2024—100 per cent legal, 0 per cent illicit.

Some consumers may prefer to grow their own cannabis. The complexity of most other drugs makes self-production less likely. Own production would reduce taxation income and products would not be subject to extensive product regulation. This CBA makes a simplifying assumption that all production is market based.

Production costs

A concern of transitioning to a legal market is that prices could significantly decline, inducing a demand response.

We assume that production costs in the legal market are the same as in the illicit market (outlined in the status quo). Margins are assumed to fall in the legal market to rates more in line with other legal markets. Queensland drug manufacturers are assumed to impose a 10 per cent margin above the cost of production. On top of this retailers and wholesalers are also assumed to impose a 10 per cent margin.

Taxation

The government could replace the black-market risk premium that law enforcement provides with an explicit tax. Given the high price of drugs relative to marginal costs such a tax could be levied at a high rate. However, if the tax is set too high it would help to keep black market producers competitive, undermining the goal of reducing the harmful effects of black market activity, including imprisonment. To maintain prices at levels similar to today we assume government would replace the effects of enforcement activity with taxes.

Taxation allows government to attempt to change usage rates by increasing or decreasing taxes, where they deem consumption to create negative externalities for others or to place demands on public resources. It also allows governments to allocate funds to addressing potential harms from drugs through treatment or harm reductions measures.

In Colorado, taxation revenue for cannabis was US\$247.4 million in 2017 (Colorado Department of Public Safety 2018, p. 152). Taxation revenue was US\$67.6 million in 2014 and has increased each year thereafter. This illustrates that the adjustment from black market consumption to legal market consumption is not immediate, but likely large.

This CBA does not focus on calculating an optimal tax rate. However, the higher the tax rate the more competitive the black market would be. If tax rates are too high the black market would be maintained, and the benefits of reform would diminish commensurably.²⁰⁴

The legalisation options assume taxes will be levied on legal producers.²⁰⁵ Taxation is assumed to be equal to the market value of drugs consumed (with prices at 95 per cent of the status quo) minus the production costs of producers (including their margins). Taxes are a transfer and reduce producer surplus by an equivalent cost to the taxation benefit.

There is no assumed taxation in the decriminalisation options.

²⁰⁴ Taxation would likely be levied on the strength of drugs, similar to alcohol. However, there is a lack of data on the variety of products, quantities and purities currently produced and consumed.

²⁰⁵ Or if excise taxes are not possible government would take a monopolistic position in the market.



Summary of likely effects

Table G.16 below summarises the likely direction of the identified impacts for each policy option.

Table G.16 Direction of main impacts

Impact on:	Option 1— decriminalise cannabis	Option 2—legalise cannabis	Option 3—legalise MDMA	Option 4— decriminalise drugs other than cannabis
Consumption	Increase 0 to 20%	Increase 0 to 20% A 1% decrease in price results in an increase of 0.1% to 0.7%	Increase 0 to 20% A 1% decrease in price results in an increase of 0.1% to 0.7%	MDMA increase 0 to 20% Meth, heroin & cocaine change –5% to 5%
Police	No possession arrests	Reduced possession and supply arrests	Reducedpossession and supply arrests	No drug possession arrests
Courts	No possession cases	Reduced possession and supply cases	Reduced possession and supply cases	No drug possession cases
Community corrections	Reduction in possession imprisonment	Reduced possession and supply imprisonment	Reduced possession and supply imprisonment	No drug possession imprisonment
Criminalisation	Reduced personal costs of imprisonment	Reduced personal costs of imprisonment	Reduced personal costs of imprisonment	Reduced personal costs of imprisonment
Property crime	No change or increase	No change or increase from usage Possible reduction due to lower drug prices	No change or increase from usage Possible reduction due to lower drug prices	No change or increase
Violent crime	No change	No change	No change	No change or increase
Organised crime	No change or increase	Decrease	Decrease	No change or increase
Fatalities	No change or increase	No change or increase for usage Decreases from better quality/safety	No change or increase for usage Decreases from better quality/safety	No change or increase
Health harms to user	No change or increase	No change or increase	No change or increase	No change or increase
Hospitalisation costs	No change or increase	No change or increase from usage Possible decreases from better quality/safety	No change or increase from usage Possible decreases from better quality/safety	No change or increase
Traffic accident costs	No change or increase	No change or increase	No change or increase	No change or increase
AODT costs	Increase	Increase	Increase	Increase
AODT benefits	Benefits from more treatment spending preparedness to seek help for cannabis	Benefits from more treatment spending preparedness to seek help for cannabis	Benefits from more treatment spending preparedness to seek help for ecstasy	Benefits from more treatment spending preparedness to seek help for other drugs
Regulatory costs	None	Increase	Increase	None

Source: QPC.



G.5 Quantifying the costs and benefits

A cost–benefit analysis compares the difference between the total costs and total benefits of various options, valued in present day dollars. There are some costs the analysis does not quantify, either because they are immaterial or because they are too difficult to quantify.

The analysis assumes the following:

- 10-year assessment period—2020 to 2029.
- Discount rate is 5 per cent.
- All values are real—that is no indexing for inflation.
- Population grows at the same rate as 2008 to 2018—about 1.8 per cent per annum.
- Drugs will remain illegal for youths under 18.
- Legal market replaces the illicit market over 5 years.
- Decreases in law enforcement of drug supply offences lags adjustment to a legal market.
- Government expenses grow in line with population.
- Drug prices do not change in the status quo.
- The price of drugs legalised equals 95 per cent of existing market prices to make legal suppliers competitive but keep the price high to deter significant increases in usage. Tax rates are set to achieve this goal.
- No other Australian state changes the legality of drugs.
- People supplying drugs outside of the regulated market would be subject to the same sanctions that currently exist.

The following impacts have not been quantified due to estimatation challenges:

- Reduced violence and corruption associated with controlling illicit markets.
- Reduced organised crime funding other dangerous and illegal activities.
- Changes in technical efficiency arising from drugs production moving into the legal market.
- Substitution and other dynamic effects
- Lower productivity from drug misuse or dependence.
- Stigma of criminal conviction reducing employability and travel.
- Legal costs associated with navigating the justice system.
- Impacts on family and friends from the effects of other identified costs and benefits.

Timing

It is likely that any change from an illicit to a legal market would occur gradually. To minimise the cost of externalities in the illicit market it would be preferable for legal suppliers to outcompete illicit suppliers. To do this price would need to remain at similar or lower levels to current levels. Over time a government may choose to lift tax rates to deter some consumption once the illicit market has collapsed.

Savings from reduced justice expenditure would not occur immediately. Continued law enforcement of illicit suppliers might be necessary to protect a regulated market. Benefits might accrue through a freeze on justice expansion or reallocation of resources rather than a fall in justice expenditure.



Option 1 Cannabis decriminalisation

Under the low demand response scenario there are no additional costs associated with decriminalisation, beyond the costs of drug treatment.

With the moderate and high demand response scenarios there are estimated to be health related costs, drug driving costs and property crime costs in additional to treatment costs. Additionally, increased drug consumption is estimated to result in increases in law enforcement costs for supply offences.

Overall costs are estimated to increase \$334, \$731 and \$1,128 million in net present value (NPV) terms (Table G.17).

Table G.17 Costs from cannabis decriminalisation relative to status quo, \$million in NPV terms

Effect	Low	Moderate	High
Premature death	0.0	59.8	119.7
Quality of life	0.0	61.6	123.3
Drug driving	0.0	25.1	50.1
Hospitalisations	0.0	2.9	5.9
Violent crime	0.0	0.0	0.0
Property crime	0.0	99.7	199.4
Police supply expenditure	0.0	57.9	115.9
Courts supply expenditure	0.0	7.0	14.0
Prisons supply expenditure	0.0	53.4	106.9
Community corrections supply expenditure	0.0	5.5	11.0
Personal imprisonment costs	0.0	23.8	47.6
Personal arrest costs	0.0	0.0	0.1
Drug treatment costs	334.2	334.2	334.2
Total	334.2	731.1	1,128.0

Source: QPC calculations.

Benefits for cannabis decriminalisation scenario are the same under the low, moderate and high demand response scenarios. Benefits of \$1,577 million in NPV terms accrue from less enforcement expenditure and the benefits of drug treatment (Table G.18).



Table G.18 Benefits from cannabis decriminalisation relative to status quo, \$million in NPV terms

Effect	Low	Moderate	High
Police possession expenditure	762.0	762.0	762.0
Courts possession expenditure	70.0	70.0	70.0
Prisons possession expenditure	155.3	155.3	155.3
Community corrections possession expenditure	16.0	16.0	16.0
Personal imprisonment costs	69.1	69.1	69.1
Personal arrest costs	3.3	3.3	3.3
Drug treatment benefits	501.3	501.3	501.3
Total	1,577.1	1,577.1	1,577.1

There is no change in producer or consumer surpluses for the low demand response decriminalisation scenario. Government savings are estimated at \$669 million in NPV terms (Table G.19).

There are increases in consumer and producer surpluses (\$346 and \$502 million in NPV terms) for the moderate responsiveness decriminalisation option. The NPV savings to government are estimated to be \$542 million.

For the high demand response cannabis decriminalisation, the producer and consumer surplus is twice as great as the moderate scenario, but the government savings (\$692 million in NPV terms) are more modest, reflecting increasing enforcement costs associated with drug supply.

Table G.19 Surpluses relative to the status quo, cannabis decriminalisation, \$million in NPV terms

Effect	Low	Moderate	High
Consumer surplus	0.0	346.2	692.5
Illicit market producer surplus	0.0	502.0	1,004.0
Government savings	669.1	542.3	415.4

Note: Government savings are already covered as costs and benefits the tables above and should not be added to other costs and benefits. Source: QPC calculations.

Option 2 Cannabis legalisation

The decrease in prices in the legalisation option causes a greater consumption effect than decriminalisation for the moderate and high response scenarios.

Under the low demand responsiveness scenario, the \$318 million increase in costs is driven by a \$334 million increase in drug treatment in NPV terms (Table G.20). A decrease in property crime associated with lower prices more than offsets modest increases in other costs.

Total costs for the moderate and high demand responsiveness scenarios are estimated to increase by \$592 million and \$886 million. The largest increases are due to drug treatment (\$334 million), property crime (\$72 million and \$179 million), reductions in quality of life (\$71 million and \$140 million) and premature death (\$69 million and \$136 million).



Table G.20 Costs from cannabis legalisation relative to status quo, \$million in NPV terms

Effect	Low	Moderate	High
Premature death	2.3	69.2	136.0
Quality of life	2.4	71.2	140.1
Drug driving	1.0	29.0	57.0
Hospitalisations	0.1	3.4	6.7
Violent crime	0.0	0.0	0.0
Property crime	-35.1	71.8	178.8
Regulatory agency	13.5	13.6	13.7
Drug treatment costs	334.2	334.2	334.2
Total	318.4	592.4	866.4

The benefits from cannabis legalisation are estimated to be about \$2.5 billion in the low, medium and high demand response scenarios, in NPV terms (Table G.21). The benefits accrue primarily from the reduction in justice costs and criminalisation of people and improved drug quality and treatment responses.

Table G.21 Benefits from cannabis legalisation relative to status quo, \$million in NPV terms

Effect	Low	Moderate	High
Police possession expenditure	762.0	762.0	762.0
Courts possession expenditure	70.0	70.0	70.0
Prisons possession expenditure	155.3	155.3	155.3
Corrections possession expenditure	16.0	16.0	16.0
Police supply expenditure	364.0	344.2	324.5
Courts supply expenditure	43.9	41.5	39.1
Prisons supply expenditure	335.8	317.5	299.3
Corrections supply expenditure	34.6	32.8	30.9
Personal imprisonment costs	218.4	210.3	202.2
Personal arrest costs	3.6	3.6	3.6
Reduction in premature death	93.6	104.2	114.7
Reduction in hospitalisations	4.6	5.1	5.7
Drug treatment benefits	501.3	501.3	501.3
Total	2,603.2	2,563.9	2,524.6

Source: QPC calculations.

The largest effect for cannabis legalisation under all three parameters is large losses in producer surplus in the illicit market or for organised crime—around \$3.7 to \$3.9 billion in NPV terms (Table G.22).

Much of the producer surplus is redistributed to government via taxation, legal producer surplus via profits and consumers via lower prices. The largest benefits accrue to government via taxation of around \$3.2 to \$3.9 billion.



Adding expenditure reductions, the government budget is estimated to improve by slightly more, upwards of \$4.6 million.

Consumers are estimated to experience increased surplus of \$149, \$551 and \$953 million, for the low, moderate and high demand response scenarios, respectively. New entrants to the legal market are estimated to experience a producer benefit of \$493, \$549 and \$604 million, respectively.

Table G.22 Surpluses relative to the status quo, cannabis legalisation, \$million in NPV terms

Effect	Low	Moderate	High
Consumer surplus	148.8	550.8	952.7
Illicit producer surplus	-3,905.8	-3,788.1	-3,670.3
Legal producer surplus	493.0	548.6	604.3
Taxation	3,161.6	3,518.3	3,875.0
Government savings	4,600.0	4,911.6	5,223.2

Note: Government savings are already covered as costs and benefits the tables above and should not be added to other costs and benefits. Source: QPC calculations.

Option 3 MDMA legalisation

Under the low demand response scenario, the \$6 million increase in costs is driven by a \$5 million increase in drug treatment and regulatory agency costs in NPV terms (Table G.23).

Total costs for the moderate and high demand response scenarios are estimated to increase by \$45 million and \$84 million. The largest increases are due to drug treatment (\$5 million), reductions in quality of life (\$14 million and \$28 million) and premature death (\$14 million and \$27 million).

Table G.23 Costs from MDMA legalisation relative to status quo, \$million in NPV terms

Effect	Low	Moderate	High
Premature death	0.5	13.6	26.7
Quality of life	0.5	14.0	27.5
Drug driving	0.0	1.0	2.1
Hospitalisations	0.0	0.7	1.3
Violent crime	0.0	0.0	0.0
Property crime	-3.5	7.2	17.9
Regulatory agency	3.8	3.8	3.9
Drug treatment costs	5.1	5.1	5.1
Total	6.4	45.4	84.5

Source: QPC calculations.

Benefits from MDMA legalisation are estimated to be \$121 million, \$129 million and \$137 million for the low, medium and high demand response scenarios, in NPV terms (Table G.24). The benefits accrue primarily from the reduction in justice costs, less criminalisation of people and improved drug quality and treatment responses.



Table G.24 Benefits from MDMA legalisation relative to status quo, \$million in NPV terms

Effect	Low	Moderate	High
Police possession expenditure	14.8	14.8	14.8
Courts possession expenditure	1.4	1.4	1.4
Prisons possession expenditure	3.0	3.0	3.0
Corrections possession expenditure	0.3	0.3	0.3
Police supply expenditure	5.9	5.6	5.3
Courts supply expenditure	0.7	0.7	0.6
Prisons supply expenditure	5.5	5.2	4.9
Corrections supply expenditure	0.6	0.5	0.5
Personal imprisonment costs	3.8	3.6	3.5
Personal arrest costs	0.1	0.1	0.1
Reduction in premature death	73.5	81.8	90.1
Reduction in hospitalisations	3.6	4.0	4.4
Drug treatment benefits	7.7	7.7	7.7
Total	120.8	128.7	136.6

The largest effect under all three parameters for MDMA legalisation is large losses in producer surplus in the illicit market or for organised crime—around \$179 to \$188 million in NPV terms (Table G.25).

Much of the producer surplus is redistributed to government via taxation, legal producer via profits and consumers via lower prices. The largest change in surplus accrues to government taxation—around \$159, \$177 and \$195 million, respectively. Adding expenditure reductions, the government budget is estimated to improve by slightly more, upwards of \$186 million.

Consumers are estimated to experience increased surplus of \$6, \$22 and \$38 million, respectively. New entrants to the legal market are estimated to experience a producer benefit of \$11, \$13 and \$14 million, respectively.

Table G.25 Surpluses relative to the status quo, MDMA legalisation, \$million in NPV terms

Effect	Low	Moderate	High
Consumer surplus	5.9	22.0	38.0
Illicit producer surplus	-187.9	-183.2	-178.5
Legal producer surplus	11.4	12.7	14.0
Taxation	159.5	177.5	195.5
Government savings	186.3	203.3	220.4

Note: Government savings are already covered as costs and benefits the tables above and should not be added to other costs and benefits. Government savings include taxation.



Option 4 Decriminalisation of drugs other than cannabis

Under the low demand response scenario there are no additional costs associated with decriminalisation, beyond the costs of drug treatment (Table G.26).

Apart from drug treatment, under the moderate response scenario there are estimated to be small increases in costs. For the high demand response scenario there are estimated to be premature death (\$174 million), quality of life (\$179 million) and property crime costs (\$178 million), in NPV terms. Additionally, increases in drug consumption are estimated to result in increases in law enforcement costs for supply offences.

The low scenario results in a \$266 million decrease in costs. The moderate and high scenarios result in increases in cost of \$341 and \$948 million.

Table G.26 Costs from decriminalisation of drugs other than cannabis relative to status quo, \$million in NPV terms

Effect	Low	Moderate	High
Premature death	-149.9	11.8	173.5
Quality of life	-154.4	12.1	178.7
Drug driving	-18.9	0.9	20.7
Hospitalisations	-7.4	0.6	8.5
Violent crime	-46.6	0.0	46.6
Property crime	-158.0	10.0	177.9
Police supply expenditure	-13.5	0.9	15.4
Courts supply expenditure	-1.6	0.1	1.9
Prisons supply expenditure	-12.5	0.9	14.2
Community corrections supply expenditure	-1.3	0.1	1.5
Personal imprisonment costs	-5.5	0.4	6.3
Personal arrest costs	0.0	0.0	0.0
Drug treatment costs	303.5	303.5	303.5
Total	-266.1	341.2	948.5

Source: QPC calculations.

Benefits for the decriminalisation of all drugs scenario are the same under the low, moderate and high demand response scenarios. Benefits of \$1,043 million in NPV terms from less enforcement expenditure and the benefits of drug treatment (Table G.27).



Table G.27 Benefits from decriminalisation of drugs other than cannabis relative to status quo, \$million in NPV terms

Effect	Low	Moderate	High
Police possession expenditure	416.4	416.4	416.4
Courts possession expenditure	38.3	38.3	38.3
Prisons possession expenditure	84.8	84.8	84.8
Community corrections possession expenditure	8.8	8.8	8.8
Personal imprisonment costs	37.7	37.7	37.7
Personal arrest costs	1.8	1.8	1.8
Drug treatment benefits	455.2	455.2	455.2
Total	1,043.0	1,043.0	1,043.0

For the low response scenario producer and consumer surplus decrease due to lower consumption. Government savings are estimated at \$281 million in NPV terms (Table G.28).

There are increases in consumer and producer surpluses (\$14 and \$23 million) for the moderate demand response decriminalisation scenarios. The savings to government from the policy are estimated to be \$242 million.

For the high demand response scenario, the quantum of producer and consumer surplus increases \$185 and \$298 million, respectively. There are estimated to be savings to government of \$203 million.

Table G.28 Surpluses relative to the status quo, drugs other than cannabis, \$million in NPV terms

Effect	Low	Moderate	High
Consumer surplus	-157.0	13.8	184.6
Illicit market producer surplus	-251.5	23.2	298.0
Government savings	281.0	242.2	203.3

Note: Government savings are already covered as costs and benefits the tables above and should not be added to other costs and benefits. Source: QPC calculations.

G.6 Results

Cannabis decriminalisation is estimated to provide net benefits to Queensland, under the low, moderate and high responsiveness parameters. If producer and consumer surpluses are not valued, the estimated net benefits are between \$1,243 million and \$449 million (Table G.29).

Even without drug treatment cannabis decriminalisation provides net benefits of between, \$1076 million and \$282 million.

Including consumer and producer surpluses, net benefits are estimated at between \$1,243 million and \$2,146 million.



Table G.29 NPVs of option 1, cannabis decriminalisation, relative to the status quo, \$million

	Low	Moderate	High
Benefits without surpluses	1,577.1	1,577.1	1,577.1
Consumer surplus	0.0	346.2	692.5
Illicit producer surplus	0.0	502.0	1,004.0
Total benefits	1,577.1	2,425.3	3,273.5
Costs	334.2	731.1	1,128.0
Net benefits without drug treatment and surpluses	1,075.7	678.8	282.0
Net benefits without surpluses	1,242.9	846.0	449.1
Net benefits with surpluses	1,242.9	1,694.2	2,145.5

Note: All NPVs are in 2019 dollars.

Source: QPC calculations.

Legalising cannabis is estimated to provide \$2,285 million of net benefits with treatment and \$2,118 million without treatment, under the low responsiveness parameter (Table G.30). If consumption increased significantly as per the moderate and high parameters, net benefits are estimated at \$1,971 million and \$1,658 million, respectively.

Including consumer and producer surplus net benefits are estimated at \$2,182 million and up to \$3,420 million. The largest effect would be the loss of black-market producer surplus, between \$3.9 billion and \$3.7 billion. Most of the loss of black-market producer surplus would transfer to the government and legal producers.

Table G.30 NPVs of option 2, legalisation of cannabis, relative to the status quo, \$million

	Low	Moderate	High
Benefits without surpluses	2,603.2	2,563.9	2,524.6
Consumer surplus	148.8	550.8	952.7
Legal producer surplus	493.0	548.6	604.3
Taxation	3,161.6	3,518.3	3,875.0
Total benefits	6,406.6	7,181.6	7,956.6
Costs without surpluses	318.4	592.4	866.4
Illicit producer surplus	3,905.8	3,788.1	3,670.3
Total costs	4,224.2	4,380.5	4,536.7
Net benefits without drug treatment and surpluses	2,117.6	1,804.4	1,491.1
Net benefits without surpluses	2,284.7	1,971.5	1,658.2
Net benefits with surpluses	2,182.4	2,801.1	3,419.9

Note: All NPVs are in 2019 dollars.

Source: QPC calculations.

Legalising MDMA is estimated to provide \$114 million of net benefits to Queensland, under the low responsiveness parameter (Table G.31). If consumption increased significantly as per the moderate and high parameters net benefits are estimated at \$83 million and \$52 million, respectively. Excluding treatment has minimal effect on net benefits.



Including consumer and producer surplus net benefits are estimated at \$103 million and up to \$121 million. The largest effect would be the loss of black-market producer surplus, between \$188 million and \$178 million. Most of the loss of black-market producer surplus would transfer to legal producers and government via taxation.

Table G.31 NPVs of option 3, legalisation of MDMA, relative to the status quo, \$million

	Low	Moderate	High
Benefits without surpluses	120.8	128.7	136.6
Consumer surplus	5.9	22.0	38.0
Legal producer surplus	11.4	12.7	14.0
Taxation	159.5	177.5	195.5
Total benefits	297.6	340.8	384.0
Costs without surpluses	6.4	45.4	84.5
Illicit producer surplus	187.9	183.2	178.5
Total costs	194.3	228.6	262.9
Net benefits without drug treatment and surpluses	111.9	80.7	49.6
Net benefits without surpluses	114.4	83.3	52.1
Net benefits with surpluses	103.3	112.2	121.1

Note: All NPVs are in 2019 dollars.

Source: QPC calculations.

The benefits of decriminalising all drugs other than cannabis is less clear cut. For the moderate response scenario consumption net benefits are unambiguous—\$702 million (without surplus). If consumption fell benefits would be \$1,309 million (Table G.32). For the high demand response scenario, the benefits are more marginal (\$95 million without surpluses).

If consumer and producer surpluses are valued there are net benefits in all three scenarios (\$901, \$739 and \$577 million). A large proportion of high scenarios net benefits are profits to organised crime and might not be valued by other analyses (\$298 million).



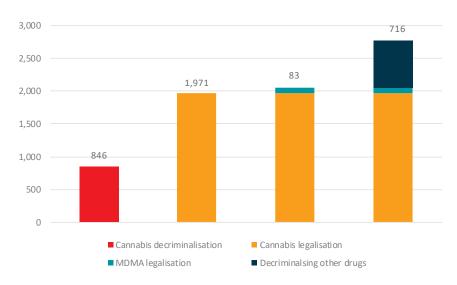
Table G.32 NPVs of option 4, decriminalisation of all drugs other than cannabis, relative to status quo, \$million

	Low	Moderate	High
Benefits without surpluses	1,043.0	1,043.0	1,043.0
Consumer surplus	-157.0	13.8	184.6
Illicit producer surplus	-251.5	23.2	298.0
Total benefits	634.5	1,080.1	1,525.7
Costs	-266.1	341.2	948.5
Net benefits without drug treatment and surpluses	1,157.4	550.1	-57.2
Net benefits without surpluses	1,309.2	701.9	94.6
Net benefits with surpluses	900.6	738.9	577.2

Note: All NPVs are in 2019 dollars. Source: QPC calculations.

If the full suite of reforms outlined and analysed were implemented the combined net benefits are estimated at \$2,771 million for the moderate scenarios.

Figure G.12 Net benefits from reform option, moderate scenarios, NPV \$million



Note: Decriminalisation of other drugs includes heroin, methamphetamines and cocaine in this figure. Cannabis decriminalisation and legalisation are mutually exclusive. Net benefits are without surpluses.

Source: QPC calculations.

Implications of not quantifying some effects

The net benefits for both decriminalisation and legalisation (to a greater extent) would increase if the effects of criminalisation, including stigmatisation, and legal and time costs were more fully quantified. Legalisation would also provide benefits from reduction in organised crime, violence and corruption, and these could be quite large. Improved technical efficiency from scale and professionalism would increase the producer surplus for legalisation.

The productivity effects of drug usage are not clear, but it is reasonable to assume they exist for some dependent users and would increase the costs of reform.



Incorporating substitution from one drug to another in the CBA, would result in higher net benefits, particularly for lower harm drugs such as cannabis and MDMA. Studies have shown some degree of substitutability between alcohol and cannabis. If legalisation and decriminalisation were associated with reductions in alcohol usage, this would imply additional benefits from less violent crime, drunk driving and the health impacts of alcoholism. Under a regulated framework, to the extent that drug users are responsive to changes in price, differential tax rates could be used to nudge consumers away from higher harm drugs and towards lower harm drugs.

The inability to quantify some effects is likely to introduce a larger downward bias in estimated net benefits for legalisation than decriminalisation. For both types of reform, it is likely that net benefits would be higher than suggested by the estimated results.

G.7 Comparisons with other studies

Sense Partners (2018) undertook an analysis on behalf of the New Zealand Drug Foundation. It estimated the impacts of two policies:

- Decriminalisation of all drugs—assuming in line with Portugal, no change in usage, a modest impact of a net social benefit of \$34 to \$84 million with no change in health policy and up to \$1 billion with additional health funding.
- Legalisation of cannabis use and supply—Net social benefits of \$10 to \$53 million were found with no health policy and up to \$963 million with a health policy. The analysis does not include the costs to people from effects such as stigma and imprisonment.

Two United Kingdom studies estimated there would be net benefits from a regulated legal market (Bryan et al. 2013b; Rolles 2009). Bryan et al. (2013b) considered the likely costs and benefits of 15, 20 and 40 per cent increases in cannabis consumption in England and Wales. They estimated net benefits of £253 million in 2009 for the mid-response scenario and £361 million for the low-response scenario. The high-response scenario was estimated to come at a net cost of £430 million. This was largely due to its assumption that crime was caused by cannabis use, resulting in a £569 million increase in costs. ²⁰⁶ The largest benefits were from savings in the criminal justice system and less criminalisation of users.

Transform Drug Policy Foundation (Rolles 2009) considered four hypothetical scenarios—the number of drugs users decreasing by 50 per cent, not changing, increasing by 50 per cent and increasing by 100 per cent. Regulating all drugs in England and Wales was estimated to provide net benefits of £13.9, £10.8, £7.7 or £4.6 billion relative to prohibition, in 2003-04. The study concluded regulation was a more cost-effective approach than prohibition.

In contrast to the previous studies, Shanahan and Ritter (2014) found that legalisation relative to the status quo would likely come at a net social cost in New South Wales. The status quo had an estimated net social benefit of \$294.6 million, while the legalised regulated proposed policy had a net social benefit of \$234.2 million. The study concluded there was no substantial difference between either policy.

Shanahan and Ritter (2014, p. 5) assumed a causal relationship and that legalisation increases youth cannabis use. The estimated resulting negative effect on educational attainment is large. This has a large impact with an estimated \$323 million decrease in educational attainment under the main legalisation scenario.

The analysis also assumed a market model with heavy regulation, under which costs (\$90.7 million) would increase from regulatory agencies (\$1 million), enforcement (\$4 million), fines (\$3.2 million), education (\$12.5 million) and personal licences (\$31.1 million) more than the reduction in enforcement costs of status quo prohibition (\$80.1 million). The difference in costs between the options for most health harms—cannabis use disorder, low

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²⁰⁶ The analysis concluded based on the literature that there is no statistically significant link between violent and acquisitive crime and cannabis use. Therefore, the low and mid-responses assumed small changes in crime of between -£15 and +£17 million.



birth weight, schizophrenia/psychosis and motor vehicle accidents were small—\$10.8, \$7.1, \$2.9 and \$3.7 million, respectively.

An ex-post analysis of Portugal's decriminalisation of all drugs estimated that the total social cost of drug use decreased 18 per cent (Gonçalves et al. 2015). This was mainly driven by reductions in indirect health costs (29 per cent), non-health related indirect costs (24 per cent) and non-health related direct costs including the criminal justice system (17 per cent). There was an increase in direct health costs of 9 per cent associated with providing prevention, treatment and harm reduction services.

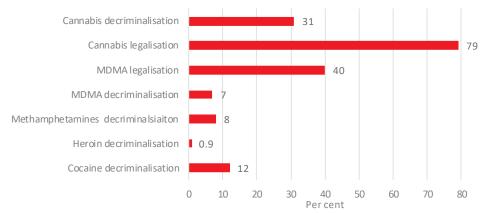
G.8 Sensitivity testing

Consumption

The extent to which drug use will change in response to the policy scenarios outlined and quantified above is inherently uncertain. The Commission has attempted to calculate costs and benefits based on credible changes in drug usage outlined in the literature and from experiences in other jurisdictions.

To provide measure of the robustness of estimated net benefits of each scenario we test how much drug consumption would need to increase for the policy provide no net benefits. For each of the following options the responsiveness of consumption to change in policy required to provide no net benefit (excluding changes in surpluses) is shown below in Figure G.13.

Figure G.13 Break-even point, increase in consumption required to provide no net benefits, not including surpluses



Note: Each scenario uses the high response assumption of –0.7 elasticity of demand. Source: OPC calculations.

If consumer and producer surpluses are included, the net benefits of:

- MDMA and cannabis legalisation increases with consumption
- decriminalising cannabis increases with consumption
- decriminalising ecstasy, methamphetamines and heroin decrease as consumption increases.

Violent crime

If we assumed cannabis and MDMA had causal relationships with violent crime, as per the assumptions used for other drugs, under the moderate demand response scenario, the additional costs for cannabis decriminalisation, cannabis legalisation and MDMA legalisation would be \$41 million, \$47 million and \$4 million, respectively. This would not affect the direction of net benefits of either option.



Prices

One of the key effects of prohibition is increased drug prices. If heroin were decriminalised and prices fell one third, there is estimated decreases in property crime of \$114 million and \$829 million in NPV terms, under the moderate scenario. This would result in net costs without surpluses of \$236 million for heroin and net benefits of \$1,335 million for methamphetamines.

If heroin consumption is less responsive, consistent with the low scenario, property crime would fall \$145 million a net benefit without surplus of \$80 million.

There would also be large losses in producer surplus associated with lower prices, of \$26 million and \$1,336 million, for heroin and methamphetamines for the moderate scenarios.

This illustrates that one of the key effects of high drugs prices is a transfer from property owners to drugs users to drug sellers via property crime. Whether higher prices result in net benefits depends on both the harms of the drug and elasticity of demand. Depending on the assumptions higher prices may result in net costs due to additional property crime or net benefits from reduced health costs.

Continued civil enforcement

The decriminalisation options consider a policy reform where the offence of use or possession ceases to be criminal and is no strongly longer enforced, rather than an option where it ceases to be a criminal offence and instead becomes an enforced civil offence. Imposing civil penalties would place additional costs on the justice system in terms of enforcement and on offenders in terms of stigmatisation, the payment of fines and time costs. Given these additional costs, such a scheme would only yield a greater net benefit if these civil penalties represented a significant additional deterrent, relative to no penalties.

For the cannabis decriminalisation option, enforcing civil sanctions and therefore incurring police and courts expenditure would still provide net benefits without surpluses of \$112 million for the moderate demand response scenarios and a net cost for the high scenario of \$187 million.

G.9 Conclusion

While use of illicit drugs has been relatively stable in Queensland between 2001 and 2016, drug-related harms increased. The rate of accidental drug-related deaths rose 144 per cent in Queensland, between 1997 and 2017.

Drugs are associated with many costs, including accidental drug-related deaths (\$1.3 billion in 2017–18), loss of quality of life (\$1.3 billion), hospitalisations (\$107 million), property crime (\$1.5 billion), violent crime (\$637 million) and drunk and drug driving (\$1.1 billion). Considerable resources are invested in enforcing laws against illicit drugs—around \$500 million.

The benefits of prohibition are directly related to the extent to which it reduces drug use. Evidence suggests that both decriminalisation and legalisation result in little or no increase in consumption.

Given lighter sanctions legalisation is more likely to result in increased consumption than decriminalisation and prices are likely to affect consumption. However, net benefits for cannabis and MDMA legalisation do not depend on consumption staying at current rates. Even assuming increased consumption, we estimate clear net benefits to legalisation.

Prohibition comes with costs beyond law enforcement. This includes personal effects of imprisonment, criminalisation, preventable overdoses from more harmful substances, spread of preventable diseases, reduced willingness to seek help, violence and corruption controlling the black market, acquisitive property crime and a lack of funding of health and drug treatment services.

The CBA considered four options for reforming the approach to drugs in Queensland. Decriminalisation and legalisation of cannabis are estimated to provide net benefits for Queensland. MDMA legalisation also provides



clear net benefits. The benefits of decriminalising drugs other than cannabis is more uncertain. Though only MDMA, cocaine, heroin and methamphetamines are quantified and these findings may not apply to lower harm unquantified drugs.

In NPV terms, we estimate for the low, moderate or high demand response scenarios from:

- cannabis decriminalisation, net benefits of \$1,243, \$846 or \$449 million
- cannabis legalisation, net benefits of \$2,285, \$1,973 or \$1,658 million
- MDMA legalisation, net benefits of \$114, \$83 or \$52 million
- decriminalising drugs other than cannabis, net benefits of \$1,309, \$702 or \$94 million.

Including consumer and producer benefits, we estimate from:

- cannabis decriminalisation, net benefits of \$1,243, \$1,694 or \$2,146 million
- cannabis legalisation, net benefits of \$2,182, \$2,801 or \$3,420 million
- MDMA legalisation, net benefits of \$103, \$112 or \$121 million
- decriminalising drugs other than cannabis drugs, net benefits of \$901, \$739 or \$577 million.

The magnitude of the benefits for legalisation is greater than decriminalisation. This is because decriminalisation provides some benefits in reducing the harm associated with enforcing possession laws but does not address the problems associated with the supply side.

Decriminalisation of drugs other than cannabis is likely to provide net benefits, so long as there is no large increase in the usage of high harm drugs such as methamphetamines and heroin. If there is no increase in consumption, net benefits are unambiguous. However, if there were to be significant increases the benefits are more marginal.

The benefits of decriminalising or legalising cannabis and MDMA are likely to be underestimated, as this analysis was unable to quantify some effects. If there is an increase in consumption, to the extent that this is a switch from higher harms drugs such as alcohol or opioids to lower harm drugs, there are likely to be additional net benefits.

The largest effects estimated in the legalisation options are increased taxation (for cannabis \$3.2 to \$3.9 billion and for MDMA \$160 to \$196 million) and decreased illicit producer surplus (for cannabis \$3.9 to \$3.7 billion and for MDMA \$188 to \$179 million).

There is evidence that drug treatment can provide large benefits by lowering drug-related harms. Criminalisation acts as a barrier to treatment. Net benefits accrue for all options with or without drug treatment for the moderate demand responses. Harm minimisation options such as opioid maintenance therapy, safe injecting rooms and pill testing could improve the net benefits of decriminalising other drugs by reducing the health costs. Though this CBA attempts to includes AOD treatments for higher harm drugs, it is likely these benefits (particularly for opioids) are underestimated due to limitations in the methods used and conservative assumptions. Other analyses with a greater focus on quantifying the benefits of treatments for specific drugs may find greater benefits for decriminalising and medically treating higher harm drugs.

If cannabis and MDMA legalisation and the decriminalisation of other drugs is implemented, we estimate the net benefits would be \$2.8 billion.

Generally, where products and activities which have negative externalities or present the risk of harms, like alcohol, tobacco, prescription drugs, motor vehicles, sky diving and horse riding, the sale and associated conduct is regulated rather than banned. This analysis illustrates that regulatory approaches used to managing the risks of negative externalities and risks are likely to be more beneficial than the prohibitionist approach currently practised.



G.10 Detailed tables

The results are outlined in greater detail below.

Option 1 Cannabis decriminalisation

Table G.33 Costs from cannabis decriminalisation relative to status quo, low responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Premature death	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Quality of life	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drug driving	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hospitalisations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Violent crime	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property crime	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Police supply expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Courts supply expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prisons supply expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Community corrections supply expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Personal imprisonment costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Personal arrest costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drug treatment costs	42.0	42.8	43.6	44.5	45.3	46.2	47.0	47.9	48.8	49.7
Total	42.0	42.8	43.6	44.5	45.3	46.2	47.0	47.9	48.8	49.7



Table G.34 Costs from cannabis decriminalisation relative to status quo, moderate responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Premature death	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9
Quality of life	7.8	7.9	8.0	8.2	8.4	8.5	8.7	8.8	9.0	9.2
Drug driving	3.2	3.2	3.3	3.3	3.4	3.5	3.5	3.6	3.7	3.7
Hospitalisations	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Violent crime	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property crime	12.5	12.8	13.0	13.3	13.5	13.8	14.0	14.3	14.6	14.8
Police supply expenditure	7.3	7.4	7.6	7.7	7.9	8.0	8.2	8.3	8.5	8.6
Courts supply expenditure	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
Prisons supply expenditure	6.7	6.8	7.0	7.1	7.2	7.4	7.5	7.7	7.8	8.0
Community corrections supply expenditure	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8
Personal imprisonment costs	3.0	3.0	3.1	3.2	3.2	3.3	3.3	3.4	3.5	3.5
Personal arrest costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drug treatment costs	42.0	42.8	43.6	44.5	45.3	46.2	47.0	47.9	48.8	49.7
Total	92.0	93.7	95.5	97.3	99.1	101.0	102.9	104.8	106.8	108.8



Table G.35 Costs from cannabis decriminalisation relative to status quo, high responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Premature death	15.1	15.3	15.6	15.9	16.2	16.5	16.8	17.2	17.5	17.8
Quality of life	15.5	15.8	16.1	16.4	16.7	17.0	17.3	17.7	18.0	18.3
Drug driving	6.3	6.4	6.5	6.7	6.8	6.9	7.1	7.2	7.3	7.5
Hospitalisations	0.7	0.8	8.0	8.0	0.8	0.8	0.8	8.0	0.9	0.9
Violent crime	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property crime	25.1	25.5	26.0	26.5	27.0	27.5	28.0	28.6	29.1	29.7
Police supply expenditure	14.6	14.9	15.1	15.4	15.7	16.0	16.3	16.6	16.9	17.2
Courts supply expenditure	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.0	2.1
Prisons supply expenditure	13.4	13.7	14.0	14.2	14.5	14.8	15.0	15.3	15.6	15.9
Community corrections supply expenditure	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.6
Personal imprisonment costs	6.0	6.1	6.2	6.3	6.4	6.6	6.7	6.8	6.9	7.1
Personal arrest costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drug treatment costs	42.0	42.8	43.6	44.5	45.3	46.2	47.0	47.9	48.8	49.7
Total	141.9	144.6	147.3	150.1	152.9	155.8	158.7	161.7	164.7	167.9

Table G.36 Benefits from cannabis decriminalisation relative to status quo, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Police possession expenditure	95.8	97.6	99.5	101.4	103.3	105.2	107.2	109.2	111.3	113.4
Courts possession expenditure	8.8	9.0	9.1	9.3	9.5	9.7	9.9	10.0	10.2	10.4
Prisons possession expenditure	19.5	19.9	20.3	20.7	21.0	21.4	21.8	22.3	22.7	23.1
Community corrections possession expenditure	2.0	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.4
Personal imprisonment costs	8.7	8.9	9.0	9.2	9.4	9.5	9.7	9.9	10.1	10.3
Personal arrest costs	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Drug treatment benefits	63.1	64.2	65.5	66.7	67.9	69.2	70.5	71.9	73.2	74.6
Total	198.4	202.1	205.9	209.8	213.7	217.8	221.9	226.1	230.3	234.7



Table G.37 Surpluses and government savings relative to the status quo, cannabis decriminalisation, low responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Consumer surplus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Producer surplus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Government savings	84.2	85.7	87.4	89.0	90.7	92.4	94.1	95.9	97.7	99.6

Note: Government savings are already covered as costs and benefits in the tables above and should not be added to other costs and benefits.

Source: QPC calculations.

Table G.38 Surpluses and government savings relative to the status quo, cannabis decriminalisation, moderate responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Consumer surplus	43.5	44.4	45.2	46.1	46.9	47.8	48.7	49.6	50.6	51.5
Producer surplus	63.1	64.3	65.5	66.8	68.0	69.3	70.6	72.0	73.3	74.7
Government savings	68.2	69.5	70.8	72.1	73.5	74.9	76.3	77.7	79.2	80.7

Note: Government savings are already covered as costs and benefits in the tables above and should not be added to other costs and benefits.

Source: QPC calculations.

Table G.39 Surpluses and government savings relative to the status quo, cannabis decriminalisation, high responsiveness \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Consumer surplus	87.1	88.7	90.4	92.1	93.9	95.6	97.4	99.3	101.1	103.0
Producer surplus	126.3	128.7	131.1	133.6	136.1	138.6	141.3	143.9	146.6	149.4
Government savings	52.2	53.2	54.2	55.3	56.3	57.4	58.4	59.5	60.7	61.8

Note: Government savings are already covered as costs and benefits in the tables above and should not be added to other costs and benefits



Option 2 Cannabis legalisation

Table G.40 Costs from cannabis legalisation relative to status quo, low responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Premature death	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4
Quality of life	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.5	0.5
Drug driving	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Hospitalisations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Violent crime	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property crime	-1.1	-2.3	-3.5	-4.8	-6.1	-6.2	-6.3	-6.5	-6.6	-6.7
Regulatory agency	1.7	1.7	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0
Drug treatment costs	42.0	42.8	43.6	44.5	45.3	46.2	47.0	47.9	48.8	49.7
Total	42.8	42.6	42.5	42.3	42.0	42.8	43.6	44.4	45.3	46.1

Source: QPC calculations.

Table G.41 Costs from cannabis legalisation relative to status quo, moderate responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Premature death	7.8	8.3	8.8	9.2	9.7	9.9	10.1	10.3	10.5	10.7
Quality of life	8.1	8.5	9.0	9.5	10.0	10.2	10.4	10.6	10.8	11.0
Drug driving	3.3	3.5	3.7	3.9	4.1	4.2	4.2	4.3	4.4	4.5
Hospitalisations	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Violent crime	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property crime	11.7	11.0	10.2	9.5	8.6	8.8	9.0	9.1	9.3	9.5
Regulatory agency	1.7	1.7	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.0
Drug treatment costs	42.0	42.8	43.6	44.5	45.3	46.2	47.0	47.9	48.8	49.7
Total	74.9	76.2	77.5	78.8	80.1	81.6	83.2	84.7	86.3	88.0



Table G.42 Costs from cannabis legalisation relative to status quo, high responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Premature death	15.6	16.4	17.3	18.2	19.1	19.4	19.8	20.2	20.5	20.9
Quality of life	16.0	16.9	17.8	18.7	19.6	20.0	20.4	20.8	21.2	21.6
Drug driving	6.5	6.9	7.2	7.6	8.0	8.1	8.3	8.4	8.6	8.8
Hospitalisations	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
Violent crime	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property crime	24.4	24.2	24.0	23.7	23.4	23.8	24.3	24.8	25.2	25.7
Regulatory agency	1.7	1.7	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.0
Drug treatment costs	42.0	42.8	43.6	44.5	45.3	46.2	47.0	47.9	48.8	49.7
Total	107.1	109.8	112.5	115.3	118.2	120.4	122.7	125.0	127.4	129.8

Table G.43 Benefits from cannabis legalisation relative to status quo, low responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Police possession expenditure	95.8	97.6	99.5	101.4	103.3	105.2	107.2	109.2	111.3	113.4
Courts possession expenditure	8.8	9.0	9.1	9.3	9.5	9.7	9.9	10.0	10.2	10.4
Prisons possession expenditure	19.5	19.9	20.3	20.7	21.0	21.4	21.8	22.3	22.7	23.1
Corrections possession expenditure	2.0	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.4
Police supply expenditure	-0.1	15.9	31.0	46.7	63.1	72.0	73.4	74.8	76.2	77.6
Courts supply expenditure	-0.0	1.9	3.7	5.6	7.6	8.7	8.8	9.0	9.2	9.4
Prisons supply expenditure	-0.1	14.7	28.6	43.1	58.2	66.4	67.7	69.0	70.3	71.6
Corrections supply expenditure	-0.0	1.5	3.0	4.4	6.0	6.9	7.0	7.1	7.2	7.4
Personal imprisonment costs	8.7	15.4	21.7	28.4	35.2	39.1	39.8	40.6	41.3	42.1
Personal arrest costs	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Reduction in premature death	3.0	6.1	9.4	12.8	16.3	16.6	16.9	17.2	17.6	17.9
Reduction in hospitalisations	0.1	0.3	0.5	0.6	0.8	0.8	0.8	0.8	0.9	0.9
Drug treatment benefits	63.1	64.2	65.5	66.7	67.9	69.2	70.5	71.9	73.2	74.6
Total	201.3	249.1	294.8	342.3	391.6	418.8	426.7	434.7	442.9	451.3



Table G.44 Benefits from cannabis legalisation relative to status quo, moderate responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Police possession expenditure	95.8	97.6	99.5	101.4	103.3	105.2	107.2	109.2	111.3	113.4
Courts possession expenditure	8.8	9.0	9.1	9.3	9.5	9.7	9.9	10.0	10.2	10.4
Prisons possession expenditure	19.5	19.9	20.3	20.7	21.0	21.4	21.8	22.3	22.7	23.1
Corrections possession expenditure	2.0	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.4
Police supply expenditure	-7.6	9.9	26.3	43.4	61.3	72.0	73.4	74.8	76.2	77.6
Courts supply expenditure	-0.9	1.2	3.2	5.2	7.4	8.7	8.8	9.0	9.2	9.4
Prisons supply expenditure	-7.0	9.1	24.3	40.1	56.6	66.4	67.7	69.0	70.3	71.6
Corrections supply expenditure	-0.7	0.9	2.5	4.1	5.8	6.9	7.0	7.1	7.2	7.4
Personal imprisonment costs	5.6	12.9	19.8	27.0	34.5	39.1	39.8	40.6	41.3	42.1
Personal arrest costs	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Reduction in premature death	3.3	6.8	10.4	14.2	18.2	18.5	18.9	19.2	19.6	19.9
Reduction in hospitalisations	0.2	0.3	0.5	0.7	0.9	0.9	0.9	0.9	1.0	1.0
Drug treatment benefits	63.1	64.2	65.5	66.7	67.9	69.2	70.5	71.9	73.2	74.6
Total	182.5	234.4	283.9	335.4	389.1	420.8	428.7	436.8	445.0	453.4



Table G.45 Benefits from cannabis legalisation relative to status quo, high responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Police possession expenditure	95.8	97.6	99.5	101.4	103.3	105.2	107.2	109.2	111.3	113.4
Courts possession expenditure	8.8	9.0	9.1	9.3	9.5	9.7	9.9	10.0	10.2	10.4
Prisons possession expenditure	19.5	19.9	20.3	20.7	21.0	21.4	21.8	22.3	22.7	23.1
Corrections possession expenditure	2.0	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.4
Police supply expenditure	-15.1	3.9	21.6	40.1	59.6	72.0	73.4	74.8	76.2	77.6
Courts supply expenditure	-1.8	0.5	2.6	4.8	7.2	8.7	8.8	9.0	9.2	9.4
Prisons supply expenditure	-13.9	3.6	19.9	37.0	55.0	66.4	67.7	69.0	70.3	71.6
Corrections supply expenditure	-1.4	0.4	2.1	3.8	5.7	6.9	7.0	7.1	7.2	7.4
Personal imprisonment costs	2.5	10.4	17.9	25.7	33.8	39.1	39.8	40.6	41.3	42.1
Personal arrest costs	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Reduction in premature death	3.6	7.4	11.4	15.6	20.0	20.4	20.8	21.2	21.6	22.0
Reduction in hospitalisations	0.2	0.4	0.6	0.8	1.0	1.0	1.0	1.0	1.1	1.1
Drug treatment benefits	63.1	64.2	65.5	66.7	67.9	69.2	70.5	71.9	73.2	74.6
Total	163.7	219.8	272.9	328.5	386.7	422.8	430.7	438.9	447.1	455.6

Table G.46 Surpluses and government savings relative to the status quo, cannabis legalisation, low responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Consumer surplus	4.8	9.8	15.0	20.3	25.9	26.4	26.9	27.4	27.9	28.5
Illicit producer surplus	-125.8	-256.5	-392.5	-533.7	-680.4	-693.2	-706.3	-719.6	-733.2	-747.0
Legal producer surplus	15.9	32.4	49.5	67.4	85.9	87.5	89.2	90.8	92.5	94.3
Taxation	101.8	207.7	317.7	432.0	550.7	561.1	571.7	582.5	593.5	604.7
Government savings	184.3	326.0	470.0	619.7	775.2	806.4	821.6	837.1	852.9	869.0

Note: Government savings are already covered as costs and benefits in the tables above and should not be added to other costs and benefits. Government savings include taxation.



Table G.47 Surpluses and government savings relative to the status quo, cannabis legalisation, moderate responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Consumer surplus	50.1	57.8	65.7	74.0	82.6	84.1	85.7	87.4	89.0	90.7
Illicit producer surplus	-73.7	-215.6	-363.9	-518.7	-680.4	-693.2	-706.3	-719.6	-733.2	-747.0
Legal producer surplus	17.5	35.8	54.9	74.9	95.7	97.5	99.4	101.2	103.1	105.1
Taxation	112.3	229.6	352.2	480.2	613.7	625.3	637.1	649.1	661.4	673.8
Government savings	178.3	334.7	494.1	660.5	834.1	870.2	886.6	903.4	920.4	937.8

Note: Government savings are already covered as costs and benefits in the tables above and should not be added to other costs and benefits. Government savings include taxation.

Source: QPC calculations.

Table G.48 Surpluses and government savings relative to the status quo, cannabis legalisation, high responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Consumer surplus	95.4	105.7	116.5	127.6	139.3	141.9	144.6	147.3	150.1	152.9
Illicit producer surplus	-21.7	-174.7	-335.3	-503.8	-680.4	-693.2	-706.3	-719.6	-733.2	-747.0
Legal producer surplus	19.1	39.2	60.3	82.4	105.5	107.5	109.6	111.6	113.7	115.9
Taxation	122.8	251.6	386.7	528.4	676.8	689.5	702.5	715.8	729.3	743.0
Government savings	172.4	343.5	518.1	701.3	893.1	934.1	951.7	969.6	987.9	1006.5

Note: Government savings are already covered as costs and benefits in the tables above and should not be added to other costs and benefits. Government savings include taxation.



Option 3 MDMA legalisation

Table G.49 Costs from MDMA legalisation relative to status quo, low responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Premature death	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Quality of life	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Drug driving	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hospitalisations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Violent crime	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property crime	-0.1	-0.2	-0.4	-0.5	-0.6	-0.6	-0.6	-0.6	-0.7	-0.7
Regulatory agency	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
Drug treatment costs	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
Total	1.0	1.0	0.9	0.8	8.0	8.0	8.0	8.0	8.0	0.8

Source: QPC calculations.

Table G.50 Costs from MDMA legalisation relative to status quo, moderate responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Premature death	1.5	1.6	1.7	1.8	1.9	1.9	2.0	2.0	2.1	2.1
Quality of life	1.6	1.7	1.8	1.9	2.0	2.0	2.0	2.1	2.1	2.2
Drug driving	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Hospitalisations	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Violent crime	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property crime	1.2	1.1	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Regulatory agency	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
Drug treatment costs	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
Total	5.6	5.7	5.9	6.1	6.2	6.3	6.4	6.6	6.7	6.8



Table G.51 Costs from MDMA legalisation relative to status quo, high responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Premature death	3.1	3.2	3.4	3.6	3.7	3.8	3.9	4.0	4.0	4.1
Quality of life	3.2	3.3	3.5	3.7	3.9	3.9	4.0	4.1	4.2	4.2
Drug driving	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Hospitalisations	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Violent crime	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property crime	2.4	2.4	2.4	2.4	2.3	2.4	2.4	2.5	2.5	2.6
Regulatory agency	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
Drug treatment costs	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
Total	10.2	10.5	10.9	11.3	11.6	11.9	12.1	12.3	12.5	12.8



Table G.52 Benefits from MDMA legalisation relative to status quo, low responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Police possession expenditure	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.2
Courts possession expenditure	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Prisons possession expenditure	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Corrections possession expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Police supply expenditure	-0.0	0.3	0.5	8.0	1.0	1.2	1.2	1.2	1.2	1.3
Courts supply expenditure	-0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Prisons supply expenditure	-0.0	0.2	0.5	0.7	0.9	1.1	1.1	1.1	1.1	1.2
Corrections supply expenditure	-0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Personal imprisonment costs	0.2	0.3	0.4	0.5	0.6	0.7	0.7	0.7	0.7	0.7
Personal arrest costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduction in premature death	2.4	4.8	7.4	10.0	12.8	13.1	13.3	13.5	13.8	14.1
Reduction in hospitalisations	0.1	0.2	0.4	0.5	0.6	0.6	0.7	0.7	0.7	0.7
Drug treatment benefits	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1
Total	6.1	9.4	12.8	16.3	19.9	20.6	21.0	21.4	21.8	22.2



Table G.53 Benefits from MDMA legalisation relative to status quo, moderate responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Police possession expenditure	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.2
Courts possession expenditure	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Prisons possession expenditure	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Corrections possession expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Police supply expenditure	-0.1	0.2	0.4	0.7	1.0	1.2	1.2	1.2	1.2	1.3
Courts supply expenditure	-0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Prisons supply expenditure	-0.1	0.1	0.4	0.7	0.9	1.1	1.1	1.1	1.1	1.2
Corrections supply expenditure	-0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Personal imprisonment costs	0.1	0.2	0.4	0.5	0.6	0.7	0.7	0.7	0.7	0.7
Personal arrest costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduction in premature death	2.6	5.3	8.2	11.2	14.3	14.5	14.8	15.1	15.4	15.7
Reduction in hospitalisations	0.1	0.3	0.4	0.6	0.7	0.7	0.7	0.7	0.8	0.8
Drug treatment benefits	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1
Total	6.0	9.7	13.4	17.3	21.4	22.2	22.6	23.0	23.5	23.9



Table G.54 Benefits from cannabis legalisation relative to status quo, high responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Police possession expenditure	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.2
Courts possession expenditure	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Prisons possession expenditure	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Corrections possession expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Police supply expenditure	-0.2	0.1	0.4	0.7	1.0	1.2	1.2	1.2	1.2	1.3
Courts supply expenditure	-0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Prisons supply expenditure	-0.2	0.1	0.3	0.6	0.9	1.1	1.1	1.1	1.1	1.2
Corrections supply expenditure	-0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Personal imprisonment costs	0.1	0.2	0.3	0.4	0.6	0.7	0.7	0.7	0.7	0.7
Personal arrest costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduction in premature death	2.9	5.9	9.0	12.3	15.7	16.0	16.3	16.6	17.0	17.3
Reduction in hospitalisations	0.1	0.3	0.4	0.6	0.8	0.8	0.8	0.8	0.8	0.9
Drug treatment benefits	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1
Total	6.0	10.0	14.1	18.4	22.9	23.8	24.2	24.7	25.1	25.6

Table G.55 Surpluses and government savings relative to the status quo, MDMA legalisation, low responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Consumer surplus	0.2	0.4	0.6	8.0	1.0	1.1	1.1	1.1	1.1	1.1
Illicit producer surplus	-9.0	-14.3	-19.8	-25.6	-31.5	-32.1	-32.7	-33.3	-33.9	-34.6
Legal producer surplus	0.4	0.7	1.1	1.6	2.0	2.0	2.1	2.1	2.1	2.2
Taxation	5.1	10.5	16.0	21.8	27.8	28.3	28.8	29.4	29.9	30.5
Government savings	6.6	12.6	18.8	25.3	32.0	32.9	33.5	34.2	34.8	35.5

Note: Government savings are already covered as costs and benefits in the tables above and should not be added to other costs and benefits. Government savings include taxation.



Table G.56 Surpluses and government savings relative to the status quo, cannabis legalisation, moderate responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Consumer surplus	2.0	2.3	2.6	3.0	3.3	3.4	3.4	3.5	3.6	3.6
Illicit producer surplus	-7.0	-12.7	-18.7	-25.0	-31.5	-32.1	-32.7	-33.3	-33.9	-34.6
Legal producer surplus	0.4	0.8	1.3	1.7	2.2	2.3	2.3	2.3	2.4	2.4
Taxation	5.7	11.6	17.8	24.2	31.0	31.5	32.1	32.7	33.4	34.0
Government savings	6.8	13.5	20.4	27.6	35.1	36.1	36.8	37.5	38.2	38.9

Note: Government savings are already covered as costs and benefits in the tables above and should not be added to other costs and benefits. Government savings include taxation.

Source: QPC calculations.

Table G.57 Surpluses and government savings relative to the status quo, cannabis legalisation, high responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Consumer surplus	3.8	4.2	4.6	5.1	5.6	5.7	5.8	5.9	6.0	6.1
Illicit producer surplus	-4.9	-11.1	-17.6	-24.4	-31.5	-32.1	-32.7	-33.3	-33.9	-34.6
Legal producer surplus	0.4	0.9	1.4	1.9	2.4	2.5	2.5	2.6	2.6	2.7
Taxation	6.2	12.7	19.5	26.7	34.1	34.8	35.4	36.1	36.8	37.5
Government savings	7.0	14.3	21.9	29.9	38.2	39.3	40.1	40.8	41.6	42.4

Note: Government savings are already covered as costs and benefits in the tables above and should not be added to other costs and benefits. Government savings include taxation.



Option 4 Decriminalisation of all drugs other than cannabis

Table G.58 Costs from the decriminalisation of drugs other than cannabis relative to status quo, low responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Premature death	-18.9	-19.2	-19.6	-19.9	-20.3	-20.7	-21.1	-21.5	-21.9	-22.3
Quality of life	-19.4	-19.8	-20.2	-20.5	-20.9	-21.3	-21.7	-22.1	-22.6	-23.0
Drug driving	-2.4	-2.4	-2.5	-2.5	-2.6	-2.6	-2.7	-2.7	-2.8	-2.8
Hospitalisations	-0.9	-0.9	-1.0	-1.0	-1.0	-1.0	-1.0	-1.1	-1.1	-1.1
Violent crime	-5.9	-6.0	-6.1	-6.2	-6.3	-6.4	-6.6	-6.7	-6.8	-6.9
Property crime	-19.9	-20.2	-20.6	-21.0	-21.4	-21.8	-22.2	-22.6	-23.1	-23.5
Police supply expenditure	-1.7	-1.7	-1.8	-1.8	-1.8	-1.9	-1.9	-1.9	-2.0	-2.0
Courts supply expenditure	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Prisons supply expenditure	-1.6	-1.6	-1.6	-1.7	-1.7	-1.7	-1.8	-1.8	-1.8	-1.9
Community corrections supply expenditure	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Personal imprisonment costs	-0.7	-0.7	-0.7	-0.7	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8
Personal arrest costs	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
Drug treatment costs	38.2	38.9	39.6	40.4	41.1	41.9	42.7	43.5	44.3	45.2
Total	-33.5	-34.1	-34.7	-35.4	-36.1	-36.7	-37.4	-38.1	-38.9	-39.6



Table G.59 Costs from decriminalisation of drugs other than cannabis relative to status quo, moderate responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Premature death	1.5	1.5	1.5	1.6	1.6	1.6	1.7	1.7	1.7	1.7
Quality of life	1.5	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.8	1.8
Drug driving	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Hospitalisations	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Violent crime	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property crime	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.5	1.5
Police supply expenditure	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Courts supply expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prisons supply expenditure	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Community corrections supply expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Personal imprisonment costs	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Personal arrest costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drug treatment costs	38.2	38.9	39.6	40.4	41.1	41.9	42.7	43.5	44.3	45.2
Total	42.9	43.7	44.5	45.4	46.2	47.1	48.0	48.9	49.8	50.8



Table G.60 Costs from decriminalisation of drugs other than cannabis relative to status quo, high responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Premature death	21.8	22.2	22.6	23.1	23.5	24.0	24.4	24.9	25.3	25.8
Quality of life	22.5	22.9	23.3	23.8	24.2	24.7	25.1	25.6	26.1	26.6
Drug driving	2.6	2.6	2.7	2.7	2.8	2.9	2.9	3.0	3.0	3.1
Hospitalisations	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.3
Violent crime	5.9	6.0	6.1	6.2	6.3	6.4	6.6	6.7	6.8	6.9
Property crime	22.4	22.8	23.2	23.7	24.1	24.6	25.0	25.5	26.0	26.5
Police supply expenditure	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.2	2.3
Courts supply expenditure	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
Prisons supply expenditure	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1
Community corrections supply expenditure	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Personal imprisonment costs	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9
Personal arrest costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drug treatment costs	38.2	38.9	39.6	40.4	41.1	41.9	42.7	43.5	44.3	45.2
Total	119.3	121.5	123.8	126.2	128.6	131.0	133.4	136.0	138.5	141.1

Table G.61 Benefits from the decriminalisation of drugs other than cannabis, relative to status quo, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Police possession expenditure	52.4	53.4	54.4	55.4	56.4	57.5	58.6	59.7	60.8	62.0
Courts possession expenditure	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7
Prisons possession expenditure	10.7	10.9	11.1	11.3	11.5	11.7	11.9	12.2	12.4	12.6
Community corrections possession expenditure	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.3	1.3
Personal imprisonment costs	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6
Personal arrest costs	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Drug treatment benefits	57.3	58.3	59.4	60.6	61.7	62.9	64.0	65.3	66.5	67.7
Total	131.2	133.7	136.2	138.8	141.4	144.0	146.8	149.5	152.3	155.2



Table G.62 Surpluses and government savings relative to the status quo, decriminalisation of drugs other than cannabis, low responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Consumer surplus	-19.7	-20.1	-20.5	-20.9	-21.3	-21.7	-22.1	-22.5	-22.9	-23.4
Producer surplus	-31.6	-32.2	-32.8	-33.5	-34.1	-34.7	-35.4	-36.1	-36.7	-37.4
Government savings	35.3	36.0	36.7	37.4	38.1	38.8	39.5	40.3	41.0	41.8

Note: Government savings are already covered as costs and benefits in the tables above and should not be added to other costs and benefits.

Source: QPC calculations.

Table G.63 Surpluses and government savings relative to the status quo, decriminalisation of drugs other than cannabis, moderate responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Consumer surplus	1.7	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.1
Producer surplus	2.9	3.0	3.0	3.1	3.1	3.2	3.3	3.3	3.4	3.5
Government savings	30.5	31.0	31.6	32.2	32.8	33.4	34.1	34.7	35.4	36.0

Note: Government savings are already covered as costs and benefits in the tables above and should not be added to other costs and benefits.

Source: QPC calculations.

Table G.64 Surpluses and government savings relative to the status quo, decriminalisation of drugs other than cannabis, high responsiveness, \$million

Effect	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Consumer surplus	23.2	23.7	24.1	24.6	25.0	25.5	26.0	26.5	27.0	27.5
Producer surplus	37.5	38.2	38.9	39.6	40.4	41.2	41.9	42.7	43.5	44.3
Government savings	25.6	26.1	26.5	27.1	27.6	28.1	28.6	29.1	29.7	30.3

Note: Government savings are already covered as costs and benefits in the tables above and should not be added to other costs and benefits



Appendix H: The existing regulatory framework for licit and illicit drugs

The existing system of legal production and regulation

There is an extensive system of production, distribution, use and possession of controlled drugs in Australia and overseas—the licit (within the law) drug market. Any reforms to illicit drugs laws involving the supply of drugs would likely build on the existing framework and extensions to it.

The legal system of supply of controlled drugs is intended to meet the demand from medical and scientific uses:

Control is exercised over 130 narcotic drugs, mainly natural products, such as opium and its derivatives, morphine, codeine and heroin, but also synthetic drugs, such as methadone and pethidine, as well as cannabis and coca leaf. Parties to the 1961 Convention undertake to limit the production, manufacture, export, import, distribution and stocks of, trade in and use and possession of the controlled drugs so that they are used exclusively for medical and scientific purposes. The production and distribution of controlled substances must be licensed and supervised, and Governments must provide estimates and statistical returns to International Narcotics Control Board on the forms supplied for that purpose, on the quantities of drugs required, manufactured and utilized and the quantities seized by police and customs officers. (INCB n.d.)

The regulatory functions of the Australian government and state and territory governments provide a framework for establishing licences and national manufacturing quotas to ensure the level of manufacture (and production of cannabis) does not exceed that required to meet domestic medical and scientific needs. The Office of Drug Control liaises with state and territory governments and establishes the domestic requirements for cannabis (and all narcotic drugs) and furnishes these to the INCB who determines whether the quantities are acceptable for Australia (The Office of Drug Control 2016).

INCB (2018b) provides information on Australia's production or manufacture of controlled narcotic substances, use, exports and imports. Production or manufacture of controlled narcotic substances is linked to the cultivation of cannabis and poppy (Table H.1). A large share of domestically produced controlled narcotic substances is exported.

There is no significant production or manufacturing of controlled psychotropic substances in Australia, although there is substantial consumption requirements for medical and scientific purposes (INCB 2018c).



Table H.1 Select narcotic drugs requirements and manufacturing, Australia, 2016

Substance	Production or manufacture (kg)	Consumption (kg)^	Export (kg)
Cannabis		20	
Cocaine		7	
Codeine	37,937	214	23,610
CPS Total anhydrous codeine alkaloid	17,374		25,899
CPS Total anhydrous morphine alkaloid	57,888		31,677
CPS Total anhydrous oripavine alkaloid	31,449		19,847
CPS Total anhydrous thebaine alkaloid	130,148		110,190
Hydromorphone		70	
Methadone		782	1
Morphine	45,537	704	470
Oxycodone		2,480	
Pethidine		34	14
Thebaine	39,890		36,208

Notes: ^ Actuals.

Source: INCB 2018b, pp. 319-321.

Industrial cannabis

The Narcotic Drugs Act 1967 (Cth) provides the legislative framework for licensing the cultivation of cannabis plants, the production of cannabis, and the manufacture of drugs. In Queensland, the Drugs Misuse Act 1986 (Qld) regulates the production of cannabis fibre and fibre products and seed and seed products (Box H.1). In March 2018, the Drugs Misuse Act 1986 (Qld) was amended to allow for the growing of industrial cannabis seeds for food for human consumption.

Medicinal cannabis

Amendments to the *Narcotic Drugs Act 1967* (Cth) in 2016 introduced a licensing and permit system for cannabis cultivation and production for medicinal purposes (the medicinal cannabis scheme). Under the scheme, businesses can apply for a licence to cultivate cannabis for medicinal purposes, to manufacture medicinal cannabis products or to conduct medicinal cannabis related research.

On the demand side, medicinal cannabis products (as therapeutic goods) are supplied in accordance with the provisions of the *Therapeutic Goods Act 1989* (Cth). Therapeutic goods must also comply with relevant state/territory drug and poisons legislation. States and territories are responsible for the distribution of therapeutic goods through pharmacies.



Box H.1 Production of industrial cannabis in Queensland

The commercial production of industrial cannabis is legal in Queensland. Industrial cannabis is specifically bred to have tetrahydrocannabinol (THC) levels of no more than 1 per cent and does not have the psychoactive properties that marijuana does. Fibre can be produced from the stem and oil can be extracted from the seed. Fibre and oil can be processed to make cosmetics, building materials, paper and textiles.

The development of a hemp industry in Queensland began in 1998 with the amendment of the *Drugs Misuse Act 1986* (Qld) to allow some controlled field trials and plant breeding research. The trial period was extended through to 2002 when the *Drugs Misuse Act 1986* (Qld) was further amended to allow for growing, processing and marketing of industrial cannabis for use as commercial fibre and seed products and their derivatives, other than as food and for research and for related research.

The entire industrial cannabis industry in Queensland is presently very small, currently occupying approximately 30 hectares of land predominantly in North Queensland on the Atherton Tableland.

Part 5(B) of the *Drugs Misuse Act 1986* (Qld) and Part 4 of the *Drugs Misuse Regulation 1987* (Qld) provide the legal framework. Legal commercial production includes:

- · the processing and marketing of, and trade in, industrial cannabis fibre and fibre products
- the processing and marketing of, and trade in, industrial cannabis seed and seed products for purposes that
 - include supplying industrial cannabis seed to people who hold cannabis research licences or medicinal cannabis licences under the *Narcotic Drugs Act 1967* (Cth) to use as allowed under that Act: but
 - otherwise, do not include, directly or indirectly, producing anything for administration to, or smoking by, a person (see Part 5(B) of the *Drugs Misuse Act 1986* (Qld) and Part 4 of the *Drugs Misuse Regulation 1987* (Qld)).

Part 5(B) provides for two types of licences:

- grower licence—to produce industrial cannabis fibre and seed; supply industrial cannabis fibre and seed to authorised persons; and produce industrial cannabis seed for food products
- research licence (categories 1 and 2)—to possess industrial cannabis plants and seed for research purposes; conduct breeding programs and other research activities; and deal with higher level THC industrial cannabis.

Source: Department of Agriculture and Fisheries 2019; Queensland Government 2018a; Department of Agriculture and Fisheries 2018.



The Queensland controls around medicinal cannabis balance allowing treatment with medicinal cannabis and the necessary controls to ensure medicinal cannabis products are not used illegally. Medicinal cannabis is only legal if prescribed by a doctor with the necessary state and Commonwealth authority/approvals.

The Health (Drugs and Poisons) Regulation 1996 (Qld) prescribes controls over the possession, supply, administration and other activities for substances listed in the Standard for the Uniform Scheduling of Medicines and Poisons, including medicinal cannabis.

Access is restricted to appropriate patients with medical conditions where there is evidence to support its therapeutic use. A patient living in Queensland must access medicinal cannabis through a doctor who is authorised under the Special Access or Authorised Prescriber Scheme administered by the Commonwealth Therapeutic Goods Administration. In Queensland, all doctors can prescribe Schedule 4 - cannabidiol (CBD) only products without a Queensland approval. Specialist medical practitioners (including specialist general practitioners) can prescribe Schedule 8 - products containing tetrahydrocannabinol (THC) without a Queensland approval (Queensland Government n.d.; Queensland Health n.d.; Therapeutic Goods Administration 2018).

Poppy

The sap of the opium poppy produces the pain-relieving drug opium. The sap inside the capsule of the opium poppy contains alkaloids such as morphine, codeine and thebaine (alkaloids are compounds produced by plants that can have physiological effects on humans) (Parliamentary Library and Information Service (Victoria) 2014, p. 2).

Opium poppies are grown legally for the licit pharmaceutical industry and illegally for the illicit drugs trade. The main countries growing poppies for the licit market are Australia, Spain, Turkey, France and India (Parliamentary Library and Information Service (Victoria) 2014, p. 2).

Tasmania has had a commercial poppy industry since the 1960s, when the first commercial crop was planted (Martinello 2018). Some components of the regulatory framework and policies that support or provide enforcement, includes:

- Licences to grow opium poppies are issued to farmers only after they have been contracted (by one of the licensed companies) to grow and distribute the crop to a licensed manufacturer.
- Farmers must obtain a security clearance from Tasmania Police and provide a detailed plan of the cultivation site.
- Prevention of diversion to illicit markets occurs through a number of activities. These include
 - property assessments by the Poppy Advisory and Control Board (PACB) field officers along with grower background checks by Tasmania Police at time of licensing
 - general surveillance and reporting by growers, harvest operators and company field officers, of suspicious activity
 - investigation of thefts, apprehension and prosecution of offenders and intelligence by a special Tasmania
 Police Drug Bureau Task Force
 - coordination of security efforts by the PACB (Transform Drug Policy Foundation 2009, p. 198).

In 2014, Victoria introduced a licensing scheme to cultivate alkaloid poppies and process poppy straw (see *Drugs, Poisons and Controlled Substances (Poppy Cultivation and Processing) Amendment Act 2014* (Vic)). The NSW Government's Poppy Industry Bill 2016 (NSW) and associated *Poppy Industry Regulation 2017* (NSW) enabled a commercial alkaloid poppy industry to operate in NSW. The poppy industry has also recently expanded to South Australia and the Northern Territory.



Appendix I: Illicit drugs reform in overseas jurisdictions

In many jurisdictions the medicinal use of some drugs has been legalised and regulated, including cannabis in Queensland. Australian jurisdictions have implemented a mixture of de jure and de facto decriminalisation of recreational use. In Queensland the first cannabis possession charge is decriminalised.

Cannabis was effectively decriminalised in 1986 in South Australia, with the introduction of a cannabis expiation scheme with the cultivation or possession of cannabis attracting fines of \$50 to \$150. If paid it would not be dealt with by a court, would not constitute an admission of guilt and not amount to a criminal conviction (Manderson 1993, p. 192). In 1992 the ACT Government became the second jurisdiction in Australia to decriminalise the possession and cultivation of small quantities of cannabis (Manderson 1993, p. 204).

There is a growing trend towards decriminalisation and legalisation of the recreational use of drugs. In at least twelve European countries minor cannabis possession is not punishable by imprisonment (EMCDDA n.d.). Portugal decriminalised possession of all drugs in 2001. The Netherlands undertook a de facto decriminalisation in the 1970s. Today coffeeshops are licensed by municipalities to retail cannabis and tolerated so long as they adhere to criteria published by the public prosecutor, however the production of the product is not legal.

Twelve American jurisdictions—Washington, Oregon, Colorado, Nevada, Alaska, Michigan, Vermont, Massachusetts, Maine, California, Illinois and Washington DC—have created legal and regulated markets and a further fifteen have decriminalised possession (Lopez 2018, 2019). Uruguay and Canada have also legalised cannabis for recreational purposes and Jamaica for religious reasons.

It is now possible to travel North America's west coast from the Arctic Circle in Canada to Mexico's southern border without leaving a jurisdiction where cannabis possession is legal (Rolles 2018). In Argentina, Mexico and South Africa courts have ruled that criminalising cannabis use is unconstitutional.

Reform activity for other types of drugs has also occurred, but to a lesser extent. Bolivia legalised coca and Columbia and Peru have decriminalised it (Farah 2019). Recently the people of Denver voted to decriminalise psilocybin (or magic mushrooms) (Owran 2019).

In response to the spread of HIV infection Switzerland has operated injection rooms since the 1990s and this enjoys popular support (Gouverneur 2018). A number of countries (including the United Kingdom, The Netherlands and Canada) now prescribe heroin for use under medical supervision (Transform drugs 2019).

Many jurisdictions are currently considering and debating drug decriminalisation and legalisation. The New Zealand Government has announced it will hold a referendum in 2020 (Roy 2018). In Luxembourg the government has announced it will legalise and regulate recreational cannabis with reducing crime a key rationale (Luxembourg Government 2018).

Table I.1 below lists decriminalisation and legalisation reforms in overseas jurisdictions. A case study on recent Canadian reforms is then provided.



Table I.1 Examples of overseas drug reform efforts

Jurisdiction	Year	Reform
Colorado	2012	Legalised possession and supply of cannabis
Washington	2012	Legalised possession and supply of cannabis
Oregon	2014	Legalised possession and supply of cannabis
Alaska	2014	Legalised possession and supply of cannabis
Oregon	2014	Legalised possession and supply of cannabis
California	2018	Legalised possession and supply of cannabis
Nevada	2016	Legalised possession and supply of cannabis
Massachusetts	2016	Legalised possession and supply of cannabis
Maine	2016	Legalised possession and supply of cannabis
Michigan	2018	Legalised possession and supply of cannabis
Illinois	2019	Legalised possession and supply of cannabis
Washington D.C.	2015	Legalised possession and supply of cannabis
Guam	2019	Legalised possession and supply of cannabis
15 other US states		Decriminalised use/possession of cannabis
Canada	2018	Legalised possession and supply of cannabis. Medically supervised heroin injecting.
Uruguay	2013	Legalised possession and supply of cannabis
Bolivia	2009	Legalised supply and possession of coca
Spain	2001	Legalised consumption, growing and cannabis social clubs, however commercial production and sale remain illegal
Netherlands	1974	Retail but not wholesale cannabis sales 'de facto' allowed through approved outlets. Possession of small quantities of other drugs is generally unenforced, for example half a gram of cocaine. One dose of 'hard' drugs not prosecuted. Medically supervised heroin injecting.
Chile	2005	All private drug use/possession is unpunished. Thresholds between trafficking and personal use determined by a judge.
Croatia	2012	All drug use/possession decriminalised. Drug use per se is not regulated by the law but administrative regulations apply for public usage.
Czech Republic	2009	All drug use/possession decriminalised. Fines of up to 15,000 Czech korunas.
Mexico	2009	All drug use/possession decriminalised, however quantities are ambiguous. In 2018 the Supreme Court ruled the ban on use of cannabis was unconstitutional and a new government has introduced a bill to legalise recreational cannabis use.
Peru	2003	Possession of small quantities of cannabis, cocaine, opium and MDMA are not punishable. However, police practices may not reflect this.
Portugal	2001	All drug use/possession decriminalised



Jurisdiction	Year	Reform
Slovenia		All drug use/possession decriminalised. Fines up to 800 euros. It is a misdemeanour rather than a crime.
Argentina	2009	Decriminalised use/possession of cannabis by order of the supreme court
Armenia		Decriminalised use/possession of cannabis
Austria	2016	Decriminalised use/possession of cannabis
Belgium	2003	Decriminalised use/possession of cannabis
Brazil		Decriminalised use/possession of cocaine & cannabis
Columbia	1994	Legalised possession of 1 gram of cocaine. Decriminalised use/possession of cannabis.
Costa Rica		Use/possession of cannabis de facto decriminalised
Ecuador		Decriminalised use/possession of cannabis
Estonia		Decriminalised use/possession of cannabis
France	2018	Depenalised use/possession of cannabis to 200 euro fine
Georgia	2018	Legal possession and consumption but not sale of cannabis through a constitutional court decision.
Germany		Authorities not required to prosecute possession of a minor amount
India		Illegal but exceptions are made for spelling and consuming bhang
Israel		Decriminalised use/possession of cannabis
Italy		Decriminalised use/possession of cannabis
Jamaica	2015	Decriminalised use/possession of cannabis. Legalised cannabis use for religious purposes.
Luxembourg	2001	Decriminalised use/possession of cannabis
Paraguay	1988	Decriminalised use/possession of cannabis
South Africa	2018	A Constitutional Court decision legalised cannabis consumption by adults in private places
Switzerland	1990s	Decriminalised use/possession of cannabis. Medically supervised heroin injecting.
UK		Medically supervised heroin injecting.

Note: Amounts or thresholds of a drug permitted or penalised less severely vary. Use/possession generally refers to small quantities which differ by jurisdiction. Laws and practices are subject to change and may differ from those indicated in the table.

Sources: Collins 2018; EMCDDA 2019; Global Commission on Drug Policy 2016; Harding 2018; Hughes et al. 2016; Transform 2019; Isajanyan 2016; International Drug Policy Consortium 2012; Transnational Institute 2010; Transnational Institute n.d.; Rolles & Eastwood 2009; https://en.wikipedia.org/wiki/Legal_status_of_cocaine.



Case study: Canada and the recent legalisation of cannabis

Recreational cannabis use was legalised nationwide in Canada in October 2018, subject to conditions (Box I.1). This section provides a fairly detailed description of the elements of the reforms to show that the design of the regulatory framework to support reforms can be quite detailed and address many issues and risks. Whether it achieves the right balance between the harms of drug consumption, risks of overregulation and emphasis on a health-based approach is not considered.

A health-based approach

Legalisation followed a report from the Task Force on Cannabis Legalization and Regulation which proposed a public health approach be taken based on evidence that the risks of cannabis are higher with early age of initiation and/or high frequency of use. It recommended the aim of the approach should be to:

- delay the age of the initiation of cannabis use
- reduce the frequency of use
- reduce higher-risk use
- reduce problematic use and dependence
- expand access to treatment programs
- ensure early and sustained public education and awareness (Government of Canada 2016, p. 15).

Inter-governmental responsibilities

The federal government's responsibilities are to set:

- strict requirements for producers who grow and manufacture cannabis
- industry-wide rules and standards, including
 - types of cannabis products available for sale
 - packaging and labelling requirements for products
 - standardised serving sizes and potency
 - prohibitions on the use of certain ingredients
 - good production practices
 - tracking requirements of cannabis from seed to sale to keep it out of the illegal market
 - restrictions on promotional activities.

Provinces and territories are responsible for developing, implementing, maintaining and enforcing systems to oversee the distribution and sale of cannabis. They are also able to add their own safety measures, such as:

- increasing the minimum age in their province or territory (but not lowering it)
- lowering the personal possession limit in their jurisdiction
- creating additional rules for growing cannabis at home, such as lowering the number of plants per residence
- restricting where adults can consume cannabis, such as in public or in vehicles (Government of Canada 2018a).



Box I.1 The Canadian legalisation of cannabis

Bill C-45, the *Cannabis Act*, came into force on 17 October 2018. The *Cannabis Act* creates a legal and regulatory framework for controlling the production, distribution, sale and possession of cannabis in Canada. The Act:

- restricts youth access to cannabis
- prohibits promotions that are designed to encourage youth to use cannabis
- imposes serious criminal penalties on people who break the law, especially those who import or export cannabis illegally, or provide cannabis to youth
- establishes strict product safety and quality requirements
- reduces the burden on the criminal justice system
- provides for the legal production of cannabis
- allows adults to possess and access regulated, quality-controlled, legal cannabis
- enhances public awareness of the health risks associated with cannabis.

Subject to provincial or territorial restrictions, adults who are 18 or 19 years of age or older (depending on the province or territory) will be able to legally:

- purchase limited amounts of fresh cannabis, dried cannabis, cannabis oil, cannabis seeds, or cannabis plants from retailers authorised by the provinces and territories
- possess up to 30 grams of dried legal cannabis or equivalent in non-dried form in public
- consume cannabis in locations authorised by local jurisdictions
- grow up to four cannabis plants per household (not per person) for personal use, from licensed seeds or seedlings from licensed suppliers
- share up to 30 grams of dried cannabis or equivalent with other adults
- make legal cannabis-containing products at home, such as food and drinks, provided that dangerous organic solvents are not used in making them.

Source: Government of Canada 2018b.

Regulation of the supply-side of the cannabis market

A federal licence is required to cultivate, process and sell cannabis for medical or non-medical purposes. All federal licence holders can conduct related activities such as possession, transportation, storage, destruction, research and development, and sale of bulk cannabis to other federal licence holders.

Health Canada issues the following classes of licenses:

- licence for cultivation (sub-classes: micro-cultivation; standard cultivation; nursery)
- licence for processing (sub-classes: micro-processing; standard processing)
- licence for analytical testing
- licence for sale (sub-class: for sale to medical purposes)
- · licence for research
- cannabis drug licence (Government of Canada 2019).



The micro-cultivation and processing licences are intended to facilitate the participation of small-scale producers in the legal cannabis industry.

Cultivators, producers and packagers of cannabis products are also required to obtain a cannabis licence from the Canada Revenue Agency. Once licensed, licensees are required to buy and apply cannabis excise stamps to their products (if they package cannabis products). An excise stamp must be present on all cannabis products that have been legally produced and are available for purchase.

Key features of the cannabis industry structure are:

- federally licensed growers and processors are private commercial and not-for-profit entities
- provincially regulated distributors and retail sellers may be private entities, government owned corporations (licensing boards), and/or a mix of the two depending on the province/territory.

Criminal offences still apply

Possession, production, distribution and sale outside the legal system will remain illegal and subject to criminal penalties proportionate to the seriousness of the offence, ranging from ticketing up to a maximum penalty of 14 years' imprisonment (Table I.2). These offences raise the costs of illegal production and supply relative to the newly created legal market for recreational cannabis.

The Cannabis Act creates two new criminal offences, with maximum penalties of 14 years in jail for:

- giving or selling cannabis to youth
- using a youth to commit a cannabis-related offence.

Driving while impaired by cannabis, or any other drug, remains illegal.

Table I.2 Canadian cannabis offence penalties post-legalisation reforms

Offence	Penalties
Possession over the limit	Tickets for small amounts. Up to 5 years in prison.
Illegal distribution or sale	Tickets for small amounts. Up to 14 years in prison.
Producing cannabis beyond personal cultivation limits or with combustible solvents	Tickets for small amounts. Up to 14 years in prison.
Taking cannabis across Canada's borders	Up to 14 years in prison.
Giving or selling cannabis to a person under 18	Up to 14 years in prison.
Using a youth to commit a cannabis-related offence	Up to 14 years in prison.

Source: Government of Canada 2018a.



Appendix J: Economic analysis of crime policy

This appendix outlines basic economic models of crime, optimal sanction theory and economic perspectives on defining the boundary of the criminal law.

J.1 The scope of the economic analysis of crime

Economic analysis can assist the process of understanding the observed patterns and characteristics of crime, and it can suggest policies which might reduce crime and its associated costs.

The economic analysis of law is forward looking considering the incentives created by legal rules:

Legal rules are to be judged by the structure of incentives they establish and the consequences of people altering their behaviour in response to those incentives. (Friedman 2000, p. 11)

If people act as rational maximisers in nonmarket contexts, rules of law can alter the amount or character of nonmarket activities by imposing prices on them. A change in legal rules, just like a change in relative prices, will affect human behaviour, and economic theory can assist judges and legislative bodies in the difficult choice of remedies for undesirable human behaviour. (Parisi 2000, p. xii)

This is in contrast to theories based on retribution or just punishment which are sometimes characterised as backward looking, although, in practice, they also create incentives that influence future behaviours. These theories focus on addressing the past wrong committed.

J.2 The standard economic models of crime

Economic efficiency and wealth maximisation

The standard (or modern) economic analysis of crime is built on neoclassical welfare economics and concepts of economic efficiency. The normative choice criterion used to evaluate policy is that policy should seek to maximise the aggregate utility of individuals in society (sometimes considered as their happiness, welfare or well-being). In practice, utility is replaced as an objective in favour of wealth maximisation:

Unlike wealth (or quantities of physical resources), utility cannot be objectively measured. Furthermore, interpersonal comparisons of utility are impossible, rendering any balancing across groups of individuals largely arbitrary. These limitations make utility maximisation non-viable for practical policy purposes. (Parisi 2005, p. 44)

Crime causes significant harm to society. In the context of crime policy, the objective of wealth maximisation becomes—minimise the total social costs of crime given the constraint that the enforcement of laws is costly:

We propose the following simple goal for analyzing criminal law: Criminal law should minimize the social cost of crime, which equals the sum of the harm it causes and the costs of preventing it. (Cooter & Ulen 2016, p. 474)

Costs are conceptualised broadly and include the harm done to victims, policing costs, court costs, the costs of the corrections system, and external costs imposed on the community. Other costs can include the harm done to the offender's family and costs associated with increases in demand for services provided through the welfare system.

The objective of wealth maximisation may or may not have further constraints put on it, such as, distributional considerations, 'rights' or other justice considerations.



Deterrence and rationality

Punishment alters incentives

The standard analysis assumes that criminals behave rationally in that they respond to the incentives created by their environment, and seek to maximise their own satisfaction, wealth or welfare. Because they respond to incentives, would-be offenders can be deterred by altering the expected net payoff from committing an offence. Theories of deterrence are based on the idea that individuals respond rationally to:

- the certainty of punishment
- the severity of punishment
- the celerity (or immediacy) of punishment (Chalfin & McCrary 2017, p. 6).

The criminology literature makes a distinction between two types of deterrence:

- General Deterrence—effect of the **threat** of punishment on offending.
- Specific Deterrence—effect of the **experience** of imprisonment on reoffending.

When speaking of deterrence, the economic literature is referring to what criminologists call 'general' deterrence.

The basic economic model of crime (based on Becker 1968) and its extensions are tools of what some refer to as rational crime analysis. In rational crime analysis, the certainty and severity of punishment plays a central role in the analysis of crime (Winter 2008, p. 8).

Only a weak rationality standard is needed

There are various criticisms of the assumption of rationality in economic models, including of crime.

By rationality, what is meant is simply that criminals take into account the benefits they receive from the crime and the potential costs they may face in committing the crime. Criminals are rational in the sense that they weigh the costs and benefits of their actions, and, therefore, can be influenced by policies that impact on the incentives criminals face, such as, the probabilities of arrest and conviction, and the severity of punishment.

To be of potential benefit, a policy to reduce crime does not require that all offenders behave rationally or even that most offenders behave rationally. It does require that a proportion of the population of offenders behave rationally:

For rational crime analysis to have merit, all that matters is that 'some' criminals take into account the expected punishment they face. If this is true, in pursuing a social policy to deter crime the authorities can affect the crime rate by manipulating the components that make up the expected punishment...the driving force behind rational crime deterrence policy is that crime can be reduced by increasing the expected punishment, regardless of why criminals behave the way they do. (Winter 2008, p. 8)

The key difference between the economic approach to crime and other non-economic theories is that the economic approach emphasises the role of individual choice:

Economists do not deny that poor education, limited work opportunities, and numerous other environmental, psychological and biological factors may influence criminal activity. They simply argue that so long as there is an element of rational choice involved in criminal behaviour, actual or potential criminals will respond to changes in their choice environment, including changes in the probability of apprehension and the severity of punishment. (Dollery & Wallis 1996, p. 236)



Rather than describing a would-be offender as either (fully) rational or (fully) irrational, it is more useful to think in terms of a continuum of diminished rationality. Even where the state of mind at the time of committing an offence can be described as highly irrational, this does not mean that the multitude of decisions made by the offender leading up to the event were also 'irrational'. The assumption of rationality is also made in criminal law:

The principles of criminal law are based on the concept that all persons are rational human beings, capable of making choices between right and wrong and able to control their conscious actions. (Schloenhardt 2015, p. 44)

Schloenhardt (2015) states that there is a presumption in criminal law that individuals do not suffer from mental impairment, citing s. 26 of the *Criminal Code Act 1899* (Qld):

Every person is presumed to be of sound mind, and to have been of sound mind at any time which comes in question, until the contrary is proved.

A number of defences are available that help deal with situations when the assumption of rationality does not hold (Box J.1).

The basic economic model of crime

Outline of the model

The basic economic model of crime views crime as a gamble undertaken by a rational individual (Becker 1968). An individual gains a benefit from a crime but there is a risk of being caught which results in costs to the individual. An individual faces three choices each which results in a different expected level of net benefit for the individual:

- the choice to abstain from crime
 - the benefit associated with abstaining from crime is principally a function of the individual's ability to derive benefit from non-illicit activities
- the choice to commit a crime that does not result in an apprehension
 - the benefit from criminal activity depends on how criminally productive the individual is
- the choice to commit a crime that results in apprehension and punishment
 - the cost of apprehension and punishment depends on the probability of apprehension and the severity of punishment.

Predictions from the basic model

The main predictions from the basic model of crime are:

- crime is worthwhile as long as it is expected the benefit to the individual exceeds the benefit from abstention
- crime becomes more attractive when the cost of capture is slight (for example, less unpleasant prison conditions, shorter sentences)
- crime becomes less attractive when the benefit of work is high (for example, the unemployment rate is low or the wage rate is high)
- to engage in crime, the gains relative to its loss must exceed the odds of capture
- an increase in the probability of apprehension unambiguously reduces the likelihood of crime
- an increase in the cost of capture unambiguously reduces the likelihood of crime
- whether the probability of apprehension or the cost of capture has a larger effect on criminal behaviour depends on the individual's attitude towards risk.



Box J.1 Rationality and defences in Queensland criminal law

A defence of 'insanity' can be made where/if the assumption of rationality does not hold:

The presumption of 'sanity'...may be displaced by the defence of 'insanity' (s. 27 of the Criminal Code (Qld)). This defence requires proof that the accused was suffering from mental impairment at the time he or she committed an offence, and that this illness impaired his or her ability to know the nature of the conduct or to know that the conduct was wrong or, in some jurisdictions, affected the accused's capacity to control his or her conduct. (Schloenhardt 2015, p. 44)

The defence of insanity is used in only a small percentage of criminal cases in Queensland (schizophrenia is the most common mental disease pleaded). In other words, the criminal law overwhelmingly considers that the offenders brought before the courts are rational human beings for the purpose of determining criminal responsibility.

The criminal law does recognise a range of circumstances, other than the defence of insanity, where the assumption of rationality is not applied. An example is that children are excluded from the criminal law as they lack the ability to reason (in that sense are not considered rational) (Schloenhardt 2015, p. 45). Persons less than 10 years of age are not criminally responsible for their conduct. Persons 10 years of age and less than 14 years of age are not criminally responsible for their conduct unless they have the capacity to know their conduct is wrong. Persons 14 years of age and older and less than 18 years of age are criminally responsible for their conduct, but are tried before special courts (*Youth Justice Act 1992* (Qld)).

Another example is the defence of diminished responsibility which deals with the soundness of the accused's mind at the time of the commission of the offence. It deals with less serious mental disorders than the insanity defence in relation to the charge of murder which, if a defence of diminished responsibility can be made, can have a murder conviction reduced to manslaughter (Schloenhardt 2015, p. 567).

Alcohol (intoxication) and drug use can reduce a person's capacity to act rationally. In Queensland, intoxication may be a defence in limited circumstances:

- offences of basic intent (for example, manslaughter, rape and unlawful use of a motor vehicle): under s. 28(3) of the *Criminal Code Act 1899* (Qld), voluntary intoxication can never give rise to a defence
- offences of specific intent: these types of offences are where the accused's mind is aimed at consequences that go beyond the physical elements of the offence. For these types of offences, intoxication may be relevant for determining the accused's intention. Where a defence of intoxication is upheld, the accused is convicted of another less serious offence (Schloenhardt 2015, pp. 578–581).

In Queensland criminal law, evidence of intoxication may be relevant for the defences of insanity and diminished responsibility in two ways:

- · intoxication may be the cause or trigger of a mental disease or an abnormality of mind
- unintentional intoxication may be the basis for the defence of insanity (Schloenhardt 2015, p. 583).



Case study: impacts of the certainty of punishment on the expected disutility from offending

The severity of sentences, whether the level of monetary fines or the number of days in prison, deters a would-be offender conditional on the probabilities of the offence being detected and the offender apprehended, charged and convicted. For a given level of deterrence, the lower these probabilities are the higher is the required severity of sentencing (that is, there is a trade-off between the certainty and severity of punishment).

A seemingly lengthy sentence—or sentence that appears proportional to the harm of the offence—can translate into relatively few expected days in jail if would-be offenders perceive that the likelihood of punishment is low.

For offences classified as acts intended to cause injury there is, on average, a 46 per cent chance that the offence will be reported. Given that the offence is reported, there is a 51 per cent chance that the offence proceeds to charging. Given a charge, there is a 69 per cent chance that the accused will be found guilty (Table J.1). Once found guilty, there is a 36 per cent chance that a sentence of imprisonment will be imposed. Given that the average expected time to serve for this type of offence is 2.0 years, and taking into account these probabilities, a rational would-be offender weighs the choice between risking 43.1 days in prison against the gains from committing the offence. For theft and related offences, the expected time in prison is only 2.4 days.

However, the offender would also take account of the possibility of other forms of punishment if they are found guilty (for example, the probability of receiving a monetary fine).

Table J.1 Probabilities and expected days spent in prison

	Offence is reported*	Offender proceeds to charging*	Offender is proven guilty*	Custody in a correctional institution*	Expected time to serve (avg., years)	Expected time in prison (days)
Acts intended to cause injury	0.46	0.51	0.69	0.36	2.0 years	43.1 days
Theft and related offences	0.67	0.31	0.37	0.09	0.9 years	2.2 days

Notes: * The probabilities are 'objective' probabilities as they are based on flows of offences through the criminal justice system, and not on the perceptions of would-be offenders (that is, the offender's perceptions of the likelihood of the crime being reported, being apprehended, charged and sentenced). An individual confident of her/his skill will perceive that probabilities are lower than otherwise.

Sources: QPS unpublished data; ABS 2019e; ABS 2019d; QPC estimates.

Time allocation and dynamic models

Time allocation models help examine labour market choices, in this case, between legal and illegal sources of income. The opportunity cost of crime—in terms of the foregone income from legal activities—are addressed more explicitly in time allocation models than in Becker (1968). Some of the issues that dynamic models help explore are:

- Crimes that cause the most harm are serious property and violent crimes. These crimes are punished by lengthy prison sentences rather than fines or instantaneous physical punishment. Therefore, '...the disutility associated with apprehension for the most important crimes is experienced many periods after the utility gain associated with commitment of the crime' (McCrary 2010, p. 82).
- Intensive policing strategies may reduce crime in a location at a point in time, but this may not translate to general reductions in crime over time if, for example, there are spatial (crime shifts to another region) or intertemporal substitutions effects (crime is delayed).



- Government policies to reduce crime can involve very different time profiles, particularly in terms of the costs of the policy. One option may involve increased up-front costs (for example, more police officers) while an alternative may involve shifting costs to the future (for example, long incarceration sentences).
- The important role that the accumulation of human capital plays, both criminal and legitimate, can lead to important differences between short- and long-run crime reduction benefits of policy interventions.
- Whether offenders can be induced to reveal their beliefs about the likelihood of recidivism (McCrary 2010, p. 82 and 101–02).²⁰⁷

Dynamic models allow individuals to differ in their time preferences. The most important result from dynamic models is that those offenders who are myopic and engage in hyperbolic discounting will be more strongly deterred from changes in the certainty of punishment than the severity of punishment (Chalfin & McCrary 2017, p. 39). For these offenders, changes in long sentences are likely to deter far less than changes in the probability of arrest and conviction.

Dynamic models can be used to analyse transition paths from schooling to legal employment or criminal behaviour. They provide a structure for considering how a criminal justice system record may affect employment opportunities and the evolution of criminal careers. In a dynamic model:

individuals recognise that their current criminal decisions and any resulting criminal justice system records may affect their future wages and changes of employment. If individuals are non-myopic, then the current supply of crime depends upon possible criminal justice system sanctions and the extent to which the labour market penalises those with a criminal past. Given that the years of heaviest criminal involvement are also the years when individuals complete their schooling, crime has been incorporated into the standard human capital investment model as an alternative to work and schooling. (Tauchen 2010, p. 26)

The market model of crime

Crime can be analysed using the tools of supply, demand and partial equilibrium analysis. The 'equilibrium' crime rate is deterred through the interactions of demand and supply where demand and supply are defined differently than they would be in normal markets for goods and services:

In the 'market model' (Ehrlich 1981), the equilibrium flow of offenses results from the interaction between aggregate supply of offenses, direct or derived demand for offenses (through self-protection) and optimal public enforcement, which operates like a tax on criminal activity. (Ehrlich 2010, p. 5)

The supply of offences

A rational would-be offender considers the various factors influencing the benefits from a potential crime, the costs of actually carrying out the crime, the likelihood of apprehension, and the potential costs if apprehended. Costs and benefits include both monetary and non-monetary costs and benefits. Costs also include opportunity costs, such as the loss of income from legal activities while in prison.

In a market for a particular type of crime, say, the market for property theft, the total supply of offences curve is the sum of the supply schedules for each existing and would-be (or marginal) property offender. Each individual's supply schedule represents the amount of crime that the individual is willing to commit given the marginal benefits of the pool of potential crimes available to the individual. Where the marginal benefits are low, an individual would generally be willing to commit fewer hours to crime and commit fewer crimes, or commit none at all.²⁰⁸ Where the

²⁰⁷ See Tauchen (2010, pp. 29–34) for a discussion of applications of dynamic models.

²⁰⁸ Where an individual has a minimum revenue or budget requirement, a lower benefit from crime implies that the individual will need to commit more time and commit more crimes to earn the necessary amount of money.



marginal benefits are high, an individual would be willing to commit more of their time to illegal activities and commit more crime.

The total supply-of-offences is unlikely to be perfectly inelastic—meaning that neither existing offenders or would-be offenders do not change their behaviours in response to changes in the net return to criminal activity. Even if the supply schedule for existing offenders was perfectly inelastic, the total supply curve would likely still have some degree of elasticity because would-be offenders change their behaviour in response to the incentives provided by changes in the net returns to criminal activity:

even if individual supply-of-offenses functions were completely inelastic with respect to variations in net returns above their critical threshold levels, so that active offenders would not react to either positive or negative incentives above these levels, it is still true that the market supply curve would be generally elastic. This is because changes in the actual net return from crime would make the latter exceed or fall below the threshold level of marginal offenders, thus inducing the latter to enter or exit from criminal activity. (Ehrlich 1996, p. 47)

Incapacitation and the elasticity of the supply-of-offences

Removing an offender from the community and imprisoning them eliminates their ability to commit crime for a period of time (other than crime committed while in prison against other inmates or prison personnel). This is referred to as the incapacitation effect of incarceration (or imprisonment) and the benefit it provides is the avoidance of further harm under the assumption that the offender would commit a further offence/s:

A major benefit of incarceration is that it removes criminals from civil society so that they cannot commit additional offenses. Given the wide variation in crimes committed by criminals, incarceration of chronic offenders should have a particularly large effect in reducing crime. The reduction in crime due to incarceration is known as the incapacitation effect ... Arithmetically, if you lock up someone who commits, say, 10 muggings a year in a dark alley, and no one replaces that criminal in the alley, the number of muggings should drop by 10. (Freeman 1999, p. 3540)

Assume that there are initially 1,000 offenders and that a policy is put in place which incarcerates 100 of them, reducing the number of existing offenders to 900. With a perfectly inelastic supply curve—a perfectly vertical supply curve as illustrated in the left-hand panel of Figure J.1—the incarceration of the 100 offenders reduces the number of crimes committed by 100 multiplied by their average number of offences committed per year. The reduction in the number of crimes is in proportion to the reduction in the number of offenders (that is, a reduction in crime of 10 per cent).

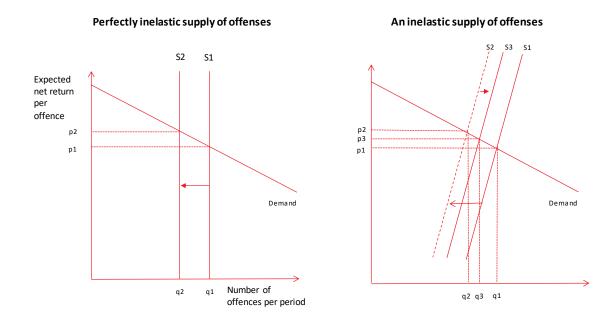
A perfectly inelastic supply curve depicts a situation where there are no behavioural responses to the reduction of offenders and the resulting increase in the marginal benefit of crime (or the expected net return per offence). Existing offenders do not respond to the change in the marginal benefit of offences by increasing their average number of crimes committed per year. Potential offenders do not respond by entering the market for crime.

A supply curve with some degree of elasticity (right-hand panel) depicts a situation where the change in incentives—the increase in the marginal benefits of crime—leads to changes in criminal behaviour. Either potential offenders respond to the increased marginal benefits of crime by becoming actual offenders, or existing offenders increase their criminal activity.

As per the situation with a perfectly inelastic supply curve, the initial effect of the incarceration is to reduce the supply of crime from S1 to S2 with equilibrium offences reducing from q1 to q2. This raises the marginal benefit of crime from p1 to p2. Assume that the response to the increase in the marginal benefit comes solely from would-be offenders. In the left-hand panel the supply from would-be offenders is implicitly zero (that is, there is no supply from would-be offenders at any level of marginal benefit so that the market sector supply curve is fully made up of the supply from existing offenders). But if would-be offenders are responsive to changes in marginal benefits (represented by a supply curve with some degree of elasticity), then the market supply curve is now the sum of the supply schedules of would-be offenders plus supply from existing offenders.



Figure J.1 The net effect of incapacitation is influenced by the elasticity of the supply of offences



S2 is the supply of existing offenders (now 900 offenders). S3 is the market supply curve which consists of the supply of both categories of offenders. The additional number of offences that would-be offenders supply at each level of marginal benefit is the horizontal distance between the supply curves (S3 - S2). The new equilibrium rate of offences is represented by the point (p3, q3). The net effect is that some of the crime that would have been undertaken by the incarcerated 100 is undertaken by someone else, dampening the effect of incarceration on reducing crime (that is, q3 > q2).

The more elastic the supply of offences curve—the more responsive is the supply of crime to changes in the marginal benefits to crime—the lower the reduction in crime from incarcerating additional offenders.²⁰⁹

Influences on the shape and elasticity of the supply-of-offences curve

The aggregate supply of offences is influenced by labour market opportunities and investments in policing and prisons which increase the expected cost of time spent in illegal activities (Chalfin & McCrary 2017, p. 5).

The supply-of-offences curve can be constructed to different requirements, for example, for examining first time offences, recidivism or the total supply of offences. When considering the supply of offences from offenders previously incarcerated (recidivism), there are a range of additional factors that might influence proclivities to re-offend and, therefore, the positioning or shape of the supply-of-offences curve:

- prison incapacitation effects
 - learning effects where criminals become more skilful criminals through close interactions with other criminals,
 raising their criminal productivity
 - updating of risk perceptions concerning the probability of apprehension and severity of punishment

 $\Delta C = \eta \Delta I / (\epsilon + \eta)$, where

C is crime, η is the elasticity of demand for crime, and ε is the elasticity of supply of crime.

²⁰⁹ The impact of increased incapacitation (\triangle I) on the supply of criminals is:



- reduction in the social stigma from re-offending²¹⁰
- reduction in the opportunity cost of legal employment if imprisonment reduces an offender's future income potential
- the extent to which rehabilitation programs are participated in and are successful in altering criminal behaviour
- the extent to which criminals can re-integrate into a 'normal' functioning community.

A range of factors influence the positioning of the supply-of-offences curve and its slope. When these factors change, the supply-of-offences curve will either shift leftward (inward) representing a reduction in the supply of offences, or rightward (outward) representing an increase in the supply of offences, or its slope will change.

Different types of crime likely have different supply elasticities. The incapacitation effect is expected to be less on crime rates for offences that have a strong economic motivation, such as, property theft, prostitution and drug dealing. The removal of offenders increases the marginal return to these offences inducing would-be offenders to enter the market or inducing existing offenders to increase their rate of offending (the number of offences they commit per time period).

For many violent crimes, there is no equivalent to the 'market mechanism' inducing a supply response to the incapacitation of offenders.²¹¹ The 'market' for violent crimes is characterised less as a market than a large number of independent, bi-lateral and involuntary transactions.²¹² The removal of an offender who has committed a violent crime will generally not influence the net payoff available to other would-be offenders. Many violent crimes may be quite specific to the relationship between two individuals (person A the victim and person B the offender). Some other offender has no reason (receives no payoff) from committing a violent crime against person A if person B is imprisoned.

Therefore, it is expected that the elasticity of the supply of offences with strong economic motivations will be significantly greater than the elasticity of supply of most types of violent offences. This, along with a range of other rationales, suggests that prison is a relatively more suitable option for violent crimes than for other forms of crime.

If supply was perfectly elastic, then:

- incapacitation would have no effect on crime rates: the removal of 10 offenders induces 10 would-be offenders to enter the market, and/or existing offenders to increase their criminal activity so that there is no reduction in crime
- rehabilitation of offenders has no effect on crime rates: rehabilitation of an incapacitated offender may result in the individual being permanently removed from crime, but there is a fully offsetting supply response
- in reverse, recidivism has no effect on crime rates: whatever the rate of recidivism, the market adjusts so that the only impact on the crime rate is on who is committing crime (offenders who have never previously been imprisoned versus those who have).

For crimes with an inelastic supply curve, such as violent crimes and crimes committed by irrational offenders, incapacitation and successful rehabilitation have a relatively greater effect on crime reduction.

While incapacitation works through removing the supply of offenders, deterrence works through raising the costs of engaging in criminal activity. Deterrence reduces the returns to criminal activity by the amount of the expected penalty, shifting the marginal benefit curve inward, reducing the equilibrium rate of crime. Deterrence reduces the rate of crime even if the supply of criminal activity is perfectly elastic.

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²¹⁰ Social stigma is reduced because the costs of stigma have already been borne by the offender for previous offences. An additional offence may not add to those costs.

²¹¹ An exception is the supply of drugs where there is a strong economic motivation inducing supply responses, and a tendency to violent crimes.

²¹² There are likely to be exceptions, for example, when people are hired to commit a violent crime on behalf of another person.



An application—the illegal market for illicit drugs

The illegal market for the supply of illicit drugs provides a good example of the usefulness of the market model of crime in considering the impact of government policies. For many decades policies have been in place that prohibit consumption (make it illegal) and prohibit supply. Yet, as discussed in Chapter 13, the attempts to reduce supply, despite significant resources being directed at the problem, have largely been ineffective.

The market model of crime provides an explanation. Policing efforts lead to the incarceration of suppliers. This, at the margin, temporarily increases the net expected payoff of supplying. This induces would-be offenders to enter the market, or it helps incentivise existing suppliers (who have not been caught) to expand their supply.

In terms of the benefits of imprisonment, this suggests that the incapacitation effect is likely to provide minimal benefit. Locking-up one supplier results in someone else taking their place, or an existing supplier becoming larger.

The 'demand' for crime

The direct demand for offences involving 'normal' goods

For some types of crime, the analysis of the 'demand for crime' has straight forward parallels to the analysis of the market demand for any 'normal' good or service. The consumer markets for illegal drugs and prostitution are examples.

The secondary market for stolen property, such as for computers, cameras, jewellery and so on, is another example. Where the net marginal benefits of property theft per offence are low (high), criminals choose to undertake less (more) property crime. The supply curve for property crime is upward sloping as is typical for the supply of legal goods and services. Higher (illegal) market prices incentivises more theft (supply).

People buy the stolen property either directly from criminals or indirectly through intermediaries. For a product, such as a particular camera model, the higher the price asked for the camera the lower the demand (the same as for all normal goods).²¹³ The lower the price, the higher the demand. The demand curve facing the offender is downward sloping when seeking to sell stolen property.

Violent crimes and the primary market for property offences

The demand curve for other types of crime, such as, violent crime and the primary market for property offences, is conceptualised as the 'negative' demand for offences which is inversely related to the demand for safety. A person's demand for self-protection creates a positive private demand for safety or a negative demand for crime (Dp in Figure J.2). A potential victims' demand for self-protection, creates a demand for safety or a negative demand for crime (Ehrlich 2010, p. 5).

The purpose of self-protection by potential victims is to raise the costs of appropriation to the offenders, so as to reduce their incentive to commit crime. The optimal level of private investment in self-protection is where the marginal private costs of crime are balanced against the marginal benefits of self-protection.

The demand curve can be thought of as representing the private tolerance for crime, given the marginal costs of deterring crime. For an individual the demand curve shows:

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²¹³ Raising the price of certain products may actually result in increasing the demand for the product. These products are often referred to as 'luxury' items. Womens' perfume is often advanced as an example.

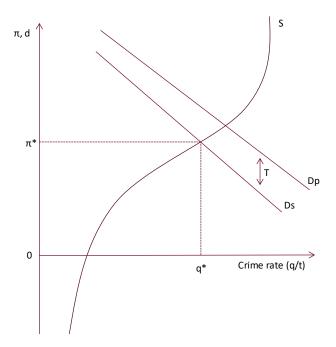


why a given crime rate, or risk of victimisation, is "demanded" (tolerated) by potential victims as an indirect consequence of what they are willing to spend to reduce their risk of victimisation. Higher expenditures on protection raise the time and effort offenders must spend on acquiring the potential loot from their victims... Any increase in the latter, in turn, means a reduction in the differential "gross" return per offense over the direct and opportunity cost incurred by the offender (the loss of a legitimate wage), in the absence of any sanctions... The bottom line is that a higher crime rate, or risk of victimisation...induces greater efforts at self-protection by potential victims, which in turn reduce the differential gain to offenders... Hence the downward-sloping shape of the derived-demand curve. (Ehrlich 1996, p. 49)

In addition to private efforts to deter crime, public law enforcement expenditures act like a tax on crime reducing the net returns to offending. The optimal sanction or 'tax' (T) is determined by balancing the marginal costs of enforcement with the social loss from crime. It combines the probability of apprehension and the severity of the sanction taking account of positive enforcement costs. The social demand curve sits below the private demand curve by the amount of T. The combined expenditure on safety indicates a lower tolerance for crime than if only private investments in self-protection are considered.

The supply-of-offences curve is more likely to take the shape presented below compared to those presented earlier. Crime is likely to be positive even where some criminals face a negative net expected payoff from committing crime. As the net payoff increases the supply of crime increases at a faster rate (the curve is concave). Continuing further increases in net payoffs begin to have a lesser effect on the supply of additional crime (the curve turns convex).

Figure J.2 Private and public (negative) demand for a violent crime and property theft



Source: Ehrlich 1996.



Why deterrence is important

Deterrence is important for controlling or reducing crime because:

- reducing crime only through imprisonment necessarily increases imprisonment which has significant resource costs; whereas
- reducing crime with (general) deterrence achieves a larger reduction in crime for the same level of resources consumed in imprisoning offenders
- if the deterrence effect is strong enough, then imprisonment can potentially reduce both crime and imprisonment. If crime is deterred, then there is no need for punishment.

The stronger the deterrent effect of imprisonment, the lower the costs to taxpayers to achieve a given level of crime reduction. Overseas studies support a positive (general) deterrence effect of prisons (Box J.2):

The overwhelming volume of studies following systematic econometric applications, which were applied to alternative regions, population groups and different crime categories, has produced similar findings: probability and length of punishment are generally found to lower crime rates, with elasticities of response of crimes to probability of punishment often exceeding those with respect to severity of punishment. (Ehrlich 2010, p. 16)

... popular myth to the contrary, the evidence is overwhelmingly in favor of deterrence in the economist's sense. There have been many statistical studies measuring the effect on crime rates of changes in either the probability of apprehension, the punishment, or both; with few exceptions, they show that increasing the expected punishment reduces crime rates. (Friedman 2000, p. 235)

On average, imprisonment provides benefits through the incapacitation effect and deterrence. The trade-offs between the certainty and severity of punishment no longer holds if punishment does not deter:

When an increase in either the certainty or severity of punishment reduces crime because of the deterrent effect, the authorities can substitute between the two. With respect to prison sentences, this suggests that, to achieve a desired level of expected punishment, as the prison sentence is increased the probability of apprehension and/or conviction can be reduced. But this fundamental trade-off no longer holds if the sole advantage of prison is through the incapacitation effect. (Winter 2008, p. 27)



Box J.2 Imprisonment and deterrence

The economic empirical literature finds that prisons deter crime.

The 'average' or overall effect of the prison system can be summarised as:

- the incapacitation effect of prisons provides an important positive contribution through the avoidance of harm. The benefit is reduced the more elastic is the supply-of-crime
- incapacitation also provides an important (general) deterrence effect which reduces the amount of crime and harm caused. In addition, there are benefits through the avoidance of a broader range of costs where would-be offenders are deterred from entering the market for crime, with a certain probability that early crimes become a pathway to further crime.
 - The magnitude of the negative relationship between crime and imprisonment is not precisely measured. Based on U.S. evidence, a reasonable bound is between -0.1 and -0.7: meaning that a 10 per cent rise in the prison population would reduce crime between one and seven per cent. The limited Australian evidence available also falls within this range
- the rehabilitation and criminogenic effects of prison work in opposite directions on the rate of recidivism. It is not known which effect dominates. If criminogenic effects dominate, then the overall positive incapacitation and deterrence effect of prisons is reduced compared to the situation where prisons are more successful as a mechanism for rehabilitation.

Surveys which ask criminals if threatened sanctions influence their behaviour find:

- evidence is generally consistent with deterrence, but it is not the most important factor
- a positive deterrence effect is often found amongst juveniles, a demographic group often assumed to be less forward-thinking in its decision making
- that incapacitation is not solely responsible for the crime-reducing effect of imprisonment, but that deterrence also matters (Levitt & Miles 2007, p. 471).

In interpreting the above findings, it should be kept in mind that:

- A positive deterrence effect of prisons does not mean that there is a significant, positive effect for all offenders or all types of crime. An important example is that it is difficult to deter offenders who exhibit significant mental impairments.
- To say that prisons deter crime does not mean that, given the existing level of severity of sentencing, further increases in severity will provide additional (general) deterrence benefits. This could be the case, but it could also be the case that severities have gone beyond where they provide any useful additional deterrence.
- The overwhelming bulk of the accumulated empirical evidence is based on overseas studies, particularly the United States, where conditions are different to Australia.

A forward-looking test

If there is no deterrence, then the criteria used to evaluate policy reduces to a simpler forward-looking test—a prisoner should stay imprisoned so long as the expected harm from future criminal acts exceeds the costs of imprisonment (Box J.3). In practice, the future behaviour of the offender is unlikely to be known, or unlikely to be known to a sufficient likelihood, to make the policy workable. Further, the policy would confront significant ethical/philosophical critiques, such as whether the restriction of the offender's liberty can be justified.



Box J.3 Incapacitation if there is no deterrence

If there is no deterrent effect, determining the optimal length of the prison sentence no longer depends on the level of certainty of punishment. The authorities will still choose a desired level of certainty, but the length of the prison sentence only depends on the potential harm a released criminal will inflict upon society. For example, if it is determined that a released criminal will always cause more harm than the cost of incapacitation, the optimal prison sentence is life behind bars. If it is determined that a prisoner, at some point in their life, will cause less harm than the cost of incapacitation, that prisoner can be released. So, a lengthy prison sentence or a short prison sentence can be justified without concern about continually trading off between the certainty and severity of punishment.

Another important distinction between the deterrent and the incapacitation effects has to do with the relationship between the severity of the prison sentence and the magnitude of the harm caused by the criminal. For optimal deterrence, it is typically the case that the greater the harm caused the more severe the prison sentence. With incapacitation, however, the criminal should remain incarcerated as long as the expected harm from future criminal acts exceeds the cost of incapacitation. This is true if the expected harm just slightly exceeds the cost of incapacitation, or greatly exceeds the cost.

With respect to the incapacitation effect, prison can be best thought of as a place for criminals who are most likely to commit future crimes. In theory, this suggests that an individual who has yet to commit a crime may need to be incarcerated if an expected future crime is deemed sufficiently harmful. Once these criminals are incarcerated, they should be given life sentences until it is determined that they would impose less harm on society than the cost of incapacitation. In a sense, then, the optimal length of a prison sentence would be determined by a prisoner's eligibility for parole.

As can be seen, if there is no deterrent effect, then some fairly extreme predictions about how to set the severity of a prison sentence based on the incapacitation effect result. From a social policy perspective, this is why it is important to distinguish between the two effects.

Source: Winter 2008, pp. 27-28.

Achieving a reduction in crime and imprisonment

If deterrence is strong then there may be scope to reduce both crime and imprisonment:

a sanction policy that reduces crime solely by incapacitation necessarily will increase the rate of imprisonment. In contrast, if the policy also prevents crime by deterrence, then it is possible that it will be successful in reducing both imprisonment and crime. Hence, the rejection of deterrence as a crime-reduction mechanism implicitly can constitute a reason for mass incarceration. (Durlauf & Nagin 2011, p. 16)

Where the elasticity of crime with respect to imprisonment is relatively inelastic (< 1.0) then reductions in crime through imprisonment will be associated with rising imprisonment levels (Figure J.3). However, if there is a stronger deterrence effect, then reductions in crime resulting from imprisonment can be achieved at the same time as reductions in imprisonment.

Queensland has experienced generally falling crime rates, particularly for crimes that result in imprisonment. This has occurred simultaneously with rising imprisonment rates. If there were no other factors influencing outcomes, then this might suggest that Queensland prisons deter, but not strongly enough to achieve a simultaneous reduction in crime and imprisonment.

A clear policy implication is that any policies that have the potential to improve deterrence should be considered as part of an overall strategy to reduce imprisonment.



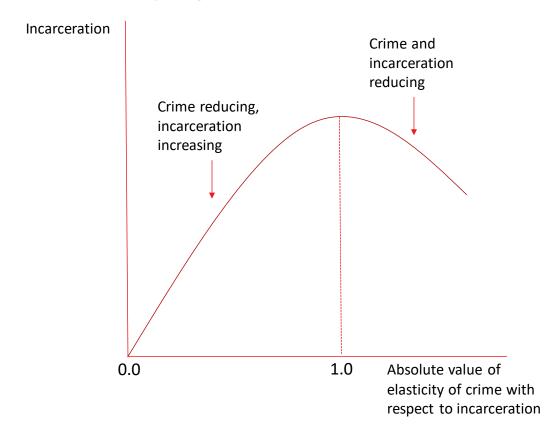


Figure J.3 Deterrence sufficiently strong to reduce both crime and incarceration rates

A high recidivism rate is a prediction of economic models of crime

High recidivism rates imply that rehabilitation in prisons does not work and incapacitation is an important benefit from imprisonment. Regardless of expenditures on specific rehabilitation programs, one of the objectives of imprisonment is to give offenders the opportunity to reflect, learn and rehabilitate.

High recidivism is not only consistent with the economic model of crime, but it is a prediction of it:

- A risk neutral criminal will commit a crime if the expected net benefit from committing the crime is greater than the expected cost of the punishment.
- Before people enter prison, the costs to them of crime were lower than the benefits they expected from crime (that is, they were not deterred by current punishments). When criminals leave prison, usually the costs to them of crime have only mildly changed (there may be some increase in penalties for repeat offenders, or the penalty may be marginally more severe for an older offender).
- On the other hand, once a person has been imprisoned, the stigma associated with a second term may diminish, so the costs of punishment (the costs from being apprehended again) may fall. Further, reduced legitimate opportunities may increase the net benefit from crime even more.
- Imprisonment might increase the benefits from crime, since they may act as schools to form more effective (productive) criminals. This may lower their probability of apprehension reducing the expected punishment.

If an offender found crime attractive before entering prison, they are still likely to afterwards.



Risk preferences and the decision to offend

In the basic economic model of crime:

- if individuals are risk-neutral, then equal percentage changes in the probability of apprehension and the costs of capture are equally effective in reducing crime
- if individuals are risk-averse, changes in the costs of capture (for example, time spent in incarceration) have a relatively larger effect
- if individuals are risk-preferring, changes in the probability of apprehension have a relatively larger effect.²¹⁴

Empirical studies often find that crime rates appear more sensitive to changes in the probability of apprehension than to changes in the severity of punishment. This is often interpreted as suggesting that criminals are risk preferring. However, fixed punishment costs may provide part of the explanation why crime may be more sensitive to marginal changes in the certainty of punishment than the severity of punishment (Box J.4):

If the number of years in jail represents only part of the punishment and the other part is fixed, a given percentage increase in the jail term raises the expected cost to the criminal by less than the same increase in the probability of conviction and therefore has less deterrent effect even if criminals are risk neutral with regard to punishment. (Friedman 2000, p. 236)

Other reasons why criminals may be more sensitive to changes in the probability of apprehension include: stigmatisation; discounting of future impacts; judgement proofness; forfeitability of illegal gains; and the possibility of being punished for unsuccessful criminal attempts (Mungan & Klick 2016).

J.3 An optimal system of sanctions

Monetary fines as an optimal system of sanctions

Offenders will be indifferent between a punishment specified in terms of some level of a fine and some period of time spent in prison (for example, an offender may perceive a \$10,000 fine and 60 days in jail as equally reducing their utility or well-being, so that the fine and the days in jail are an equal deterrent).

In theory, an optimal system of deterrence is based solely on monetary fines. This is because the establishment and operation of a system of imprisonment is a costly form of punishment compared to a system of deterrence based on monetary fines. Further, imprisonment consumes resources while monetary fines are transfers of resources between the offender and the victim or the state. Although resources are consumed in administering a system of monetary fines, fewer resources are consumed compared to achieving the same level of deterrence through custodial options.

Relative to an ideal system of monetary fines it can be shown that a policy of incarceration is inefficient unless the ability to pay fines has been completely exhausted (Cooter & Ulen 2016, p. 5).

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²¹⁴ The terms risk-preferring, risk-neutral and risk-averse are not really about a criminal's preferences or taste for risk. Rather, the terms describe how the value of money (income) varies with the amount of money (income) the criminal already has. A criminal whose utility function exhibits diminishing marginal utility to further increases in wealth or income is said to be risk-averse. An increase in income of \$1,000 at low levels of income increases utility by a larger amount than an increase in \$1,000 at higher levels of income. This results in a concave utility curve. A person whose utility changes by the same amount in the addition \$1,000, whether at low levels of income or high levels of income, is said to be risk-neutral (has a constant marginal utility of income). A person who has increasing marginal utility of income is said to be risk-preferring or risk-seeking (depicted as the convex curve).



Box J.4 How fixed costs influence expectations of time in jail

Studies consistently show that crime rates are more sensitive to the probability of capture than to punishment. Increasing the chance of being caught and convicted from 10 to 20 per cent reduces crime more than increasing the penalty from one year to two years in prison. This is sometimes interpreted as showing that criminals are risk preferers, that they prefer the riskier 10 per cent change of a two-year sentence to the less risky 20 per cent chance of a one year sentence, even though the expected cost in years is the same.

An alternative explanation is that the cost of being tried for an offence is not limited to the punishment imposed by the court after conviction; it also includes time spent awaiting trial or money spent raising bond by offenders who have the good luck eventually to be acquitted, litigation costs in time and money, and stigma. Suppose the combined effect of all of those costs is equivalent to an extra year in jail. A potential offender faces the situation:

A: 10 per cent chance of 2 years in jail = 0.1 * (2 years in jail + 1 year in other costs) = 0.3 years in jail

B: 20 per cent chance of 1 year in jail = 0.2 * (1 year in jail + 1 year in other costs) = 0.4 years in jail.

In the absence of the fixed 'other costs', the expected time spent in jail is the same, that is, 2.4 months (0.1 * 2 years and 0.2 * 1 year). A risk neutral offender would be indifferent between the two options. But the expected time spent in jail of the options are not the same once the fixed 'other costs' are taken into account.

Source: Friedman 2000, pp. 235-36.

Low certainty-high severity

There is a multitude of certainty–severity sanction combinations that provide the same level of expected costs to a would-be offender considering whether to commit crime. Therefore, given positive and high enforcement costs, policy should, to the extent possible:

- rely on monetary fines
- combine a low certainty of punishment with a high severity of punishment, whether a fine or alternative penalty, such as, imprisonment.

These two rules serve the objective of minimising the total social costs of crime given positive enforcement costs (Friedman 2000, Winter 2008). Friedman (2000) provides examples of the historical use of these rules.

Constraints on an optimal system of fines

There are several problems with relying solely on fines to reduce crime:

- many individuals may be unable to pay the large fines required under a system of low certainty-high severity
- high monetary sanctions raise issues in 'fairness' between rich and poor (Box J.5)
- harsh sanctions (monetary and forfeiture of property) can influence the incentives facing enforcement agencies when the 'spoils' are kept by the agency (for example, where the revenues from traffic fines are retained by the agency to cover the costs of running the agency). While there is a stronger incentive for the agency to enforce laws, two problems can arise:
 - rather than an optimal system of low certainty combined with high severity (which saves the resource costs of imprisonment), the agency's behaviour may result in a system of high certainty and high severity. In this case, there is crime reduction below the 'optimal' level of crime



- enforcement resources reallocated away from crimes with higher social damage, but do not result in revenue
 retention for the agency, towards crimes with lower social damage that earn the agency significant revenue
- high monetary fines may leave a criminal in financial trouble leading to further demands on the welfare state and/or motivating further criminal activity (Winter 2008, pp. 18–22).

Box J.5 The wealthy, the poor and fines

The general rule of low certainty and high severity can raise a number of issues in perceived 'fairness', including:

- punishment does not fit the crime: looking at sentences on a case by case basis, it may be perceived that the severity of the sanction is not in proportion to the harm done by the offence
- fairness in detection: under a low certainty rule, some get away with a crime and some get caught. The ones that get caught are then punished at a level of severity that is higher than under a high certainty and low severity rule
- form of liability: sentencing rules based on strict liability may appear unfair compared to fault-based liability.

Once enforcement costs are considered, the optimal punishment depends not only on damage done but also on how hard it is to deter offences. It takes a higher monetary punishment to deter a rich criminal than to deter a poor one: conversely, it takes a shorter prison sentence to deter a rich criminal. If deterrence is expensive, it may make sense to impose on each sort of criminal just enough punishment to deter most offences, which requires different punishments for different people.

Fines are more efficient punishments than imprisonment, and richer offenders can pay higher fines. Even if neither offender can pay a sufficiently high fine, imposing a given dollar punishment via imprisonment requires fewer days in jail for a higher income offender and is therefore cheaper. So punishment costs (per dollar of punishment) should decrease as income rises, which implies a higher efficient dollar level of punishment for richer offenders.

On the other hand, punishing rich criminals is cheaper than punishing poor criminals. But convicting rich criminals is more expensive because they have better lawyers. Both sorts of costs need to be taken into account in designing an efficient legal system.

Source: Friedman 2000; Polinsky & Shavell 2007, pp. 447–49.

Some of the fairness concerns about a low certainty-high severity rule can be addressed by differentiating the severity of fines by capacity to pay the fine, and/or allowing the fine to be paid in monetary terms or time spent in prison (or some other option, such as, indentured employment). To provide equal deterrence monetary fines should be higher for rich people than poor people. Here, an optimal or efficient system of fines aligns with concerns about fairness.

Application of the low certainty-high severity rule also needs to take account of the constraints:

- harsh sanctions may be nullified by juries and judges
- severe penalties may give rise to increased litigation and other legal costs
- in applying penalties, marginal deterrence needs to be maintained across types of offences so that incentives do not, inadvertently, lead to criminals substituting to more harmful crimes (discussed further below)
- high fines and onerous prison terms may increase crime and enforcement costs if they are viewed as unjust and diminish respect for the law potentially leading to increased crime



- harsh sanctions increase the incentives of offenders to evade capture which can increase the social costs of crime, and lead to further crime perhaps with greater social damage²¹⁵
- a criminal may be sensitive not just to the level of the expected cost from being caught and convicted, but also the separate components of the disincentive (the probability of apprehension, the probability of conviction and the severity of the sentence). If the criminal is more sensitive to, for example, changes in the probability of apprehension than to changes in the severity of the sentence, then optimal policy settings involve a lower severity and high probability of apprehension compared to a situation where a criminal was indifferent to the components of the disincentive to crime (Winter 2008, pp. 18–22 and Veljanovski 2007, p. 252).

The low certainty-high severity approach will not be optimal if potential offenders are not risk neutral. If offenders care about the components of the expected cost of sanction (the probability of apprehension and conviction versus the severity of the sanction), and not just the level of expected cost, then it may be optimal to re-balance the certainty–severity trade-off. If offenders are more responsive to a proportional change in the certainty of conviction than an equal proportional change in the severity of sanction, then this implies, to achieve a given level of crime deterrence, that relatively more resources will be directed at catching criminals, combined with shorter sentences (or lower monetary fines).

In practice, a system of sanctions uses both fines and imprisonment as sanctions:

Alternatively, the authorities can maintain a very low certainty of punishment, set fines as high as possible, and enhance the severity of punishment with prison sentences. This last option can be efficient if the resource cost of increasing the certainty of punishment is high relative to the cost of imprisonment. One study (Waldfogel, 1995) finds that, for fraud offenders, fines are directly related to a defendant's ability to pay and are used reasonably efficiently with prison sentences. On average, for each one-month reduction in the prison sentence, there is a \$1,500–\$2,000 increase in the fine. This suggests that, while monetary sanctions are not being used exclusively or excessively, they are being used on the margin to reduce the resource cost of imprisonment. (Winter 2008, p. 18)

Deter up to the point where the marginal gains to offenders plus the marginal costs of enforcement equal the marginal harm to victims

Optimal public expenditure on law enforcement and the provision of criminal sanctions is determined by balancing the marginal costs of enforcement with the marginal benefits of crime prevention.

Socially optimal deterrence occurs at the point where the social cost of reducing crime at the margin equals the social benefit (Figure J.4). Crime should be reduced up the point of D* where the marginal social cost of crime curve (D1) intersects with the marginal social benefits of crime reduction curve. At any point to the left of D*, the benefit from reducing crime is greater than the costs that must be borne to achieve the reduction (mainly enforcement costs, such as, policing resources). At any point to the right of D*, further reductions in crime provides benefits which are outweighed by the costs of enforcement.

The marginal social cost curve represents the marginal social costs of achieving a given level of crime reduction. The curve slopes upward because enforcement officials undertake easier (less costly) deterrence before harder (more costly) deterrence, for a given level of deterrence. For a given enforcement budget, officials first select those enforcement practices which provide the greater level of deterrence for a given cost. Achieving additional reductions in crime, for a given level of deterrence, becomes increasingly costly.

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²¹⁵ An example is a speeding driver who—under a low certainty high severity system of fines—faces losing their vehicle and everything else in their possession if pulled over by the police. This increases the likelihood that a speeding fine turns into a high speed chase which could cause significant damage to property and possibly even loss of life (Winter 2008, p. 18).



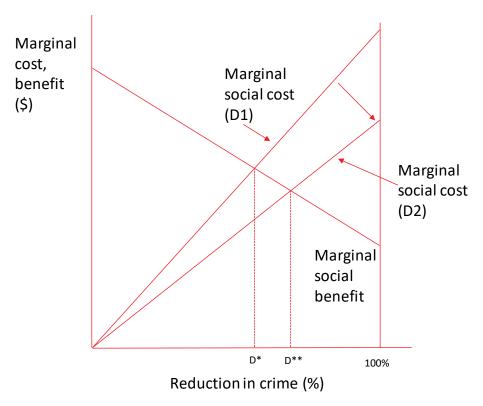


Figure J.4 The efficient level of deterrence

Source: Cooter & Ulen 2016, p. 475.

The marginal social benefit curve measures the social benefits of achieving increasing levels of crime reduction. It is downward sloping based on the idea that the social benefit to society of further small reductions in the crime rate declines as the total amount of crime declines (Cooter & Ulen 2016, p. 475). A reduction in crime of 10 per cent to 12 per cent benefits society more than a reduction in crime of 20 per cent to 22 per cent. This occurs because resources are first devoted to reducing those crimes with the highest net social costs taking into account the costs of prevention. As further efforts are directed at prevention, the marginal social benefit of avoided crime reduces.

The optimal deterrence level will change if either the marginal social cost curve or the marginal social benefit curve shifts. For example, if the opportunity costs of resources devoted to deterring crime falls (D1 shifts to D2), and marginal social benefits from crime reduction are unchanged, then the optimal level of deterrence increases from D* to D**.

As catching, trialling and punishing offenders is costly, there is a positive rate of crime where the social costs of reducing crime further outweighs the social benefits:

As long as deterrence is costly, the optimal amount of crime is positive. Costly deterrence precludes a rational society from entirely eliminating crime. If deterrence costs rise, the optimal amount of crime rises. If, however, the net harm from crime rises, the optimal amount of crime falls. (Cooter & Ulen 2016, p. 476)

Diminishing deterrence at the margin to increasing sentence lengths

Imprisoning offenders reduces crime through incapacitating offenders and deterring crime. However, this 'average' effect for the system overall does not necessarily mean that a marginal change in a policy that can be used to influence crimes rates will provide a further deterrence effect. For example, assume that an offender is half as likely to commit a crime when they become aware that the sentence for the crime has increased from two to four years.

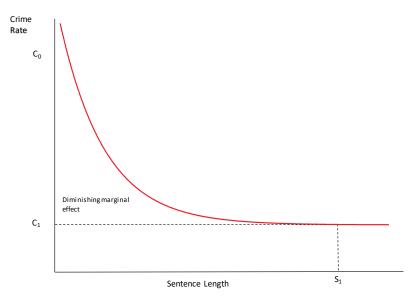


A further doubling of the sentence length to eight years may still provide some additional deterrence effect, but the reduction in the likelihood of the offender committing the crime is diminished, say, only 10 per cent less likely to commit the crime.

Where there is a diminishing effect at the margin to further sentence length increases, at some point the marginal effect of increasing sentence lengths is zero (illustrated as point S_1 in Figure J.5). Where the sentence length is initially zero, the crime rate is high at C_0 . Initial increases in sentence lengths provide a strong deterrence effect and crime falls. Continuing increases in sentence length increasingly result in smaller reductions in crime. As sentence lengths approach S_1 , increasing sentences provides very little or no further reduction in crime.

As discussed above in the context of dynamic models, future benefits are valued less by people than the same benefit received today. Likewise, future costs which must be paid are valued less than if those costs had to be paid today. Discounting provides a rationale for why the deterrence effect of increasing sentences from two to four years is likely to be greater than increasing the sentences from four to eight years.

Figure J.5 A diminishing effect on crime reduction as sentence lengths increase



Source: Durlauf & Nagin 2011.

'Marginal deterrence': maintaining relativities in harm across types of offences

Under the low certainty-high severity rule each sanction (whether a fine or time spent in prison) could be set at its 'maximal' level in order to minimise the certainty of apprehension thereby minimising the cost of providing a given level of deterrence. However, this creates a problem if the maximal penalty for a type of crime that does relatively little harm is the same or close to the maximal penalty of a crime that does much more harm:

In many circumstances, an individual may consider which of several harmful acts to commit, for example, whether to release only a small amount of a pollutant into a river or a large amount, or whether only to kidnap a person or also to kill him. In such contexts, the threat of sanctions plays a role in addition to the usual one of deterring individuals from committing harmful acts: for individuals who are not deterred, expected sanctions influence which harmful acts individuals choose to commit.

Other things being equal, it is socially desirable that enforcement policy creates marginal deterrence, so that those who are not deterred from committing harmful acts have a reason to moderate the amount of harm that they cause. (Polinsky & Shavell 2007, p. 432)



Friedman (2000, p. 243) quotes an old English proverb, 'As well hang for a sheep as for a lamb.' At one time stealing either a sheep or a lamb was a capital offence, so you might as well steal the more valuable animal.

If, for lower harm crimes, the severity of sentencing is purposefully set below its maximal/optimal level to maintain 'marginal deterrence' 216, then does this mean that there will be under-deterrence for these types of crime?

the penalty for mugging should not be set at its maximal level; it should be set sufficiently below the penalty for murder so that the higher penalty for murder will provide an additional deterrent. Although the lower expected penalties will increase lesser crimes, the reduction in harm from the decrease in more serious crimes will more than offset the increase in harm from the lesser crimes, increasing social welfare. (Shepherd & Rubin forthcoming, p. 16)

Maintaining marginal deterrence will not necessarily reduce the level of deterrence for lower harm crimes as additional enforcement resources can increase the certainty of punishment (above what it would be under the maximal/optimal level), even if this is a less efficient option.

In Queensland, the general pattern in average prison sentence lengths is broadly consistent with the marginal deterrence principle (Figure J.6). Those offence types with a short average sentence length also rank lowly on the National Offence Index (NOI) (for example, have a rank of over 120). Those offences that have higher average sentence lengths have NOI rankings moving towards a ranking of 1 which is held by murder).

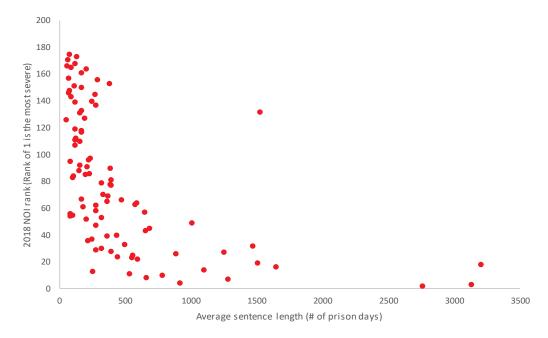


Figure J.6 NOI ranking and average sentence length by type of offence

Notes: Average sentence lengths calculated by offence type at ANZSOC 4-digit level based on all convictions involving a sentence of imprisonment in 2017–18. The NOI rankings are a combination of public perceptions of the relative seriousness of offences and expert opinions (see Appendix F). The horizontal axis has been truncated: the average sentence length for murder was assumed to be 7,300 days. Source: DJAG unpublished data; QPC estimates.

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²¹⁶ Note that the use of the term 'marginal deterrence' differs from the meaning often seen in the economic literature referring to the marginal effect or the effect at the margin of a policy.



Stigma as an efficient form of punishment

Stigma can be a form of punishment separate from the immediacy, certainty and severity of other forms of punishment, such as non-custodial and custodial sentencing options. Stigma can be a highly efficient form of punishment:

Stigma is information, and information is, with rare exceptions, valuable, since it allows people to make more nearly correct choices. The knowledge that you are a crook is valuable to potential employers. If you can still persuade them to hire you by offering to work for less, the stigma has simply transferred money from you to them since, without that information, they would have hired you at the normal wage. If you cannot persuade them to do so, the information must have been worth more to them than it cost you. So stigma can be, and often is, a form of punishment with net negative cost, one that benefits other people by more than it hurts the person being punished. (Friedman 2000, p. 232)

However, for stigma to be an efficient form of punishment, it is important that the convicted person is actually guilty. If we convict someone who is innocent, stigma becomes a very inefficient punishment, since the information being created is false. As a 'criminal' conviction usually imposes stigma and a civil conviction usually does not, it makes sense that the criminal law requires a higher standard of proof (Friedman 2000, p. 232).

One problem with relying on stigma as a form of deterrence is that effects will be highly heterogenous across offenders:

One criticism of shaming punishments is that the amount of shame a criminal incurs may vary greatly from person to person. I may find it awful to have to stand in front of a post office wearing a sign that reads: "I stole mail. This is my punishment" (an actual real-world punishment). Some people may actually get a kick out of doing that, especially when compared to being fined or imprisoned. Thus, it may be very difficult to gauge the deterrent effect of any particular shaming punishment. But this point is true for all forms of punishment. Different individuals respond differently to similar punishments, whether they are fines, imprisonment, or something else. (Winter 2008, p. 24)

Changes in group dynamics and social norms can also reduce the effectiveness of stigma in deterring individual criminal behaviour. An example is where a criminal act becomes a 'right of passage' for youth offenders, or where the proportion of a community's population with prior imprisonment experience becomes large such that stigma is reduced.

J.4 The scope of the criminal law

There are characteristics of an offence/offender that can be used to consider whether the criminal law is likely to be the best policy option for regulating the undesirable behaviour.

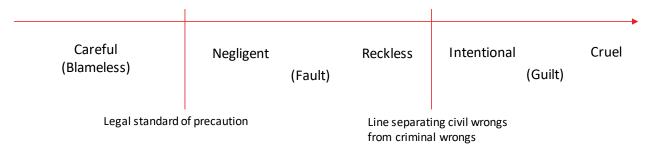
The role of intent

Intent plays an important role in the criminal law. Intent can range from careful (blameless behaviour) to negligent and reckless behaviour to intentional and cruel behaviour (illustrated in Figure J.7). The culpability of the offender increases from left to right, with higher culpability being more blameworthy or deserving of punishment. Intention demarcates reckless acts that are a civil wrong from intentional acts that are a criminal wrong. This distinction is increasingly being eroded with the expansion of strict liability offences under the criminal law (discussed further later).

Acts involving intent tend to have lower detection rates as offenders take precautions not to be identified and apprehended. This results in a reduction in the certainty of punishment.



Figure J.7 Intent and culpability



Source: Re-produced from Cooter & Ulen 2016, p. 457.

Judgment-proof criminals

If the certainty of punishment is low, then, for a given level of deterrence, the severity of sanctions needs to be higher under an optimal deterrence rule. An optimal deterrence rule will set the severity of a sanction equal to the harm caused divided by the certainty (probability) of punishment (f = h/p, where f is the severity of the sanction, h is the harm causes and p is the probability or certainty of punishment. The ratio h/p is sometimes referred to as the 'probability multiplier').

As an example, if an offence causes harm of \$100 and has a certainty of punishment of 50 per cent, then the optimal sanction equals \$200 (\$100/0.5). At this level of sanction, the expected value to the offender of committing the crime is zero (ignoring issues concerning the timing of costs and benefits and the discounting of those costs and benefits).

In the case of monetary fines, a low certainty of having to pay the fine implies a higher fine. Therefore, intent resulting in a lower certainty of punishment also results in an increase in the likelihood that offenders will not have the capacity to pay the fine. In general, the criminal law is more suited to handling the challenges created by this problem than tort law. If the offender does not have the financial resources to pay compensation (are judgment-proof), then the criminal law has the option of imposing a custodial sentence.²¹⁷ In other words, the offender can pay with their time rather than financial resources.

In tort cases, the offender is usually known to the claimant because, as the activity often does not involve intent, the offender did not take precautions against detection. In these cases, the probability of detection, apprehension and punishment (the certainty of punishment) is high (approaching 100 per cent). In contrast, the certainty of punishment for many types of criminal offences is 50 per cent or less.²¹⁸

A higher certainty of punishment makes the civil law a more viable option without resulting in under-deterrence.

An approach to dealing with the problem of judgment-proof offenders is to recognise that while an offender may have limited wealth, she or he may not be short on time and ability to supply labour. In lieu of capacity to pay a fine, options that allow offenders to provide community service or 'work-it-off' can support a system that provides workable alternatives to imprisoning an offender. The State Penalties Enforcement Registry currently has in place such arrangements and restorative justice processes can involve non-monetary ways of compensating victims.

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²¹⁷ In principle, the length of the custodial sentence can be set to provide a level of deterrence equal to that which would be provided under an optimal monetary sanction (fine).

²¹⁸ Many types of offences have reporting rates that are around 50 per cent or less in 2016–17, including: physical assault, theft from a motor vehicle; face-to-face threatened assault; malicious property damage; attempted break-in; and other theft (ABS 2019d). The perceived likelihood of being punished is also affected by an offender's beliefs about the probabilities of being charged and found guilty.



'Positive value' offences

These are offences for which it is easy to manufacture false positive verdicts. If the court sets a sanction above the level of harm (for example, a probability multiplier is applied for the purpose of deterrence), then the value to the 'victim' of a guilty finding may be greater than the actual harm done. This provides an incentive for entrapment and/or framing offenders, favouring use of the criminal law over the civil law (Friedman 2000, pp. 286–7).

This is a particular problem where harms extend beyond easily measurable harms (and compensatory damages) to, for example, emotional or psychological harms which are less easy to verify.

Returning to the example above, tort law will set the fine at \$100, which offsets the liability owed to the plaintiff, but is too low from a deterrence perspective. On the other hand, if tort law was to apply a probability multiplier and set the fine at \$200—so that the monies paid to the plaintiff is greater than the harm caused—then this would create the conditions for positive value offences.

While the problems of judgment-proof offenders and positive-value offences pose challenges for the civil law, Friedman (2000) discusses a number of mechanisms for private law to overcome these problems.

Standard of proof and the signalling value of the criminal law

A criminal conviction provides more accurate information on the character/productiveness²¹⁹ of the offender compared to tort and administrative law alternatives, which have lower standards of proof.

This 'signal' has value to those interacting with offenders, for example, employers, and is a large part of the reason why stigma is seen as an efficient mechanism for providing deterrence (see also Friedman 2000, pp. 231–32).

Expansion of the criminal law to include more and more undesirable behaviours can result in stigma dilution. The signal provided by criminalisation loses its value because the quality of the signal provided by a criminal conviction is reduced. To mitigate stigma dilution, Mungan (2015, p. 13) suggested:

- Do not criminalise acts that do not, on average, provide much information regarding a person's productivity and character.
- Regulate such acts through other models of regulation, such as, administrative law.
- Use expungements (the sealing of criminal records) in combination with criminal sanctions.

Mungan argues that decriminalising offences that are better addressed in an alternative way will increase the deterrence value of the wrongful acts that remain crimes (Mungan 2015, p. 3).

Some findings

The traditional common law crimes: intent and high harm

Traditional common law offences account for just under 70 per cent of Queensland's prison population. These offences generally have a strong rationale for criminalisation because they involve:

- relatively high levels of harm, where harm directly infringes upon the liberty of another person (to have their person and property free from coercion by others)
- intent so that there are strong incentives to avoid detection
- judgment-proof offenders

²¹⁹ Non-criminals participate in legal economic activity that produces outputs valued at more than the resources consumed in their production. In contrast, criminal activity does not add value or contribute to net increases in welfare; rather, it produces harm and consumes significant resources (for example, in enforcing laws). Criminal activity is therefore usually highly inefficient or unproductive.



- positive value offences if treated under tort law
- offences for which the stigma of a criminal conviction is warranted.

For the undesirable behaviours covered by the traditional common law offences, the criminal law will generally provide a better solution than alternative policy approaches.

The criminal law's protections to offenders provides valuable information about offenders:

Delivering these sanctions through criminal law is desirable, because it provides the necessary procedural tools to minimize wrongful convictions. Avoiding wrongful conviction in this context is necessary, because such convictions would disseminate inaccurate information about the convicted person. (Mungan 2012, p. 63)

A detailed analysis of individual offences or groups of offences may find that, at least for some offences, there are viable alternatives. Friedman (2000) discusses some of the historical solutions that evolved to address the conditions thought to favour the criminal law over alternatives.

The main alternative for these offences is likely to be the civil law. Where there is a concern that damages limited to compensatory damages will provide under-deterrence, a probability multiplier could be applied. An option for addressing the problem of positive value offences may be to have any damages beyond compensatory damages, under certain conditions, paid to a third party (for example, a victim compensation or offender rehabilitation fund). This system would represent a balancing of interests where victims do not receive full restitution, but receive a significant degree of restitution, and more than they usually receive under existing processes.

Overall, traditional common law offences appear to have relatively strong justifications for criminalisation.

Intent and low harm

Where common law offences involve relatively low levels of harm, the criminal law may still be a relatively efficient mechanism because these offences often involve low probabilities of detection and conviction. In addition, victims will lack sufficiently strong incentives to prosecute under civil law.

The use of administrative law, reducing the barriers of accessing the civil law, applying a probability multiplier under the tort law and/or awarding punitive damages under tort law may provide alternative options. However, these options lack the accurate information production feature of criminal law, because under these alternatives the suspect is not protected by standards of proof as high as under the criminal law (Mungan 2012, p. 58).

Punitive damages under tort law may be preferable to criminal sanctions when:

the act in question reflects slight deviances from social norms, but not great enough to warrant the imposition of criminal stigma on the offender. The fact that the plaintiff is the recipient of punitive damages suggests that such damages should be awarded only upon clear evidence supporting accusations. Otherwise, the possibility of obtaining punitive damages may be an invitation to fraudulent claims. (Mungan 2012, p. 58)

Another alternative for offences characterised by intent and low harm is to maintain the offences under the criminal law and maintain police enforcement, but to reorient sentencing towards a restitution and restorative justice focus for those victims and offenders willing to constructively participate (discussed in Chapter 14).

Unintended harms

Mungan (2012, p. 63) argues that there are persuasive arguments for restricting the scope of criminal law to intentional wrongdoings. Criminal sanctions are not nearly as necessary or desirable in regulating acts leading to unintended harms as they are in regulating common law crimes. Inadequate deterrence is not as great a problem, because the unintentional nature of accidents leads to higher detection probabilities. Furthermore, there is a risk that criminalizing undesirable acts resulting in unintended harms can cause individuals to refrain from similar



desirable acts in fear of wrongful convictions. Many unintentional harms are a by-product of otherwise beneficial activity.

When the harm in question is unintended, criminal law is less likely to produce accurate and valuable information concerning the offender.

Negligence

Negligent homicide is an example of an offence that has a weaker *mens rea* (a 'guilty mind') requirement than most other crimes. Mungan (2012, p. 63) argues that criminalising negligent homicide is justifiable:

Negligent homicide requires a state of mind which greatly deviates from the average. As such, criminalizing this act is unlikely to cause fear of wrongful conviction and abstention from socially desirable activity. Furthermore, criminal law will fulfil its informative function by convicting only those who show great deviances from social norms.

Strict liability offences

To be convicted of a crime, the criminal law traditionally required evidence that the accused intended to do harm or behave in a way that broke the law. To establish 'responsibility' for a criminal offence, the prosecution must establish beyond reasonable doubt the elements of the offence the accused is charged with, including:

- proof of the voluntary occurrence of the physical elements of the offence
- proof of the mental elements of that offence (if required) to make a person criminally responsible for that conduct
- the absence of any defences (justification or excuses) that would negate criminal responsibility for that offence (Schloenhardt 2015, p. 55).

However, there is a trend towards dropping the *mens rea* requirement for an increasing range of offences in favour of a strict liability rule. Strict liability offences can impose sentences where there has been no demonstration of intent to cause harm. These changes have implications for deterrence policies:

It has been suggested that in criminal law mens rea is an indirect measure of the 'elasticity of the response' of the criminal to sanctions. Where the offender did not intend to commit the crime, he or she is not likely to be sensitive to sanctions – i.e. punishing crimes which are mistakes or unintended will not generate [...] deterrence. However, where they are intended then the elasticity of the response to sanctions can be expected to be greater, and therefore punishing the offender will generate greater [...] deterrence. (Veljanovski 2007, p. 257)

The Institute of Public Affairs (IPA) raised concerns about the expanded use of strict liability in the context of regulatory offences:

Strict liability regulatory offences can impose prison sentences on individuals who have demonstrated no intent to cause harm. It is difficult to see incarceration for these offenders as necessary for the protection of the community and its norms. (IPA sub. 11, Attachment: The use of prisons in Australia: Reform directions, p. 60)

Under the economic framework used in Mungan (2012) and Mungan (2015), it was found that strict liability crimes should not be criminalised. As offender protections are removed, the criminal law no longer fulfils its function as a signal of the characteristics of the offender.

The main legal objection to criminalisation is that there is 'something fundamentally objectionable to subjecting a defendant who has not behaved in a blameworthy way to conviction and punishment under the criminal law' (Herring 2015, p. 245). While recognising some arguments provide support for strict liability, it is claimed that these benefits 'would be just as strong if a negligence-based offence was used, or at least one where there is a defence of "due diligence" (Herring 2015, p. 246).



In the case of the United Kingdom, it was estimated that:

nearly half of all offences are offences of strict liability, although most of them involve minor offences. (Herring 2015, p. 234, citing Blake & Ashworth 1996)

Public order offences

Public order offences were a significant concern for many stakeholders (Box J.6).

Two key characteristics of public order offences are:

- The 'victim' is usually the community or public interest and not an individual person. In some cases, the victim may be an individual, for example, when an activity vilifies or incites hatred on racial, cultural, religious or ethnic ground, or where cruelty to animals is involved.
- The offences usually involve relatively low harm or harmless acts, such as the consumption of legal substances in prohibited spaces (for example, the consumption of alcohol in a public park).

Given these characteristics, offenders are rarely sentenced to imprisonment for a public order offence. As at 30 June 2018, public order offences accounted for only 0.3 per cent of the prison population (QCS unpublished data). However, their impact on the criminal justice system is much larger. In 2017–18, 26,048 public order offences, or 16.2 per cent of all offences, either proceeded to charging (court action) or involved non-court action (ABS 2019g). In addition, public order offences may lead to other and more serious offences, so that an offence against the public order is one of a number of more serious charges for which an offender is imprisoned.²²⁰

Community-based methods (for example, community justice groups) were suggested as an alternative way of handling public order offences:

The purpose of the offence of commit public nuisance is to protect community interests in the peaceful use and passage through public spaces. For the reasons noted in Professor Walsh's paper, it is an overused and misused charge. We would suggest investigating community-based methods for addressing a commit public nuisance. It is after all a community interest in the use of public spaces that is sought to be protected. To that end, it is an offence that could more appropriately be dealt with by way of court-ordered mediation to address the underlying concerns. That one measure alone would have a dramatic impact on the incarceration rates. ²²¹ (ATSILS sub. 35, p. 4)

Restorative justice processes could also provide a community-based solution for offences that do not warrant criminalisation, such as public order offences:

Another possible collective response to public wrongs is to avoid any formal legal process, in favour of a publicly organized (and funded) system of mediation, negotiation, or 'restorative justice': that is, to treat (alleged) public wrongs, which could be defined and treated as crimes, as 'conflicts', or 'troubles' that need to be resolved by those involved in them, rather than as crimes whose perpetrators should be called to formal, public, censorial account ... our concern here is with versions that offer not new ways of dealing with crimes as crimes, but ways of avoiding the perspective and structure of criminal law altogether. (Duff 2018, p. 282)

A diversionary option is the use of Deferred Prosecution Agreements (see Chapter 11).

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²²⁰ Prisoners are classified based on their major serious offence. A prisoner may also have committed other (lesser) offences for which they were sentenced, including public order offences.

²²¹ See Walsh 2006, 2008 and Mazerolle et al. 2010.



Box J.6 Stakeholder views on public order offences

Public order offences invariably involve conflict:

The policing of public order is fraught with conflict. The 'right' of one person or group to enjoy public spaces is often presented as being in conflict with the rights of others to do the same. Other rights may conflict with one another in the context of public space, including the right to freedom of expression, the right to freedom of assembly and the right to freedom from interference. Further, interactions in public space between police and members of the public can result in both verbal and physical conflict. Each may harbour resentment and prejudice against the other which influences, and is influenced by, the exchanges that occur between them in public space. (Walsh 2008, p. 1)

Concerns were raised during the inquiry that too many people are charged with public order offences:

Many of these people with issues are then charged with something called 'public nuisance' which an all-encompassing offence aimed at removing potential 'troublemakers' from the public gaze...

Over 25000 people are charged every year in this State with 'public nuisance' offences and yet we hear nothing of the circumstances of these cases unless the media deems them sensational or supportive of the standard 'law and order' demands for punishment. (White sub. 28, p. 6)

Concerns were also raised that the harm thresholds are too low, resulting in too many people having contact with the criminal justice system, particularly young adults:

[It] takes very little to meet the criteria for public nuisance, obstruct/assault police or contravene a direction by police. To a significant extent, this comes down to how police respond and engage ... For some young people, while their behaviour is not optimum, they do not have the skills to be able to manage their actions and express their frustration and anger more appropriately. Bringing them in the criminal justice system will not assist with this. Additionally, some engagements with police result in children being charged with the offences solely as a result of their interaction with police... (YAC sub. 34, p. 10)



Appendix K: Victim-focused proposal design issues

Chapter 14 proposed the adoption of a more victim-focussed criminal justice system and sentencing process. This appendix discusses the design issues.

In this appendix, reference to restorative justice (RJ) processes has a broad meaning. Victims can choose a process focused solely on restitution, restorative justice or some combination of both. Restitution processes can encompass both financial and non-financial forms of compensation. In addition to financial and non-financial elements, RJ include processes more focussed on 'restoration'. Even where there is a strong focus on restitution to the victim, there can be benefits to the offender—for example, where it substitutes for court-imposed sanctions, such as imprisonment.

RJ processes can include:

- RJ conferences (direct face-to-face meetings, or indirect conferencing, such as, through video conferencing. Conferences often include family and community supports)
- offender-victim mediation (direct between the participants, or indirect, for example, through a third party),
- reparative panels
- community justice panels and circle sentencing
- restorative reintegration services.

K.1 Design issues

Eligibility—the scope of included offences

All offences involving direct harm to an identifiable victim should be included within scope of the proposal regardless of the level of harm or the complexity of the circumstances. However, this does not mean that all offences are necessarily in scope in the first year of operation of the proposal. Some offences, for example, those involving sexual crimes and gender-based domestic violence, may gradually be brought within scope as standards are developed and mediators trained.

Evidence suggests that RJ conferencing should include medium and higher harm offences in addition to offences that are relatively lower harm:

When [Restorative Justice] conferences are conducted as they were in the experiments... there can be a high confidence of good results with violent crime, and somewhat less confidence with property crime. The evidence suggests that with serious offenders with long criminal records, the delivery of RJCs also offers substantial cost-effectiveness. The evidence in the London experiments in particular suggests that banishing RJC to low-seriousness crimes is a wasted opportunity. If governments wish to fund Restorative Justice at all, this evidence suggests that the best return on investment will be with violent crimes, and also with offenders convicted after long prior histories of convictions. (Strang et al. 2013, p. 48)

RJ conferencing may have a more significant impact in reducing recidivism for violent crimes than for property crimes:

The average effect of RJCs (compared to [Conventional Justice]) on repeat offending across all three reported property crime experiments was nil, while the average effect of RJCs across five experiments with violent crime was a modest but statistically significant reduction in the frequency of repeat offending. (Sherman et al. 2015, p. 528)



One of the concerns of including high-harm offences is for the emotional and physical safety of the participants. However, the proposal, and RJ conferencing typically, includes a number of safeguards, including:

- indirect conferencing is an option to face-to-face meetings
- both victims and offenders must agree to proceed with whichever mediation option is mutually chosen
- various sources of advice will be available to participants to help them understand the relevant safety issues and make choices
- mediators will be trained in the conduct of conferencing
- RJ practice guidelines could be developed to assist mediators.²²²

The proposed scope of included offences is similar to New Zealand restorative justice processes. An amendment to the *New Zealand Sentencing Act* in 2014 requires all cases that meet certain criteria be adjourned for consideration of whether RJ is appropriate prior to sentencing. Higher harm as well as lower harm offences are in scope, including sexual and domestic violence offences.

Compared to Queensland's Adult Restorative Justice Conferencing (ARJC) program, the proposed scope of offences is likely to be broader in practice, although higher harm offences are also sometimes addressed under the ARJC (Box K.1).

Box K.1 Queensland Adult Restorative Justice Conferencing features

The Adult Restorative Justice Conferencing model is based on multiple referral points and conferencing with a convenor appointed by the Department of Justice and Attorney-General (DJAG). All restorative justice processes run by the Dispute Resolution Branch of DJAG are conducted under the *Dispute Resolution Centres Act 1990*.

Some key elements of the model are:

- *Voluntary*: conferencing requires informed consent. Parties are provided with information regarding the process and their options. Parties are also provided with the support and advice necessary to understand this information and exercise their choice.
- *Referrals*: the court, police, prosecutor or corrective services can refer people to RJ conferencing. Victims, defence solicitors and barristers can also suggest it.
- Types of offences: conferencing is usually for the low to medium-harm offences heard in a Magistrates Court, but may also be used for high-harm offences. Conferencing is most commonly used for offences heard in a Magistrates Court, such as stealing, assault, fraud, wilful damage and unlawful use of a motor vehicle. It might also be used for more serious offences, depending on the situation.
- Restorative process: adult restorative justice conferencing, but currently at a minimum scale.
- Impact on court proceedings: Where the matter is before a court, the referrer will decide the best way
 to proceed, including whether the court process should continue or what impact conference outcomes
 will have on the sentence imposed.

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²²² See, for example, Restorative Justice Council 2011 and NZ Ministry of Justice 2017.



How court outcomes are impacted

Who applies the 'residual' public interest test?

In the inquiry's draft report, it was proposed that magistrates would receive the victim-offender agreements and would assess the agreement for a residual public interest (this is also the model described in Chapter 14). It was further proposed that, below a certain harm threshold, the court would be required to accept the outcomes of the agreement—meaning that no further court sentencing, including a sentence of imprisonment, could be applied. There would still be the scope to provide referrals to treatment and rehabilitation programs.

Consultations on the Draft Report raised concerns that this may not be consistent with Chapter III of the Australian Constitution.

Chapter III of the Constitution is concerned with judicial power. The structure of the constitution requires:

- the judicial power of the Commonwealth cannot be vested in a non-judicial body
- non-judicial power cannot be vested in a Chapter III court.²²³

This acts to separate the exercise of judicial power (and the judiciary) from legislative and executive bodies.

If the proposal, as described, is unconstitutional, then there are at least two options:

- Option 1—agreements influence magistrate's decisions (as proposed in the chapter), but involve ex-judicial officers. The ODPP/QPS decision to charge proceeds independently of the outcomes of the mediation process which also proceeds as soon as feasible. The offender is charged and the case proceeds to court. The magistrate receives the agreement from the mediator and takes into account relevant legislative requirements in deciding whether further court action is required, what form that action should take, and the quantum or severity of the action
 - But, mediators are required to include former judicial officers of a federal, state or territory court as part of their mediation service (see Bronitt 2018, p. 3 who discusses this solution to the potential Chapter III constraint in the context of Deferred Prosecution Agreements).
- Option 2—integration of the 'residual' public interest test with existing legal processes. The victim's choice as to enter into mediation occurs prior to the decision to charge and/or proceed to court. Agreement outcomes affect these decisions taken by the ODPP/QPS. Where cases proceed to court, the judiciary takes into account the agreement, at its discretion, in determining appropriate further court action.

Ex-judicial officers and mediation

The provision of RJ services could be required to include ex-judicial officers, either as appointed mediators directly, or as part of contracted organisations such as under the New Zealand model. These officers would be involved in the provision of documentation to magistrates which would provide advice on the outcomes of the mediation process, including their view on whether there is a 'residual' public interest which may require further court sentencing.

Ex-judicial officers could also be included under the option where the agreement influences ODPP/QPS decisions to proceed with charging.

Integration of the 'residual' test with existing legal processes

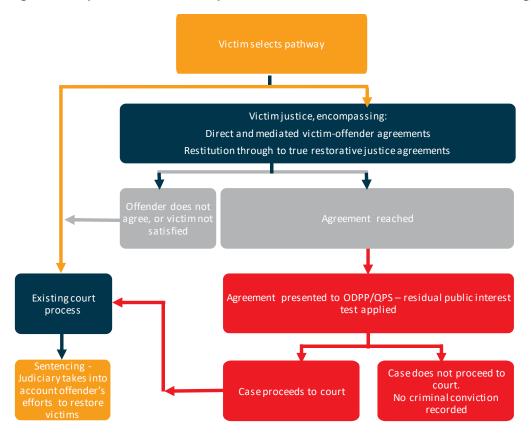
QPS/ODPP could apply the residual public interest test as part of the normal process for determining whether a case should proceed to charging and/or court (illustrated in Figure K.1). This decision-making process includes the existing public interest test and the ODPP's Director's Guidelines.

²²³ R v Kirby; Ex parte Boilermakers' Society of Australia (Boilermakers' Case) (1956) 94 CLR 254.



The difference would be that the government could amend legislation to implement the policy position that, for cases below a test threshold (discussed later), the victim-offender agreement (RJ outcome) suffices as a sanction, subject to agreement compliance. The Director's Guidelines would be updated to provide assistance on policy intent and the application of the threshold test.

Figure K.1 Option for the residual public interest test to influence the decision to charge/proceed to court



Integrating the proposed residual test in this way would involve a relatively straightforward expansion of existing processes.

For cases above the test threshold, once a case has proceeded to court (under Option 1 or 2), the policy intention would be that the judiciary makes some allowance for restorative justice outcomes and this becomes reflected in a reduced severity of court sentencing, including a reduction in average sentence length. How much of a reduction is allowed for by the judiciary would evolve over time, influenced by the judiciary's views of the impacts of RJ processes assessed against the traditional purposes of sentencing guiding the judiciary (just punishment, rehabilitation, deterrence, denunciation, and protection of the community).

To provide greater assurance that outcomes will be taken into account in sentencing, one approach is to amend the *Penalties and Sentences Act 1992* and include a section stating that RJ outcomes are to be considered in the same way that s. 13 of the *Penalties and Sentences Act 1992* states that a guilty plea is to be taken into account.

If the Queensland Government chose to implement Option 2, then RJ processes influence the decision to proceed to court which is different than the New Zealand model.



The 'residual' public interest test

The existing public interest test and its purpose

A criminal incident that comes to the attention of authorities can result in a crime being recorded leading to a police investigation. Where an offender is identified, a charge may be laid or, alternatively, a caution or other form of diversionary outcome may result. A person may be charged through a 'Notice to Appear', 'arrest and charge' or 'complaint and summons' (Douglas et al. 2010, p. 107).

Most charges commenced by Queensland Police officers are prosecuted by Queensland Police Service (QPS) prosecutors in the Magistrates Courts. Some more serious charges are prosecuted by the Office of the Director of Public Prosecutions (ODPP).

The decision of a police officer to charge a particular offender should be guided by the ODPP's Director's Guidelines. The guidelines were developed to assist police officers and staff of the ODPP in their exercise of discretion (Douglas et al. 2010, p. 109).

The quidelines contain a two-tiered public interest test in deciding whether a case should proceed to court:

- is there sufficient evidence?
 - a prima facie case is necessary but not enough
 - a prosecution should not proceed if there is no reasonable prospect of conviction before a reasonable jury (or Magistrate)
- does the public interest require a prosecution? (Office of the Director of Public Prosecutions 2016, p. 2)

The Director's Guidelines sets out a range of discretionary factors that can be considered under the second tier of the public interest test. These include, amongst other factors: the availability and efficacy of any alternatives to prosecution; any entitlement or liability of a victim or other person to criminal compensation, reparation or forfeiture if prosecution action is taken; and the attitude of the victim of the alleged offence to a prosecution.

The existing public interest test is also discussed in Chapter 11.

Options for specifying the 'residual' public interest test

Under Option 1, victim and offender agreements are submitted to magistrates and, if the case falls below a test threshold, then no further action is taken by magistrates. Under Option 2, the agreements are submitted to the QPS/ODPP and, if the case falls below the test threshold, then the case does not proceed to court. Under both options, if the case falls above the threshold then there is a potential 'residual' or secondary public interest in further court action.

In principle, the test could rely on estimates of the proportion of harm internalised by the victim compared to harm externalised to the community. The higher the proportion of harm internalised by the victim the stronger is the case that there is no residual or secondary public interest to be addressed by further court action. Even where a sizeable proportion of the harm is externalised, arguably, public funding of police services and mediation services addresses this externality fully. If this is the case, then there is no rationale for further court sentencing. The test threshold could be set such that offences with these characteristics fell below the threshold.

Offences above the threshold would be those where private action directly between victims and offenders, combined with public funding of police and mediation services, are insufficient to minimise the social costs of crime given positive enforcement costs (for example, if there is a legitimate and significant concern of under-deterrence in the absence of further court action). However, in practice, the information required for this approach is not available.

Two alternative approaches for a harm-based threshold test are:



- relative rankings of harm by offence classification: pre-existing empirical tools which rank the seriousness or harm of offences based on classifications of offences could be used (see Appendix F). These tools are based on one or more of public perceptions of relative harm, legislated maximum sentences, and actual court outcomes. The test threshold could be based on a position in the rankings, for example, offences ranked in the bottom third of offences (i.e. are relatively lower harm) are deemed to be below the threshold.
- monetise the harm: the harm of each case could be monetised based on the specifics of the case. The threshold test would then be based on a harm level expressed in monetary terms, for example, offences causing harm less than \$10,000 are deemed below the threshold

One of the advantages of using relative rankings of harm by offence classification is that it is simple to implement. However, the approach has a few shortcomings:

- There can be significant variation in harm levels across cases within the same offence classification.
- There is the potential for differences of view on relative harms. Whose view matters—the judiciary's (suggesting the relative harms of offences would be based on court outcome data, such as, differences in average sentence lengths); the public's (suggesting surveys of public opinion); or politician's (suggesting the use of legislated maximums)?
- A case may involve multiple charges, although ranking on the basis of the most serious offence could be undertaken.

Monetising the harm of the case, even if a rough estimate, could help address these weaknesses of ranking approaches.

Any harm-based test is also subject to the problem that two identical offences can have very different levels of harm because harm done is influenced by the victim's responses to the offences.

Similar to the existing public interest test on whether to proceed to court, a 'residual' public interest test may not be able to be specified so tightly as to remove the need for discretion in deciding whether a case falls below or above a threshold.

If monetising harm is not feasible, then a reasonable approach would be to establish the threshold test using relative harm rankings based on offence classifications constructed from Queensland data, but to include a general 'exception' to capture those outlier circumstances where the harm in the individual case is dramatically higher than the average harm for the offence type.

An illustration of the threshold test using NOI rankings of harm

Table K.2 ranks ANZSOC offence classifications by their National Offence Index (NOI) ranking and includes information on 2018 prison shares and accumulated prison shares. Offences are ranked from most harmful at the top of the table to least harmful. Only offence types involving direct harm to other persons are included.

Assuming a harm-based test threshold was set to include roughly one-third of the 2018 prison population below the threshold, then the offences in scope are those beginning at the bottom of the table, moving up the table until the accumulated prison share equals thirty-three per cent. This includes the range of offences from harassment and private nuisance to other acts intended to cause injury (not elsewhere classified).



Table K.2 NOI ranking and prison shares for ANZSOC division 01 to 08 offence codes

ANZSOC	Description	Restricted to ANZSOC 01-08		
		NOI rank, 2018	Prison share, 2018 (%)	Accumulated prison share from lowest rank (%)
0611	Aggravated robbery	18	11.9	48.6
0521	Deprivation of liberty/false imprisonment	19	0.0	36.7
0212	Serious assault not resulting in injury	20	1.9	36.7
0213	Common assault	21	1.8	34.7
0299	Other acts intended to cause injury, n.e.c	23	0.1	33.0
0291	Stalking	24	0.4	32.9
0491	Neglect or ill-treatment of persons under care	27	0.0	32.4
0499	Other dangerous or negligent acts endangering persons, n.e.c	28	0.5	32.4
0411	Drive under the influence of alcohol or other substance	30	0.6	31.9
0412	Dangerous or negligent operation (driving) of a vehicle	31	4.4	31.3
0612	Non-aggravated robbery	34	1.2	26.9
0621	Blackmail and extortion	36	0.4	25.7
0532	Threatening behaviour	38	0.4	25.3
0711	Unlawful entry with intent/burglary, break and enter	39	18.9	24.9
0811	Theft of a motor vehicle	40	0.1	6.0
0812	Illegal use of a motor vehicle	41	3.3	5.9
0821	Theft from a person (excluding by force)	42	0.0	2.6
0813	Theft of motor vehicle parts or contents	43	0.0	2.5
0822	Theft of intellectual property	45	0.0	2.4
0823	Theft from retail premises	46	0.0	2.4
0829	Theft (except motor vehicles), n.e.c	47	0.3	2.4
0820	Theft (except motor vehicles), n.f.d	48	1.6	2.1
0831	Receive or handle proceeds of crime	49	0.3	0.5
0841	Illegal use of property (except motor vehicles)	50	0.0	0.2
0800	Theft and related offences, n.f.d	51	0.1	0.2
0531	Harassment and private nuisance	52	0.0	0.0

Notes: The above prison shares data is based on the national census of prisoners. Shares, in terms of the flow of prisoners through the prison system over a given year, will differ. Prison shares will also vary from year to year. In the ANZSOC classification system, 'n.e.c.' stands for not elsewhere classified and 'n.f.d.' stands for not further defined.

Source: QCS unpublished data; QPC estimates.

Option to re-classify offences under the criminal code

Section 3 of the *Criminal Code Act 1899 (Qld)* divides offences into two types—criminal offences and regulatory offences. Criminal offences comprise simple offences, crimes and misdemeanours (illustrated in Figure K.2):

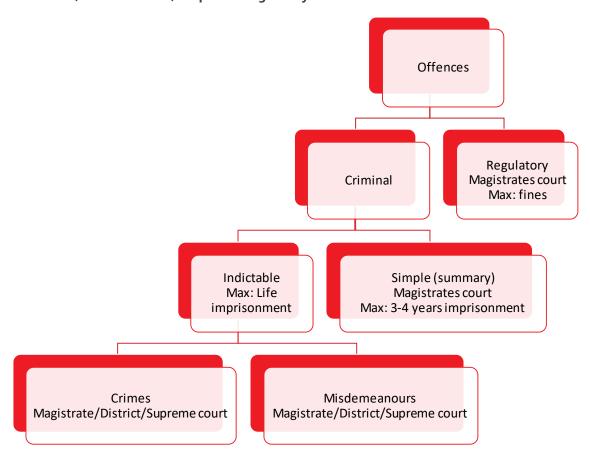
• Simple offences: a simple offence (also known as a summary offence) is a less serious offence—for example, many driving offences, creating a public nuisance, trespassing and minor drug offences. If a criminal offence is not otherwise designated (for example, as a misdemeanour or crime), it is automatically a simple offence. Simple offences are usually heard in the Magistrates Court and are set out in the Summary Offences Act 2005.



• Crimes and misdemeanours (indictable offences)²²⁴: an indictable offence must be prosecuted on an indictment (a written charge by a person authorised to prosecute criminal offences) bringing a person to trial in a higher court (District or Supreme Court) before a judge and jury. In certain circumstances, a charge on indictment may be prosecuted before a judge alone, without a jury. Generally, crimes are more serious than misdemeanours.

Every offence defined in legislation is classified as either a regulatory, simple or indictable offence (misdemeanour or criminal).

Figure K.2 Crime, misdemeanour, simple and regulatory offences



Regulatory offences are further set out in the *Regulatory Offences Act 1985 (Qld)* and include acts such as stealing goods valued at \$150 or less from a shop; leaving a hotel or restaurant without payment of a bill for goods or services valued at \$150 or less; damaging property valued at \$250 or less. Regulatory offences must be finalised in the Magistrates Court only. Regulatory offences carry fines as the maximum penalty according to the Act. An important feature of regulatory offences is that they provide police with an alternative to charging a person with a criminal offence.

Imprisonment is the maximum sanction for most simple offences. As the offences are heard in the Magistrates Court, the maximum length of time that can be imposed is three years imprisonment, although a sentence of up to

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²²⁴ Examples of misdemeanours are: sedition (maximum of 3 years imprisonment); common assault (2 years); forcible entry (2 years); extortion by public officers (3 years); observations or recordings in breach of privacy (2 years); distributing prohibited visual recordings (2 years); and criminal defamation (3 years). Examples of crimes are: murder and manslaughter (imprisonment for life); attempt to commit rape (14 years); and serious animal cruelty (7 years).



four years imprisonment can be imposed by the Magistrates Court sitting as the Drug and Alcohol Court. A monetary fine is the maximum sentence for some simple offences.²²⁵

Indictable offences carry a maximum sentence of imprisonment (Caxton Legal Centre 2019; QSAC 2018a).

The discussion of the public interest test above works within this classification system (i.e. does not require any changes).

An alternative would be to change the definition of the classifications or add a definition specifically to cater for those offences that legislation would nominate as part of the new offence type. The new offence type would define the set of offences for which legislators have decided fall below the test threshold. For these offences, successful restitution/RJ outcomes can substitute for court sentencing. There may be no need to apply a residual public interest test.

Admitting guilt and restorative justice

Restorative justice processes are more likely to result in successful outcomes when there is agreement on the basic facts of the case between participants:

If restorative justice sentencing agreements (RJSA) are reserved only for cases in which the offender has indicated an early plea of guilty, steps can be taken at an early stage to consider whether an agreement can be reached in a case. The agreed facts of the offence form a clear basis for negotiations to begin. Further, the opportunity to participate in RJSA which might reduce the term of imprisonment that might otherwise be imposed is likely to act as an incentive to resolve a matter at an early stage. (Prison Fellowship Australia sub. DR27, p. 3)

In restorative justice, responsibility plays an important role, and accepting it (a sine qua non requirement for joining the process) involves confronting the consequences of the offense, including the effects of the conduct and the damages caused, and taking positive steps to repair the rift created by the offense. Assuming such responsibility is good for the victims, society, and the offenders because it combines responsibility for past actions with responsibility for present and future ones. The objective of this responsibility is to provide for the needs of the victim and of society, but also of the offender, in order to change him into a responsible agent, integrated within society. (Luzon 2016, p. 580)

Taking responsibility for one's actions in a restorative justice process differs from what often occurs under normal court processes:

...the criminal process may deter perpetrators from assuming responsibility for their actions because defendants fear that it will lead to the imposition of criminal liability, conviction, and punishment. Defendants use various legal strategies to evade responsibility, often on the advice of their attorneys. These actions serve to intensify their lack of empathy toward the victim and the community, and create a sense of mutual alienation between them and society. This feeling is exacerbated throughout the legal process, and even more so during incarceration. (Luzon 2016, p. 580)

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²²⁵ Some examples of the potential maximum imprisonment period for simple offences include: public nuisance offences (6 months); trespass (1 year); public begging (6 months); possession of a graffiti instrument (1 year); throwing things at a sport event (6 months); performing tattooing on a minor (6 months); and unlawful unregulated high risk activities (for example, climbing up or down the outside of a building or structure) (1 year) (*Summary Offences Act 2005 (Qld*)). Public urination and unlawfully driving a motor bike on public land is an example of a simple offence where the maximum penalty is a fine. While a fine only, the offences still result in a criminal conviction and a criminal record.



Processes that result in an early admittance of guilt by the defender (for example, early plea bargaining and restorative justice) are subject to the criticism that they diminish the defendant's right to procedural justice. However, the proposal has several offender protections:

- the offender has to agree to enter the restitution/RJ process
- the victim and offender must settle on a negotiated agreement; both parties must 'agree'
- if the offender does not wish to enter the process, or cannot come to an agreement, normal court processes occur (with their protections).

There can be a difference between admitting the 'facts' for a restorative justice process and a plea of guilty for court processes.

In addition, well over ninety per cent of cases that come to court involve a plea of guilty.

There is a trade-off between the protection of a defendant's procedural rights, potential savings from processes that may avoid higher court costs, and the benefits that may result from restorative justice processes undertaken prior to going through a trial:

In Prison Fellowship Australia – Queensland's (PFAQ) view, an RJSA is less likely to be reached where a matter has proceeded to trial, and the parties have had to go through that process and the added trauma that that process entails. (Prison Fellowship Australia sub. DR27, p. 3)

Referral points

In New Zealand, restorative justice is integrated into the criminal justice system with referral for assessment for eligibility becoming mandatory in 2014. Restorative justice processes can operate in a variety of ways at different stages in the criminal justice system (pre-trial stage, pre-sentence, and post-sentence). It can be offered alongside a police caution, as part of a sentence, or post-sentence.

While New Zealand RJ referrals can happen at a number of different points in the criminal justice process, presentence referrals are the most common. 'Pre-sentence' means that prior to referral:

- the case has proceeded to court
- the offender has pleaded guilty
- the judge has assessed the case and has decided that the case should be considered for restorative justice
- the case is adjourned pending the outcome of the restorative justice process.

Victims in New Zealand can ask for the court to consider referral, but victims have no authority to choose RJ.

Under the proposal, victims choose to enter mediation/RJ prior to and independent of a police, ODPP or court referral. However, as people can change their mind, existing referral options should be maintained. For example, a victim and/or offender may decide against RJ participation, the case proceeds to court, the case results in conviction and the judiciary, as part of the sentencing process, offers RJ at that stage.

Risk and the role of screening

Victims choose RJ, subject to the offender's agreement to participate. Both parties can receive advice on whether an RJ process, and which type of process, is suitable for their circumstances. However, it is proposed that the decision to proceed remains with the victim and offender.

Information and advice to participants can come from, for example, the appointed mediator, legal advice, government information provision (websites, pamphlets), and family and friends. One of the roles of the mediator would be to advise victims/offenders of the most suitable process for their circumstances. This would take into account current ARJC screening criteria (Box K.2).



For a large proportion of cases under the proposal, the ARJC criteria will be overly risk averse because the types of mediation/RJ processes in scope is much broader than direct face-to-face RJ conferencing. These processes entail lower risk, particularly for the victim, than direct conferencing.

Mediation/RJ processes for most types of offences carry a level of risk significantly less than, for example, some sexual and domestic violence offences. For offences where there could be significant negative impacts on participants, many cases will involve processes other than direct face-to-face RJ conferencing. For those that do, mediators and others will provide appropriate advice to victims and offenders. And where advice is not to proceed, often at least one of the participants will agree not to proceed.

Box K.2 ARJC screening criteria

The Dispute Resolution Branch (DRB) policy for the conduct of ARJC sets out the criteria which underpins the decision to proceed to a restorative justice process:

- that both the victim and offender provide ongoing and informed consent to participate in an Adult Restorative Justice process
- the victim and offender agree on the basic circumstances of a matter as the basis for their participation in the Adult Restorative Justice process
- the offender accepts responsibility for their offending behaviour and is willing to take steps to repair the harm caused
- the victim is not seeking retribution in relation to the offender
- power dynamics, which may impact on the process or the ability for the parties to negotiate in their own interests can be appropriately managed within the restorative justice process
- the Adult Restorative Justice process is unlikely to result in further harm being caused to the parties, in particular the victim.

DRB's practice for the conduct of post-sentence restorative justice includes other suitability criteria.

Source: DJAG 2018b.

Protections against coercion

Under the proposal, victims are given the option to choose a RJ process, with assistance provided to help victims make informed decisions, including screening and consultation with the mediator. However, the choice remains with the victim, subject to agreement of the offender.

In some cases, there will be a risk that the offender may seek to exercise coercion over the victim either to agree to the process or to lower their demands in the process. Therefore, there would need to be a process where the ODPP/QPS or judiciary can overrule victim preferences, if it is suspected that the victim has been subject to coercion by the offender.

Delays in sentencing

In a system where RJ processes are an add-on to existing criminal justice system processes they may result in delays to cases being finalised. In New Zealand, the RJ process and the offender's completion of agreed obligations are usually concluded prior to sentencing. This eliminates monitoring and enforcement issues, but raises issues concerning delays to sentencing. To help avoid delays in sentencing, particularly with the legislated increase in referrals for eligibility assessment, court coordinators can decline eligibility for conferencing.

Under both Option 1 and Option 2 (outlined earlier), RJ processes would begin earlier than is normally the case in New Zealand.



Nonetheless, under Option 1 where agreements are submitted directly to magistrates, some delays in case finalisation can be expected for those cases that would be finalised relatively quickly. There can be a wide variance in the time it takes for the court to make a finding:

The speed with which cases move through the court system can vary enormously. In some cases the process can take months, in others it can be days and this can impact upon victim engagement. (Bright 2017, p. 60)

Where cases are not finalised rapidly, by the time the offender is convicted, any agreement between victim and offender will be available to the magistrate to inform sentencing.

Risk of delay will vary by the different types of restitution/RJ processes included in the proposal. Some of these processes may be concluded rapidly compared to, say, direct face-to-face conferencing where, for example, more time may be needed to organise supporting family and community members.

Under Option 2 where agreements are submitted to the QPS/ODPP, the proposal may delay the decision to proceed to court. However, for cases below the test threshold, cases do not proceed to court where there is a successful agreement (unless there is a suspicion of coercion involved). For cases above the test threshold, there may be some delay.

To help minimise delays, mediation deadlines can be imposed tailored to the specific type of RJ process:

Further, reasonably strict deadlines by which an RJ [agreement] is to be reached should be imposed. PFAQ is of the view that imposing such deadlines will assist the parties to make decisions about whether they will participate in RJ processes and ensures that negotiations don't simply drag out. It also places a reasonable degree of pressure on an offender to reach an agreement in order to gain the benefit of an RJ [agreement] at their sentence. (Prison Fellowship Australia sub. DR27, p. 3)

Use of surrogate participants

The use of surrogate victims or offenders is also an option where one of the participants is unavailable or unwilling to engage in the process. Where the victim does not participate, the use of a surrogate enables an offender to benefit from the process primarily to facilitate their rehabilitation, but also to have the opportunity of a reduced sentence (Prison Fellowship Australia, sub. DR27, p. 4).

Community contracting

There are a number of options for the supply of RJ (mediation) services. Under the proposal, 'mediation' has a broader meaning than sometimes used in other contexts. As indicated at the beginning of this appendix, it includes various alternative dispute resolution mechanisms typically associated with the civil law and it includes various restorative justice processes.

Community contracting in the NZ model

RJ mediators are community service providers operating under a contract to the NZ Ministry of Justice to provide primarily Restorative Justice conferencing, but other forms of RJ are also provided. Maori service provides are available in many areas.

Conferences are run by 26 community service providers selected through a transparent and open tender process. Community service providers constitute a diverse group:



- 8 lwi organisations²²⁶ which provide a range of services in addition to restorative justice
- 10–11 restorative justice trusts, who only have restorative justice contracts with the NZ Ministry of Justice
- district councils and religious groups.

The size of service providers ranges from a couple of people to hundreds of people.

In RJ conferences, offenders and victims are brought together with their support networks and perhaps community representatives to discuss an offence and attempt to arrive at a shared view of how to right the wrong. One of the main purposes of this form of RJ is inviting an offender to express remorse so that victims can gain a sense of closure (New Zealand Government 2016, p. 2).

Providers may conduct RJ conferencing as face-to-face meetings or use 'indirect' processes, such as, an exchange of letters, 'shuttle' mediation, and/or telephone or videoconference communications (Restorative Justice Council 2011, pp. 5–6).

The Department of Corrections provides post-sentencing conferencing, but offender willingness to participate has been an issue (New Zealand Government 2016, p. 6).

Community contracted mediation and Indigenous service reforms

The use of community–based organisations in New Zealand to provide RJ services suggests the potential for a similar approach to be adopted in Queensland. This has a natural tie-in to the structural reform recommendations contained in QPC (2017). Those recommendations involve devolution of greater decision-making authority to the local level and greater local involvement in service delivery. Contracting of community-based organisations to provide RJ services also aligns with the Queensland Government's Indigenous Procurement Policy and purchasing targets.

Under a community contracting model, various groups in communities that are already involved in youth programs, diversionary programs and restorative processes could be expected to tender for the delivery of services. For example, community justice groups (Box K.3) would be well placed in some communities to provide services under the proposal.

Different service delivery models for different circumstances

Implementation could include a range of mediation or service delivery options, including through the ARJC and a community contracting model. There are also existing civil law alternative dispute resolution mechanisms²²⁷, and existing arbitration and expert determination models, that might be utilised or built upon.²²⁸

The most cost-effective model of service delivery varies by the circumstances of the case. There will be significant variation in victims and offenders, different types of offences, differences in victim and offender supports (for example, family participation), cultural differences, and differences in population densities affecting the cost of

²²⁶ Iwi are the largest social units in New Zealand Māori society. The Māori language word iwi means 'people' or 'nation', and is often translated as 'tribe', or a confederation of tribes.

²²⁷ In Queensland, mediation services for settling civil disputes out of court include, for example: Adult restorative justice conferencing (also referred to from criminal cases); abbreviated mediation for QCAT minor civil disputes; child protection conferencing; facilitated workplace dispute resolution; separating couples mediation; neighbourhood mediation; mediation for Aboriginal and Torres Strait Islander peoples; and the 'main' mediation service provided by DJAG Dispute Resolution Centre trained and accredited mediators. The most common disputes dealt with through the latter service are: neighbourhood disputes involving fences, noise, children, pets and overhanging trees; family and intergenerational disputes; workplace disputes; commercial disputes; disputes relating to relationship separation; property settlement disputes; and multi-party disputes, sometimes involving whole communities (see https://www.qld.gov.au/law/legal-mediation-and-justice-of-the-peace/settling-disputes-out-of-court/mediation). Mediation usually involves disputes between individuals or an individual and an organisation. Facilitation usually involves large-scale disputes with several parties, an organisation, a department or an entire community.

 $²²⁸ See \ https://www.qls.com.au/For_the_community/Alternative_Dispute_Resolution\#conciliation.$



programs. A range of options will help match the form of RJ process (mediation) to what is needed to achieve successful and cost-effective outcomes.

Box K.3 Community justice groups

A community justice group (CJG) is usually formed when community members come together voluntarily to help reduce crime and social problems in their community. Nearly all CJG members are volunteers and include Elders, traditional owners, Respected Persons and community members of 'good standing'.

CJGs provide a community-based response to local issues, working cooperatively with magistrates, police, corrective services personnel and staff from other government agencies.

CJGs perform three important activities:

- making cultural submissions to the Magistrates Court on behalf of defendants
- identifying and promoting treatment and support programs for defendants to help magistrates in their bail and sentencing decision making
- assisting and directing defendants as they progress through Murri Court.

K.3 'Severity' of restitution and RJ agreement outcomes

Court outcomes provide a benchmark and upper limit

Where restitution is a strong focus of the agreement, the mediated process will result in levels of restitution which evolve over time in line with, or constrained by, court sentencing outcomes for similar offences and circumstances.

Agreed restitution may take many forms, but each agreement can be thought of as involving a certain level of restitution or 'severity'. If offenders must agree the restitution, and have the option of taking their chances in court, then what will evolve is a norm of sentencing outcomes where maximum severity is truncated and minimum severity has a long 'tail' distribution (illustrated in Figure K.3):

- Maximum severity: there are constraints on the maximum severity able to be imposed by the victim as the agreement is a negotiated outcome between victim and offender, likely through a mediator. If the demands of the victim are more severe than evolved punishment norms, the offender chooses court sentencing.
- Minimum severity: the victim is free to choose a severity below evolved norms as the offender will not contest such an outcome. The 'debt' to be paid is to the victim only, and the preferences or 'values' of the victim (for example, if the victim believes strongly in forgiveness) play a role in the severity of sentencing. This will result in a distribution truncated on the high-severity side of sentencing, and a longer tail on the lower-severity side of sentencing.

For a particular offence and level of harm, if courts were to increase/decrease the severity of sentences over time, then the upper limit of the level of restitution that might be demanded by victims would increase/decrease accordingly.

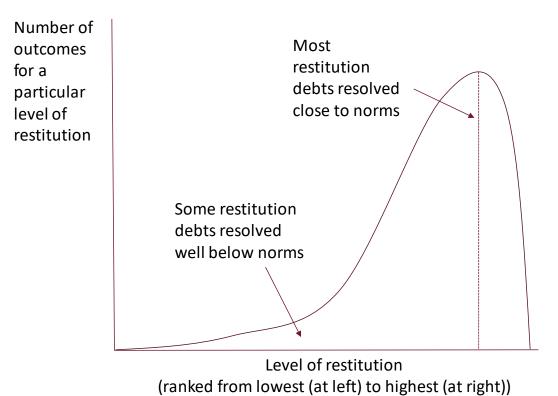
Because of the process of benchmarking to court outcomes, in many, or perhaps the majority of cases, victims may not receive full restitution.²²⁹ However, they would often receive significantly more than they currently do.

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²²⁹ Measurable harm may include damages for restoration of property or health (mental and physical). Where there has been severe physical harm, measurable harm can include the present value of the stream of lost income. In addition to measurable harm, full restitution would include compensation to the victim for the invasion of their property rights (sometimes referred to as 'punitive' damages). Full restitution arises 'when the victim is satisfied, not when her or his measurable costs have been paid' (Benson 1996, p. 78).



Figure K.3 An asymmetric distribution of the level of restitution to victims



Victims can choose a lesser punishment

If the judiciary is given the authority to determine and impose punishments on all offenders (tens of thousands each year), which involves the strong exercise of coercion over offenders, then a natural limitation on the exercise of that power is that it be applied consistently to a set of agreed principles and purposes. The consistency principle helps judges and magistrates be seen to be fair in their judgements as their judgements concern a restriction on or the partial removal of an offender's liberty.

The principle of consistency tends to deliver consistent severity near or above the maximum penalty according to the principle of proportionality. Media attention in the case of bad outcomes, and the risk-averseness of politicians and actors throughout the criminal justice system, support this tendency. From an efficiency perspective, an optimal deterrence rule will often require the severity of a sentence to be greater than what would be set under a proportionality rule.

The theory of proportionality says that the criminal loses her or his rights to the extent she or he has deprived the victim of their rights:

The proportionality theory only supplies the upper bound to punishment — since it tells us how much punishment a victim may rightfully impose. (Rothbard 1982)

The proportionality rule tells us how much punishment a victim or plaintiff may exact from an offender. It imposes a maximum penalty beyond which the punishment is viewed as unjust. The principle of proportionality does not:

- require mandatory punishment
- require the maximum to be paid, or
- specify the form that the punishment must take (in particular, it does not require imprisonment, even for high harm offences) (Rothbard 1982).



Consistency in sentencing outcomes is not relevant in a system where the focus is on the relationship between victims and offenders, particularly where that system provides for limitations on maximum severity. The level of restitution is determined by the victim (who may actually be the only person who understands the level of harm caused) and the victim's preferences for financial versus non-financial forms of restitution. This is constrained by the requirement that the offender must agree the restitution and be capable of 'paying' it.

Recidivism and escalating punishment

The main reason lower harm offenders are in prison is that they are recidivists with a significant criminal history (discussed in Chapter 6). In the early phase of their offending pattern, the courts may impose sanctions with a severity that would be below the harm done (for example, warnings, absolute release and good behaviour bonds) (Figure K.4). As the offender re-offends and returns to court, sanctions progress through a sentencing hierarchy becoming increasingly severe until, eventually, the option of imprisonment as a last resort is exercised by the court. At some point through this progression, and certainly when the sanction of imprisonment is used, the severity of the sentence is likely to be greater than the harm done by the most recent offence.

This general pattern may not always be the case, particularly as the courts may use sanctions in combination, for example, combining good behaviour bonds with restitution and compensation orders.

The pattern of escalating penalties for recidivists is logical given that enforcement costs, including imprisonment, can be expensive. Where this pattern holds, the court is both attempting to give offenders an opportunity to change their behaviours, an incentive to do so, and, where this fails, a much stronger and costly incentive (penalty) in the form of imprisonment.

In effect, the principle of proportionality still holds, but it applies over a set of offences rather than each individual offence.

Under the proposal, each agreement between a victim and offender is a discrete case. The process will not take into account prior offending behaviour, but only the one-on-one relationship between the victim and offender. Whereas a court may escalate penalties as it moves through a sentencing hierarchy, the mediated victim-offender process is focussed on the harms done for the specific case at hand.

However, this may not hold in practice as outcomes are benchmarked against court sentencing outcomes through the offender's option to proceed with normal court processes. If an early stage offender knows that she or he is likely to be sentenced lightly in a court (in the sense of a sentence severity less than proportional to the harm caused), then this will limit what victims can negotiate for. So, the 'severity' of victim-offender agreements may mirror court outcomes to some extent for recidivists.

If an early-stage offender considers that they benefit from avoiding a criminal conviction for the offence, then this strengthens the victim's bargaining position. An offender may also view the court process as a significant cost in itself.



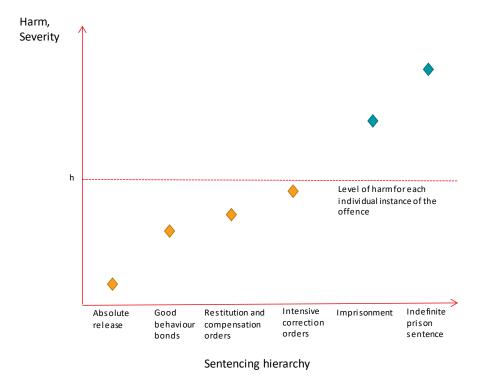


Figure K.4 Sentencing hierarchy and repeated offending of a lower harm offence

Notes: Court orders may be used in combinations. Court ordered restitution and compensation orders on their own will be well below full restitution set equal to harm done. Intensive correction orders could be above or below harm.

Under-deterrence and soft on crime?

Certainty of punishment

Deterrence works for many would-be offenders, while others respond poorly. Those that are responsive to incentives may respond differently to equal percentage changes in the components of deterrence—the immediacy of punishment, the certainty of punishment and the severity of punishment. Punishment includes both sentencing outcomes, stigma and the costs borne by those people whom the offender cares about (for example, her or his family). Empirical evidence suggests, mainly from U.S.-based studies, that any desired increase in deterrence is better achieved through altering the certainty of punishment rather than the severity of punishment.

A victim-focussed system improves the incentives of victims to report crime and cooperate fully with enforcement agencies. If a victim chooses to demand a level of restitution that is lower than the equivalent of what the judiciary would impose, then an argument might be made that there is under-deterrence compared to some 'socially optimal' level of deterrence. Under the current system, reporting a crime and the subsequent police and court processes can add further (uncompensated) costs to the victim. Under the proposed victim-focused approach, an offender's 'debt' is paid to the victim to the extent possible so that the victim is better off from reporting the crime, or at least no worse off.

Offence reporting rates are part of what determines deterrence because they influence the probability of being apprehended and the certainty of punishment. Under the proposal, there will be situations where individual victims will agree a level of restitution that a court applying uniform sentencing rules regards as too low (not severe enough) from a deterrence perspective. The increase in the certainty of punishment that a victim-focussed system may provide will at least partially, and potentially more than fully, offset any reduction in deterrence resulting from a reduction in severity.



A confronting process for many

One of the impediments to the widespread take-up of adult restorative justice processes has been the impression that it is 'soft on crime':

My response to that and we have got videos where our crime survivors have spoken to us and we have recorded those is it's not soft on crime. When we go into the prisons and engage with the inmates they are literally petrified. You know this is the first time they have had to have any sort of serious dialogue with a victim you know and they are mortified. You know these are people who are accustomed to doing violent offences or a range of other activities and they are just absolutely mortified because they have to do deal with issues, and it's not just the victim impact statement where you know it gets read out and, or the victim speaks for 10 minutes and 15 minutes of that is that and they tune out. They have to be engaged for eight weeks, they have to see this person you know for lengthy periods of time. And until people understand that that is a tough process and it is by no means soft on crime, people will just go to the default option which it can sell in 15 seconds—we will increase this sentence, we will make that sentence mandatory. (Prison Fellowship Australia, Brisbane public hearing, p. 19)

A recent evaluation of youth RJ conferencing in Queensland considered that conferencing can be very confronting:

Restorative justice conferencing should not be considered a 'soft option' for young offenders. Facing up to what they have done and to the people they have harmed can be a confronting experience. (DCSYW 2018a, p. 3)

Consultations with Yarrabah Shire Council (YSC) raised concerns that the criminal justice system is often seen by youth as lacking significant consequences (for example, multiple warnings) leading to a disrespect for the law (QPC visit to YSC of 1 May 2019). In contrast, an expansion of restorative justice processes, particularly where they involve strong community engagement, were supported by YSC. However, it was also stated that restorative processes need to be conducted properly and provide community/family supports because the processes can result in significant shame for young offenders, even to the point of being a suicide risk.

Interviews of offenders following RJ processes have tended to find that offenders found the processes difficult:

restorative justice processes and outcome are not easy or "soft". Researchers have found based on observations of restorative justice processes and with interviews of offenders after these processes that facing a victim is most often a difficult and emotional experience for offenders. Offenders, in the face of real suffering by real victims, are less able to utilise excuses to explain away or rationalise their offending behaviour. Many offenders have indicated that restorative justice processes and outcomes are more difficult to endure than traditional justice processes and punishment. (Schmid 2002, p. 128)

The Chief District Court Judge of New Zealand has observed:

There is nothing soft about the way conference participants deal with offenders. In fact, my experience is that, in terms of outcomes, the courts are and have been much softer on young offenders than families ever are. "Sometimes it's an easy option for a youngster to go into prison for a short time and sit in his cell doing nothing for the greater part of the day". (cited in Schmid 2002, p. 129)



Obeying the law voluntarily not because of threat

Gabbay (2005) lists reasons why people voluntarily obey law:

- they fear the disapproval of their social group for violating the law (an external incentive)
- people generally view themselves as moral human beings
- people tend to obey laws that others, whom they respect, view as worthy of obedience (pp. 386–7).

Gabbay (2005) argues that even if restorative justice processes result in a lower severity of what is traditionally considered 'punishment', potentially reducing general deterrence, a broader conceptualisation of deterrence would take into account how restorative justice better utilises or supports the mechanisms by which people voluntarily obey the law.

Public perceptions

A NSW survey of public attitudes towards restorative justice found²³⁰:

- widespread support for restorative justice principles
- restorative justice was perceived as less effective than 'better supervision of young people' but more effective than 'a prison sentence'
- more support for RJ among females, those with lower educational attainment, regional dwellers, and those with more punitive attitudes (Moore 2012).

Respondents with more 'punitive attitudes' were those respondents who viewed court sentencing as 'too lenient'. Roughly eighty per cent of punitive respondents agreed that victims should have a say in how an offender can make amends compared to roughly sixty-six per cent of respondents who considered that sentencing was 'too tough' (p. 9).

Overall, it is not clear that the proposal would result in a reduction in severity. It will change the direction in which the offender's 'debt' is paid (from the state to victims). And it will change the nature of the debt (for example, from imprisonment to a combination of financial compensation, non-financial means of compensation and restorative processes). It will also result in less uniformity in sentencing.

Will the proposal actually reduce time spent in prison?

The proposal shifts who an offender's debt is paid to—from the state in the form of often idle time in prison to the active restoration of victims. It does not necessarily change the level of that debt (the severity of the sentence), only its composition or nature. However, for offences above the test threshold which result in further court action, it is not certain that magistrates and judges will actually take into account the 'full value' of the agreement between victim and offender.

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²³⁰ The NSW Bureau of Crime Statistics and Research surveyed NSW residents as to their support for restorative justice initiatives for theft/vandalism and assault offences. The survey was undertaken over a four week period in 2011 with 2,530 surveys completed.



How much of a sentence reduction is given will be determined by the judiciary:

First, many victims, offenders and indeed criminal justice professionals wrongly believe that successful completion of a restorative justice activity in the pre-sentence stage automatically reduces the sentence given. The court may take participation in restorative justice and subsequent outcome agreements into account when sentencing, just as many other factors are considered – for example, whether a guilty plea was entered and how quickly. It is not a given, however, that successful engagement in restorative justice will lessen the sentence imposed. (Bright 2017, p. 60)

QPC consultation with New Zealand stakeholders suggests that the extent to which the judiciary is adjusting sentencing to take account of restorative justice outcomes is unclear. At this point, there is no reliable evidence on this issue.

Where agreements buy little in the way of sentence reduction then, in the first instance, the impact is to increase the overall level of 'debt' paid by the offender—the offender makes efforts to restore victims and 'pay' the sentence imposed by the judiciary. There is little in the way of substitution of restitution and restorative justice for court sentencing.

If the proposal evolves in this way, then the level of effort offenders are willing to commit to the process will be greatly reduced. The 'discount' that the judiciary applies to agreements will highly influence the level of victim restoration.



Appendix L: Key reports on Indigenous involvement in criminal justice

Table L.1 identifies selected highlights from key reports and studies related to Indigenous involvement with the Queensland criminal justice system—setting out reported problems/findings and recommendations.

Table L.1 Conclusions of key reports into Indigenous incarceration—problems and recommendations

Problems/findings

Recommendations

Royal Commission into Aboriginal Deaths in Custody (RCIADIC) (Johnston 1991)

- Indigenous people die in custody at a higher rate than non-Indigenous because they are over-represented in custody.
- The most significant contributing factor to the overrepresentation of Indigenous people in custody is their disadvantaged and unequal position—socially, economically and culturally.
- Empower Indigenous people; return control of their lives and their communities to Indigenous hands. Adhere to the principle of Indigenous self-determination.
- Recommendations are principally directed to the elimination of disadvantage and to the growth of Indigenous empowerment and self-determination.
 Recommendations also relate to more specific justice system reforms.

The Aboriginal and Torres Strait Islander Women's Task Force on Violence Report (Department of Aboriginal and Torres Strait Islander Policy and Development et al. 1999)

- Dispossession, cultural marginalisation, unresolved trauma and grief combined with high unemployment, poor health and educational attainment contribute to high rates and cycles of violence.
- Service delivery unable to meet needs, while encouraging dependence. Use of quick-fix over longer term solutions. Lack of Indigenous control in decision making.
- Alcohol control not working due to vested interests.

- Whole of government response required across health, education, housing and social services.
- Develop strategies for improving economic development and sustainability.
- Greater community involvement in crime prevention and intervention.
- Develop restorative justice and use of customary lore.
- Incorporate Aboriginal community police into Queensland Police.
- Re-establish the Indigenous Justice Advisory Committee.
- Provide victim support and violence prevention programs.
- Enforce law relating to supply of alcohol and work with communities to develop alcohol management strategies.



Problems/findings

Recommendations

The Aboriginal and Torres Strait Islander Justice Agreement (Queensland Government 2000)

- Long term aim of the agreement is to reduce Indigenous contact with the criminal justice system to parity with the non-Indigenous rate.
- Set target for 2011 to reduce by 50 per cent the rate of Indigenous incarceration in Queensland through supporting outcomes and initiatives.
- Overrepresentation is due to underlying disadvantage, lack of support, cultural differences and community capacity.

- Strategic directions to build:
 - community capacity (to restore order and reduce offending)
 - individual capacity (to navigate justice system)
 - a more culturally sensitive justice system
 - a stronger role for communities in justice administration (from caution to post release)
 - integrated and coordinated justice related services.

Cape York Justice Study (Fitzgerald 2001)

- Alcohol and substance abuse and violence had become normalised in Cape York communities. Incentives encourage the supply of alcohol.
- Intergenerational impacts on children, and direct harms through abuse and neglect.
- High levels of welfare dependence and limited economic opportunities.
- Control availability of alcohol and provide rehabilitation.
- Enforcement of law to reverse acceptance of violence, while reducing unnecessary contact with the criminal justice system.
- Improve service delivery and coordination.
- Provide community-based sentencing options.
- Emphasised community based early intervention and prevention.

Evaluation of the Queensland Aboriginal and Torres Strait Islander Justice Agreement (Cunneen et al. 2005)

- Community Justice Groups (CJGs) inadequately skilled and funded for the work they do.
- Failure to use alternatives to arrest and expand Indigenous staff in policing.
- Failure to resource Murri Courts.
- Lack of community-based sentencing options.
- Lack of urgency and support for initiatives.
- Continuation of the Agreement and further audit and evaluation by an independent body.
- Establish Aboriginal and Torres Strait Islander Justice Advisory Council.
- Crime prevention programs to target prevalent crime types.
- Improve diversion as an alternative to arrest and bail-based programs as an alternative to custody.
- Develop an Indigenous Criminal Justice Research Agenda
- Develop Murri Courts, fund and support CJGs, increase access to legal representation
- Expand Queensland Aboriginal and Torres Strait Islander Police.



Problems/findings

Recommendations

Restoring Order: Crime prevention, policing and local justice in Queensland's Indigenous communities (CMC 2009)

- Indigenous communities have high rates of crime and substantial violence.
- There is a concentration of risk factors for involvement in crime in Queensland's Indigenous communities.
- Reform implementation has been poor and too much focus has been put on criminal justice system reforms.
- Responses both within and external to the criminal justice system are required:
 - improve and maintain focus on crime prevention
 - local justice components to be incorporated into the criminal justice system.
- Government should provide communities with the powers, responsibilities and accountability mechanisms to allow them to develop appropriate responses to their situation.
- Local police should play a key supporting role.

Evaluation of the Remote JP Magistrates Court Program (Cunneen et al. 2010)

- Remote JP courts serve a useful function in providing peer based timely justice (for minor matters with guilty pleas). Largely supported by stakeholders, but with little measured impact on recidivism.
- Retain and expand JP courts but with greater support.
- Remove barriers to recruitment of JP magistrates, including prior conviction requirements, to increase local candidates to the position of JP.

Evaluation of the Community Justice Group Program (KPMG 2010)

- The quality and effectiveness of the CJG Program is constrained by poor program resourcing and governance arrangements.
- The legislation is too broad and not specific enough to clearly guide their activities.
- The skills, capacity and number of available CJG members to implement and monitor crime prevention activities is a major factor for the effectiveness of future crime prevention and community-based initiatives.
- It was not possible to measure the effectiveness of the CJG Program in reducing Indigenous contact with the criminal justice system due to limited data.

- Strengthen program design by clarifying goals and objectives.
- Revise the service model to define activities and the performance management framework.
- Improve the administration, financial and performance management frameworks.
- Retain voluntary status but ensure tasks are suited to volunteers—provide relevant training for roles.
- Remove boundaries for CJG membership (such as prior spent criminal convictions).



Problems/findings

Recommendations

Evaluation of the Queensland Murri Court (Morgan & Louis 2010)

- More resource intensive than usual court processes—has expanded beyond sentencing input into interventions, bail programs and other offender support.
- Lack of resources to support expanded activities, particularly in Indigenous communities.
- The court had high levels of stakeholder support.
- The court improved appearance rates and increased opportunities for participation in rehabilitation.
- There were few measured differences in short term reoffending, but perceptions of fairness in the court system were improved.

- Improve documentation and efficiency of practice and procedures.
- Improve resourcing and training.
- Review eligibility criteria of offenders through wider consultation.
- Bail programs require greater collaboration and definition of purpose.
- Improve availability of culturally appropriate programs and services in the community and custodial settings.
- Clarify roles and responsibilities in relation to stakeholders.

Exploring Indigenous and non-Indigenous Sentencing in Queensland (Bond et al. 2011)

- Limited evidence of negative discrimination in sentencing.
- Indigenous defendants tend to have different types of offences, criminal and social histories.
- Lack of Indigenous community-based diversion options.
- Improved data collection including unique offender identifier, and key sentencing factors. Regular monitoring of sentencing outcomes.
- Increased resources for programs that support Indigenous offenders through court—translation services, CJGs, Murri Court, JP Magistrates court.
- Increased number of Indigenous targeted programs through the CJS.
- Increased community-based supervision and rehabilitation orders.
- Greater cross-cultural awareness in the CJS.



Problems/findings

Recommendations

Assessment of the Aboriginal and Torres Strait Islander Justice Agreement 2000–2010 (Queensland Government 2011)

- The agreement goal of 50 per cent reduction in the rate of Indigenous incarceration within 10 years (by 2010) was not achieved.
- Murri court, CJGs and JP Magistrate courts have been developed.
- Lack of initiatives focused on causes of overrepresentation—crime prevention, early intervention and community focused interventions.
- Failure to target effort to where most impact could be made.
- Some gains in reduction in use of arrest and increased use of community corrections orders.
- Lack of strong and consistent leadership.

- Focus strategy on reducing offending, not just fairness of criminal justice system.
- Stable high-level governance arrangements that can influence resource allocation and support evidence based programs. Monitoring, evaluation and ongoing local level involvement with the community is required.
- Encouraging local place-based solutions to crime and offending issues is vital—and should use service delivery coordination through community safety plans.
- Use of Multi-systemic therapy for chronic offending.
- Locally based rehabilitation/alcohol abuse programs, parenting programs, early years and school programs.

Arresting Incarceration (Weatherburn 2014)

- A combination of loss of employment, forced removal from ancestral lands and lifting of restrictions on alcohol have been the main drivers of the increase in Indigenous incarceration.
- Indigenous people have greater exposure to critical factors linked to crime—child neglect and abuse, poor school retention and performance, unemployment and substance abuse.
- Strategies should target:
 - improving child development
 - reducing substance abuse
 - increasing school attendance and performance
 - increasing workforce participation
 - reform of the law in relation to bail
 - reducing recidivism.



Problems/findings

Recommendations

Not Now, Not Ever (Special Taskforce on Domestic and Family Violence 2015)

- Significantly higher incidence of domestic and family violence for Indigenous women and in Indigenous communities.
- Fear of child removal is a barrier to seeking help for domestic violence.
- Negative impacts of colonisation, dispossession, forced removal of children and trauma play key part in violence against women and children.
- Lack of formal and culturally appropriate support services in remote communities.
 Emergency accommodation is less effective (difficulty in keeping locations hidden).

- One size fits all approach will not work—place-based, integrated and timely responses required.
- Trial integrated service provision in discrete Indigenous communities.
- Consider expanding role of CJGs in the design and implementation of co-located services, mediation and support; and roles for JP courts. Build local delivery capability.
- Increased funding for responses to Indigenous perpetrators.

Overcoming Indigenous Disadvantage (SCRGSP 2016b)

- Closing the gap indicators show:
 - improvements in child mortality, education, employment and connection to land
 - family and community violence still high
 - increased psychological stress, self-harm, and substance misuse—and incarceration.
- Report makes no recommendations.
- In December 2016 the Council of Australian Governments agreed to refresh the Closing the Gap agenda.

Service delivery in Queensland's remote and discrete Indigenous communities (QPC 2017)

- Existing system of service delivery (estimated at \$1.2 billion) has poor incentives, fosters dependence and results in poor outcomes.
- Examples of overlapping services, mismatches between service provision and community needs, and excessive compliance burdens.
- Establish community authorising bodies to purchase services on behalf of their communities—with agreement for community outcomes with the government.
- Establish independent agency to monitor and report on agreement outcomes.
- Remove impediments on economic activity, home ownership and employment.

Pathways to Justice (ALRC 2018)

- Aboriginal and Torres Strait Islander people are significantly more likely to be charged with an offence and imprisoned.
- The key drivers of incarceration for Aboriginal and Torres strait islander people are external to the justice system.
- Justice reinvestment, a place-based approach that emphasises working in partnership with communities to develop and implement reforms, should be applied.
- Other reforms are recommended in areas such as bail, sentencing, sentencing options, mandatory sentencing, prison programs and parole and access to justice.



Appendix M: Reform options for institutional coordination

Governments can adopt various administrative and governance options that aim to coordinate agency decision-making. Mechanisms can vary from informal networks to use of procedures to major departmental structural reforms (Table M.1).²³¹

Table M.1 Coordination mechanism options

Coordination mechanisms	Description
Networks	Officials working together outside of official channels
Collaboration	Officials meeting to create common understanding and reframe policy issues
Hierarchy	
 Central agencies 	Organisations to supervise and support line agencies
 Cabinet committee 	Committee to bring together ministers to produce collective policies
Superministry	Administrative structure that brings agencies together to facilitate internal coordination
- 'Czar'/taskforce/office	Group of ministers or officials given responsibility to make and/or implement policy
Procedures	
 Program management system 	Setting of government priorities, monitoring of achievement
 Notification requirement 	Ministers with proposals to cabinet to notify colleagues and seek views
 Budget process 	Process to identify and fund policy priorities
 Policy impact assessment 	Formal systematic process of critically assessing policy proposals

Source: Adapted from Peters 2018.

Other jurisdictions use a combination of these mechanisms (Box M.1). New South Wales and Victoria combine the policy functions of the police, court and correctional services into single departments, while South Australia and New Zealand have had administrative offices or committees to coordinate policy activities across the sector. Other jurisdictions have maintained separate agencies.

²³¹ Coordination does not always have to happen only at the top of organisations. It may be more effective if coordination is focused at the lower levels of organisations where the imperative to quickly respond to real clients with real needs is stronger (Peters 2018, p. 3). However, this approach can be undermined if decision making authority remains centralised, where a commitment to collaboration is not shared. A study of the implementation of a community level 'joined-up government' initiative found that 'operating a joined-up model requires a supporting architecture which resets incentives, provides authority, builds long-term trusting-based relationships, and recognizes and rewards cooperative behaviours' (O'Flynn et al. 2011).



Box M.1 Approaches in other jurisdictions

New South Wales

The Department of Justice (DoJ) has roles including advising the government on law, justice and legal
reforms; administering courts; supervising adult offenders; supervising youth in custody, on bail, and
community based orders; and implementing intervention and diversionary programs. DoJ has an
Office for Police, with the NSW Police Force as a separate agency. DoJ reports to the Minister for
Police, Attorney General and Minister for Corrections. DoJ is the principal department of the Justice
Cluster consisting of justice sector agencies including the NSW Police Force.

Victoria

• The Department of Justice and Regulation (DoJR) leads the delivery of justice and regulation services in Victoria. Its 10 policy and program divisions include criminal justice strategy and coordination, criminal law policy and operations, police and crime prevention, corrections and youth justice. Victoria Police is a separate agency. DoJR reports to six ministers including the Attorney–General and Ministers for Police, Corrections and Youth Affairs.

Other Australian States and Territories

- Other Australian states and territories either have their court and corrective services functions in the one agency, with their police agency separate (Western Australia, Tasmania and Northern Territory), or the three functions in separate agencies (South Australia).
- In 2013, South Australia established the Criminal Justice Sector Reform Council chaired by the
 Attorney-General and Minister for Justice Reform. It consisted of the Ministers for Police and
 Correctional Services, the Under Treasurer and the heads of relevant agencies across the criminal
 justice sector. Chief judicial officers were observers. The council agreed on five specific projects across
 the sector involving diversion, remand, early resolution of court issues, information flows and
 technologies, and performance measures (SA Attorney-General's Department 2014).
- The Australian Capital Territory has a Justice and Community Safety Directorate which is responsible to the Attorney General, Minister for Police and Emergency Services, Minister for Corrections and Justice Health, and Minister for Justice, Consumer Affairs and Road Safety.

New Zealand

- The Department of Justice, Department of Corrective Services and New Zealand Police report to different ministers.
- The Justice Sector Leadership Board is responsible for ensuring the achievement of collective goals.
 The board coordinates major change programmes and oversees planning to improve services, reduce harm and the number of people in the criminal justice system, maintain institutions and manage investment. The board includes the Secretary for Justice (chair); Commissioner of New Zealand Police; Chief Executive, Department of Corrections; Chief Executive, Serious Fraud Office; Solicitor General; and Crown Law Office.

This brief survey indicates that other jurisdictions have been grappling with the issue of how best to manage their criminal justice system. Moreover, there is no consensus on a single model of best practice—instead there is a menu of options from which Queensland can choose to suit its circumstances.



Glossary

Adjudication The determination of rights and liabilities in dispute. In a criminal law this refers to the

determination of the guilt of the accused.

Bail The release from custody granted to a person charged with an offence subject to any

conditions the court may impose, on the condition that he or she undertakes to return

to the court at some specified time.¹

Breach of suspended sentence

Applies if an offender commits another offence during the operational period of

suspended sentence.

Case management Process for close monitoring and supervision of an offender while in diversion programs

or rehabilitation whilst in custody.

Caution A warning issued as an alternative to prosecution.

Celerity The 'swiftness' or immediacy of punishment following an offence.

Chronic offenders Individuals who commit at least five offences.

Clearance rates The proportion of crimes reported to police which result in a charge being laid.

Commitment Imprisonment resulting from a failure to pay a fine or in response to contempt of court.¹

Community Re-Entry Support Team (CREST) A service available to prisoners to discuss re-integration needs, provide pre-release supports, provide post-release support for up to three months and assist parolees in

need of extra assistance.

Community-based

orders

Sanctions or penalties imposed by the courts that are non-custodial. It can include a community service order, graffiti removal order, intensive correction order or probation

order.

Corrections An umbrella term which ordinarily refers to the part of the criminal justice system

dealing with imprisonment, parole and probation.

Corrections officer An officer appointed under Chapter 6, Part 4 of the Corrective Services Act who exercises

their powers under that act in accordance with the directions of the chief executive. Synonymous with prison officer, custodial officer or corrective services officer.

Corrective Services
Act 2006 (Qld)

The principal Queensland legislation governing imprisonment. The stated purpose of the act is 'community safety and crime prevention through the humane containment,

supervision and rehabilitation of offenders.' See Corrective Services Act 2006 (Qld) s. 3(1).

Cost-benefit analysis (CBA)

A method of evaluation that provides an objective framework for weighing up the

different impacts of a policy.

Court ordered parole

Parole ordered at the time of sentencing by the sentencing court. Currently available as

an option for sentences up to three years that are not violent or sexual offences.



Criminal Justice
Commission (CJC)

A predecessor to the current Crime and Misconduct Commission; created in response to the Fitzgerald Inquiry.

Criminal justice system

The people, processes, institutions and laws associated with the defining, monitoring and enforcement of rules, for which a breach attracts a financial or custodial sanction.¹

Criminal law

The rules of statute and common law which direct that certain actions are punishable by the state. Generally, offences of a regulatory nature, such as parking offences and minor traffic offences, are not considered to be part of the criminal law.¹

Criminal stigma

The disdain or discrimination directed by a community toward an individual because of their prior record of actions breaching criminal law.

Criminalisation

The process by which an action is rendered a criminal offence, or by which a person undertaking such an action is rendered a criminal.

Criminogenic effect

An outcome that increases the likelihood of criminal behaviour. Imprisonment is said to have a criminogenic effect if prisoners have, post-release, a higher propensity to commit crime than before their time in prison.

Custodial sentence

A sentence involving an imprisonment term, which may be wholly or partly suspended subject to conditions. An intensive corrections order is considered a custodial sentence.

Decarceration

The process of removing people from prisons or reducing the prison population.

Decriminalisation

The lessening or removal of criminal sanctions in relation to certain acts (e.g. drug decriminalisation). Distinct from legalisation, which is the complete removal of a prohibition on an act.

Depenalisation

While an act remains a criminal offence, sentencing options available to the judiciary are reformed. Depenalisation may involve removing imprisonment as the most severe sentencing option.

Deterrence effects

The prevention of crime through the threat of a criminal sanction, including imprisonment.

Discount rate

The rate used to 'discount' the value of future transactions to present value terms.

Diversion programs

In criminal law, a procedure intended to divert a specific class of offender, or an offender charged with a specified type of offence, away from the criminal justice system. If the procedure is followed to completion, then the person will not be dealt with by the court for the offence in respect of which the person came under police notice.¹

Efficient policy

A policy is efficient if its benefits exceed its costs (including all social costs and benefits) and no other use of resources would yield higher value for the community.



Elasticity An economic concept that captures the response of one variable to a change in another

variable. More formally, an elasticity summarises both the magnitude and relative direction of change in two variables (equivalent to the percentage change in X relative to

the percentage change in Y).

Electronic monitoring

The use of GPS, radio and other technologies to provide surveillance and tracking capabilities over offenders released to the community. It can take the form of electronic braces and other tamper-proof electronic devices fitted to the person, where these

transmit signals to correctional authorities to monitor offenders.

Fitzgerald Inquiry An inquiry into institutional corruption in the Queensland Government. It was tabled in

Parliament in July 1989.

Home detention A community-based sentence order which requires offenders to remain at a specified

address for a specified period. This sentence is usually applied in conjunction with an

electronic monitoring device attached to the individual.

Human capital The value of skills, knowledge and experience possessed by individuals.

Imprisonment The confinement of an offender in custody or the restraint of a person's liberty.¹

Incapacitation effect

The prevention of further offences by removing a prisoner from society.

Index crime A crime used for statistical purposes with a definition that is relatively uniform across

time and jurisdiction, for example murder.

Intensive corrections order (ICO)

A court order that an offender receiving a sentence of not more than one year imprisonment serve the sentence undergoing intensive correction in the community rather than a prison term. Generally, the minimum terms for an intensive correction order are that the offender not reoffend, regularly report during the period of correction, perform community work, and undergo counselling.¹

For more information, see Part 6 of the Penalties and Sentences Act 1992.

Legalisation The amendment of law to eliminate any sanction, criminal or administrative, associated

with an activity.

Mandatory sentencing

A sentence for an offence prescribed by legislative instrument as opposed to an exercise

of judicial reasoning.

MARA A service available in south east Queensland which provides pre-release support

including referral to other agencies and post-release support up to nine months after

release.

Mediation A process in which the offender and victim discuss the source of the harm and ways it

may be remedied. The process is ordinarily overseen by a mediator (or a judge) and may

additionally involve a prosecutor or legal representation for the parties.

Net-widening The application of a new sanction to individuals who otherwise would have not faced a

sanction or would have faced a less serious sanction.



Non-custodial

A sentence not involving imprisonment. This may involve absolute release, the imposition of a good behaviour bond, a restitution or compensation order, a non-contact or banning order, a fine, a community service order, or a probationary period.

Non-parole period

The period within which a prisoner is ineligible to apply for parole and must remain in prison. This may be specified by the sentencing court or is determined by law.

Offender

'A person who is convicted of an offence whether or not a conviction is recorded.' See *Penalties and Sentences Act 1992* (Qld) s. 4.

Opportunity cost

The cost of foregoing the next-best option when making a choice.

Overcriminalisation

The excessive use of the criminal law when alternatives may be available.

Parole

'The release of a prisoner from custody after the completion of a minimum period of imprisonment determined by a court so that the prisoner may serve the rest of the sentence on conditional liberty.'

Penalties and Sentences Act 1992 (Qld) The principal legislative instrument governing criminal penalties and sentences in Oueensland.

Plea bargaining

Negotiations between the prosecution and defence by which an accused agrees to plead guilty to avoid prosecution on an additional or alternative charge, or for the prosecution to pursue a lower sentence. Note that plea bargaining does not affect a court's discretion in imposing a sentence.

Police Powers and Responsibilities Act 2000 (Qld) The principal Queensland legislative instrument which provides and governs the powers and responsibilities of police officers in relation to investigating offences and enforcing the law.

Probation

The period of supervision over an offender, ordered by court instead of serving time in prison. An offender on probation is typically ordered to follow certain conditions set out by the court, usually under the supervision of a probation officer. Breaking these conditions may result in imprisonment.

Queensland Corrective Services (QCS) The government body primarily charged with the management, operation and oversight of prisons in Queensland.

Queensland Parole System Review (QPSR) A review led by Mr Walter Sofronoff QC into the parole system in Queensland. The review report was delivered on 1 December 2016, and the Government's response was issued on 16 February 2017.

Also referred to as the Sofronoff review.

Recidivism

The reversion of an individual to criminal behaviour after they have been arrested, convicted, sentenced and discharged in respect of a prior offence (Maltz 1984, p. 1).

Reintegration program

A program under the *Corrective Services Act 2006* designed to assist an offender to reintegrate into the community, including parole.



Remand To stand a matter over until a future date and as a consequence return the accused to

> custody.¹ A remandee is an individual held in custody prior to the completion of a related criminal case. A sentencing judge may have regard to time spent in remand,

including by treating that as time served in prison.

Reoffending In this report the terms reoffending and recidivism are treated as synonyms. Note that in

other material the terms may be defined differently and treated as distinct.

Report on Government Services (ROGS) An annual report issued by the Productivity Commission which provides information on

the equity, effectiveness and efficiency of government services in Australia.

Reported offence An offence which has been reported to the police.

The giving up of an enrichment or its value to the person at whose expense it was Restitution

obtained.¹ Restitution in the *Penalties and Sentences Act* involves the return of an illegally obtained item to its original owner. Relatedly, a compensation order may be made for property loss, property damage or personal injury. In this report, the term is used broadly to encompass the return of property and both financial and non-financial

forms of compensation to a victim.

Restitution agreement

An instrument formed between a victim and offender for restitution or compensation

which may be considered in sentencing.

Restorative justice An approach to justice which places principal importance on the restoration of victims,

> rehabilitation of offenders, and reconciliation between offenders, victims and the community at large. The centrepiece of a restorative justice framework is typically

mediation between those parties.

Retribution The theory that the imposition of punishment under the criminal law is justified because

> a person who inflicts harm should receive a proportionate amount of harm in return.¹ This is in contrast with other considerations in sentencing such as offender rehabilitation.

State Penalties Enforcement Registry (SPER) A division of Queensland Treasury responsible for the collection and enforcement of unpaid infringement notice fines, court-ordered monetary penalties, offender debt

recovery orders and offender levies.

Suspended sentence

Following the imposition of a sentence of imprisonment of less than five years, a court may order the conditional or unconditional release of an offender where appropriate to do so in the circumstances. A sentence may be suspended in whole or in part. Following

the commission of another offence or breach of the conditions of the suspension, a

court may reactivate the sentence.

For more information, see Part 8 of the Penalties and Sentences Act 1992.

Temporary release

The release of a prisoner for a fixed period and on certain conditions. The exact nature of temporary release varies by jurisdiction. Depending on jurisdiction, the term may be synonymous with parole. In South Australia, for example, it may be granted to attend the

funeral of a relative or to participate in work release programs.

Sometimes referred to as 'temporary license' in other jurisdictions.



Throughcare The provision of services to prisoners both in anticipation of and following their release

to assist with their reintegration and rehabilitation.

Victimisation The process of becoming a victim of crime.

Work release A type of temporary release in which prisoners are maintaining non-prison employment

but return to prison outside of working hours.

Wrap-around services

Rehabilitation or reintegration services that aim to simultaneously address several needs

at once (for example, a service that addresses mental health, homelessness and

substance abuse).

Youth justice The application of the criminal justice system to young offenders. In Queensland, 'young

offenders' are individuals who are 17 or younger. The *Youth Justice Act 1992* (Qld) is the primary statute. Youth justice regimes focus on the greater vulnerability of children who offend and the greater interest in rehabilitating and reintegrating childhood offenders.

¹ LexisNexis, Encyclopaedic Australian Legal Dictionary (at 12 November 2018).



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