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Estimating the costs of serious and organised crime in Australia, 2022–23

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Estimating the costs of serious and organised crime in Australia in 2022–23

Australian Government
Australian Institute of Criminology

Serious and organised crime cost Australia up to

$68.7 BILLION

in 2022–23

$16.9 BILLION

for the cost of **prevention and response.**

$10.7b
PUBLIC SECTOR

$6.2b
PRIVATE SECTOR

$51.8 BILLION

for the cost of serious and organised **criminal activity** as well as the serious and organised component of conventional crimes.

$18.7b
ILLICIT DRUG ACTIVITY

$12.4b
ORGANISED FINANCIAL CRIME

$6.8b
ILLICIT COMMODITIES

$1.9b
CRIME ENABLERS

$0.9b
CRIMES AGAINST THE PERSON

$2.6b
PURE CYBER CRIME

$8.5b
CONSEQUENTIAL SERIOUS AND ORGANISED CRIME

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Acknowledgements

This is the fourth in a series of reports undertaken for the Australian Criminal Intelligence Commission (ACIC) to estimate the cost of serious and organised crime in Australia. As with previous editions, the estimate for 2022–23 relies heavily on the methodological approach developed by previous researchers at the Australian Institute of Criminology (AIC), supported by others involved in the creation, development and execution of the current and previous studies. These include intelligence analysts from the ACIC, other government and business analysts, subject-matter research specialists from the AIC and current and former staff of the JV Barry Library. Senior AIC research staff, particularly Anthony Morgan and Dr Alexandra Voce, provided comprehensive feedback on an earlier draft.

Acronyms and abbreviations

ABACUS	Australian Business Assessment of Computer User Security
ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ACCC	Australian Competition and Consumer Commission
ACFE	Association of Certified Fraud Examiners
ACIC	Australian Criminal Intelligence Commission
AFP	Australian Federal Police
AIC	Australian Institute of Criminology
APRA	Australian Prudential Regulation Authority
ASD	Australian Signals Directorate
ATO	Australian Taxation Office
AUSTRAC	Australian Transaction Reports and Analysis Centre
EUIPO	European Union Intellectual Property Office
GDP	gross domestic product
IP	intellectual property
MDMA	3,4-methylenedioxymethylamphetamine
OECD	Organisation for Economic Co-operation and Development
PwC	PricewaterhouseCoopers
RBA	Reserve Bank of Australia

Abstract

This report estimates the cost of serious and organised crime in Australia in 2022–23 to be between $30.4b and $68.7b. This is the fourth in a series of reports undertaken for the Australian Criminal Intelligence Commission estimating the cost of serious and organised crime. It updates and improves on the methodology used in the previous report, which estimated the cost of serious and organised crime in 2020–21 to be between $24.8b and $60.1b. As with the previous research, this report considers the direct and consequential costs of serious and organised crime in Australia, as well as the costs to government entities, businesses and individuals associated with preventing and responding to serious and organised crime. The current estimate includes the cost of some additional crime types, not previously included, but even accounting for these additions it is clear that serious and organised crime continues to impose a substantial burden on the Australian economy.

Introduction

This Statistical Report estimates the cost of serious and organised crime in Australia for the year 2022–23. The definition of serious and organised crime is that used by the Australian Crime Commission (ACC 2015a, 2015b) and the Australian Criminal Intelligence Commission (ACIC; Smith 2018b), although the conventional understanding of organised crime groups is extended by adding all serious crime of an entrepreneurial nature or committed to support a criminal enterprise, whether by a group or an individual.

This is the fourth in a series of reports undertaken by the Australian Institute of Criminology (AIC) concerning the cost of serious and organised crime in Australia. The three earlier reports (ACC 2015a, 2015b; Smith 2018b; Smith & Hickman 2022) drew on the methodological approach first developed by the AIC in the 1970s and 1980s to estimate the size and cost of crime and criminal justice in Australia: Kononewsky (1976); Biles (1979); Biles and Johnson (1982); and Mukherjee, Walker and Psaila (1987). Subsequent reports improved the scope and sophistication of the methodology used (Mukherjee & Dagger 1990; Walker 1997, 1992; Mayhew 2003a; Rollings 2008; Smith et al. 2014).

Crime, of course, is continually evolving and adapting to changes in society, the economy and the criminal justice system. Since the last report was written (Smith & Hickman 2022), Australia and the world have been subject to the continuing impact of the COVID-19 pandemic, changes in the cost of living, the impact of a number of conflicts in Europe and the Middle East and changes in governments in a number of global economic powers. Some of these changes have influenced the estimate of the cost of serious and organised crime for 2022–23, while others will take longer to have an impact.

The focus is on the influence of serious and organised crime on the Australian economy. As with the previous research, this report examines the direct and consequential costs of serious and organised crime as it affects the Australian economy, and also the costs to government entities, businesses and households associated with preventing and responding to serious and organised crime.

The total cost for 2022–23 is estimated to be between $30.4b (low), $46.3b (medium) and $68.7b (high). This total comprises the following cost categories.

- **Direct serious and organised crimes** were estimated to cost up to $43.3b in 2022–23. These are crimes that have a clear and direct link with serious and organised crime (eg illicit drug trafficking, human trafficking and organised financial crime).
- **Consequential serious and organised crimes** were estimated to cost up to $8.5b in 2022–23. These are conventional crimes committed as a consequence of serious and organised crimes—for example:
  - crimes that generate funds used to support involvement in serious and organised criminal activities (in particular, the crimes illicit drug users commit to finance drug purchases);
  - crimes that result from involvement in serious and organised crime related activities (violence, sexual assaults and burglaries committed by those using illicit drugs); and
  - conventional crimes committed by organised crime groups (eg organised shop theft); and
  - conventional crimes to facilitate serious and organised criminal activities (eg using violence to intimidate businesses or using identity crime to facilitate financial fraud).
- **Prevention and response costs** were estimated to be up to $16.9b in 2022–23. These include costs incurred by law enforcement, the criminal justice system, other government agencies, the private sector and individuals in the community in preventing and responding to crime.

The monetary values in this report are expressed in Australian dollars, rounded to billions or millions where appropriate. Totals in tables may differ from more precise estimates due to rounding.

The methodology adopted in this report seeks to estimate costs for the financial year 2022–23. Where data were not available for any given period, estimates were uprated where appropriate using the Reserve Bank of Australia's (2024) inflation calculator to reflect changes in the cost of living. In addition, adjustments were made to reflect changes in the incidence of relevant crime types. However, where reference is made to costs reported in earlier years, these relate to the year in question without uprating or adjustment, unless otherwise indicated.

In terms of geographical and jurisdictional reach, the same approach was used as in the previous reports: that is, crimes that have an impact on Australia are included even if they were committed by individuals who were not resident in Australia at the time of offending. Similarly, crimes committed by individuals in Australia are included even if the proceeds were moved outside Australia. Where offending has taken place offshore, or where proceeds of crime have moved offshore, the effect on the Australian economy is considered, if it is quantifiable.

In some instances where evidence from Australia is unavailable, research from other countries, reported in overseas currencies, has been relied. One example concerns the indirect cost of harm experienced by victims of crime. Where such costs are derived from other countries, these have been converted to Australian dollars using the purchasing power parity calculator of the Organisation for Economic Co-operation and Development (OECD 2024).

Where appropriate, subjective indications of the level of confidence attached to the estimates are given (Table 33 on page 64). For some offence categories, confidence in the estimates is quite low, given the paucity of statistical and economic data. Since the previous report (Smith & Hickman 2022), however, some datasets have become available or improved in quality, making the current report of greater utility than previous versions.

Although the latest published baseline crime statistics were used for many of the current estimates, there are still crime types for which information is unavailable or incomplete, including some that have extensive serious and organised crime group involvement. The principal crime categories that have incomplete data are:

- pure cybercrime;
- firearms trafficking;
- migration and visa fraud;
- investment of financial resources by serious and organised crime;
- maritime people smuggling; and
- corruption.

Attempts have been made to estimate costs in some of these areas and to fill gaps in the available data in other areas, although where the incidence or cost of criminality is simply not recorded or is unknown, estimates are not provided and further research is required. Accordingly, the figures in this report should be treated as conservative estimates.

To indicate the range of likely costs, three estimates are provided—low, medium and high—which reflect the degree of involvement of serious and organised crime group members in the crime type examined. These estimates were developed for the 2013–14 research (ACC 2015a, 2015b) by conducting a workshop comprising federal, state and territory law enforcement officers across Australia experienced in investigating conventional serious and organised crime, as well as criminologists, statisticians and regulatory, policy and subject matter experts. The resulting estimates of serious and organised crime involvement in various forms of criminality examined in this report are much the same as those of the earlier study (ACC 2015a, 2015b) and the previous report in this series (Smith & Hickman 2022). As data sources improve and new intelligence products become available, it will be possible to develop more precise and accurate estimates of the level of involvement of serious and organised crime in the crime types examined.

Although this report estimates the cost of serious and organised crime in Australia for the year 2022–23, there remains an ongoing need for government and business to invest in collecting better and more comprehensive data on how serious and organised crime affects their operations. Statistical collections need to document more precisely the nature of organised offending as one of the variables regularly included in official data and crime victimisation surveys. Finally, new research is needed to quantify the prevalence of crime types for which data are inadequate, particularly those in which serious and organised crime groups play a major role.

Direct serious and organised crime costs

Crimes that have a clear and direct link with serious and organised criminals include illicit drug activity, organised financial crime, some violent crimes committed against individuals, human trafficking and other crimes involving illicit commodities and pure cybercrime.

Various crime enablers are also directly linked to serious and organised crime. These enablers include money laundering, violence, corruption, the misuse of identity and technology, and professional facilitators such as lawyers, accountants and real estate agents.

Illicit drug activity

The involvement of serious and organised crime in illicit drug markets has a number of potential effects on the Australian economy. These include the costs associated with the importation, production and distribution of substances; the amounts paid to purchase drugs; and the medical and lost output costs suffered by those who use illicit substances. The AIC's previous estimates of the cost of serious and organised crime involvement in the illicit drug markets included three direct cost elements (Smith & Hickman 2022):

- **medical costs**—including injury, treatment costs and cost of death;
- **lost output**—lost output of drug users while in treatment or due to death; and
- **expenditure on illicit drugs**—money lost to the economy through payments for illicit drugs.

This third element has been modified to acknowledge that not all expenditure on illicit drugs is lost to the Australian economy (noting that medical and lost output costs are suffered by the economy fully and, unlike drug expenditure, do not require adjustment). To account for this, the current illicit drug expenditure estimates have been adjusted to indicate low (20%), medium (50%) and high (100%) proportions of the actual losses suffered by the Australian economy due to this form of crime. These proportions were derived from the stakeholder consultations undertaken in 2015 (ACC 2015a, 2015b).

In addition, the cost of conventional crimes committed by illicit drug users (such as burglaries, robberies, assaults or domestic violence) are included as part of the consequential serious and organised crime costs below.

The costs incurred by law enforcement and other government agencies associated with controlling the illicit drug market are included in the prevention and response costs described below. Finally, the expenses incurred by offenders in importing, producing and distributing illicit drugs have not been estimated owing to the absence of relevant research into the loss to the economy from these components of the illicit drug market.

Medical and lost output costs

The 'human' cost of illicit drug offences includes the medical costs of illicit drug use such as the cost of illicit drug related deaths, medical treatment and hospitalisation for illicit drug related harms and treatment for illicit drug dependence (Mayhew 2003b: 63). Other costs to the economy from illicit drug use include loss of productivity of drug users arising from their dependence and inability to work during periods of illness or because of their death. These latter costs are known as lost output costs, which also arise in the case of certain other crime types such as homicides, motor vehicle related deaths and assaults.

One of the AIC's first attempts to quantify the costs relating to illicit drug use was undertaken in respect of the 2000–01 financial year (Mayhew 2003b). This study estimated the drug-related human costs to include deaths ($510m), medical costs of hospitalisation ($26m), drug treatment costs ($370m), methadone maintenance costs ($100m), and lost productivity of drug users ($960m)—totalling $1,960m (Mayhew 2003b: 66).

This research has since formed the basis of estimates of the cost of all crime in 2005 (Rollings 2008), in 2011 (Smith et al. 2014), and in respect of serious and organised crime in 2014 (ACC 2015a, 2015b), in 2017 (Smith 2018b) and in 2021 (Smith & Hickman 2022). Mayhew's (2003b) original estimates have been uprated to account for new data on each health impact component, and changes in the incidence of illicit drug use in the community and variations in official policing responses to illicit drug use. The current estimate for 2022–23 also relies on the previous research, recalling the limitations identified by Mayhew (2003b) in her original calculations.

Simple application of inflation at the rate of 2.7 percent a year between 2000–01 and 2022–23 (RBA 2024) gives an estimated human cost of illicit drug use of $3,531m in 2023 dollars—not accounting for the decline in the rate of illicit drug offences per 100,000 population since 2000–01.

In 2000–01, the rate of recorded illicit drug offences was 402.9 offences per 100,000 population (Australian Bureau of Statistics (ABS) 2003: Table 11.14), while in 2022–23 this rate was 225.9 offences per 100,000 population (a 43.9 percent decline; ABS 2024b). Applying this decrease would result in a human cost for 2022–23 of $1,981m, which is arguably too low.

The most recent data from the ABS (2023a) show that at 30 June 2022, there were 1,693 drug-induced deaths, compared to 1,788 deaths in 2021. The age-standardised death rate (per 100,000 estimated resident population) at 30 June 2022 was 6.5, a decline of 0.4 from 2021. Applying the same rate of decline to 30 June 2023 would indicate a rate of 6.1 drug-induced deaths per 100,000 population.

According to the 2022–23 National Drug Strategy Household Survey, 2.6 percent of people aged 14 and over who had recently used illicit drugs reported that they had experienced an injury while under the influence of illicit drugs that required medical attention, and 1.3 percent said their injury was serious enough to require hospitalisation (Australian Institute of Health and Welfare (AIHW) 2024, Table 5.40). The total number of hospitalisations with a drug-related principal diagnosis fluctuated from 136,000 hospitalisations in 2015–16 to a high of 152,000 in 2020–21, before returning to 135,000 in 2021–22 (AIHW 2024). It would be reasonable to estimate that the number in 2022–23 would be similar to that in 2021–22. Comparing the rates per 100,000 population for hospitalisations with drug-related principal diagnoses for 2016–17 with the rates for 2021–22, it appears that these were similar for the drug types considered in the current report (AIHW 2024).

To estimate the medical costs and lost output costs associated with illicit drug use, the previous estimates for 2016–17 (Smith 2018b) were inflated using the RBA's (2024) inflation calculator. Medical costs increased from $937.7m in 2016–17 to $1,118.4m in 2022–23, and lost output increased from $3,881.8m in 2016–17 to $4,629.8m in 2022–23.

In addition, changes in drug consumption and the incidence of offending need to be taken into account in estimating the associated medical and lost output costs. As noted above, between 2016–17 and 2022–23 there was a 40.9 percent decrease in the rate per 100,000 population of recorded illicit drug offences (from 382.2 to 225.9; ABS 2024b). Over the same period, however, total consumption of four illicit drugs—methylamphetamine, cocaine, MDMA (3,4-methylenedioxymethylamphetamine) and heroin—increased by 22.4 percent (ACIC 2024a: 14). This estimate excludes cannabis because consumption data were not available before 2018–19. If cannabis is included from 2018–19, the increase in consumption of the five drugs from 2018–19 to 2022–23 was 3.8 percent. The ACIC (2024a: 14) notes, however, that 'there has been limited change over the life of the [National Wastewater Drug Monitoring] Program in the hierarchy of consumption of the 5 major illicit drugs'. Accordingly, it is appropriate to rely on the increase in consumption of 3.8 percent, rather than 22.4 percent. The increase in drug consumption measured by wastewater analysis is also a better indication of changes in medical and lost output costs than the change in the rate of illicit drug offending as recorded by police.

Increasing the estimated medical costs and lost output by 3.8 percent results in medical costs increasing from $1,118.4m to $1,160.9m and lost output costs increasing from $4,629.8m to $4,805.7m in 2022–23. The resulting estimated total medical and lost output costs were $5,966.6m for 2022–23.

Expenditure on illicit drugs

In relation to the money lost to the economy through illicit drug use, the methodology adopted in the previous report will again be applied for the year 2022–23. Since the previous report, however, report 22 of the National Wastewater Drug Monitoring Program (ACIC 2024b) has disclosed both consumption data (kilograms per annum) and estimated value of drugs consumed for five drug types: methamphetamine, MDMA, cocaine, heroin and cannabis. These are reproduced in Table 1 below for the years 2018–19 to 2022–23.

Table 1: Estimated annual drug consumption and street value consumed for five major illicit drug types, 2018–19 to 2022–23

Drug	Index	Year				
		2018–19	2019–20	2020–21	2021–22	2022–23
Methamphetamine	kg	11,516	11,147	8,838	9,018	10,585
	$m	8,630	6,960	7,950	8,340	10,585
Cocaine	kg	4,636	5,675	4,711	3,385	4,037
	$m	2,080	1,410	1,880	1,100	1,310
MDMA	kg	2,226	2,630	1,231	723	962
	$m	211	227	96	62	100
Heroin	kg	941	1,021	984	1,077	999
	$m	423	383	418	539	450
Cannabis	kg	9,808	10,733	11,922	13,396	13,638
	$m	233	268	268	335	341
Total	**kg**	**29,127**	**31,206**	**27,686**	**27,599**	**30,221**
	$m	**11,500**	**9,100**	**10,500**	**10,300**	**12,786**

Note: Consumption figures were calculated using annual national consumption data between 2018–19 and 2022–23 from the National Wastewater Drug Monitoring Program (ACIC 2024a: 14). Cannabis consumption is the weight of THC consumed nationally. Value of drugs consumed is the latest ACIC (2024b) national median price data ($m).

Methylamphetamine, which has the highest value of these drug types and consumption of which increased by 17 percent between 2021–22 and 2022–23, accounted for the majority of the expenditure ($10.6b, or 85% of the total estimated expenditure). For all five drug types, the total estimated street value increased to $12.8b (ACIC 2024a: 14).

Serious and organised crime involvement

Estimating the cost of serious and organised crime involvement in each of five major illicit drug markets was undertaken through a process of consultation with stakeholders in 2015 (ACC 2015a, 2015b). For each drug market, three levels of serious and organised crime involvement were identified (low, medium and high), each expressed as a percentage. Table 2 presents these for each of the five drug types under current consideration.

Table 2: Serious and organised crime involvement in five major illicit drug markets (2015 estimations) (%)			
Drug type	**Low**	**Medium**	**High**
Methylamphetamine	65	85	90
Cocaine	65	85	100
MDMA	50	75	95
Heroin	65	85	100
Cannabis	20	40	60

Applying the 'high' estimates of serious and organised crime involvement in each drug market to the expenditure on each drug produces the costs presented in Table 3.

Table 3: Calculations of estimated costs attributable to serious and organised crime involvement in the consumption of five major illicit drug types, 2022–23						
	Meth.	**Cocaine**	**MDMA**	**Heroin**	**Cannabis**	**All**
Estimated street value ($m)	10,585	1,310	100	450	341	12,786
High proportion of serious and organised crime involvement in each drug market (%)	90	100	95	100	60	
Cost attributable to serious and organised crime ($m)	9,527	1,310	95	450	205	11,587

Finally, as explained above, an adjustment had to be made to reflect the actual losses suffered by the Australian economy, as opposed to the net amounts paid for each type of illicit drug. We calculated low (20%), medium (50%) and high (100%) estimates of the proportion of drug expenditure lost to the economy. Although the upper estimate is arguably possible in cases where illicit drug related income is transferred overseas by organised crime groups for laundering or investment, this would occur in only a small proportion of the most serious criminal operations, making the overall high estimate of $11.6b possible but in need of further research to verify its likelihood. The final totals for drug expenditure, along with medical and lost output costs, are shown in Table 4, noting that medical and lost output costs are suffered by the economy fully and, unlike drug expenditure, do not require adjustment.

Table 4: Total illicit drug cost estimates, 2022–23			
Type	**Low**	**Medium**	**High**
Proportion lost to the economy (%)	20	50	100
Drug costs lost to the economy ($m)	2,317	5,794	11,587
Medical (not adjusted)	1,161	1,161	1,161
Lost output (not adjusted)	5,967	5,967	5,967
Total ($m)	**9,445**	**12,922**	**18,715**

Serious and organised financial crime

The AIC's previous estimate of the cost of serious and organised financial crime for 2020–21 was between $2.8b and $9.4b (Smith & Hickman 2022). Serious and organised financial crime continues to target Australia's banking, investment and superannuation sectors, as well as individuals, businesses and government entities, through complex financial frauds that result in direct losses and indirect damage to institutional reputations and personal financial security. In estimating the financial impact of these crimes, caution is needed to avoid double-counting of offences recorded in other categories, particularly those relating to pure cybercrime, identity misuse and financial payment fraud.

The current estimate of the cost of financial crimes associated with serious and organised crime for 2022–23 made use of similar methodologies to those previously used (Smith 2018b; Smith & Hickman 2022). For the 2022–23 financial year, it can be estimated that financial crimes involving serious and organised crime cost between $4,213.2m (low), $7,487.0m (medium) and $12,359.3m (high).

Tax and revenue crime

Serious and organised crime offenders have been identified as being involved in a number of types of taxation and revenue crime in Australia (ACIC 2017b; Australian Taxation Office (ATO) 2024c). These have included dishonest activities that target each of the taxation revenue streams administered by the ATO, offshore tax evasion, illegal phoenix activities (in which new companies are created to continue the business of companies that have been deliberately liquidated to avoid paying their debts), misuse of trusts to conceal income and superannuation fraud (see below).

Each year, the ATO conducts a range of complex compliance and enforcement activities. In 2022–23, it undertook 177 successful summary prosecutions of individuals for tax-related offences, resulting in 174 convictions, $458,785 in reparation orders and $2.14m in fines being imposed (ATO 2024d). The number of successful summary prosecutions almost doubled since 2021–22, with the value of reparation orders and fines increasing threefold over the last 12 months.

Particularly serious matters were prosecuted by the Commonwealth Director of Public Prosecutions, with 23 convictions obtained and 11 custodial sentences imposed in 2022–23 and reparation orders worth $1.72m made and $17,200 in fines imposed (ATO 2024d). Although the number of cases and custodial sentences have remained relatively constant since 2020–21, the number and value of reparation orders and fines have fluctuated.

The most serious cases, including those most likely to involve serious and organised crime, were investigated by the Serious Financial Crime Taskforce. This taskforce completed 2,152 audits and reviews between 1 July 2015 and 31 March 2024, leading to 38 convictions and raising over $2.182b in liabilities, of which $842m was collected (ATO 2024c).

In 2014, the ATO estimated the cost of four types of fraud, against excise, GST, income and other forms of taxation. These estimates were incorporated into the ACC's cost of serious and organised crime estimation (ACC 2015a, 2015b). The ATO's estimated total costs of tax fraud attributed to serious and organised crime ranged from $1,345m (low—25%), $2,025m (medium—50%) to $3,950m (high—75%) for 2012–13. Accounting for changes in the cost of living, these estimates were inflated by 28.5 percent (RBA 2024) to 2022–23 values. The updated values range from $1,728m (low—25%), $2,602m (medium—50%) to $5,075m (high—75%).

No change was made to account for variations in the ATO's and the Commonwealth Director of Public Prosecutions caseload as the numbers of both cases and convictions have remained relatively constant (ATO 2024d).

In addition, previous estimates of the cost of serious and organised crime involvement in illegal phoenix activity were based on a report by PricewaterhouseCoopers (PwC, 2018) prepared for the inter-agency Phoenix Taskforce established in 2014. This ATO-led taskforce conducted 2,967 audits and reviews to detect phoenix activity, collected more than $107m in cash, and banned or disqualified five directors in 2022–23 (ATO 2024b). The ATO (2024a) still relies on the modelling of phoenix activity undertaken by PwC in respect of the 2015–16 year, which estimated the direct cost to business from unpaid trade creditors, to employees through unpaid entitlements and to government from unpaid taxes and compliance costs was between $2,853m and $5,129m in 2015–16 dollars (PwC 2018: 15).

In the absence of more recent estimates, the median direct cost of $3,991m was relied on as an estimate of illegal phoenix activity. Inflated to 2022–23 values using the RBA (2024) calculator, the baseline estimate amounts to $4,841m. Applying the ACIC's assessment of the level of serious and organised crime involvement, the resulting estimates of the economic cost to business and government of phoenix activity for 2022–23 range from $1,210m (low—25%), $2,421m (medium—50%) to $3,631m (high—75%).

Taxation and revenue crime is also relevant to a number of the other crime types examined in this report, including superannuation fraud, illicit tobacco, cybercrime, identity crime and money laundering. Efforts have been made in the current analysis to avoid double-counting of costs across multiple categories.

The resulting total cost of serious and organised crime involvement in tax and revenue crime ranges from $2,938m (low), $5,023m (medium) to $8,706m (high; see Table 5).

Table 5: Cost of serious and organised crime involvement in taxation fraud, 2022–23

	Low	Medium	High
Serious and organised crime involvement (%)	25	50	75
Organised crime value (excluding phoenix activity) ($m)	1,728	2,602	5,075
Organised crime phoenix activity ($m) (based on PwC 2018: 15)	1,210	2,421	3,631
Total ($m)	**2,938**	**5,023**	**8,706**

Superannuation fraud

Superannuation funds continue to be attractive targets for serious and organised crime because of the substantial value of financial resources being managed each year. The Australian Prudential Regulation Authority (APRA) reported that, at 30 June 2023, total superannuation industry assets were $3,549.8b, with $2,467.8b in superannuation assets under management in APRA-regulated funds and a further $1,082b in self-managed and other funds (APRA 2024). In 2022–23, superannuation contributions totalled $165.3b, with $102.0b in benefits paid (APRA 2024).

Superannuation fraud can arise when employers do not comply with their superannuation payment obligations such as through sham contracting, misuse of the cash economy or phoenix activity, as well as from dishonest withdrawal of funds through misuse of personal information, such as identity crime. In 2013–14, it was estimated that superannuation fraud could amount to 0.14 percent of superannuation assets under management (ACC 2015a, 2015b). Applying this rate to all superannuation assets in 2023, exposure could amount to $4,970m.

Since the AIC's last estimate of the cost of serious and organised crime (Smith & Hickman 2022), cases of superannuation fraud have continued to be dealt with by law enforcement, including those arising from the government's Superannuation Early Release Scheme introduced during the COVID-19 pandemic. In one case, three women in Queensland pleaded guilty to illegally attempting to access superannuation payments of $103,500 under the government's scheme, all being sentenced to terms of imprisonment, deferred subject to good behaviour bonds (Australian Federal Police (AFP) 2024b; Swanston 2020). In evidence to the Senate Select Committee on COVID-19, the ATO believed that the rate of suspected fraudulent applications under the scheme was 0.05 percent (APRA 2021). Further work is need to establish whether this lower estimate applies to superannuation schemes more broadly.

Using the original estimate of 0.14 percent, and assuming the involvement of serious and organised crime in conventional superannuation non-compliance at the rates estimated by the ACC (2015a, 2015b) to range between 10 percent (low), 30 percent (medium) and 50 percent (high), the total estimate of superannuation non-compliance potentially involving serious and organised crime would range from $497m (low), $1,491m (medium) to $2,485m (high).

Payment fraud

Payment fraud statistics are collected each year by the Australian Payments Network, a network of 150 members and participants with an interest in payment systems and transactions. Twice yearly, payment fraud statistics collected by Australia's financial institutions and card schemes are published, providing a reliable indication of the extent and cost of payment fraud perpetrated against financial institutions, merchants and individuals in Australia. These data include fraud perpetrated on Australian-issued cheques and cards and fraud perpetrated in Australia on cards issued overseas.

During the financial year 2022–23, there were 14.7b transactions undertaken using Australian-issued cards, worth $1,055b. Of these, 5.1m transactions, worth $677.3m, were fraudulent (64.2 cents per $1,000 spent using these cards). If cheques and cards issued overseas are added, there were 5.6b fraudulent transactions in Australia worth $777.2m in 2022–23. The value of all fraudulent payment transactions in 2022–23 ($777.2m) was 60.9 percent more than in 2020–21 ($483.1m). This increase is largely due to the decline in transactions and fraud during the pandemic years. In 2018–19, for example, the overall fraud rate was 66.1 cents per $1,000 spent (Australian Payments Network 2024).

Estimates previously provided by the ACIC showed that organised crime involvement in payment fraud ranged from 20 percent (low), to 40 percent (medium), to 60 percent (high). Applying these percentages of serious and organised crime involvement to the estimated value for 2022–23 of $777.2m gives an estimated range of $155.4m (20% involvement), to $310.9m (40% involvement), to $466.3m (60% involvement).

Other financial transaction fraud

In addition to payment fraud relating to credit, debit and charge cards, proprietary debit cards, cheques and overseas-issued payment cards used in Australia, fraud can involve financial transactions such as interception or alteration of electronic funds transfers, online banking, share market transactions and direct payment instructions.

Organised crime involvement in these forms of financial transaction fraud was estimated to range from 50 percent (low), to 75 percent (medium), to 95 percent (high) and these rates were maintained for the current estimation.

In 2020–21, financial transaction fraud was estimated to amount to $387.1m (low), $411.5m (medium) or $436.3m (high). Between 2020–21, when the last AIC estimates were published (Smith & Hickman 2022), and 2022–23, payment transaction fraud in Australia increased by 60.9 percent. In the absence of better data on other transaction fraud, it is reasonable to apply this same rate of increase to estimate other types of transaction fraud. On this basis, and applying the rate of 60.9 percent, other financial transaction fraud was estimated to amount to $622.8m (low), $662.1m (medium) or $702.0m (high).

Summary: Serious and organised financial crime

Table 6 provides a summary of the various components of serious and organised crime involvement in financial crime for 2022–23.

Table 6: Summary of serious and organised financial crime, 2022–23

	Involving serious and organised crime		
	Low	Medium	High
Tax and revenue crime ($m)	2,938.0	5,023.0	8,706.0
Superannuation fraud ($m)	497.0	1,491.0	2,485.0
Payment fraud ($m)	155.4	310.9	466.3
Other financial transaction fraud ($m)	622.8	662.1	702.0
Total financial crime ($m)	**4,213.2**	**7,487.0**	**12,359.3**

Crimes against the person

The costs associated with crimes against the person in 2022–23 were estimated for human trafficking (excluding forced marriage, where organised crime involvement is unlikely to be apparent) and child sexual abuse. In addition, serious and organised crime is involved in other crimes of violence that are considered below as enablers of serious and organised crime. The estimated costs of serious and organised crime involvement in the two crime types examined now ranged from $371.6m (low), to $548.5m (medium) to $884.3m (high).

Human trafficking and modern slavery

Serious and organised crime groups are closely involved in the commission of human trafficking, slavery and slavery-like practices. Although forced marriage is included in the generally accepted definition of modern slavery, there is little evidence of organised crime involvement and, accordingly, forced marriage is not included in the current cost estimation. Many victims of human trafficking and modern slavery are moved across domestic borders or internationally for the purposes of exploitation. Organised crime groups play a central role in facilitating such activities, as substantial profits can be, and are, made.

The potential costs to the Australian economy associated with human trafficking include the funds paid to organised crime members to facilitate recruitment, harbouring and movement of victims, health and social costs experienced by victims and the cost to government entities of preventing and responding to the problem. These prevention and response costs are included in the final estimates in Table 33 (page 64). The various costs paid by victims of trafficking to organised crime, if paid outside Australia by foreign citizens, would not involve a cost to the Australian economy and are not included. Where travel and associated costs are initially paid by recruiters and recovered from victims during their servitude in Australia, these are counted as a direct cost of trafficking and slavery.

The remaining cost category concerns the personal, health and social costs experienced by individual victims once in Australia. In Australia, these have not been estimated, but the United Kingdom Home Office (Reed et al. 2018) has provided a comprehensive analysis of these costs based on research into the economic and social costs of modern slavery, including labour exploitation, sexual exploitation and domestic servitude. These cost estimates, although based on the situation in the United Kingdom, can be adapted to similar crime types present in Australia, where the personal cost burden would arguably be comparable. Some additional costs associated with debt bondage, loss of earnings during forced employment and living expenses during servitude have not yet been assessed, and calculating these costs requires future research.

Prevalence

The present costing used AFP statistics in respect of the financial year 2022–23 (Table 7). During this year the AFP received 340 reports of human trafficking and modern slavery (AFP 2023). Of these 340 cases in 2022–23, 90 related to forced marriage and were unlikely to have serious and organised crime involvement. These have not been counted for present costing purposes. Although exit trafficking has been included, some of these matters were associated with forced marriage, although further research is needed to determine precisely how many. The remaining 250 matters related to various types of human trafficking, sexual and other forms of exploitation and slavery (AFP 2023).

Table 7: Human trafficking and slavery reports received and investigated by AFP, 2020–21 to 2022–23

Human trafficking category	2020–21		2021–22[a]	2022–23	
	n	Investigated	*n*	*n*	Investigated
Forced marriage	79	na	84	90	na
Sexual servitude	42	30	54	73	52
Forced labour	35	26	42	43	32
Child trafficking	12	6	21	22	11
Trafficking in persons	12	8	19	38	25
Exit trafficking	16	6	37	30	11
Debt bondage	<5	4	6	18	14
Domestic servitude	15	10	18	16	11
Slavery	6	6	8	<5	5
Deceptive recruiting	<5		5	6	6
Organ trafficking	<5	1	0	0	
Harbouring	0		0	0	
Other	0		0	0	
Total	**224**	**97**	**294**	**340**	**167**

a: Statistics on the number of matters that proceeded to investigation are not available for 2021–22
Source: AFP (2023)

Not all of the matters reported to the AFP progressed to an investigation, due to a range of factors identified by Lyneham (2021). Although statistics on the number of matters that proceeded to investigation were available for 2020–21 (AFP 2023), these figures are not available for 2022–23. Based on data available for 2020–21, 67 percent of matters were investigated, with numbers for each type of trafficking (excluding forced marriage) shown in Table 7. Applying these same percentages to each type of trafficking in 2022–23 gives an estimated 167 cases investigated out of the 340 matters in 2022–23 (67%).

Because AFP data relate to the number of reports received, it is necessary to estimate the number of victim-survivors involved. AFP (2021b) data record 224 matters assessed in 2020–21, including forced marriage, relating to an estimated 264 victims (1.18 victims per referral assessed). Applying this same rate to the 167 estimated matters progressed to investigation in 2022–23, excluding forced marriage, these would have involved an estimated 197 individual victims.

To account for cases not detected or reported to police, the AIC's estimate of a 26 percent detection rate based on a multiple systems estimation approach (see Lyneham, Dowling & Bricknell 2019) was applied to the 197 matters that proceeded. This gives an estimated 768 victim-survivors, counting both detected and undetected cases, for 2022–23 (multiplier of 3.9).

Each of these types of trafficking has the potential for serious and organised crime involvement, but an assessment has not yet been undertaken of the extent of such involvement for each separate category. Based on the workshopped estimates undertaken for the ACC's (2015a, 2015b) report, the overall estimate of serious and organised crime involvement in these cases ranged between 25 percent (low), 35 percent (medium) and 50 percent (high). These proportions are used in the current calculations.

Cost estimations

As in the AIC's previous estimate of the cost of human trafficking and slavery for 2020–21 (Smith & Hickman 2022), the current calculation relies on the United Kingdom Home Office's estimate of the economic and social costs of modern slavery (Reed et al. 2018). Although these costs relate to crimes occurring in the United Kingdom, they can be applied to Australia, where the circumstances of victimisation and the harms experienced are likely to be similar.

Some of the Home Office's unit costs relate to prevention and response costs, which are dealt with in other sections of this report, but the remaining mean unit costs for 2016–17 relating to physical and emotional harm (£271,190) and lost output (£47,040) are relevant to the current estimation.

When these are converted to Australian currency using the OECD (2024) purchasing power parity calculator for 2022 (1.37), the costs are $371,530 (for physical and emotional harm) and $64,445 (for lost output), totalling $435,975. Uprating this total mean unit cost for inflation to 2022–23 figures (RBA 2024) gives an estimate of $466,609. Using the above estimates of serious and organised crime involvement, the cost of human trafficking is estimated to be between $89.6m (low), $125.5m (medium) and $179.2m (high) for 2022–23 (Table 8).

Table 8: Human costs of serious and organised crime involvement in human trafficking and slavery, excluding forced marriage, 2022–23			
AFP referrals accepted 2022–23 (*n*)			167
Estimated total victims (*n*)			197
Multiplier			3.9
Total reported and unreported victims (*n*)			768
Level of organised crime involvement			
	Low 25%	**Medium 35%**	**High 50%**
Organised crime victims (*n*)	192	269	384
Unit cost ($)	466,609	466,609	466,609
Cost attributable to serious and organised crime ($m)	89.6	125.5	179.2

Organised child sexual abuse

For the purposes of this report, organised child sexual abuse entails sexual offences committed against children (0–17 years) by serious and organised offenders, such as sexual assault (rape and acts of indecency), grooming of children for sexual purposes and conduct involving the production, dissemination, accessing or possession of child abuse materials. Instances of serious and organised crime involvement in such offences include institutional abuse of children such as organised concealment of offending, and organised production and sale of child abuse materials.

The cost of these crimes to the Australian economy is difficult to quantify, as official crime statistics do not identify the presence of organised offenders who commit these crimes and child sexual abuse is under-reported. In addition, in the case of child sexual abuse material offences, many children who are subject to abuse are located outside Australia, where their abuse is recorded or live streamed and traded online—either for cash or for other images—for consumption in Australia and other countries. There is also a lack of clarity in crime statistics regarding the number of offences in which the production of child sexual abuse material also entails contact offending against children. Depending on the circumstances, prosecutions may involve assaultive contact offences, with or without non-assaultive offences arising from the production of child sexual abuse material such as photographs or live streaming. There may also be a lack of consistency in charging these various types of offending relating to contact offending and the associated production and dissemination of child sexual abuse material.

As explained in the AIC's previous report (Smith & Hickman 2022), it is possible to estimate the cost of sexual assault offences perpetrated against children aged under 18 years at the time the offence was committed, using the latest ABS (2023e) data from the *Recorded crime – victims* series.

The costs associated with the online child sexual abuse material market, as it affects Australia, include money paid by Australian residents to purchase images, and the costs incurred by law enforcement, victim support agencies and charities in Australia in preventing and responding to such offending. These latter costs are included in the prevention and response estimates, presented later in this report. The total amount of money paid by Australians to purchase child sexual abuse material is, at present, unknown.

Little research has been conducted into the prevalence of organised crime involvement in child sexual abuse, with even less concerning the child sexual abuse material market (see Salter & Richters 2012 for a review of the research). Although the involvement of serious and organised crime group members in contact offending against children is rare, they do have some involvement in child prostitution and sexual abuse arising from human trafficking and slavery. In 2023–24, for example, the AFP (2024a) received 22 reports of child trafficking, almost double the number in 2020–21 (12 reports; AFP 2023). It is also important to distinguish 'organised child sexual abuse' from 'child sexual abuse by organised crime group members' as these involve quite different circumstances and characteristics (Salter & Richters 2012).

Since December 2022, the AFP has undertaken a joint investigation, Operation Mirani, with the Department of Home Affairs and the Indonesian National Police into trafficking of children from Indonesia for sex work in Australia. The operation has resulted in the arrest of one man in Australia, the principal of an organised crime syndicate, and a woman in Indonesia who was alleged to have recruited victims for trafficking (AFP 2024c). The income derived from the criminal operation has not, however, been reported.

In addition, the cost of redress made to victims of child sexual abuse under the National Redress Scheme needs to be taken into account. As at August 2024, 46,280 applications had been made to the scheme, with 16,128 payments made totalling approximately $1.44b (a mean of $8,929). This is arguably a cost to the Australian community as funding is provided by the institutional members of the Scheme (Australian Government 2024).

Not all of these payments are, however, made in respect of crimes involving serious and organised crime, although it is arguable that the conduct of groups of individuals in some institutions in committing abuse and concealing it from authorities could fall within the definition of organised criminal activity. More problematic, though, is the fact that the National Redress Scheme provides financial redress to individuals who have been victimised at any time in the past. Accordingly, using the total payments made would overstate considerably the economic cost for the financial year 2022–23 alone. As a result, the cost of redress has not been included in the current estimation.

Current costing methodology

The current methodology used to estimate the cost of child sexual abuse involving serious and organised crime follows that used in the AIC's previous report: estimating the number of reports to police, using a multiplier to account for unreported cases, and applying unit costs for relevant categories of economic loss (Smith & Hickman 2022).

The latest official recorded crime statistics for victims of sexual assault in Australia in 2023 (ABS 2023d) report 20,903 victims of sexual assault under the age of 18 years at the date of the incident.

A multiplier of 5.1 was used to account for cases of abuse not reported to police or a representative of the criminal justice system. This was based on a 19.7 percent reporting rate identified among victim-survivors of child sexual abuse who gave evidence to the Royal Commission into Institutional Responses to Child Sexual Abuse (2017: 37). Applying this multiplier resulted in a total of 106,605 reported and unreported cases for 2023.

Unit costs for harms experienced by child victims of sexual abuse in 2016–17 were derived from the Deloitte Access Economics (2018) report *The economic cost of violence against children and young people*. Focusing on cost estimates relating to those under 18 years of age—and considering the annual costs across Australia relating to sexual abuse only, comprising health system costs, lost productivity, disability adjusted life years and premature death caused by sexual offending—a unit cost per person of $22,182 was derived. Inflated to 2022–23 values, this was estimated to be $26,456. This unit cost was multiplied by the 106,605 cases to total $2,820.3m in 2022–23 prices.

Using the workshopped estimates of serious and organised crime involvement in child sexual abuse (ACC 2015a, 2015b) of 10 percent (low), 15 percent (medium) and 25 percent (high), the estimated losses range from $282.0m (low), $423.0m (medium) and $705.1m (high; Table 9).

Table 9: Estimated cost of serious and organised crime involvement in child sexual abuse, 2022–23

Victims of sexual assault aged under 18[a] (*n*)			20,903
Multiplier[b]			5.1
Total reported and unreported victims (*n*)			106,605
Unit cost ($)[c]			26,456
Total estimated cost ($m)			2,820.3
Level of serious and organised crime involvement[d]			
	Low 10%	**Medium 15%**	**High 25%**
Cost attributable to serious and organised crime ($m)	282.0	423.0	705.1

a: ABS (2023d)
b: Royal Commission into Institutional Responses to Child Sexual Abuse (2017: 37)
c: Derived from Deloitte Access Economics (2018)
d: ACC (2015b)

Illicit commodities

The serious and organised crime costs associated with illicit commodities include those relating to intellectual property crime; environmental crime involving forestry, fisheries, mining, oil theft, waste disposal and wildlife trafficking; illicit tobacco; and firearms trafficking. The current estimate of the cost of serious and organised crime involvement in these commodity markets for 2022–23 ranged between $2,660.7m (low), $4,734.4m (medium) and $6,838.7m (high).

Intellectual property crime

In the present context, intellectual property (IP) crime refers to three types of crime markets: counterfeit goods, digital piracy and the theft of trade secrets. IP crime in Australia comprises cross-border importation of counterfeit goods such as clothing, luxury goods and footwear and the domestic manufacture of goods that infringe copyright such as films, music, games and software. Those involved in IP crime range from members of the public to professionally organised networks. The degree of serious and organised crime involvement varies considerably depending on the commodity in question. In addition, much online infringement is carried out by individuals who use digital services coordinated by organised crime groups. There is also considerable debate about the extent and economic impact of IP infringement, globally and in Australia, for which variable and contested methodologies exist (AIC 2008).

Counterfeit and pirated goods

Research published in 2021 by the OECD and the European Union Intellectual Property Office (EUIPO) estimated that the trade in counterfeit and pirated goods for the year 2019 amounted to approximately 2.5 percent of world trade, which in 2019 was worth an estimated US$464b (OECD & EUIPO 2021). Previous estimated piracy rates published by the OECD and EUIPO (2016, 2019) were 2.5 percent for 2013 and 3.3 percent for 2016, returning to 2.5 percent for 2019. It is reasonable to assume that the median rate of 2.9 percent would be likely for 2022–23. Applying this to the value of world merchandise trade for 2023 of US$23,783,494m (World Trade Organization 2024) gives an estimate of US$689,721m.

The OECD–EUIPO rate of trade in counterfeit and pirated goods is, however, subject to several qualifications. First, it focuses primarily on the infringement of copyright, trademarks, design rights and patents, and excludes intangible infringement such as online piracy. The infringement rate is also based on all types of goods and merchandise, some of which would be unlikely to attract the attention of serious and organised crime. In addition, the infringement rate is based on all countries, including those that are high producers of infringing goods. In Australia, for example, the opportunities for serious and organised crime involvement would be less than, for example, in China, which is the top producer of counterfeit goods. In addition, border controls and enforcement activities differ considerably across countries. The impact of policing on serious and organised criminal activity in Australia would, for example, be greater than in some countries where enforcement is weak.

To account for these limitations, some adjustment is required. In Australia, the two-way trade in goods in 2022–33 was valued at A$693.8b (Department of Foreign Affairs and Trade 2023; see also Australian Bureau of Statistics 2023b). Not all trade in goods would entail a risk of copyright infringement and it is necessary to limit this by reference to the value of trade potentially at risk.

One estimate of this is the value of the contribution of Australia's copyright industries to the economy, which PricewaterhouseCoopers (PwC 2017) estimated to be $122.8b for 2015–16. This was based on the methodology developed by the World Intellectual Property Organization, which defined copyright industries as those which rely on copyright protection. Between 2012 and 2016, this value increased by 5.3 percent (1.33% per year). Assuming the same rate of increase over the next four years, the value in 2022–23 would be $134.2b. Accordingly, the copyright industry's proportion of Australia's total two-way trade in goods for 2023 would be 19.3 percent.

Applying the estimated world counterfeit trade rate of 2.9 percent to the estimated value of the copyright trade in 2022–23 would amount to $3,892m.

Online content

In the case of online content, rates of infringement differ considerably from those of other goods. In 2023, ORIMA Research (2024) conducted a survey on behalf of the Australian Government Department of Infrastructure, Transport, Regional Development and Communications to assess the rate of online consumer copyright infringement. Participants were asked about their consumption of online content in the three months preceding data collection from 27 June to 15 July 2023. A total of 2,400 individuals aged 12 years or over who used the internet participated. It was found that 78 percent of respondents had consumed online content, while 41 percent of those had consumed *some* content that was likely to be unlawful (an increase from 39% in 2022). However, only two percent of respondents had consumed solely unlawful content.

Research into the economic impact of piracy on the Australian economy was undertaken by Sphere Analysis for the Australian Content Industry Group (2011), with projections to 2016. It was estimated that the projected loss to retail content industries (music, film, publishing, games and software development) would be $5.2b in 2016, with a further projected revenue loss to the Commonwealth of $1.1b, totalling $6.3b. This took account of growth in the population and the number of internet users but assumed that all pirated goods resulted in a loss of retail sales, which cannot be assumed for all products counterfeited. Inflating this to 2023 values (RBA 2024) results in an estimated loss for 2022–23 of $6.9b.

Adding the estimated value of counterfeit and pirated goods in the Australian market in 2022–23 of $3,892m to the value of online retail content infringement of $6,900m gives a total estimate of the value of relevant IP infringement for 2022–23 of $10,792m.

Serious and organised crime involvement

As noted above, not all IP infringement would involve serious and organised crime. Based on the estimated rate of organised crime involvement in IP crime developed by the ACC (2015a, 2015b) and the AIC (Smith 2018b) ranging from five percent (low), to 15 percent (medium), to 25 percent (high), it could be concluded that the cost of IP infringement committed by serious and organised crime in Australia in 2022–23 would range between $539.5m (low), $1,618.5m (medium) and $2,697.5m (high), as shown in Table 10. For present purposes, these estimates will be included in the total of illicit commodities.

Table 10: Estimates of intellectual property crime involving serious and organised crime in Australia, 2022–23

		Rate 2023 (%)	Value 2023 ($m)
Copyright industry value add[a]			134,200
Counterfeit and pirate goods[b]		2.9	3,892
Online retail content infringement[c]			6,900
Total IP infringement (goods and online)			10,792
Level of serious and organised crime involvement			
	Low 5%	**Medium 15%**	**High 25%**
Cost attributable to serious and organised crime ($m)	539.6	1,618.8	2,698.0

a: PwC (2017)
b: OECD & EUIPO (2021)
c: Australian Content Industry Group (2011)

Environmental crime

As noted in the AIC's previous estimation (Smith & Hickman 2022), the lack of available data makes estimating the cost of environmental crime difficult. However, the latest research by Interpol, RHIPTO (the Norwegian Center for Global Analyses) and the Global Initiative Against Transnational Organized Crime (GI-TOC) has found that environmental crime is the fourth most costly transnational organised crime category in the world, after drug trafficking, counterfeit crimes and human trafficking (Nellemann et al. 2018). Environmental crime alone contributed between US$110b and US$281b in 2018 to the cost of world illicit flows involving transnational organised crime (Nellemann et al. 2018).

Using a mean of US$195.5b for 2018, this represents a 14 percent increase from the previous estimate for 2016 and a 32 percent increase from the first estimate for 2014 (Nellemann et al. 2016). Assuming the same mean annual rate of increase that occurred between 2016 and 2018 (7%), the mean cost in 2023 could be estimated to be US$263.9b.

Serious and organised crime continues to play a substantial role in environmental crimes that are linked to other serious criminality examined elsewhere in the current report, including various forms of financial crime. Serious and organised crime is also engaged in trafficking waste, chemicals, ozone-depleting substances, illegally caught seafood, timber and other forest products, as well as conflict minerals including oil, gold and diamonds.

In Australia, the ACIC (2017a: 38) noted that environmental crime 'is seen principally in the trade of illegal wildlife and in incidents of IUU [illegal, unreported and unregulated] fishing'. Native vegetation clearance and water theft have previously been recognised as additional environmental crime types occurring in Australia. The exact level of serious and organised crime involvement in environmental crime in Australia is unknown, although the ACC (2015a, 2015b) has previously estimated of the extent of serious and organised crime involvement in environmental crime generally, ranging from five percent (low), to 10 percent (medium), to 15 percent (high).

In the absence of more authoritative data on environmental crime in Australia, the Interpol, RHIPTO and GI-TOC estimates have again been used as a benchmark (Nellemann et al. 2018). This 2018 estimate indicates an overall increase between 2016 and 2018 of 14 percent (7% a year) but only provides data on individual sectors for 2016. Given the documented increase in the prevalence of global environmental crimes between 2014, 2016 and 2018 (Nellemann et al. 2018), the mean annual estimated increase of seven percent has been applied to the cost estimates for individual crime types to calculate estimates for 2022–23. These estimates in US dollars are then converted into a percentage of world gross domestic product (GDP), and these resulting percentages are applied to Australian GDP for 2022. The resulting values are then inflated to Australian 2023 prices using the RBA calculator (2024). Finally, the estimated range of serious and organised crime involvement is then applied. These calculations are as shown in Table 11.

Again, the estimates provide a general indication only of the extent of serious and organised crime involvement. Further research is needed to quantify the rates more precisely in each category of environmental crime, particularly as they affect the specific Australian environment. In 2018, the United Nations Environment Programme and the United Nations Interregional Crime and Justice Research Institute published an assessment of the extent to which criminality has a serious impact on the environment (UN Environment Programme 2018). Although this provided valuable information on the nature of such illegality, it did not further quantify the problem in terms of the cost of individual crime types. In July 2021, the Financial Action Task Force (2021) examined money laundering risks from environmental crime and sought to disaggregate the Interpol, RHIPTO and GI-TOC findings in terms of their impact on source countries, transit countries and destination countries. Although relevant factors were identified, again it was not possible to provide a national breakdown of proceeds of crime for specific environmental crime types. Accordingly, this analysis awaits future research.

Table 11: Cost of serious and organised crime involvement in environmental crime, 2022–23

	UN Environment Programme			7% increase pa	% world GDP	Apply to Aust GDP	Inflated to 2023 (RBA)	Cost involving serious and organised crime		
	2016			2022			2023	2022–23		
	Low	High	Mean	Mean	%	$	$	5%	10%	15%
	US$b	US$b	US$b	US$b	US$b	A$b	A$b	A$m	A$m	A$m
Forestry	51	152	102	144	0.143	3.033	3.25	162.5	325.0	487.5
Fisheries	11	24	18	26	0.026	0.607	0.65	32.5	65.0	97.5
Mining	12	48	30	43	0.043	1.003	1.07	53.5	107.0	160.5
Oil theft	19	23	21	30	0.03	0.700	0.75	37.5	75.0	112.5
Waste	10	12	11	16	0.016	0.373	0.40	20.0	40.0	60.0
Wildlife	7	23	15	21	0.027	0.630	0.67	33.5	67.0	100.5
All						6.346	6.79	339.5	679.0	1,018.5

Note: In 2022 world GDP was US$100,835b and Australian GDP was A$2,333.221b (Australian Government 2023). Values inflated from 2022 to 2023 values (7.0%) using RBA (2024) inflation calculator

Source: Interpol, RHIPTO and GI-TOC (Nellemann et al. 2018)

Illicit tobacco

In Australia, the tobacco market includes both legal and illicit tobacco. Illicit tobacco comprises loose-leaf tobacco ('chop-chop') and pre-rolled cigarettes, which include counterfeit tobacco manufactured illegally, contraband tobacco illegally smuggled into Australia and 'illicit whites' smuggled into Australia illegally and sold without payment of tax. All locally grown tobacco in Australia is now illicit. Vapes, e-cigarettes and other similar items, including those containing nicotine, were banned in Australia in July 2024 (Therapeutic Goods Administration 2024). Although vaping products have not been included the current report, these will be an important inclusion for future editions given the illicit market that may emerge in response to these regulations.

As explained in the previous report (Smith & Hickman 2022), there have been a number of attempts to quantify and estimate the cost of the illicit tobacco market in Australia, each producing different findings based on different methodologies. The Parliamentary Joint Committee on Law Enforcement's (2020) inquiry into illicit tobacco reviewed various estimates of the size and value of the illicit tobacco market in Australia, citing tobacco usage data, Australian Border Force seizure data, industry estimates and tax gap estimations carried out by the ATO. The committee concluded: 'The ATO estimate is likely to now be the most independent and verifiable data to estimate the size of the illicit tobacco market' (Parliamentary Joint Committee on Law Enforcement 2020: 19). As such, the current estimation will rely principally on the ATO's tax gap data.

Illicit market size and loss of revenue

For the year 2022–23, the ATO (2024e) estimated the total tobacco market to amount to 9,392 tonnes. This has contracted by 37 percent since 2016–17, although the illicit market has increased by almost a third since 2016–17, creating a substantial tax gap.

The tobacco tax gap is the difference between the estimated value of excise or customs duty raised from tobacco according to the law and the value actually paid in any financial year. The tobacco tax gap estimate includes illicit tobacco importation and 'chop-chop'. In 2022–23, the ATO estimated the net tobacco tax gap to be 14.3 percent. This equates to approximately $2.7b in lost excise revenue, meaning that $2.7b was available to be channelled into organised criminal activities, instead of funding essential community services (ATO 2024e).

In terms of lost revenue, the ATO (2024e) estimated that for 2022–23, the value of the potential tobacco market—including all legally imported and attempted illicit tobacco supply in the absence of government intervention—was $18,945m, while the net gap of undetected illicit tobacco that made it to the market was 14.3 percent, with a value of $2,711m.

Health and social costs

In addition to loss of revenue, the illicit tobacco market has various social costs. Tobacco use is the leading risk factor contributing to disease burden and deaths in Australia. It contributed to almost 20,500 deaths (13% of all deaths) in 2018 alone and was responsible for 8.6 percent of the total burden of disease in Australia in 2018 (AIHW 2021). Tobacco smoking is the most common form of tobacco use (World Health Organization 2023). In 2015–16, smoking cost Australian society more than $136b annually in treatment and lost productivity costs (Whetton et al. 2019).

The extent of current tobacco usage can be estimated using the National Drug Strategy Household Survey data (AIHW 2024). This estimated that in 2022–23, one in three people in Australia (35%) had smoked in their lifetime (5.57m people aged over 14). The same survey also found that 1.8m Australians over the age of 14 smoked daily, a decrease from 2.3m in 2019.

In 2022–23, 23 percent of all people who smoke had smoked unbranded tobacco in their lifetime, while 43 percent were aware of unbranded tobacco (AIHW 2024). Of the 10 percent of people who currently smoke who purchased these products, 40 percent said they purchased them from a tobacconist and 26 percent said they bought them from a supermarket, convenience or grocery store (AIHW 2024).

Based on these findings, of the 1.8m daily adult smokers, 23 percent smoke unbranded tobacco—414,000 people, or 2.6 percent of the adult population in 2023. Whetton et al. (2019) estimated the tangible heath care and workplace costs of tobacco for 2015–16 to be $19,243m, or $798 per person. Inflating this to 2022–23 prices (RBA 2024) gives an estimate of $968 per person. Applying this to the 414,000 Australians in 2023 who used unbranded tobacco gives an estimated cost of $400,752,000 for 2022–23.

Serious and organised crime involvement

According to the evidence presented to the Parliamentary Joint Committee on Law Enforcement in 2020, the involvement of serious and organised crime in this market has increased. Imperial Tobacco submitted that the illicit tobacco market 'has become so lucrative that it is, to a large extent, driven by well organised and orchestrated criminal gangs' (Parliamentary Joint Committee on Law Enforcement 2020: 16). In addition, the description of the role of serious and organised crime by the Financial Action Task Force (2012: 7) continues to be valid in 2023:

> … some Organised Crime Groups (OCGs) will manage all aspects of the production process, from sourcing raw tobacco product, through to developing specific tobacco packaging that will generate suitable market interest and/or appear legitimate in counterfeit product. Others will rely on the work of key facilitators, often based overseas, who engage with smaller legitimate tobacco manufacturers in sourcing the tobacco goods and associated packaging. The OCG then agrees a distribution route with the facilitator and agrees risk mitigation mechanisms to ensure successful delivery. Certain groups simply exploit lower cross-border prices of genuine tobacco products and smuggle them to their chosen destination for sale.

Information provided by the ACC in 2014 (ACC 2015a, 2015b) estimated that serious and organised crime involvement in the illicit tobacco market was between 57 percent (low), 78 percent (medium) and 100 percent (high). Applying these proportions to the estimate of $2,711m in lost government revenue in 2022–23, and adding the estimated social cost of $400.8m for the same year, results in an estimated total cost of illicit tobacco attributable to serious and organised crime of between $1,773.8m (low), $2,427.2 (medium) and $3,111.8m (high) for 2022–23 (Table 12).

Table 12: Estimated cost of serious and organised crime involvement in illicit tobacco, 2022–23

Cost component	Net cost ($m)	Involving serious and organised crime ($m)		
		Low 57%	Medium 78%	High 100%
Tangible healthcare and workplace costs[a] ($m)	400.8	$228.5	$312.6	$400.8
Loss of excise (14.3% tax gap)[b] ($m)	2,711.0	1,545.3	2,114.6	2,711.0
Total ($m)	**3,111.8**	**1,773.8**	**2,427.2**	**3,111.8**

a: AIHW (2024), Whetton et al. (2019)
b: ATO (2024e)

Firearms trafficking

According to the ACIC (2017: 24):

> Firearms are used by a wide range of criminals to protect their interests, for intimidation through the threat of harm, or to commit acts of physical violence. Reporting indicates several serious and organised crime groups are involved in trafficking firearms.

On the basis of available data, the ACIC (2024c) conservatively estimates there to be 200,000 firearms in the domestic illicit market at present. This is a reduction in the size of the illicit market compared to the previous estimate of 260,000 firearms (ACIC 2016). The current illicit market is now made up of 190,000 long-arms and 10,000 handguns. This revised estimate is based on a range of intelligence sources, including historical and updated firearm importation figures, seizure trends, and the number of firearms surrendered during the course of Commonwealth, state and territory amnesties (ACIC 2024c).

Between 2016–17 and 2022–23, the ABS (2024b) found a 5.3 percent increase in the number of offenders whose principal offence involved prohibited or regulated weapons (12,117 to 12,757). This trend is different from the ACIC's estimated decrease in the number of illicit firearms, although the ABS records weapons rather than solely firearms and so the units of measurement are not comparable.

In 2015, the ACC estimated that the range of black market prices for long-arms was between $3,000 and $25,000 and the range for handguns was between $1,500 and $3,000—depending on model, age and condition. In 2014, the Director of the Organised Crime Directorate of the New South Wales Police Force gave evidence to the Senate Legal and Constitutional Affairs References Committee on the ability of Australian law enforcement authorities to eliminate gun-related violence in the community and suggested that semi-automatic handguns were selling for up to $15,000 in Australia (Partridge 2014; Senate Legal and Constitutional Affairs References Committee 2015). The Commander of the New South Wales Police Firearms and Organised Crime Squad added that 'a firearm that has never come under police notice or the notice of authorities before' might have a price of about $15,000 (Senate Legal and Constitutional Affairs References Committee 2014: 51).

More recently, Broadhurst et al. (2021) undertook research into the availability and cost of weapons across a number of cryptomarkets during 2019. Of the 1,497 handguns advertised, the mean price was A$1,234 (median price: A$965), and of the 218 rifles on offer the mean price was A$1,817 (median price: A$1,288). Shotguns (*n*=34) were slightly lower in price, on average, than rifles. Broadhurst et al. (2021) also found evidence of high maximum prices for handguns of $13,088 and rifles of $10,966. These prices are, however, based on international illicit cryptomarkets in 2019 and may not be representative of the current Australian market for illicit handguns and long-arms, online and offline.

Applying Broadhurst's (2021) mean prices as conservative estimates of the cost of firearms gives an estimated value of Australia's 10,000 handguns to be $12,340,000 and 190,000 long-arms (using the mean price for rifles as indicative of all long-arms) to be $345,230,000. Inflated to 2023 prices from those in 2019 using the RBA (2024) inflation calculator gives 2023 prices of $14,408,725 for handguns and $403,105,692 for long-arms.

The ACC (2015a) previously estimated the cost of firearms trafficking to be the value of illegal firearms that, had the funds been invested, would have been available to the community. Although some illicit firearms are purchased by serious and organised crime using the proceeds of other crime, it is arguable that the loss to the economy would amount to the loss of the investment value of these funds. Assuming a net return on investment of 2.5 percent per annum, the estimated minimum investment value lost in 2022–23 for handguns would be $360,218, and for long-arms would be $10,077,642—or $10,437,860 for all firearms.

Not all of this loss to the economy would, however, be due to serious and organised crime involvement and it is necessary to apply the ACC's (2015a, 2015b) workshopped estimate of serious and organised crime involvement in firearms trafficking of 75 percent (low), 90 percent (medium) and 100 percent (high). This results in the loss to the economy of $7.8m (low), $9.4m (medium) and $10.4m (high; Table 13).

Table 13: Estimated cost of serious and organised crime involvement in firearms trafficking, 2022–23

	Handguns	Long-arms	All
Illicit market weapons (*n*)[a]	10,000	190,000	200,000
Mean price 2019 (2019 $)[b]	1,234	1,817	
Estimated market (2019 $m)	12.3	345.2	
Estimated market (2023 $m)[c]	14.4	403.1	
Investment loss 2.5% ($m)	0.4	10.1	10.4
Cost involving serious and organised crimed ($m)			
Low (75%)			7.8
Medium (90%)			9.4
High (100%)			10.4

a: ACIC (2024c)
b: Broadhurst et al. (2021)
c: RBA (2024)
d: ACC (2015a, 2015b)

Pure cybercrime

Because information and communications technologies are used widely throughout society and are instrumental to government, business and consumer activities, there is considerable overlap between the estimated costs of cybercrime and the costs of other crime types, particularly economic crimes, banking and financial crimes, transnational crime, online commerce and computer-enabled crime such as consumer fraud, online dissemination of child abuse material and intellectual property infringement. There are also potential areas of overlap between cybercrime affecting government, business and individuals, as costs may be calculated in one or more categories relating to the same victimisation event. Many of the previous estimates of cybercrime have also included the indirect cybersecurity costs of prevention and response by government, businesses and households.

The present estimate sought to avoid this double-counting and, accordingly, is limited to computer-dependent or so-called 'pure' cybercrimes, involving unauthorised access to networks (hacking), modification of data, and impairment of systems. The cybersecurity prevention and response costs are also separately reflected in the general indirect cost of crime calculations below.

Research into the prevalence and harms associated with cybercrime continues to expand in Australia and elsewhere, although robust global estimates of the cost to national economies are still absent. The latest studies that have assisted with the current estimation process include:

- the AIC's 2023 Australian Cybercrime Survey, which examined the victimisation of both individuals and small businesses and included some information on financial losses (Voce & Morgan 2023);
- the Australian Signals Directorate's *Cyber threat report 2022–2023* (ASD 2023);
- the Bureau of Crime Statistics and Research report *Trends in and characteristics of cybercrime in NSW* (Klauzner & Pisani 2023); and
- the National Anti-Scam Centre's report *Targeting scams* (Australian Competition and Consumer Commission (ACCC) 2024).

As in previous years, not all victimisation sectors are covered in full, although the level of confidence in the available information has improved. In the case of the ASD (2023) report, victim self-report data are given for cybersecurity incidents, which approximate to the current definition of pure cybercrime, and for cybercrime incidents, which mainly relate to cyber-enabled criminality. The AIC's survey and the National Anti-Scams Centre report also predominantly relate to consumer fraud or scam victimisation, apart from some reference to malware and ransomware, which involve pure cybercrime.

Accordingly, the most relevant and authoritative research on pure cybercrime costs remains the AIC's report on the cost of pure cybercrime for 2019 (Teunissen, Voce & Smith 2021). This provided national prevalence estimates for three types of pure cybercrime: computer access crimes, computer disruption crimes and computer malfunction crimes—all excluding cyber-enabled crimes such as consumer scams.

Cybercrime affecting individuals

The AIC's previous estimation of the cost of pure cybercrime affecting individuals in 2020–21, reported in Smith and Hickman (2022), relied on the findings of the AIC's survey (Teunissen, Voce & Smith 2021). This survey found that 14 percent of the adult Australian population had been victimised in the preceding 12 months (June 2018 to May 2019), with the total economic impact of pure cybercrime on individuals amounting to $3,499m. This comprised $1,914m directly lost by victims, $597.4m spent dealing with the consequences of victimisation, and $1,376m spent on prevention costs. Victims recovered $388.7m.

Using the net loss of $2,123m after recoveries (excluding prevention costs) and inflating this by 16.8 percent over four years since 2019 using the RBA (2024) inflation calculator results in an estimated economic loss of $2,479m in 2022–23. This, of course, excludes any increase in the rate of victimisation over this period.

In 2023, the AIC conducted a large-scale survey of 13,887 computer users in Australia (Voce & Morgan 2023) that measured a number of dimensions of cybercrime victimisation over the preceding 12 months (early 2022 to early 2023). Only one cybercrime type was relevant to pure cybercrime (malware victimisation), with other types (identity crime and misuse, online abuse and harassment, and fraud and scams) being cyber-enabled crimes. It was found that 21.8 percent of respondents had been victims of malware and that 7.9 percent of these victims officially reported their victimisation to police or ReportCyber. Only 4.4 percent of malware victims reported a financial loss arising from the most recent incident of victimisation, with 79 percent reporting a loss of less than $1,000, 19 percent a loss from $1,000 to $9,999 and three percent a loss of $10,000 or more. The net median loss for malware victims was $250. The AIC's survey also documented various forms of non-financial harms that could be used to assess the cost of cybercrime more fully. Among malware victims, 10.1 percent lost money dealing with the consequences of the incident, while 2.3 percent had money reimbursed (with a median amount recovered of $200).

In addition to the AIC's research, information on cybercrime affecting individuals and businesses was recorded by the ASD's (2023) *Cyber threat report 2022–2023*, based on victim reports to the ReportCyber online portal. In 2022–23, nearly 94,000 cybercrime reports were made to ReportCyber.

Between 2021–22 and 2022–23, the average cost of cybercrime incidents reported to ReportCyber increased by 14 percent, with mean losses for small business of $45,965, for medium business of $97,203 and for large business of $71,598. These reports were primarily cyber-enabled crime and so are relevant to other sections of this report, including personal fraud, fraud against business, identity theft, online sexual offending and internet fraud. Information on losses due to cybersecurity incidents are not reported by ASD (2023).

To estimate the increase in pure cybercrime victimisation costs since 2019, a comparison could be made between the national prevalence finding of 14 percent victimisation in 2019 (Teunissen, Voce & Smith 2021) and the non-probability sample victimisation rate for malware losses in 2023 of 4.4 percent (Voce & Morgan 2023). However, this assumes that the same levels of financial loss apply in each study. In both studies, median losses were similar ($267 in 2019 and $250 in 2023), and the distribution of losses was generally similar, with most reporting losses of less than $1,000 and very few reporting large losses over $10,000. However, due to the different methodologies used in the two studies, and the different forms of pure cybercrime examined, it is not appropriate to make a direct comparison between these findings. Accordingly, no changes will be made to loss estimates due to the 7.8 percent increase in prevalence found between the two studies. For individual pure cybercrime victimisation, the total amount lost in 2022–23 is estimated to be $2,479m.

Cybercrime affecting business and government

In addition to the above reports of pure cybercrime victimisation of individuals, previous estimates of pure cybercrime have attempted to include the cost of victimisation experienced by business and government. Since 2021, however, the data sources previously relied on have been revised and it is no longer possible to estimate these losses with certainty using publicly available data (ASD 2023; ACCC 2024). In 2022–23, for example, the Australian Cyber Security Centre responded to 1,134 cybersecurity incidents that were almost entirely cyber-dependent, pure cybercrime. Of these, 113 incidents related to ransomware, with the largest proportion being reported in the professional, scientific and technical services sectors. No loss estimates were provided for these incidents. Similarly, the ACCC's (2024) report no longer includes cybersecurity reports and focuses solely on online scams reported by individuals.

Although somewhat dated, the AIC's Australian Business Assessment of Computer User Security (ABACUS) remains the most relevant national study of computer security incidents against businesses in Australia, using a representative sample of small, medium and large businesses from all industry sectors and weighting data to reflect the whole Australian business population (Richards 2009). The ABACUS survey measured 'computer security incidents', which were defined as 'any unauthorised use, damage, monitoring attack or theft of business information technology'. Thus, it covered many of the same categories of pure cybercrime as the ASD's (2023) cybersecurity reports.

The ABACUS survey analysed 4,000 usable questionnaire responses completed on paper, online or via computer-assisted telephone interviews and found that 14 percent of all businesses were victimised at least once in 2006–07—interestingly, the same percentage as individuals victimised in 2019 (Teunissen, Voce & Smith 2021). The mean financial losses resulting from computer security incidents for businesses that experienced such incidents during the period was $4,469. For small businesses the mean loss was $2,431, for medium businesses it was $12,405 and for large businesses it was $49,246.

Using the ReportCyber security incident classification matrix (ASD 2023: Tables 1 and 3, pp 8–9), it is estimated that reports for 2022–23 were made by 153 small organisations and sole traders, 187 by medium-sized organisations including schools and local government, 273 state government entities and large organisations, and 521 federal government entities including 55 national security entities—1,134 in total.

To estimate the number of matters that were not reported, a multiplier of 12.7 derived from Richards (2009) and Voce & Morgan (2023) was used, representing a low reporting rate of 7.9 percent for all sectors. Separate data were not, however, available for the mean losses involved in reported and unreported incidents.

Applying the ABACUS survey's mean losses for these sectors, and increasing the costs to reflect inflation between 2006–07 and 2022–23 (RBA 2024), resulted in the estimates presented in Table 14.

Table 14: Estimated cost of pure cybercrime for business and government by sector, 2022–23

Sector	Mean loss 2007 ($)	Mean loss 2023 ($)	Reports 2023 (*n*)	Multiplier (% reported)	Reported and unreported totals (*n*)	Estimated total losses ($m)
Small business	2,431	3,717	153	12.7 (7.9%)	1,943	7.2
Medium business	12,405	18,966	187	12.7 (7.9%)	2,375	45.0
Large business	49,246	75,290	273	12.7 (7.9%)	3,467	261.0
Government	$4,469	6,833	521	12.7 (7.9%)	6,617	45.2
Total						**351.3**

Note: Means were derived from Richards (2009) and Voce & Morgan (2023); report numbers were derived from ASD (2023); loss estimates were inflated using the RBA (2024) calculator. Government mean was based on the mean for all business sizes reported in ABACUS (Richards 2009). No separate data were available for the mean losses involved in reported and unreported incidents

Serious and organised crime involvement

Serious and organised crime involvement in pure cybercrime is likely to vary considerably across cybercrime types (Wall 2024). Some types, such as ransomware and denial of service, have high levels of involvement (Whelan, Bright & Martin 2023), unlike cyber-enabled crimes such as phishing and business email compromise, which have much lower levels of involvement.

The present study used the previous estimates of the involvement of serious and organised crime in pure cybercrime categories, which ranged from 50 percent (low), to 70 percent (medium), to 90 percent (high). Future research should revise these percentages following the methodologies used in previous reports (ACC 2015a, 2015b; Smith 2018b) to take account of the changing involvement of serious and organised crime in pure cybercrime in recent years (see ASD 2023).

Using the above research findings, the estimated cost of serious and organised crime involvement in pure cybercrime in 2022–23 was estimated to be between $1,481.7m (low), $1,986.1m (medium) and $2,553.7m (high; Table 15).

Table 15: Estimated cost of serious and organised crime involvement in pure cybercrime, 2022–23 ($m)

Victim type	Net cost ($m)	Cost involving serious and organised crime ($m)		
		Low 50%	Medium 70%	High 90%
Individuals[a]	2,479.0	1,239.5	1,735.3	2,231.1
Small business[b]	7.2	3.6	5.0	6.5
Medium business[b]	45.0	22.5	31.5	40.5
Large business[b]	261.0	130.5	182.7	234.9
Government[b]	45.2	22.6	31.6	40.7
Total	**2,837.4**	**1,418.7**	**1,986.1**	**2,553.7**

a: Teunissen, Voce & Smith (2021)
b: Derived from Richards (2009) and ASD (2023)

Serious and organised crime enabling costs

The cost of serious and organised crime enablers includes the costs of identity crime, commissions paid for laundering the proceeds of crime, corruption of public officials to facilitate serious and organised crime and violence used to intimidate and extort funds from victims.

There is still no research or intelligence available to assess the value of assets held by serious and organised crime offenders in Australia, and so it was not possible to estimate the income that could have been generated through the investment of such assets or the amount lost to the economy through lost taxation revenue. This component of enabling costs awaits further research.

The total cost of the above categories of enabling crime for 2022–23 ranged between $802.7m (low), $1,383.5m (medium) and $1,922.5m (high).

Identity crime

Criminal misuse of personal information, popularly known as identity crime, was estimated to cost Australia $2,291.1m in 2020–21 in direct costs alone, excluding prevention and response costs (Smith & Hickman 2022). Using the same methodology but applying the most recent data, Table 16 below presents the total estimated direct costs of identity crime for 2022–23. These are based on the AIC's methodology that estimated the direct cost of identity crime in 2018–19 to be $2.1b (Smith & Franks 2020; Smith 2018a), using the cost of fraud and dishonesty offences as the basis and apportioning these to estimate the amount attributable to identity crime.

The calculation of direct costs is based on previous methodologies developed by the AIC to quantify the cost of serious and organised crime in Australia (Smith & Hickman 2022), the extent of identity crime (McAlister et al. 2023), the cost of identity crime (Smith & Franks 2020) and the cost of fraud against the Commonwealth (McAlister & Bricknell 2024). Officially recorded police fraud statistics have also been relied on, as well as information derived from comparable international studies.

The category of additional direct costs is based on 2021 data from the United States Bureau of Justice Statistics (Harrell & Thompson 2023).

Indirect costs were calculated using Mayhew's (2003b) estimate that indirect costs—including preventive, intangible, response and lost output costs—add a further 40 percent to direct costs.

These estimations were undertaken in respect of four data sources relating to Commonwealth entities, individual victims, victims of serious identity crime and identity crime reflected in official police recorded crime statistics. The outcomes were then assessed in terms of the proportion that had serious and organised crime involvement. Adjustments were made to guard against double-counting across categories.

Identity crime affecting Commonwealth entities

For Commonwealth entities, the estimate was based on data reported in the AIC's Fraud Against the Commonwealth census for 2022–23 (McAlister & Bricknell 2024). In 2022–23, there were 378,033 allegations of fraud received or detected. Of these, 11,473 related to internal fraud and 366,196 related to external fraud.

Not all fraud allegations result in an investigation or other action. An investigation was classified as 'commenced' when the entity determined that the allegations met the threshold for starting an investigation. In 2022–23, Commonwealth entities reported commencing 5,483 investigations and 84,486 alternative actions.

Fraud investigations were finalised when one of the following occurred: the entity's investigation of the allegations had concluded, the allegations had been referred to a law enforcement or prosecution entity for further action, debts or liabilities arising from the investigation had been written off as unrecoverable, or the individual who was the subject of allegations had died.

In 2022–23, 6,915 fraud investigations were finalised and. Of these, 3,192 allegations were substantiated in full or in part, worth $161.0m (McAlister & Bricknell 2024). This equates to approximately $50,449 per fraud allegation. A multiplier of 1.15 was then applied (Smith et al. 2014) to account for frauds that were undetected or not included in the annual census. This inflated the total number of substantiated fraud allegations to 3,671, with an estimated total value of $185.2m. Of the amounts lost to fraud in 2022–23, entities recovered $8.2m in reparation or repayment, although not all of the monies recovered related to losses incurred in the same year. It was not possible to determine if the amounts recovered included any incidents of identity fraud. Deducting the amount recovered from the total leaves a net total loss of $177.0m. As in 2021, the same proportion of 40 percent attributable to identity crime was used, resulting in a total value of identity crime for Commonwealth entities of $70.8m.

As in previous estimations, additional direct costs were added. These include various out-of-pocket losses victims of identity crime and misuse can incur such as fees for replacing identification documents, legal fees, bank fees, psychological and/or medical consultation payments, fines and miscellaneous expenses such as postage, phone calls and court costs. In the absence of relevant Australian research on these costs, this study again relied on the results of Bureau of Justice Statistics surveys carried out in the United States, the latest of which is Harrell and Thompson (2023), in respect of the year 2021.

Harrell and Thompson (2023: 25) found that, in 2021, 3.8 percent of identity theft victims reported incurring additional costs during the preceding 12 months as a result of identity theft. These victims reported mean additional costs of US$280 ($395 in 2021 Australian dollars, calculated using the OECD's (2024) purchasing power parity, inflated to A$445 in 2023 dollars using the RBA's (2024) calculator). The US survey also found a median cost of US$40 ($56 in 2021 Australian dollars, calculated using the OECD's (2024) purchasing power parity, inflated to A$63 in 2023 dollars using the RBA's (2024) calculator).

Assuming that 3.8 percent of Commonwealth fraud incidents (after applying the multiplier) involved additional costs (*n*=139), and applying the converted estimate of A$63 per incident, the additional loss amount would be $8,757 with 40 percent of that involving identity crime ($3,503).

The total direct cost of identity crime affecting Commonwealth entities in 2022–23 was $70.8m (Table 16).

Table 16: Estimated direct cost of identity crime affecting Commonwealth entities, 2020–21 and 2022–23

	2020–21	2022–23
Substantiated allegations (*n*)	3,461	3,192
Multiplier (for unreported or undetected fraud)	1.15	1.15
Allegations × multiplier (*n*)	3,980	3,671
Unit cost ($)	73,006	50,449
Subtotal ($m)	290.6	185.2
Recovered amounts ($)	136,941	8,220,759
Total out-of-pocket cost ($m)	290.4	177.0
Proportion related to identity crime (%)	40	40
Direct identity crime costs to Commonwealth entities ($m)	116.2	70.8
Additional direct identity crime costs ($)	3,159	3,503
Total direct costs ($m)	**116.2**	**70.8**

Identity crime affecting individuals

The cost of identity crime to individuals is best estimated using the findings of crime victimisation surveys, as these avoid the need to employ multipliers to inflate the number of offences recorded by police to account for unreported crimes. In the case of identity crime, the proportion of offences not reported is difficult to determine precisely and estimates are generally considered to be extremely unreliable.

Since the publication of the last cost of serious and organised crime report (Smith & Hickman 2022), improved sources of data have become available to help estimate the cost of identity crime in Australia. The most authoritative data source for the 2022–23 year was the Personal Fraud survey conducted by the Australian Bureau of Statistics (ABS 2024a). This survey found 1.0 percent of persons aged 15 years and over experienced identity theft in the previous 12 months (199,000 persons), while 2.5 percent (514,300) experienced a scam and 2.1 percent (434,300) experienced online impersonation.

In the case of card fraud, 8.7 percent of persons (1.8m) experienced card fraud, with the median amount withdrawn or used in the most recent incident being $200. For the most recent incident the gross amount withdrawn or used was $2,208.6m, of which $475.6m was the net loss (21.5%). Comparable loss amounts for scams, identity theft and online impersonation were not collected (ABS 2024a).

In addition, the National Anti-Scam Centre has published its first report on scam activity for 2023 (ACCC 2024). Based on data from Scamwatch, ReportCyber, the Australian Financial Crimes Exchange, IDCARE and the Australian Securities and Investments Commission, the combined losses reported in 2023 were $2.74b (a 13% decrease in losses anticipated for 2023 based on the trajectory of losses recorded in 2022). The decline in losses is due to a range of countermeasures used to disrupt scam activity and increased awareness of risks among potential victims.

In 2023, the AIC published the findings of its Australian Cybercrime Survey (Voce & Morgan 2023). Although not a national prevalence study, it was a large-scale study with 13,887 respondents and provides current data of relevance to the present assessment. The findings that related to identity theft, compromise and misuse have been published by McAlister et al. (2023) and include median losses ($300) and median monies reimbursed ($250).

Using these data sources enables the present study to provide a plausible estimate of the likely victimisation rate and economic losses from identity crime in 2022–23 that can then be used to estimate the proportion involving serious and organised crime. It is important to note, however, that these various studies have used different terminology and definitions for measuring identity crime, making precise comparisons difficult.

For the present analysis dealing with identity crime victimisation of individuals, the starting point is the ABS (2024a) survey, which focuses on individuals as victims. However, the ABS research categorises personal fraud into card fraud, scams, identity theft and online impersonation, each of which has elements of identity crime. Accordingly, it would be misleading simply to use the 1.0 percent victimisation rate for identity theft for present purposes, and the card fraud rate of 8.7 percent would be too high as some card fraud would not entail identity crime. The Australian Cybercrime Survey identified 15 types of identity crime with varying rates of prevalence over the preceding year among respondents. The most frequently experienced type involved suspicious banking payments (9.3% of respondents). For present purposes, the ABS (2024a) rate, which is midway between that of 1.0 (identity theft) and 8.7 (card fraud), would be appropriate to use (5.0%).

It would also be inappropriate to use the total victimisation rates reported by the National Anti-Scam Centre as some of these relate to business victimisation and also go beyond identity crimes and include some serious identity fraud matters and some police-reported cases. In addition, the reported losses are likely to be skewed by victims losing greater amounts being more likely to report their cases. However, the reports of identity theft (19,896) with losses of $8.6m would be too low, even taking into account the general decline in victimisation and losses since 2021 reported by the National Anti-Scam Centre (ACCC 2024a).

Smith and Hickman's (2022) estimate of direct individual identity crime losses was $619m, which was based on a 10 percent identity crime victimisation rate and a median loss of $369 per victim.

For present purposes, a victimisation rate of 5.0 percent of persons aged 15 years and over will be used, with 80 percent of victims experiencing a direct financial loss and a median loss amount of $300 (based on McAlister et al. 2023). This results in an estimated direct loss for individual identity crime victims of $259.1m.

Additional direct costs were based on the 3.8 percent reported by Harrell and Thompson (2023) for 2021, converted to Australian dollars and inflated to 2023 values, but estimating that 90 percent of these additional direct costs would have involved identity crime. This resulted in an estimate of an additional $2.1m, making a total direct loss for individuals of $261.2m for 2022–23 (Table 17).

Table 17: Estimated direct cost of identity crime to individuals, 2020–21 and 2022–23

	2020–21	2022–23
Population estimate (over 15 years of age) (m)	21.0	21.6
Identity fraud victimisation rate (%)	10.0	5.0
Identity crime victims (m)	2.1	1.1
Victims suffering a direct financial loss (80%)(m)	1.7	0.9
Median out-of-pocket loss per victim ($)	369	300
Total direct costs of identity crime to individuals ($m)	619.9	259.1
Additional direct identity crime costs ($m)	3.2	2.1
Total direct costs ($m)	**623.1**	**261.2**

Serious identity crime

In addition to volume identity crimes targeting government entities and individuals, a proportion of identity crimes entail large economic losses for victims, particularly business enterprises. These could relate to misuse of personal information to defraud victims in relation to complex economic crimes such as payroll fraud, invoicing fraud or investment scams (Smith 2018a). ‘Seriousness’ can be defined on the basis of the level of financial loss, the sophistication of the planning and execution of the offence, or whether the offences were committed by professionals (such as solicitors, accountants, financial planners or mortgage brokers) who breach clients’ trust (Smith et al. 2014).

In 2023, the National Anti-Scam Centre found that 4,933 scam reports worth $29.5m were reported by businesses, a 27.9 percent increase on the number reported in 2022. The median loss for these reports was $5,980.

To estimate losses for serious identity crime cases, the estimated number of incidents identified by Smith and Hickman (2022) for 2020–21 (*n*=350) was inflated by 30 percent based on the increase in business identity crime cases found by the National Anti-Scam Centre (ACCC 2024). The same multiplier (2.17) was used to represent 46 percent of cases being reported officially. The unit cost of $1.5m in 2021 was increased to $1.7m based on the latest industry research (Association of Certified Fraud Examiners (ACFE) 2024), but an allowance of 17 percent was deducted for recoveries, again based on the recoveries recorded in the Asia-Pacific region by ACFE (2024). In total, 40 percent of losses were attributable to identity crime, as in previous reports.

Again, additional direct costs were added to the above direct cost estimate, based on Harrell and Thompson's (2023) findings from the United States Bureau of Justice Statistics surveys. Harrell and Thompson found that, in 2021, 3.8 percent of identity theft victims reported incurring additional costs during the preceding 12 months as a result of the theft. These victims reported mean additional costs of US$200 (A$282 in 2021 dollars, calculated using the OECD's (2024) purchasing power parity, inflated to A$317 in 2023 dollars using the RBA's (2024) calculator). The use of mean costs was appropriate for these serious identity crime matters, whereas the median cost was used for Commonwealth and Individual matters, discussed above. This resulted in $10.8m in additional direct costs in respect of serious identity crime matters in 2022–23.

The total estimated identity crime cost relating to serious matters was $491.5m for 2022–23 (Table 18).

Table 18: Estimated direct cost of serious identity crime, 2020–21 and 2022–23

	2020–21	2022–23
Incidents (*n*)	350	455
Multiplier	2.17	2.17
Incidents × multiplier (*n*)	760	987
Unit cost ($m)	1.5	1.7
Subtotal ($m)	1,140	1,481
Recovered monies 17% ($m)	159.6	251.7
Subtotal ($m)	980.4	1,228.8
Related to identity crime (%)	40	40
Subtotal ($m)	392.2	491.5
Additional direct costs ($m)	14.9	10.8
Total direct costs ($m)	**407.1**	**491.5**

Police recorded offences

Finally, and importantly, losses attributable to police recorded fraud and deception offences were estimated for the year 2022–23, based on the number of offences recorded by police for 2022–23 (144,581 offences).

Deductions to avoid double-counting were then made for 18 Commonwealth fraud cases referred to police (McAlister & Bricknell 2024), and 455 serious fraud matters referred to above. The total was also reduced by 68,000 reported incidents of personal fraud, counted as part of individual identity crime above (based on an increase of 4.5% since 2021). The remaining 76,108 offences were then used to estimate costs.

A multiplier of four was again applied to account for unrecorded matters (based on Mayhew's (2003b) reporting rate for fraud of 25%). Mayhew's (2003b) unit costs for recorded matters ($17,671 for 2022–23 after uprating for inflation) and unrecorded matters ($2,838) were then applied to the 76,108 recorded matters and 228,324 unrecorded matters, giving a total cost of all frauds of $1,992.9m for 2022–23. Based on McAlister et al.'s (2023) survey findings that 52 percent of identity crime losses were reimbursed, the net loss for these police matters was $956.6m. It was estimated from previous research that 68 percent of frauds would entail misuse of personal information, resulting in an estimated direct cost of $650.5m for 2022–23.

Again, additional direct costs were added based on 3.8 percent of identity crime incidents having such costs, and the estimated mean additional cost of $317 in 2022–23 derived from Harrell and Thompson's (2023) findings. Assuming that 90 percent of additional direct costs related to identity crime, the additional direct cost component would be $3.3m.

The total estimated identity crime cost relating to police recorded matters was $653.8m for 2022–23 (Table 19).

Table 19: Estimated direct cost of police recorded identity crime, 2020–21 and 2022–23

	2020–21	2022–23
Net incidents (*n*)	72,655	76,108
Multiplier	4	4
Incidents × multiplier (*n*)	290,620	304,432
Unit cost ($m)	1.5	1.7
Loss subtotal ($m)	1,701.9	1,992.9
Recovered monies 52% ($m)	na	1,036.3
Subtotal ($m)		956.6
Related to identity crime (%)	68	68
Subtotal ($m)	1,157.3	650.5
Additional direct costs ($m)	3.0	3.3
Total direct costs ($m)	**1,160.3**	**653.8**

Summary: Identity crime

Serious and organised crime is involved in acquiring and selling personal information as well as using stolen credentials to facilitate other types of crime. Information provided by the ACC (2015a, 2015b) estimated serious and organised crime involvement to range from 20 percent (low), to 40 percent (medium), to 60 percent (high). These proportions are again used for the current estimation (Table 20).

Applying these proportions of serious and organised crime involvement to the latest estimate of direct identity crime costs for 2022–23 results in a cost of between $295.5m (20%), $509.9m (40%) and $886.4m (60%). These costs were not included in the consequential costs of serious and organised fraud, presented later. This estimate excludes the indirect costs of preventing and responding to identity crime incurred by government, business and individuals, as these are included in the indirect costs of prevention and response below.

Table 20: Estimated direct cost of serious and organised identity crime, 2022–23 ($m)

Category	Obtained cost[a]	Additional cost[b]	Total direct ID cost	Involving serious and organised crime		
				Low 50%	Medium 70%	High 90%
Commonwealth entities	70.8	0.004	70.8	14.2	28.3	42.5
Individuals	259.1	2.1	261.2	52.2	104.5	156.7
Serious fraud	491.5	0.01	491.5	98.3	196.6	294.9
Police recorded	650.5	3.3	653.8	130.8	261.5	392.3
Total	1,471.9	5.4	1,477.3	295.5	590.9	886.4

a: 'Obtained cost' refers to the monetary amount the offender obtained from misusing a victim's account or personal information, including the estimated value of goods, services, credit, loans or cash obtained

b: 'Additional cost' refers to costs incurred by the victim as a result of misuse, or attempted misuse, of personal information, including legal fees, bank fees on dishonoured cheques or funds transfers, and other miscellaneous expenses such as postage, phone calls and court costs

Money laundering commissions

Previous sections of the current report have estimated the extent of proceeds of crime generated through serious and organised criminal activity in Australia in 2022–23 (see also AUSTRAC's 2024 *National risk assessment* for further discussion of the extent of proceeds of crime in Australia). One further cost incurred by the Australian economy due to serious and organised criminality is in respect of commissions paid to individuals who facilitate money laundering by undertaking the various processes of placement, layering and integration of proceeds of crime to reduce risks of detection and confiscation.

The ACIC has estimated that the value of commissions charged in Australia for laundering the proceeds of crime could range between six and seven percent of proceeds available for laundering. As in the AIC's previous assessment for 2020–21 (Smith & Hickman 2022), a mean rate of 6.5 percent will be used, although this may now be somewhat conservative.

Information provided by the ACIC estimates that serious and organised crime involvement in money laundering ranges from 50 percent (low), to 75 percent (medium), to 95 percent (high). This entails collecting the proceeds of crime, obtaining professional advice, transferring funds as advised and paying commissions to those undertaking the laundering activities.

The present study focused on the estimated proceeds of crime generated by each of the criminal activities examined as the baseline amount of funds available for laundering in Australia (see column 2 in Table 33 below). Proceeds of crime generated outside Australia but brought into Australia for laundering have not been counted, as the quantification of this activity remains incomplete. Accordingly, the present estimate of money laundering commission payments is likely to be highly conservative.

Not all proceeds of crime are, however, dealt with by organised crime in a way that requires a commission to be paid, as many methods of laundering simply entail the purchase of assets using methods to disguise their origins and to ensure the identity of purchasers cannot be traced. In this sense, money available for laundering does not equate to actual proceeds of crime or the size of the criminal economy, as the Home Office has previously noted:

> “Proceeds of crime differ from laundered money in that if the proceeds are used directly without a means of storing or transferring value then they are not considered laundered (Levi, 2014). Levi illustrates this through either staffing costs which are paid directly in cash or low-level organised criminals who do not earn significantly enough to require their income to be laundered (for uses other than those that can be purchased through cash). (Fell et al. 2019: 113)

It can plausibly be estimated that one-quarter (25%) of proceeds of crime may require the assistance of professional launderers, especially large-scale proceeds generated through drug trafficking and financial crime. The present study has estimated that the net proceeds of crime derived from all the crime types examined totalled $60,849.2m in 2022–23 (Table 33, column 2, below). This is a 13.2 percent increase on the estimated proceeds of crime in 2020–21 of $53,740.8m.

Using the current estimate of proceeds of crimes that are likely to warrant professional laundering (25% of total proceeds of crime—$15,212.3m), and assuming an average commission charged by money launderers of 6.5 percent, it is estimated that the commissions paid to money launderers would total $988.8m.

Not all money laundering is commissioned by serious and organised crime. Using the ACC’s (2015a, 2015b) previously workshopped estimates, the estimated cost of commissions paid by serious and organised crime would range between $494.4m (low, 50%), $741.6m (medium, 75%) and $939.4m (high, 95%; Table 21).

Table 21: Estimated cost of commissions paid for laundering the proceeds of crime, 2022–23			
Total proceeds of crime ($m)a			60,849.2
Proceeds available for laundering 25% ($m)			15,212.3
Laundering commissions payable 6.5% ($m)			988.8
Level of serious and organised crime involvement			
	Low 50%	**Medium 75%**	**High 95%**
Cost attributable to serious and organised crime ($m)	494.4	741.6	939.4

a: Table 33, column 2, below

Corruption

In 2022, the AIC canvassed three ways in which the cost of serious and organised crime involvement in corrupt conduct could be estimated (Smith & Hickman 2022). The first involved using a methodology developed by the Australia Institute (2018) using the approach of PricewaterhouseCoopers (2016), which examined the relationship between corruption and GDP per capita. This argued that a one-point increase in perceived corruption using Transparency International's (2023) Corruption Perceptions Index could be associated with a specified decrease in GDP per capita. Between 2010 and 2020, the 10-point change in Australia's index (from 87 to 77) equated to a reduction in GDP per capita of $2,916. When grossed-up to the entire Australian population, this amounted to $125.4b over the 10 years, or $12.5b a year.

Updating these estimates for 2023, the further four-point change in the index between 2020 and 2023 (from 77 to 73; Transparency International 2023) would equate to a 2.26 percent reduction in GDP of $54.4b over the three years, or $18.1b a year. Again, this is highly dependent on the validity of the Corruption Perceptions Index and is likely to be over-inclusive and to overstate the estimated costs of corruption in Australia.

The second method involved examining the number of allegations of corrupt conduct recorded by each of Australia's eight principal anti-corruption agencies: Victoria's Independent Broad-based Anti-corruption Commission (2023); the New South Wales Independent Commission Against Corruption (2023); Queensland's Crime and Corruption Commission (2023); Tasmania's Integrity Commission (2023); South Australia's Independent Commission Against Corruption (2023); Western Australia's Corruption and Crime Commission (2023); the Northern Territory's Independent Commission Against Corruption (2023) and the Australian Commission for Law Enforcement Integrity (2023). The National Anti-Corruption Commission (2024), an independent Australian Government agency that detects, investigates and reports on serious or systemic corrupt conduct in the Australian Government public sector, commenced operations on 1 July 2023 and so is outside the reference period of the current study and has not been included.

Not all these bodies have sole jurisdiction over corruption matters that could potentially involve serious and organised crime, and there is some potential overlap with other sections of this report. Nonetheless, examining the caseload and outcomes of these eight agencies could provide some indication of the extent of corrupt conduct in Australia.

In 2022–23, the eight agencies received 17,708 complaints, reports or notifications of alleged corrupt conduct (variously defined) that fell within their individual jurisdictions – an average of 1,843 matters recorded by each. Each agency has differing jurisdiction over corrupt conduct and deals with and resolves matters in different ways, but their annual reports for 2022–23 show that 234 matters were reviewed and assessed as potentially involving serious corrupt conduct. Criminal convictions were obtained in 21 cases and other formal outcomes determined, although information on outcomes was not consistently reported across the agencies.

Although some of the eight agencies' annual reports provide information about the potential economic losses involved (such as in Queensland, where assets of $4.3m were forfeited, and in Western Australia, where $1.2m in confiscation orders were made in 2022–23), the reports do not give precise indications of the actual costs to the economy of the cases. Quantifying costs is also difficult in cases in which the corrupt conduct had no direct financial impact. Accordingly, these reports are unsuitable for use in estimating the cost of corruption generally, and the cost of serious and organised crime involvement in particular.

The third method that can be used to provide a general indication of the potential costs involved in serious and organised crime involvement in corrupt conduct is based on the median losses found by the Association of Certified Fraud Examiners' (2024) yearly *Report to the nations*. In respect of 48 percent of the occupational fraud cases involving some form of corruption in 2023, the median loss was US$200,000 per case. This survey was based on 1,921 responses from certified fraud examiners globally in 2023.

As a general indication of the potential cost of corruption throughout Australia, the Association of Certified Fraud Examiners' (2024) median loss was converted to Australian dollars (A$299,887) using current values. To account for unreported matters, a multiplier of 1.8 was applied to the 234 matters finalised by Australian anti-corruption agencies in 2022–23. The multiplier of 1.8 was based on the rate of occupational fraud cases referred for criminal action of 57 percent in the Association of Certified Fraud Examiners (2024) survey. This totalled an estimated 421 reported and unreported cases. The median unit cost of $299,887 was then applied to the 421 estimated corruption matters in 2022–23. This resulted in a total estimated cost of corruption of $126.3m.

Applying the ACC's (2015a, 2015b) workshopped estimate of the involvement of serious and organised crime in cases of corruption, it is estimated that the costs could range from $12.6m (low—10% involvement), to $50.5m (medium—40%), to $94.7m (high—75%).

Violence as an enabler

Some crimes such as kidnapping, abduction, blackmail and extortion have a greater relevance to the activities of serious and organised crime than others and can be included as an enabler of serious and organised criminal activities where violence and threats of violence accompany many forms of economic crime. To avoid double-counting, they were not counted as a consequential crime type, below.

Their economic impact can, however, be estimated based on recorded crime statistics. The ABS (2023d) dataset, *Recorded crime – victims*, found there were 501 victims of kidnapping and abduction offences in 2023—noting that data for New South Wales may be slightly inflated, and that 34 percent of these offences (169 victims) were related to family and domestic violence, and these cases might be less likely to involve serious and organised crime.

In 2023, there were 3,380 victims of blackmail and extortion offences, with large increases occurring since 2022 in New South Wales (122% increase) and Western Australia (64% increase)—possibly due to increases in online crimes involving blackmail and extortion such as ransomware (Voce & Morgan 2021). Serious and organised crime involvement would be relatively high for these crimes, where threats of violence often accompany attempts to extort funds from victims or to use blackmail.

In the case of kidnapping and abduction, a multiplier of 1 is appropriate as these crimes would invariably be reported. In the case of blackmail and extortion, however, a multiplier of 3 is appropriate as reporting is likely to be lower, although because the number of victims has increased greatly since 2021, the previous multiplier used in 2021 of 5 would now be too high. In one AIC survey, it was found that nearly three-quarters of ransomware victims sought help, advice or support (Voce & Morgan 2022).

For 2022–23, the level of serious and organised crime involvement would be the same as for Smith and Hickman's (2022) estimation of one percent (low), two percent (medium) and five percent (high), based on the ACC's (2015a, 2015b) estimates.

The same cost elements for assault offences should also apply, after inflation to 2022–23 values.

These estimates are presented in Table 22, which indicates an estimated cost of organised crime involvement in these violent crimes to be between $80,270 (low), $173,228 (medium) and $527,925 (high) for 2022–23—the upper estimate being 13 percent lower than in 2016–17.

Table 22: Cost of serious and organised violent crime enablers, 2022–23

Crime type	Kidnapping/abduction			Blackmail/extortion			Both crime types		
Serious and organised crime involvement	Low	Med	High	Low	Med	High	Low	Med	High
Victims[a] 2023 (*n*)	501	501	501	3,380	3,380	3,380			
Multiplier	1	1	1	3	3	3			
Total victims (*n*)	501	501	501	10,140	10,140	10,140			
Organised crime involvement (%)	1	2	5	1	2	5			
Organised crime victims (*n*)	5.0	10.0	25.1	101.4	202.8	507.0	106.4	212.8	532.1
Unit cost 2013–14 ($)	2,776	3,001	3,654	2,776	3,001	3,654	2,776	3,001	3,654
Unit cost 2022–23[b] ($)	3,472	3,754	4,571	3,472	3,754	4,571	3,472	3,754	4,571
Cost 2022–23[b] ($)	17,360	37,540	114,732	71,088	352,061	2,317,497	369,421	798,851	2,432,229

a: ABS (2023d)
b: Unit cost estimates for 2023 were inflated from 2013–14 (ACC 2015a, 2015b) using the RBA (2024) calculator

Consequential organised crime costs

Consequential organised crime costs relate to the cost of conventional crimes committed as a consequence of serious and organised criminal conduct. They are crimes that generate funds used to support involvement in serious and organised criminal activities (in particular, crimes committed by illicit drug users to finance drug purchases), crimes that result from being involved in serious and organised crime related activities (eg violence, sexual assaults and burglaries committed by those using illicit drugs), or conventional crimes committed by organised crime groups (eg organised shop theft) or committed to facilitate serious and organised criminal activities (eg violence used to intimidate businesses or identity crime used to enable financial fraud).

The estimated costs of consequential serious and organised crime for the year 2022–23 are shown in Table 23, and the upper estimates for 2016–17, 2020–21 and 2022–23 are graphically represented in Figure 1. These estimates were made by undertaking three calculations.

First, figures published by the AIC for 2020–21 (Smith & Hickman 2022) of the total estimated cost of organised crime for each crime type (grouped in terms of low, medium and high involvement) were inflated by 11.8 percent to 2022–23 values using the RBA (2024) calculator. This accounted for cost-of-living increases over the preceding two years (an annual inflation rate of 5.9 percent). These baseline figures for 2020–21 incorporated all of the costing elements present in the cost estimations for each crime type, based on the methodologies developed by the AIC in 2011 and the ACC in 2015. These include: officially recorded police offence numbers; multipliers to account for unrecorded offences; the workshopped proportion attributable to serious and organised crime developed in 2014 and 2015 (ACC 2015a, 2015b); estimated property loss estimations based on prior research; medical costs associated with violent crimes; lost output due to victimisation; and intangible costs experienced by victims. The methodologies used to calculate these baseline estimates for 2011 and 2015 are set out in Smith et al. (2014) and ACC (2015b) respectively.

Second, the percentage changes in the number of police recorded offences for the crime types in question between 2020–21 and 2022–23 were calculated using official police statistics for 2022–23 for each state and territory. Some statistics had to be approximated owing to the absence of consistent counting rules across jurisdictions.

Third, the inflated estimated serious and organised crime costs for 2022–23 were multiplied by the estimated percentage change in offence numbers between 2020–21 and 2022–23 for each individual crime type. This provided a general indication of the change in the cost of serious and organised crime over the two years for each crime type considered.

This approach was then replicated for low, medium and high levels of involvement of serious and organised crime.

Future studies estimating the cost of serious and organised crime should seek to update each of the costing elements for each crime type based on the latest research and using the latest crime statistics. In addition, these future studies should seek to extend the range of offence types included, to capture more types of offences in which serious and organised crime is likely involved. Future calculations should also take into account clearance rates for police recorded offences, as these can vary considerably between crime types. Property offences attract the lowest clearance rates, while offences against the person attract much higher rates (eg rates exceeding 90 percent for homicides). Estimating the incidence of each crime type using clearance rates rather than police offence recording rates would reduce the overall cost estimates but provide a more robust estimate of criminality capable of being proven in court. For present purposes, and to ensure consistency with previous cost of crime reports, clearance rates have not been used for 2022–23. Finally, unit record police statistics should be analysed to ensure greater uniformity of offence classifications across all jurisdictions.

Table 23: Estimated cost of consequential serious and organised crime, 2020–21 to 2022–23 ($m)

Crime category[a]	% change in incidence	Level of serious and organised crime involvement					
		Low		Medium		High	
	2020–21 to 2022–23[b]	2020–21	2022–23	2020–21	2022–23	2020–21	2022–23
Murder/manslaughter[c]	4.82	19.2	19.1	53.0	53.0	174.8	174.4
Driving causing death[d]	2.17	0.94	0.69	27.8	20.6	126.2	93.6
Attempted murder[c]	−20.69	20.8	25.5	55.7	68.5	137.8	169.5
Assault[e]	9.19	129.9	151.8	188.9	206.9	289.1	316.7
Sexual offences	4.06	1.4	0.83	5.6	3.4	18.4	11.0
Robbery	19.47	27.0	38.0	53.4	75.2	97.8	137.8
Burglary	15.17	249.4	462.4	495.8	919.4	756.5	1,402.6
Vehicle theft	22.37	81.1	105.8	219.9	86.8	368.0	479.9
Theft from vehicles[f]	17.29	0.21	0.36	0.54	0.94	3.09	5.4
Shop theft[g]	50.76	35.9	59.0	54.9	90.3	78.1	128.4
Other theft	−7.07	36.6	40.8	46.6	52.1	56.4	62.2
Criminal damage	5.86	98.6	115.1	152.8	178.5	434.4	507.4
Arson[h]	2.95	8.6	13.4	25.4	39.7	178.2	77.9
Conventional fraud[i]	4.65	931.5	1,158.0	1,893.2	2,353.5	3,659.7	4,545.8
Total	9.82	1,640.9	2,224.1	3,273.5	4,419.1	6,378.3	8,508.2
% change in cost, 2020–21 to 2022–23			+35.5%		+35.0%		+33.4%

a: 2022–23 offence data sourced from ACT Policing 2023; Bureau of Crime Statistics and Research 2023; Crime Statistics Agency (Victoria) 2023; Northern Territory Department of the Attorney-General and Justice 2023; Queensland Police Service 2023; South Australia Police 2023; Tasmanian Department of Police, Fire and Emergency Management 2023; Western Australia Police Force 2023

b: The change in baseline cost between 2020–21 and 2022–23 includes an increase of 12.6% for inflation over 2 years (RBA 2024) and the percentage change in the number of recorded offences over the four years shown in column 2

c: In the ACT homicide includes murder, manslaughter and attempts. SA and Tas do not disaggregate homicide into completed and attempted offences. In SA, the number of murder/manslaughter offences includes attempts. In Tasmania, the number of attempts is unstated and only the number of murder/manslaughter offences stated

d: Driving causing death data are for 2021 due to lack of 2023 data, but prevalence of this offence is generally stable

e: Qld data include assault but the definition excludes common assault

f: ACT: data classify shop theft and theft from vehicles as 'theft excluding motor vehicle theft'. Between 2021–22 and 2022–23 theft excluding motor vehicle theft declined by 9.2% (7,780 to 7,065). This decline was applied to the last estimate of shop theft in the ACT in 2020–21 of 1,185 offences, resulting in 1,076 offences for 2022–23, and to theft from vehicles in the ACT in 2020–21 of 3,100 offences, resulting in 2,815 offences for 2022–23. Both these amounts were then deducted from the 'Other theft' amount of 5,959, resulting in 2,068 remaining for 'Other theft'

g: NT data classify shop theft as 'theft and related offences other than motor vehicle'. All theft and related offences increased by 5.7% between 2021–22 and 2022–23 (8,080 to 8,543), and this increase was applied to the shop theft offence estimate for 2020–21 of 1,174, resulting in 1,241 shop theft offences for 2022–23. This was then deducted from the other theft total of 8,125, leaving 6,884 other theft offences

h: Arson offence numbers were unavailable for the ACT and NT. These were estimated to be 500 offences each year for each territory, as in previous reports (ACC 2015a, 2015b; Smith 2018b). SA records arson as 'property damage by fire or explosion'

i: See Box 1 (below) for an explanation of how fraud offence numbers were calculated

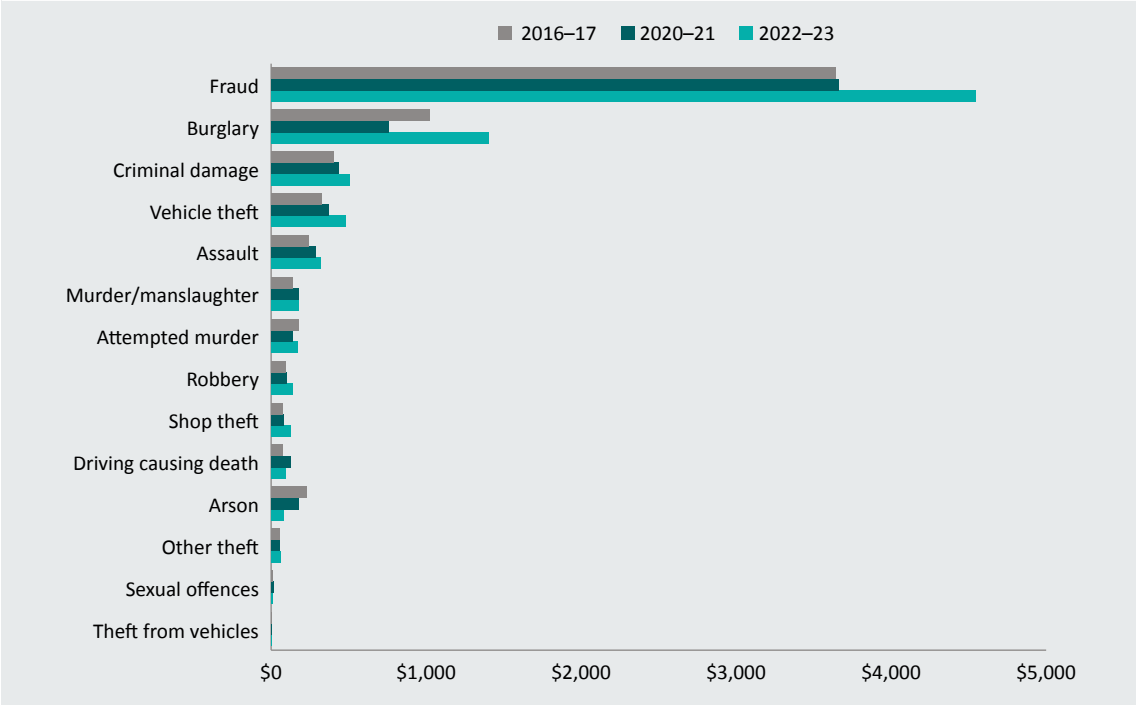
Box 1: Methodological note: Calculating fraud offences

A number of crime types have the potential for double-counting with police recorded fraud, although the organised financial crime types already counted are unlikely to have state and territory dishonesty offences charged, as they predominantly relate to Commonwealth offences. Payment and transaction fraud is also unlikely to involve conventional dishonesty offences, as these would rarely be reported to police, instead being dealt with by financial institutions. Pure cybercrime also involves computer crime and telecommunications offences rather than state and territory dishonesty offences. There is some potential for double-counting in relation to identity crimes and consumer frauds, but deductions were made for this when calculating identity crimes against individuals and identity crimes derived from police recorded offences. A proportion of identity crime would also be charged as specific identity crime offences or as cyber-enabled personal fraud.

Between 2016–17 and 2020–21 there was a 11.3 percent decline in police recorded fraud, dishonesty and deception offences across all jurisdictions. Recorded fraud offence categories differed across jurisdictions and in some cases statistics for 2022–23 were unavailable, requiring estimations to be made based on recent trends in theft offences generally. Police statistics used for this table were as follows.

- Victoria—deception offences, 1 July 2022 to 30 June 2023;
- New South Wales—criminal fraud incidents, 1 July 2022 to 30 June 2023;
- Queensland—all fraud offences, 1 July 2022 to 30 June 2023;
- Western Australia—fraud and related offences 1 July 2022 to 30 June 2023;
- South Australia—fraud, deception and related offences, 1 July 2022 to 30 June 2023;
- Tasmania—fraud and similar offences, 1 July 2022 to 30 June 2023;
- Northern Territory—fraud offences were categorised as ‘theft and related offences other than motor vehicle’. The fraud estimate for 2019–20 of 411 was inflated by changes in all theft and related offences other than motor vehicle being a decline of 12.2% to 2020–21, an increase of 30.7% to 2021–22, and an increase of 7.3% to 2022–23. This was then deducted from the theft and related offences total.
- ACT—fraud offences were included within ‘theft excluding motor vehicle theft’. Fraud estimate for 2019–20 of 1,297 inflated by changes in all theft excluding motor vehicles being a decline of 6.0% to 2020–21, an increase of 0.3% to 2021–22, and a decline of 9.2% to 2022–23. This was then deducted from the theft and related offences total.

Figure 1: Changes in estimated cost of consequential serious and organised crime by crime category, 2016–17, 2020–21 and 2022–23 ($m)



In addition to these estimates of the consequential cost of serious and organised crime for 2022–23, an attempt was made to estimate the proportion of costs for each crime type that would have generated proceeds of crime capable of being disbursed or laundered. As explained above, not all crime types generate such proceeds, with most violent crimes not having any economic benefit to the offender. Other crime types, such as acquisitive crimes, are often undertaken principally to generate funds to benefit the offender or be used for other illegal purposes.

Column 2 of Table 33 shows an estimated sum of $6,280m as proceeds of crime generated from the conventional crime types examined for 2022–23. This represents a 25 percent increase on the sum of $5,020m estimated for 2020–21. In addition, each of the other categories of acquisitive serious and organised crime shown in Table 33 has an estimate of proceeds of crime generated. The total of $60,849.2m was used as a basis for estimating the cost of commissions paid to launder these proceeds of crime (see above).

Indirect costs of preventing and responding to serious and organised crime

Previous cost of crime research has estimated various indirect costs of crime. These indirect costs generally include:

- **prevention costs**—sometimes known as defensive expenditure, including the costs associated with document security, computer security software, credit checks, awareness-raising campaigns, legislative and policy development by government, and other measures to guard against victimisation;
- **intangible impacts**—costs not easily measured in monetary terms, such as psychological harm and reputational damage;
- **response costs**—including expenses incurred in dealing with the consequences of victimisation, such as repairing a credit rating, reissuing credentials, reinstating systems, reporting to official agencies, and liaising with police and regulatory agencies to assist with their investigations; and
- **lost output**—including lost opportunity costs, business disruption costs due to the misuse of personal and business information, and the cost of victims not being able to work.

The level of information available to quantify each of these components is variable, although each year new research becomes available and new data are published, sometimes not in precisely the format required to quantify the cost of crime. Nonetheless, any improvements to data holding are of value in understanding how crime affects the economy as a whole.

Information provided by the ACIC has indicated the extent to which each of these indirect costs of crime could be attributable to serious and organised crime involvement. To maintain comparability with previous costing methodologies, the three estimates of serious and organised crime involvement (low, medium, high) developed previously for each costing element (ACC 2015b) have been maintained, while changes in government expenditure attributable to relevant agencies have been uprated using data from individual entities' annual reports and portfolio budget statements for 2022–23. The indirect costs associated with individuals and the private sector were also uprated to 2022–23 values by applying data applicable to that year or, where new information was unavailable, uprating estimates to account for inflation using the RBA (2024) inflation calculator. Details of the methodological approach are contained in the ACC (2015b) report.

Public sector costs

Public sector costs refer to the expenses of Commonwealth, state and territory government entities that relate to preventing and responding to crime. Not all government entities deal with crime-related matters, however, and so an estimation was made of the proportion of relevant entities' annual recurrent expenditure that had a crime-related component. For those such as the ACIC, this was 100 percent, while in the case of the Department of Home Affairs this was only 40 percent.

After calculating each entity's expenditure on crime-related functions, a deduction was made for any income received from enforcement action to recover proceeds of crime. In the case of the AFP in 2022–23, for example, $68.7m was recovered from offenders, while the CDPP reported having confiscated $309,000 from offenders in Commonwealth prosecutions. For present purposes, the amount actually recovered in confiscation and forfeiture action was used rather than funds restrained—that is a considerably higher amount than actual funds recovered. In the case of operational and regulatory agencies such as police, crime commissions and regulators, fines and penalties were not included.

This report considered all government agencies in the justice, law enforcement and crime and justice policy sectors across all jurisdictions. The total expenditure of each agency was sourced from its annual report for 2022–23 or from the *Report on government services 2024* (Steering Committee for the Review of Government Service Provision 2024), which permitted the actual expenditure for 2022–23 to be counted, not budgeted sums.

An estimation was then made of the proportion of each entity's net crime-related expenditure that related to serious and organised crime, once again based on the workshopped proportions developed in 2013–14 (ACC 2015a, 2015b). For example, annual expenditure attributed to crime in each state and territory police agency was assessed to be 80 percent of the total, while the proportion attributed to serious and organised crime was determined to be between 10 percent (low), 15 percent (medium) and 20 percent (high) consistently across each state and territory. In the case of the AFP, these proportions were different, owing to the AFP's more extensive non-crime-related functions but much greater involvement in dealing with serious and organised crime. (The crime-related proportion was 70%, with serious and organised crime proportions ranging from 30% to 40% to 50%.)

Table 24 presents the range of percentage allocations for different types of government entities. In some cases, a range of percentages is specified (eg 8–10%) to reflect the relevant percentages involved in various subdivisions of entities' operations. For example, some state justice departments' subdivisions have a differing focus on crime issues and on serious and organised crime related matters. In South Australia, for example, the Attorney-General's Department has jurisdiction over forensic science, which is 100 percent relevant to crime, and legal and legislative services, which were assessed as having a 35 percent relevance to crime. These different proportions affect the proportion of total departmental budget attributable to crime.

In the case of states and territories, it was difficult to disaggregate the expenditure in some large departments such as Attorney-General and Justice. It was also important to avoid double-counting where global justice expenditure included, for example, policing and corrections costs. Where possible, the cost of police, courts and corrections was obtained from the *Report on government services* rather than annual reports, and only general 'justice services' costs recorded from annual reports. In the case of prosecution and integrity agencies and regulators, expenditure was obtained from individual annual reports.

Table 24: Allocations for crime and serious and organised crime in public sector entities' annual recurrent expenditure

	% crime	% Serious and organised crime		
Agency		**Low**	**Medium**	**High**
Commonwealth				
Office of Parliamentary Counsel	15	0.5	1	2
Federal Court	10	1	2	5
Australian Signals Directorate	15	50	70	90
Australian Law Reform Commission	25	2	5	7
Attorney-General's Department	25	5	10	15
Department of the Prime Minister and Cabinet	30	3	5	7
Australian Taxation Office	30	10	15	18
Australian Security Intelligence Organisation	30	30	60	70
Department of Home Affairs	40	15	30	50
ASIC/ACCC/APRA	50	3	5	7
Australian Federal Police	70	30	40	50
Commonwealth Director of Public Prosecutions	100	5	10	20
Inspector-General of Intelligence and Security	100	10	20	30
Office of National Intelligence	100	30	60	70
Australian Institute of Criminology	100	40	50	60
Australian Transactions Reports and Analysis Centre	100	80	90	100
Australian Commission for Law Enforcement Integrity	100	80	90	100
Australian Criminal Intelligence Commission	100	80	90	100
State/territory				
Attorney-General	50–100	1–10	1–15	2–20
Justice departments	80–100	8–10	10–20	20–25
Crime and corruption commissions	80–100	25	45	60
Police	80	10	15	20
Director of Public Prosecutions	100	5	10	20
Youth justice	100	5	8	10
Criminal courts	100	8	15	20
Prisons	100	50	60	75
Community corrections	100	50	60	75

Note: ASIC=Australian Securities and Investments Commission; ACCC=Australian Competition and Consumer Commission; APRA=Australian Prudential Regulation Authority

The results of the calculations of public sector costs relating to serious and organised crime are detailed in Table 25.

Table 25: Estimated public sector costs of preventing and responding to serious and organised crime, 2022–23 ($m)

	Relevant agencies' expenses	Crime-related expenses	Recovered proceeds of crime	Net crime expenses	Cost relating to serious and organised crime		
					Low	Medium	High
Cth	15,922.3	6,387.3	69.0	6,318.3	1,384.3	2,041.2	2,690.6
NSW	10,148.2	8,039.8	3.4	8,036.4	1,495.6	1,994.8	2,588.5
Vic	6,852.7	6,008.0	33.3	5,974.6	1,060.2	1,428.5	1,848.0
Qld	5,292.5	4,587.8	14.4	4,573.5	855.8	1,131.1	1,474.8
WA	3,080.2	2,698.0	29.6	2,668.4	604.3	785.6	1,005.9
SA	1,652.8	1,416.4	3.8	1,412.6	272.9	362.0	468.6
Tas	585.3	511.2	0.6	510.5	105.2	137.4	178.2
ACT	505.1	461.9	2.3	459.6	78.1	116.6	149.4
NT	929.1	829.1	0.1	829.1	159.7	211.4	271.5
Total	44,968.2	30,939.5	156.6	30,782.9	6,016.3	8,208.7	10,675.5

Note: Agencies' actual recurrent expenditure is sourced from 2022–23 *Portfolio Budget Statements*, agencies' annual reports or the *Report on government services* (Steering Committee for the Review of Government Services 2024). Serious and organised crime proportions were based on previous research (ACC 2015a, 2015b)

Private sector and other costs

In addition to the prevention and response costs incurred by public sector entities, private sector organisations in the business and community sectors incur various costs in preventing and responding to crime, including serious and organised crime. Conventional costs of crime methodologies (eg Mayhew 2003b) include such costs as property losses and property repair costs, medical treatment costs, lost output due to work absences and a number of intangible costs and expenses. Mayhew (2003b) found that these add an additional 40 percent to the estimated direct costs of crime.

In the AIC's previous estimation of the cost of serious and organised crime in 2020–21 (Smith & Hickman 2022), the total public and private sector costs totalled $16.4b, which was 44 percent of the total upper estimate for that year of $37.3b. This is slightly higher than Mayhew's estimate of 40 percent, but nonetheless still plausible as an estimate of indirect costs as a percentage of all direct crime costs.

In the case of private sector costs alone in 2020–21, these ranged from $2,890.0m (for low serious and organised crime involvement), to $4,089.3m (for medium involvement) to $5,577.3m (for high involvement). For 2022–23, these ranged from $3,238.7m (for low serious and organised crime involvement), to $4,575.3m (for medium involvement) to $6,244.0m (for high involvement).

Although not all these indirect costs are applicable to crime types that involve serious and organised crime, it is important to include a number of them. Key among these are indirect costs incurred by the financial sector, costs of computer security and security management generally, insurance administration, household security measures and identity security. The cost of dealing with personal victimisation can also be included in cases where individuals have been harmed, maimed or killed by serious and organised criminal activities. The following estimates provide an indication of the level of these costs, noting that many areas require considerable further research before losses can be quantified more precisely.

Financial services

The financial services sector spends large amounts each year on managing investments and transactions securely. These include computer hardware and software expenses and the costs of personnel associated with compliance and economic crime prevention activities. Not all of these are, however, relevant to the various types of transactional risks that involve serious and organised crime. In addition, some costs have already been counted in other sections of this report, particularly those relating to cybercrime, identity crime and fraud.

Of the costs incurred by the financial services sector, one relevant component relates to compliance with the *Anti-Money Laundering and Counter-Terrorism Financing Act 2006* (Cth). In 2014, the financial system inquiry (Treasury 2014: 259) received evidence that the estimated annual cost of compliance with the know-your-customer requirements of this legislation was between $299m and $435m, including personnel and infrastructure costs required to administer the system. This is in addition to implementation costs, estimated to be between $647m and $1b. For present purposes, and inflating the midpoint annual cost of $367m to 2022–23 values (RBA 2024), the annual compliance costs are estimated to be $465.1m.

Regulated entities are also required to pay AUSTRAC an industry contribution levy that includes an earnings component and a component for transaction reporting activities. The levy is an annual amount that some reporting entities must pay to cover AUSTRAC's operating costs, including amortisation and the annual depreciation costs of the assets used to undertake regulatory and intelligence activities. In 2022–23, the industry contribution levy paid by entities was $98,640,000 (AUSTRAC 2023: 87).

Assuming that 70 percent of these regulatory costs relate to crime prevention, and allowing that a proportion were incurred because of serious and organised crime involvement in financial transactions, it is reasonable to estimate that the cost of preventing serious and organised crime involvement in financial services is as shown in Table 26, allowing for costs already counted in other sections of this report. The proportion of serious and organised crime involvement ranges from 20 percent (low), to 40 percent (medium), to 60 percent (high), in line with the other financial crimes examined in this report.

Table 26: Estimated cost of preventing serious and organised crime involvement in financial services, 2022–23 ($m)		
Annual regulatory cost elements	**Expenditure**	**Crime-related cost (70%)**
Know-your-customer compliance ($m)	465.1	325.6
Industry contribution levy ($m)	98.6	69.0
Total ($m)	563.7	394.6
Cost involving serious and organised crime ($m)		
Low (20%)		78.9
Medium (40%)		157.8
High (60%)		236.7

Investigation and security services

In 2022–23, the investigation and security services industry in Australia sold goods and services (exclusive of excise and sales tax) worth $12,800m (IBISWorld 2023). The most appropriate indication of the cost to the economy of investigation and security services is 'industry value add', which represents the market value of goods and services produced by the industry, minus the cost of goods and services used in production. The services provided in this sector comprise:

> … security, protection or private enquiry services other than those provided by police forces and government security agencies. In addition, services include guards and patrols, monitored security systems, locksmiths, casual and permanent security staff and crowd controllers. Some security companies also offer ATM and cash-collection services, and some aspects of secure document and computer data storage. (IBISWorld 2021: 5)

In 2020–21, industry value add represented 60.2 percent of the market size measured by revenue. Applying this same percentage to the 2023 market size of $12,800m gives a value add of $7,705.6m.

Using the same estimated proportion of these costs that would relate to protection from criminal as opposed to other forms of activity (70%: $5,393.9m), and applying the same previous estimates of serious and organised crime involvement of low (8%), medium (10%) and high (15%), it is estimated that security costs would range between $431.5m (low), $539.4m (medium) and $809.1m (high; Table 27).

Table 27: Estimated investigation and security industry costs of serious and organised crime, 2022–23		
Annual regulatory cost elements	**Expenditure**	**Crime-related cost (70%)**
Industry market value in 2023[a] ($m)	12,800.0	
Industry value add (60.2%) ($m)	7,705.6	5,393.9
Cost involving serious and organised crime ($m)		
Low (8%)		431.5
Medium (10%)		539.4
High (15%)		809.1

a: IBISWorld (2023)

Cybersecurity

The costs of serious and organised crime involvement in pure cybercrime presented above excluded the costs of responding to incidents such as staff costs associated with repairing the damage caused, loss of revenue due to an incident or any other cost that was a direct result of an incident. The costs of preventing and responding to incidents, such as measures implemented either before or after victimisation to enhance computer security, need to be taken into account in estimating indirect costs relating to cybercrime.

The estimated costs of preventing and responding to cyber-enabled offending are included in the costs of individual crime types and conventional cost estimates above. In addition, government expenditure on the prevention of and response to cybercrime is included in public sector estimates of expenditure, also above.

In relation to pure cybercrime affecting individuals (excluding businesses and sole traders), an AIC survey conducted in 2019 found that $1,376.0m had been spent on prevention costs in the preceding 12 months (June 2018 to May 2019; Teunissen, Voce & Smith 2021). Inflating this by 3.6 percent each year over four years using the RBA (2024) inflation calculator results in an estimate of $1,584.0m for 2022–23.

In respect of businesses, the AIC's national survey on computer security incidents against businesses in Australia found the annual cost of protection against computer security incidents for Australian businesses to be $1,370m to $1,950m for 2006–07. The most robust estimate for expenditure by businesses of all sizes that used a predicted value for each non-responding business was $1,740m (Richards 2009). Inflating this by 2.6 percent each year over 16 years using the RBA (2024) inflation calculator results in an estimate of $2,630.5m for 2022–23.

Not all of this expenditure is attributable to serious and organised crime and, accordingly, the previous estimates of the involvement of serious and organised crime in cybercrime—which ranged from 50 percent (low), to 70 percent (medium), to 90 percent (high)—were applied. This results in the estimates of cybersecurity expenditure presented in Table 28.

Table 28: Estimated cybersecurity expenditure of individuals and businesses, 2022–23	
Annual regulatory cost elements	**Expenditure**
Individuals ($m)	1,584.0
Businesses ($m)	2,630.5
Total ($m)	4,214.5
Cost involving serious and organised crime ($m)	
Low (50%)	2,107.3
Medium (70%)	2,950.2
High (90%)	3,793.1

Identity security

In addition to the direct costs of serious and organised crime involvement in identity crime, listed above, individuals and businesses incur various indirect costs in preventing and responding to identity crime each year. The costs of prevention and response incurred by public sector entities are included in the above estimates for public sector expenditure.

In 2023, the AIC undertook a survey of individuals who experienced misuse of personal information (McAlister et al. 2023). Of the 700 individuals who reported a financial loss in respect of their most recent incident of identity crime in 2022–23, a median loss of $700 was spent dealing with the consequences of their victimisation, totalling $134,552 for the 53 respondents who were able to quantify the amount lost. This, of course, relates only to the most recent incident experienced by individuals who lost money, not the number of victims across Australia over the 12-month period. Also, this only relates to response costs, not the cost of prevention.

In an earlier AIC study of the estimated cost of identity crime, Smith and Franks (2020) estimated the indirect costs of preventing and responding to identity crime in 2018–19 for individuals were $201.1m and, for the private sector, $20.4m. Inflating these estimates to 2022–23 values using the RBA (2024) inflation calculator results in costs for individuals of $231.5m and for businesses of $23.5m.

Serious and organised crime is involved in acquiring and selling personal information and using stolen credentials to facilitate other types of crime. Information provided by the ACIC estimated serious and organised crime involvement in identity crime to range from 20 percent (low), to 40 percent (medium), to 60 percent (high). Applying these proportions of serious and organised crime involvement in identity crime results in the estimates presented in Table 29.

Table 29: Estimated expenditure of individuals and businesses on preventing and responding to identity crime, 2022–23 ($m)				
Victim type	Expenditure	Serious and organised crime involvement		
		Low 20%	Medium 40%	High 60%
Cost to individuals	231.5	46.3	92.6	138.9
Cost to businesses	23.5	4.7	9.4	14.1
Total	**255.0**	**51.0**	**102.0**	**153.0**

Insurance administration

Insurance Statistics Australia estimated that the industry cost of administering theft claims across domestic and commercial property and private motor vehicles in Australia in 2011–12 amounted to $670m. This was based on a rate of four percent of the gross written premiums applicable to these sectors and was used in the ACC's (2015b) report.

However, over the 11 years to 2022–23, rates of unlawful entry with intent and motor vehicle theft have continued to decline (a 30.9% decline in rate of offenders per 100,000 population for unlawful entry (70.9 to 49.0), and 10.4% for motor vehicle theft (25.1 to 22.5); ABS 2024b) and this would be reflected in insurance claims made and associated premiums paid. Applying the mean rate of decline of 21 percent to the insurance industry estimate of $670m for 2011–12 results in an estimated cost of $529.3m. Inflating this to 2022–23 values (RBA 2024) gives an estimated cost of $695.5m. Applying the ACC's (2015b) estimation of the involvement of serious and organised crime in insurance administration losses of 10 percent (low), 20 percent (medium) and 25 percent (high) results in estimated losses of $69.6m (low), $139.1m (medium) and $173.9 (high) for 2022–23 (Table 30).

Table 30: Estimated cost of insurance administration for crimes involving serious and organised crime, 2022–23	
Insurance administration cost 2011–12 ($m)	670.0
Mean decline in rate of unlawful entry and motor vehicle theft (per 100,000 population) 2011–12 to 2022–23 (%)	21.0
Insurance administration cost inflated to 2022–23 ($m)	695.5
Cost involving serious and organised crime ($m)	
Low (10%)	69.6
Medium (20%)	139.1
High (25%)	173.9

Household precautions

In addition to the other categories of security expenditure, some of which would be incurred by households and individuals, Mayhew (2003b) costed the time spent by the average person on precautionary behaviours, such as the time taken each day to lock and unlock various locks, which she estimated to be approximately four minutes. Inflating the ACC's (2015b) estimate of $2,360m for the cost of such precautionary behaviours for 2013–14 to 2022–23 prices using the RBA (2024) calculator results in an estimated cost of $2,952.1m.

Not all this time is attributable to crime risks arising from serious and organised criminal activity. Applying the workshopped proportions for serious and organised crime involvement (ACC 2015b) gives an estimated range of $442.8m (low, 15%), $590.4m (medium, 20%) and $885.6m (high, 30%).

Violent crime support services

Previous AIC research has identified a range of costs associated with preventing and responding to crimes of violence (Mayhew 2003b; Rollings 2008; Smith et al. 2014). The costs most relevant to serious and organised crime are those arising from violent crimes involving illicit drug markets, human trafficking and child sexual abuse, cybercrimes harming individuals and the cost of services for victims of kidnapping, abduction, blackmail and extortion. A number of these costs are included above in government budgets, while others form part of non-profit organisational budgets and the expenses incurred by other volunteer services. Considerable difficulties arise in disaggregating the cost of these services relating to serious and organised crime, and it is likely that the estimates provided here will represent a general indication of expenses only.

Given that most violent crimes canvassed in this report have increased in number since previous cost of crime reports (ACC 2015a; Smith 2018b; Smith & Hickman 2022)—particularly human trafficking and modern slavery, child sexual abuse and other crimes of sexual violence, especially those committed online—it is reasonable to assume that the cost of private sector support services has also increased. Accordingly, the current report has inflated the previous estimates of the cost of these services made by the ACC (2015a) using the RBA (2024) calculator to provide the following estimates for 2022–23 (Table 31).

Table 31: Estimated expenditure by private sector support services for victims of violent crimes perpetrated by serious and organised crime, 2022–23

Victim type	Expenditure 2013–14	Expenditure 2022–23	Serious and organised crime involvement		
			Low	Medium	High
Child protection ($m)	1,500.0	1,876.3	56.3	93.8	187.6
Sexual violence services ($m)	124.0	155.1	0.78	1.6	3.1
Voluntary support ($m)	76.0	95.1	0.5	1.0	1.9
Total ($m)	**1,700.0**	**2,126.5**	**57.6**	**96.4**	**192.6**

Note: The percentage involvement of serious and organised crime was estimated to be: child protection (3% low, 5% medium, 10% high); sexual violence (0.5% low, 1% medium, 2% high); voluntary support (0.5% low, 1% medium, 2% high)

Summary of indirect prevention and response costs

Considering the various indirect costs of preventing and responding to serious and organised crime incurred in 2022–23 by government entities, including law enforcement, other criminal justice agencies and those in justice portfolios, and the costs incurred by private sector businesses, non-profit bodies, individuals and households, it can be seen from Table 32 that additional costs range from $9,254.9m (low), to $12,784.1m (medium), to $16,919.6m (high).

The quality of evidence used to undertake these estimations varies considerably. Government entities generally have more robust data available, while private sector expenses are more difficult to estimate, partly due to commercial confidentiality policies but also because the research needed to quantify expenditure has not yet been undertaken. Taking the upper estimate of indirect costs of $16.9b, this represents 34 percent of the total direct costs (estimated above) of $49.9b. This is slightly lower than Mayhew's (2003b) original 40 percent estimate of indirect costs as a percentage of all direct crime costs in 2003.

Table 32: Estimated indirect serious and organised crime costs, 2022–23 ($m)

Victim type	Serious and organised crime involvement		
	Low	Medium	High
Public sector			
Commonwealth government entities	1,384.3	2,041.2	2,690.6
State government entities	4,394.1	5,839.5	7,564.0
Territory government entities	237.8	328.1	421.0
Total public sector	*6,016.2*	*8,208.8*	*10,675.6*
Private sector			
Financial services	78.9	157.8	236.7
Investigation and security services	431.5	539.4	809.1
Cybersecurity	2,107.3	2,950.2	3,793.1
Identity security	51.0	102.0	153.0
Insurance administration	69.6	139.1	173.9
Household precautions	442.8	590.4	885.6
Violent crime support services	57.6	96.4	192.6
Total private sector	*3,238.7*	*4,575.3*	*6,244.0*
Total indirect costs	**9,254.9**	**12,784.1**	**16,919.6**

Note: Totals may differ from earlier estimates due to rounding

Conclusion and summary

This report estimates the cost of serious and organised crime in Australia for the 2022–23 financial year. As in the previous report, it was not possible to undertake new empirical research to improve the baseline data to support the estimated costs. Instead, the most recent reported statistics for individual crime types or public and private expenditure were used as baseline indicators of incidence. The corresponding unit cost estimates were uprated using the RBA (2024) inflation calculator. Where more recent unit cost estimates were available, these were used in preference to uprating to account for inflation.

Table 33 shows the final summary totals for each crime category examined, along with the lower, medium and upper estimated costs corresponding to various levels of organised crime involvement in each criminal activity. In addition, the final totals of public and private sector prevention and response costs are indicated.

Column 2 of Table 33 gives an indication, based on these calculations, of the total proceeds of crime generated by each type of activity that could be available for laundering. As indicated above, it is estimated that 6.5 percent of the proceeds of crime actually laundered would be paid as commissions to professional facilitators of laundering, representing a loss to the economy.

In some cases, proceeds of crime are simply spent on lifestyle, enabling these funds to remain within the economy. This raises the notion of transfer payments, in which the illegal exchange of goods from victim to offender is considered to be a financial loss to the economy. Although in some cases the value of a stolen asset remains within the economy, this depends on whether the transfer is wanted or unwanted. Mayhew (2003b: 10) argued that 'since theft involves a transfer of property unwanted by the victim out of the legal economy into the illegal one, it is conventional in costs of crime work to treat it as a cost of crime'. This approach is adopted in the current costing.

Each estimate for 2022–23 has a confidence rating to indicate the degree of certainty associated with the estimate, based on the availability, coverage and accuracy of the baseline data, multipliers and unit cost estimates applied to each category. This is shown in column 6 of Table 33.

Table 33: Summary cost of serious and organised crime estimates for 2022–23 ($m)						
Crime category	Total proceeds of crime[a]	Serious and organised crime involvement			Confidence rating	% change 2020–21 to 2022–23
		Low	Medium	High		
Direct serious and organised crimes and consequential crime costs (total)		**21,136.2**	**33,480.9**	**51,782.1**		
Direct serious and organised crimes (total)		**18,912.1**	**29,061.8**	**43,273.9**		
Illicit drugs	12,786.0	**9,445.0**	**12,922.0**	**18,715.0**	Medium	+13%
Organised financial crime (total)		**4,213.2**	**7,487.0**	**12,359.3**		
Tax and revenue crime	10,046.0	2,938.0	5,023.0	8,706.0	Low	+37%
Superannuation fraud	4,970.0	497.0	1,491.0	2,485.0	Low	+5%
Payment fraud	777.2	155.4	310.9	466.3	High	+61%
Other transaction fraud	1,245.6	622.8	662.1	702.0	Medium	+61%
Crimes against the person (total)		**371.6**	**548.5**	**884.3**		
Human trafficking	na	89.6	125.5	179.2	Medium	+61%
Organised child sexual abuse	na	282.0	423.0	705.1	Medium	+ 26%
Illicit commodities (total)		**2,660.7**	**4,734.4**	**6,838.7**		
Intellectual property crime	10,792.0	539.6	1,618.8	2,698.0	Medium	−17%
Environmental crime	6,790.0	339.5	679.0	1,018.5	Low	+71%
Illicit tobacco	2,711.0	1,773.8	2,427.2	3,111.8	Medium	+203%
Firearms trafficking	10.4	7.8	9.4	10.4	Low	na
Pure cybercrime	2,837.4	**1,418.7**	**1,986.1**	**2,553.7**	Medium	na
Crime enablers (total)		**802.9**	**1,383.8**	**1,922.9**		
Identity crime	1,477.3	295.5	590.9	886.4	Medium	−36%
Money laundering commissions	na	494.4	741.6	939.4	Low	+13%
Corruption	126.3	12.6	50.5	94.7	Low	+5%
Violence	na	0.4	0.8	2.4	Low	+361%
Consequential costs of serious and organised crime	**$6,280.0 (+25%)**	**2,224.1**	**4,419.1**	**8,508.2**	Medium	+33%

Table 33: Summary cost of serious and organised crime estimates for 2022–23 ($m) (cont.)

Crime category	Total proceeds of crime[a]	Serious and organised crime involvement			Confidence rating	% change 2020–21 to 2022–23
		Low	Medium	High		
Prevention and response costs (total)		**9,255.0**	**12,784.0**	**16,919.5**		
Public sector	na	6,016.3	8,208.7	10,675.5	Medium	−2%
Private sector	na	3,238.7	4,575.3	6,244.0	Low	+12%
Total 2020–21	**53,740.8**	**24,832.9**	**39,854.0**	**60,121.0**		
Total 2022–23	**60,849.2**	**30,391.0**	**46,264.6**	**68,701.2**		
% change 2020–21 to 2022–23	**13.2%**	**22.4%**	**16.1%**	**14.3%**		

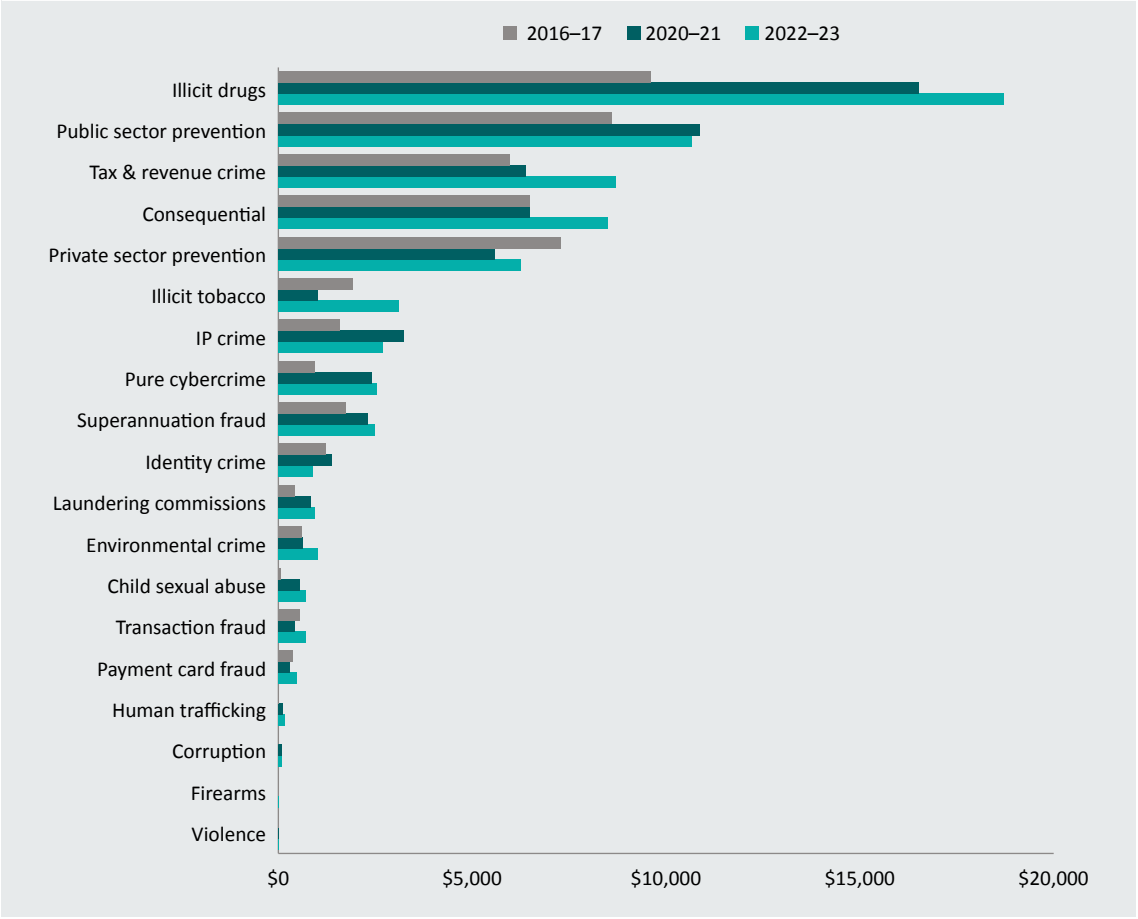
a: Disposable proceeds of crime generated by high involvement of serious and organised crime
Note: na=not available

As indicated above, there are various limitations associated with making comparisons between the current findings and those recorded in previous reports. These include changes in the societal influences on crime, changing crime control measures that have been implemented and changes in statistics and estimation methodologies used in current and previous research. Bearing these in mind, Figure 2 presents the upper estimates of the costs of serious and organised crime for each loss category in respect of the years 2016–17, 2020–21 and 2022–23.

The changes should not, however, be interpreted as necessarily reflecting a change in the net cost of each crime category as the costing methodologies used have developed over time, some new crime types have been included and different estimation techniques have been applied based on new sources of information becoming available.

Between 2020–21 and 2022–23 there were only relatively minor changes in the methodology and crime categories examined and so, unlike in the previous report, it has not been appropriate to show differences in totals with and without these methodological changes.

Figure 2: Changes in estimated cost of serious and organised crime by cost category, 2016–17, 2020–21 and 2022–23 ($m)



Source: Smith 2018b; Smith & Hickman 2022

The main changes were:

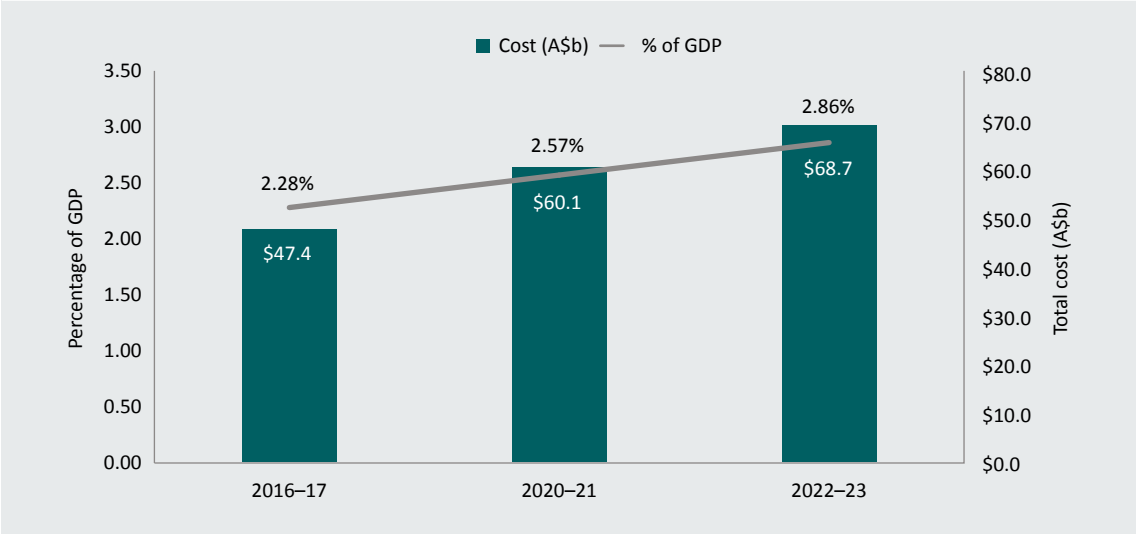
- including the cost of cannabis in the estimated cost of illicit drugs, which added $396.3m to the upper cost estimate of serious and organised crime;
- including oil theft in the estimate of environmental crime costs, adding $114m;
- including firearm trafficking, adding $10.4m to the upper estimate of serious and organised crime for 2022–23; and
- including the cost of the Australian Signals Directorate's cybercrime prevention and response activities, which added $227.7m to the upper estimate of public sector costs attributable to serious and organised crime.

New counting rules were applied in estimating the costs of pure cybercrime.

Figure 3 shows the upper estimate of the cost of serious and organised crime in 2016–17, 2020–21 and 2022–23, both in billions of dollars and as a percentage of national gross domestic product for the year in question (Australian Government 2023).

It is apparent that these upper estimates of the cost of serious and organised crime have increased at more than double the rate of inflation in Australia generally. Between 2016–17 and 2022–23, the cost of crime estimate increased by 44.9 percent (7.5% a year), while inflation increased by 19.3 percent (3.0% a year). The cost of crime as a proportion of GDP increased at a similar rate to the net cost of serious and organised crime over the six years. These changes are due primarily to changes in the incidence of the various crimes examined, as well as alterations in the research and costing methodology used for these studies.

Figure 3: Upper estimates of total cost of serious and organised crime, 2016–17, 2020–21 and 2022–23



Source: Smith 2018b; Smith & Hickman 2022

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