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# Estimating the costs of serious and organised crime in Australia 2016–17

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# Estimating the cost of serious and organised crime in Australia in 2016–17

Serious and organised crime cost Australia up to



in 2016-17.

This included

# **\$15.9 BILLION**

for the cost of prevention and response.





This included

# **\$31.5 BILLION**

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















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# Acknowledgements

This paper builds on the previous estimates of the cost of serious and organised crime in Australia for 2013–14 undertaken for the Australian Crime Commission (ACC 2015a) by John Walker Crime Trends Analysis. The current estimate relies heavily on John Walker's methodological approach and due acknowledgement is made to him and to others who contributed to the earlier report. Reliance has also been placed on Walker's (1992) research published by the Australian Institute of Criminology (AIC) and most recently revised by Smith, Jorna, Sweeney and Fuller (2014). Appreciation is extended to all those who were involved in the development and execution of these previous studies.

# Acronyms and abbreviations

ABS Australian Bureau of Statistics

ACC Australian Crime Commission

ACCC Australian Competition and Consumer Commission

ACIC Australian Criminal Intelligence Commission

ACORN Australian Cybercrime Online Reporting Network

AFP Australian Federal Police

AIC Australian Institute of Criminology

APRA Australian Prudential Regulation Authority

ATO Australian Taxation Office

AusPayNet Australian Payments Network

DFAT Department of Foreign Affairs and Trade

EUIPO European Union Intellectual Property Office

FATF Financial Action Task Force

GDP gross domestic product

IP intellectual property

MDMA 3,4-methylenedioxymethylamphetamine

OCeSC Office of the Children's eSafety Commissioner

OECD Organisation for Economic Co-operation and Development

PwC PricewaterhouseCoopers

RBA Reserve Bank of Australia

### Introduction

This paper provides an estimate of the cost of serious and organised crime in Australia for the year 2016–17. It was compiled to promote discussion in order to improve the costing methodology and estimates. The aim was to update the Australian Crime Commission's estimates for 2013–14 (ACC 2015a, 2015b), given there have been some major developments in the available baseline data, and some further attempts to improve the costing methodology.

As with the previous study, this paper considered the direct and consequential costs of serious and organised crime, as well as the costs associated with preventing and responding to serious and organised crime by government entities, businesses and individuals/households. The estimated total cost for 2016–17 was between \$23.8b (low), \$33.2b (medium) and \$47.4b (high) and comprised the following categories.

**Direct serious and organised crimes** were estimated to cost up to \$25.0b in 2016–17. These are crimes that have a clear and direct link with serious and organised crime (eg illicit drug trafficking, human trafficking, organised financial crime).

Consequential serious and organised crimes were estimated to cost up to \$6.5b in 2016–17. These are conventional crimes committed as a consequence of serious and organised crime. They are 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 (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 in order to facilitate serious and organised criminal activities (eg using violence to intimidate businesses, or using identity crime to enable financial fraud).

**Prevention and response costs** were estimated to cost up to \$15.9b in 2016–17. These include those costs incurred by law enforcement, the criminal justice system, other government agencies, the private sector and individuals in the community.

The methodology adopted for the current paper sought to estimate costs for the 2016–17 financial year. Where data were not available for this period, the Reserve Bank of Australia (RBA) (2018) inflation calculator was used to uprate estimated costs from earlier periods.

In terms of geographical and jurisdictional reach, the same approach was used as in the previous report. 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 within Australia are included even if the proceeds were moved outside Australia.

Where appropriate, indications of the level of confidence attached to the estimates are given. For some offence categories, confidence in the estimates are quite low, given the paucity of statistical and economic data.

Although the latest published baseline crime statistics were used for the current estimates, there are still a number of crime types for which information is unavailable—including some that have extensive serious and organised crime group involvement. The principal categories for which estimates have not been provided are:

- · firearms trafficking;
- migration and visa fraud;
- · maritime people smuggling; and
- corruption.

This paper provides an updated estimate of the costs, and includes some new research designed to fill gaps in data—some of which still remain. Accordingly, the figures in this report should be treated as a conservative estimate only. In order to indicate the range of likely costs, three estimates are provided—low, medium and high—that reflect the degree of involvement of serious and organised crime groups in the crime type examined. These estimates were developed for the research undertaken for 2013–14 by conducting a workshop comprising Australian based federal, state and territory law enforcement officers experienced in the investigation of both conventional and serious and organised crime, as well as regulatory, policy and subject matter experts, criminologists and statisticians. The resulting estimates of serious and organised crime involvement in various forms of criminality examined in this report are the same as in the ACC's (2015a, 2015b) earlier study. Future research should conduct new workshops to ensure that the low, medium and high percentages reflect current evidence of serious and organised crime involvement in the crime types examined.

Although this paper estimates the cost of serious and organised crime in Australia for the year 2016–17, further research is needed upon which to base more accurate estimates. Although costing methodologies are improving, there remains an ongoing need for government and business to collect 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 as well as crime victimisation surveys. Finally, new research is needed to quantify the prevalence of those crime categories for which data currently do not exist—particularly those in which serious and organised crime groups play a major role such as organised financial crime, firearms trafficking, human trafficking, environmental crime, corruption, child exploitation and money laundering.

# Methodological approach

This paper provides an estimate of the cost of serious and organised crime in Australia for the year 2016–17. The aim was to update the 2013–14 estimate prepared by John Walker Crime Trends Analysis for the Australian Crime Commission (ACC 2015a). That research was based on the cost of crime methodology developed by the Australian Institute of Criminology (AIC), which estimated the economic cost and impact of all crime in Australia (Smith et al. 2014).

The conventional approach used to estimate costs of crime is to quantify the prevalence of various types of crimes reported officially or disclosed in crime victimisation surveys; quantify a unit cost for each offence recorded; inflate the cost using a multiplier for officially-recorded offences to account for undetected and unreported crimes; add any indirect costs such as intangible impacts, loss of productivity and loss of output caused by the crimes counted; deduct the value of any compensation made or costs recovered; and then add any costs incurred by government, businesses and individuals/households in preventing and responding to crime risks (see Mayhew 2003).

In the case of serious and organised crime, it is appropriate to consider the two categories of criminality noted above—direct serious and organised crimes and consequential serious and organised crimes—when assessing how much of the total cost of crime is attributable to, or consequential upon, the activities of members of serious and organised crime groups. This paper adopts the same definition of serious and organised crime as that used in the previous study (ACC 2015b: 9–10). It extends the conventional understanding of organised crime groups by adding all serious crime of an entrepreneurial nature or committed to support a criminal enterprise, whether by a group or an individual.

# 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, identity crime and pure cybercrime. Various crime enablers are also directly linked to serious and organised crime. These enablers include money laundering, the use of violence, corruption, misuse of identity and the use of professional facilitators.

#### Illicit drug activity

The ACC's (2015b) assessment of the cost of serious and organised crime involvement in the illicit drug market included three cost elements:

- 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 drugs—money lost to the economy through international payments for
  illicit drug importations. This was based on estimates of the import values of illicit drugs at
  the border, which were used as a proxy for the costs of imported drugs (see Gajewski &
  Cullen 2012).

Other costs, including the costs to law enforcement and the costs of drug-related offending, are included in other sections of the paper. For example, the impact of conventional crimes committed by illicit drug users (such as burglaries, robberies, assaults, domestic violence) is included as part of the consequential serious and organised crime costs, below.

#### Medical and lost output costs

The most recent data from the ABS (2017a) show the number drug-induced deaths per 100,000 population increased between 2014 and 2016, from 7.3 to 7.5. Hospital separations by drug-related principal diagnoses also increased by 31 percent between 2013–14 and 2015–16 (Australian Institute of Health and Welfare 2018). It is appropriate, therefore, to allow for some increase in health costs due to illicit drug use.

The medical costs and lost output costs estimated by the ACC for 2013–14 were uprated to 2016–17 values in two steps. First, a 10.7 percentage increase was applied to account for the growth in the number of recorded illicit drug offences between 2013–14 (73,300) and 2016–17 (81,160; ABS 2017b). Secondly, the totals were inflated using the RBA's (2018) inflation calculator figure of 4.9 percent. These were then apportioned for serious and organised crime involvement of 80 percent (low), 90 percent (medium), and 100 percent (high). The results of these calculations are shown in Table 1, below.

#### Expenditure on drugs

This section draws on new research by the Australian Criminal Intelligence Commission (ACIC forthcoming) that provides data on the number and weight of illicit drugs seized by law enforcement. It also uses the ACIC's wastewater data collected between August 2016 and August 2017 as part of the National Wastewater Drug Monitoring Program to estimate the annual weight of methylamphetamine, MDMA (3,4-methylenedioxymethylamphetamine), heroin and cocaine consumed nationally. Comparing the weight of drugs seized nationally in 2016–17 and annual national drug consumption estimates derived from wastewater analysis shows that:

- the weight of methylamphetamine seized equated to 45.6 percent of the total estimated weight of methylamphetamine needed to meet national demand;
- the weight of MDMA seized exceeded the total estimated weight of MDMA needed to meet national demand (111.4 per cent)
- the weight of heroin seized equated to 29.3 percent of the total estimated weight of heroin required to meet national demand
- the weight of cocaine seized exceeded the total estimated weight of cocaine needed to meet national demand (150.3 per cent).

For the purposes of this study, only the importation costs of amphetamines, MDMA, heroin and cocaine were estimated. The ACIC's illicit drug data report for 2016–17 (ACIC forthcoming) presents the estimated street value of these four illicit drug types for 2016–17. In order to account for the finding of the National Wastewater Drug Monitoring Program in 2016–17 that national consumption of these drugs differed from the weight of drugs seized, the total seizure costs estimated were revised up or down to reflect actual consumption levels based on wastewater analysis. The ACIC provided low, medium and high estimates of the proportion of illicit drug activity attributable to serious and organised crime for each drug type. Finally, the totals were adjusted to account for the proportion of expenditure on illicit drugs imported that represented actual losses to the economy (low—20%; medium 50%; high 100%). These calculations are shown in Table 2 below and summarised in Table 1.

Table 1: Illicit drug cost estimates, 2016–17 (\$m)						
Туре	Serious and organis	ed crime involvement				
	Low (20%)	Medium (50%)	High (100%)			
Medical <sup>a</sup>	750.1	843.9	937.7			
Lost output <sup>a</sup>	3,105.4	3,493.6	3,881.8			
Expenditure on drug imports	640.8	1,843.5	4,781.9			
Total	4,496.3	6,181.0	9,601.3			

a: Inflated by 10.7% to account for the increase in recorded illicit crime (ABS 2017c), and 4.9% for inflation (RBA 2018)

Table 2: Calculations of estimated costs attributable to serious and organised crime involvement in the importation of four illicit drug types, 2016–17							
	Amphetamines	MDMA	Heroin	Cocaine	All		
Estimated street value (\$m) <sup>a</sup>	2,800	140.2	112.4	1,700			
Estimated percentage seized (%) <sup>b</sup>	45.6	114.4	29.3	150.3			
Actual value consumed (\$m)	4,077	122.8	145.3	1,131	5,476		
Low serious and organised crime involvement (%)	50	65	85	85			
Low serious and organised crime involvement (\$m)	2,039	79.8	123.5	961	3,204		
Medium serious and organised crime involvement (%)	60	75	90	90			
Medium serious and organised crime involvement (\$m)	2,446	92.1	130.8	1,017.9	3,687		
High serious and organised crime involvement (%)	85	85	95	95			
High serious and organised crime involvement (\$m)	3,465	104.4	138	1,074.9	4,782		
Loss to economy— low involvement (\$m)					640.8		
Loss to economy—medium involve	ment (\$m)				1,844		

4,782

#### **Organised financial crime**

Loss to economy—high involvement (\$m)

The ACC (2015a) estimated that in 2013–14 the cost of organised financial crime was up to \$6.3b. Serious and organised financial crime targets 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 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 card payments.

a: Estimates from Illicit drug data report 2016–17 (ACIC forthcoming)

b: Estimates from National Wastewater Drug Monitoring Program: Report 4 (ACIC 2018)

By uprating data provided by the ACIC, it can be estimated that in 2016–17 financial crimes committed by serious and organised crime cost between \$2,551m (low), \$4,949m (medium) and \$8,616m (high).

#### Tax and revenue crime

Increasing attention is being paid to serious and organised tax fraud in Australia. A recent example is the AFP's Operation Elbrus, which commenced in September 2016. This involved the investigation of a large organised crime syndicate allegedly responsible for a \$165m tax fraud against the Australian Government. The eight-month investigation identified a well-structured organised crime syndicate that had established a company called Plutus Payroll to provide payroll services to legitimate clients. The money received from these clients was then transferred to various subcontracted companies, allegedly controlled by syndicate members. While processing these payments, the syndicate allegedly diverted funds paid by legitimate clients to service tax obligations for its own personal gain. On 17 and 18 May 2017, 33 search warrants were executed across New South Wales and a variety of assets, including property, vehicles, planes and bank accounts, were restrained as suspected proceeds of crime. Ten people were arrested for serious offences including conspiring to defraud the Commonwealth, dealing in the proceeds of crime and demanding money with menace (AFP 2017: 60).

Using information provided by the ACIC, it was possible to estimate the costs of serious and organised crime associated with tax refund fraud, tax evasion, abusive use of trusts and departmental expenditure. The previous estimates obtained were increased by 25 percent. That is based on the cost of living increase of 4.9 percent (RBA 2018) and a 20.1 percent increase to account for the increase in the tax fraud caseload and case value over the period examined. The proportion of tax fraud attributed to serious and organised crime was five percent (low—\$1,481m), 15 percent (medium—\$2,370m) and 25 percent (high—\$4,673m) (see Table 3).

In addition, it was possible to estimate the cost of illegal phoenix activity using a recent report by PricewaterhouseCoopers (PwC 2018) produced on behalf of the inter-agency Phoenix Taskforce. The study examined the direct economic impact on businesses, employees and government. It estimated the direct cost to business to be between \$1,162m and \$3,171m for the 2015–16 financial year. The direct cost to employees was estimated to be between \$31m and \$298m, and the direct cost to government to be \$1,660m. The total economic impact for 2015–16 was, therefore, between \$2,852m and \$5,128m.

Applying the low (5%), medium (15%) and high (25%) estimates of serious and organised crime involvement to PwC's (2018) higher estimate results in a range from \$256.4m, to \$769.2m to \$1,282m for 2015–16, respectively. Inflating these estimates of phoenix activity to 2016–17 values results in a range from \$260.78m (low), \$782.34m (medium) to \$1,301m (high) (see Table 3).

Table 3: Cost of serious and organised crime involvement in taxation fraud, 2016–17							
Value ranges	Low	Medium	High				
Serious and organised crime involvement (%)	5	15	25				
Organised crime value (excluding phoenix activity) (\$m)	1,481	2,370	4,673				
Organised crime phoenix activity (\$m) (based on PwC 2018)	261	782	1,301				
Total (\$m)	1,742	3,152	5,974				

#### Superannuation fraud

Superannuation funds continue to be targets for serious and organised crime because of the substantial financial resources being managed each year. In 2016–17, the Australian Taxation Office (ATO), as regulator of Australia's 597,000 self-managed super funds, reported that around \$697b in assets were under management in these funds alone, representing 30 percent of the \$2.3t in superannuation assets under active management in Australia (ATO 2017: 49). Self-managed superannuation funds are vulnerable to exploitation by serious and organised crime, and in many cases victims will not know their funds are missing until retirement.

Superannuation losses can occur through the cash economy, fraudulent contracting and businesses that collapse while owing money to employees. A significant component of the total superannuation loss is due to deliberate business bankruptcy leaving employees with unpaid superannuation contributions (ACC 2015a).

Information provided by the ACIC showed that serious and organised crime involvement in superannuation fraud in 2013–14 amounted to between \$247.2m (with 10% involvement of serious and organised crime), \$741.6m (30% involvement), and \$1,236m (50% involvement).

The Australian Prudential Regulation Authority (APRA 2017) reported 40 percent growth in superannuation assets under management between June 2014 and June 2017. Total assets under management at 30 June 2014 amounted to \$1,750b and at 30 June 2017 they amounted to \$2,450b. Assuming that this growth in assets would reflect a comparable growth in superannuation fraud, the cost of serious and organised crime involvement in superannuation fraud in 2016–17 would range between \$346.1m (low), \$1,038.2m (medium) and \$1,730.4m (high).

#### Payment card fraud

Payment card fraud statistics are collected each year by the Australian Payments Network (AusPayNet), which is a network of 120 members and participants with an interest in payment systems and transactions. Twice yearly, payment fraud statistics provided by Australia's financial institutions and card schemes are published, providing a reliable indication of the extent and cost of fraud perpetrated against financial institutions, merchants and individuals in Australia.

For the financial year 2016–17, 3.1m fraudulent transactions worth \$545.6m took place on Australian cheques and cards, making up 0.029 percent of all transactions that year. In addition, there were 298,723 fraudulent transactions perpetrated in Australia on cards issued overseas, worth \$65.1m. The total value of these fraudulent transactions for 2016–17 was \$610.7m

(AusPayNet 2017). Estimates provided by the ACIC showed that organised crime involvement in card fraud ranged from 20 percent (low), to 40 percent (medium), to 60 percent (high). Applying these percentages of serious and organised crime involvement to AusPayNet's (2017) statistic of \$610.7m for 2016–17 gives an estimated range of \$122.1m (20% involvement), to \$244.3m (40% involvement) to \$366.4m (60% involvement).

#### Other financial transaction fraud

Based on information provided by the ACIC, the estimated costs of other (non-payment card) financial transaction frauds committed in 2013–14 were inflated by the same percentage increase experienced by payment card fraud between 2013–14 and 2016–17. Organised crime involvement in other financial transaction frauds was estimated to range from 50 percent (low), to 75 percent (medium), to 95 percent (high). On this basis, other financial transaction fraud was estimated to amount to \$483.9m (low), \$514.4m (medium) or \$545.4m (high).

#### Crimes against the person

The costs associated with crimes against the person in 2016–17 were estimated for human trafficking (excluding forced marriage, where organised crime involvement is not apparent) and child sexual exploitation. The estimated costs of serious and organised crime involvement in these two crime types ranged from \$23.2m (low), to \$34.7m (medium) to \$58.0m (high).

#### Human trafficking and people smuggling

Human trafficking involves people being moved domestically or across international borders for the purposes of exploitative practices such as slavery, servitude, forced labour or forced marriage. People smuggling, on the other hand, involves the movement of people across borders, usually on payment of a fee, but not for the purposes of exploitation of the victim by the offender.

The costs to the Australian economy associated with human trafficking and people smuggling include the funds paid to organised crime to facilitate travel, the health and social costs for victims of trafficking and the cost to the Australian Government of preventing and responding to the problem. These prevention and response costs are included in the final estimates in Table 11, but the travel costs paid by victims to organised crime are generally paid outside Australia by foreign citizens and do not involve a cost to the Australian economy.

The remaining cost category concerns the health and social costs experienced by individuals once in Australia. These could be estimated, in the absence of more precise data, using the unit costs of criminal assault or kidnapping.

In 2016–17, the Australian Federal Police (AFP) received 150 human trafficking referrals, 70 of which related to forced marriage, 20 to sexual exploitation and 38 to labour exploitation. The remaining 22 referrals were associated with other forms of trafficking. Of the 150 referrals, 89 were accepted for investigation and this number provides a reasonable indication of reported human trafficking matters (AFP 2017: 52). It can be assumed that 50 percent of accepted matters in 2016–17 related to forced marriage, as this was the percentage of matters referred to the forced marriage support program. The remaining 45 accepted matters related to other types of human trafficking.

Between 2004, when human trafficking was criminalised, and 30 June 2017, the AFP received 841 referrals relating to human trafficking, slavery and slavery-like offences (including forced marriage). Since forced marriage was criminalised in March 2013, the AFP has received 186 referrals relating solely to forced marriage (AFP 2017: 52).

Since 2004, 20 offenders have been convicted of trafficking offences, with half of these offences involving multiple offenders. Not all offenders were necessarily involved in organised crime syndicates, as some were family members of the victims. In 2016–17, eight operations or task forces investigated trafficking, two of which resulted in multiple offenders being charged. Accordingly, based on information provided by the ACIC, it would be reasonable to estimate serious and organised crime involvement of between 25 percent (low), 35 percent (medium) and 50 percent (high) in these cases alone.

Given that data indicate the AFP accepted 45 cases of human trafficking (other than forced marriage) for investigation in 2016–17, and assuming a non-reporting multiplier of 11, as was used in the case of sexual assault by Smith et al. 2014, it could be estimated that there were 495 cases of human trafficking (excluding forced marriage) in 2016–17. After applying the unit costs for assault of \$2,776 (low), \$3,001 (medium) and \$3,654 (high), and the revised estimates of serious and organised crime involvement, the cost of human trafficking is estimated to be between \$0.35m (low), \$0.54m (medium) and \$0.95m (high) for 2016–17 (Table 4).

Table 4: Human costs of serious and organised crinexcluding forced marriage, 2016–17	ne involvement in	human traffickin	g,
Serious and organised crime involvement	Low	Medium	High
AFP referrals accepted 2016–17 (n)	45	45	45
Multiplier	11	11	11
Estimated total victims (n)	495	495	495
Organised crime involvement (%)	25	35	50
Organised crime victims (n)	124	173	248
Unit cost 2013–14 (\$)	2,776	3,001	3,654
Cost 2013–14 (\$)	344,224	519,173	906,192
Cost 2016–17 (\$)	350,533	544,508	950,412

#### Child sexual exploitation

Organised child sexual exploitation can entail sexual offences committed against children such as rape and acts of indecency, grooming of children for sexual purposes, and conduct involving the production, dissemination, accessing or possession of child exploitation materials.

In 2016–17, the AFP's Child Protection Assessment Centre received more than 10,000 reports of child sexual exploitation. Some reports related to one image while others related to hundreds or thousands of images and videos of children being abused, or hundreds of pages of 'chat' between an online sex predator and a child. During 2016–17 the AFP arrested and charged 70 offenders with 118 offences (AFP 2017: 55).

The cost of these crimes to the Australian economy is difficult to quantify, as many children who were subject to abuse were located outside Australia, where their abuse was filmed and traded online—either in cash or in exchange for other images. There is also some overlap between victimisation of children during the process of producing child exploitation material and recorded sexual crimes against children, with official statistics generally being limited to contact offences that do not entail the production of child exploitation material such as photographs or films.

The involvement of serious and organised crime in child exploitation is likely to be high, although precise data are largely unavailable. The costs associated with the online child exploitation material market, as it affects Australia, include money paid by Australian residents to purchase access to 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. The amount of money paid by Australians to purchase access to images is unknown.

It is difficult to gauge the incidence of child sexual exploitation perpetrated against children in Australia. Both the Australian Law Reform Commission (2010) report into family violence and the Royal Commission into Institutional Responses to Child Sexual Abuse (Prichard & Spiranovic 2014) note the need for further research to quantify the problem. The 2005 personal safety survey conducted by the Australian Bureau of Statistics (ABS) indicated the historical prevalence of sexual abuse of children under 15. The ABS (2005: 12) estimated:

Women were more likely to have been sexually abused than men. Before the age of 15, 12% (956,600) of women had been sexually abused compared to 4.5% (337,400) of men.

The 2005 personal safety survey also found just 11.1 percent of respondents who reported experiencing sexual abuse before the age of 15 nominated a stranger as a perpetrator (ABS 2005: 42).

The Office of the Children's eSafety Commissioner (OCeSC) report for 2014–15 (OCeSC 2015) indicated the potential scale of the problem. The office investigates Australian internet user reports of 'child sexual abuse material' found online. In 2014–15, over 5,000 investigations were completed into confirmed child abuse material that breached particular classification standards (Krone & Smith 2017). In the 12 months to June 2016, a survey of 2,278 children aged eight to 17 years commissioned by the Office of the Children's eSafety Commissioner found that nine percent of those aged eight to 13 had been exposed to inappropriate content and five percent had been contacted by strangers (OCeSC 2018).

One indication of the costs of child exploitation in Australia comes from the National Redress Scheme, which will provide support to people who experienced institutional child sexual abuse (Australian Government 2018). The scheme provides up to \$150,000 in compensation to the estimated 60,000 victims of child sexual abuse perpetrated by or alleged against members of the 4,000 institutions examined in the Royal Commission. Although the National Redress Scheme is managed by the Commonwealth Department of Social Services, its funding is provided by the institutional members and, accordingly, could be considered as a cost to the economy.

Assuming a conservative mean payment of \$76,000 per claimant, as the government has estimated (McDonald 2018), and assuming 30,000 successful claims will be made, the payments could amount to \$2.28b in total. Not all payments will be 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 would fall within the definition of organised criminal activity. It is also debatable whether the full redress amounts should be allocated to 2016–17, given that the abuse occurred many years previously, and payments will be made over the ensuing decade. For present purposes, it is estimated that between 10 percent (low), 15 percent (medium) and 25 percent (high) of payments made under the National Redress Scheme relate to child sexual abuse involving serious and organised crime, amounting to \$228m (low), \$342m (medium) and \$570m (high). Assuming that 10 percent of these should be allocated to 2016–17, the total costs for that year would range between \$22.8m (low), \$34.2m (medium) and \$57.0m (high).

#### Illicit commodities

The serious and organised crime costs associated with illicit commodities include money lost to the Australian economy through purchasing of illicit goods offshore and through the evasion of duty on imports, as well as trade in illicit markets such as illegal tobacco, illegal fishing, and elements of illegal logging and intellectual property crime. The cost of trading in some commodities, such as firearms and wildlife, was unable to be fully measured.

The estimate for the cost of illicit commodities ranged between \$2,018m (low), \$3,052m (medium) and \$4,101m (high) for 2016–17.

#### Intellectual property crime

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 general public to more professionally organised networks. The degree of serious and organised crime involvement varies considerably depending on the commodities in question, with much online infringement being carried out by individuals who make use of digital services often coordinated by organised crime groups. There is also considerable debate concerning the extent and economic impact of IP infringement, globally and in Australia, with variable and contested methodologies being discussed (AIC 2008).

Data published in 2016 by the Organisation for Economic Co-operation and Development (OECD) and the European Union's Intellectual Property Office (EUIPO) estimated the trade in counterfeit and pirated goods amounted to up to 2.5 percent of world trade in 2013, worth an estimated US\$461b. Based on the Australian two-way trade in goods in 2016–17 using current prices of A\$569,498m (DFAT 2018: 28), the total counterfeit trade at 2.5 percent would amount to A\$14,237m.

Information provided by the ACIC estimated organised crime involvement in intellectual property crime to range from five percent (low), to 15 percent (medium) to 25 percent (high). Applying the OECD/EUIPO (2016) rate to these estimates generates a range of between \$711.9m (low), \$2,135.6m (medium) and \$3,559.3m (high). These estimates are likely to be overly high in view of the wide range of goods included in the definition of trade, many of which are not subject to piracy.

Another estimate of 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 \$5.21b in 2016, with a further projected revenue loss to the Commonwealth of \$1.09b, 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. Applying this total to the percentages of serious and organised crime involvement generates a range of between \$315m (low), \$945m (medium) and \$1,575m (high). For present purposes, these estimates will be included in the total of illicit commodities.

#### Environmental crime

Serious and organised crime groups in Australia have been identified operating in the illegal wildlife trade, illegal fishing, illegal logging and hazardous waste disposal sectors (ACC 2015a; Putt & Nelson 2009). Tailby and Gant (2002) found growth in organised crime groups' participation in the systematic harvesting, processing and distribution of abalone and rock lobster and in their use of the sector to launder money and manufacture drugs at aquaculture facilities in the early 2000s.

Illegal logging is one of the world's most profitable forms of environmental crime. In 2005, the global timber market was estimated to be worth US\$150b, of which 10 percent (US\$15b) was estimated to be attributable to illegal sourcing (Brack & Hayman 2002).

Information provided by the ACIC on the costs of illegal fishing and illegal logging in 2013–14 were uprated in accordance with the cost of living between 2013–14 and 2016–17 (RBA 2018). Estimates of organised crime involvement were applied, ranging from low (5%), to medium (10%) to high (15%). The results are as indicated in Table 5.

Table 5: Cost of serious and organised crime involvement in environmental crime, 2016–17									
Crime type	Ille	Illegal fishing Illegal logging					Both		
Serious and organised crime involvement	Low	Med	High	Low	Med	High	Low	Med	High
Estimated cost (\$m)	1.7	1.7	1.7	612.6	615.8	616.8	614.3	617.5	618.5

#### Illicit tobacco

In 2004, the late Gil Geis (2004: 12) commented that in Australia:

The amount of tax revenue loss that the government suffers because of the existence of the chop-chop market has been rather promiscuously estimated to be anywhere from \$40 million to \$600 million annually.

In 2012, Euromonitor International (2012) estimated that approximately 10 percent of the global cigarette market was illicit, resulting in between US\$40b and US\$50b in government revenue losses annually.

In 2011, the Financial Action Task Force (FATF) commenced an investigation into money laundering and terror financing associated with the illicit trade in tobacco, which was estimated to generate tens of billions of dollars in proceeds of crime and loss of government revenue. The FATF also noted the increase in tobacco-related illnesses and deaths associated with the availability of cheap or counterfeit cigarettes. The role of serious and organised crime was described as follows:

...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 if 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. (FATF 2012: 7)

Research by KPMG (2018) found that, while tobacco consumption in Australia declined by 6.1 percent between 2016 and 2017, estimated illicit consumption as a proportion of total consumption increased from 14.3 percent in 2016 to 15.0 percent in 2017. This represented 2.348m kilograms of illicit tobacco that, had it been purchased legally, would have produced \$1.91b in excise, using the average excise rate for 2017 (KPMG 2018: 6).

Information provided by the ACIC 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 KPMG's (2018) estimate of \$1.91b in lost revenue results in an estimated cost of illicit tobacco attributable to serious and organised crime of between \$1.09b (low), \$1.49b (medium), and \$1.91b (high) for 2017.

#### 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 internet-facilitated crime such as consumer fraud, online dissemination of child exploitation material and intellectual property infringement. 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 so-called 'pure' cybercrimes involving unauthorised access to networks (hacking), modification of data, and impairment of systems. The cybersecurity prevention and response costs are reflected in the general indirect costs of crime calculations, below.

Serious and organised crime involvement in pure cybercrime is likely to vary considerably across cybercrime types. Some types, such as ransomware and denial of service, may have high levels of involvement, while cyberbullying and some consumer frauds will have much lower levels of serious and organised crime involvement. The present study estimated that, overall, serious and organised crime involvement in pure cybercrime ranges from 50 percent (low), to 70 percent (medium) to 90 percent (high).

In order to avoid double counting with other categories examined in this paper, particularly those relating to conventional personal fraud, the present estimate was limited to five pure cybercrime types: hacking, malware/ransomware, denial of service, business email compromise, and remote access intrusion. There remains some element of overlap, but these categories are most likely to involve serious and organised crime seeking to obtain funds using pure cybercrime methods. Other scam categories examined by the Australian Competition and Consumer Commission (ACCC 2018) and the Australian Cybercrime Online Reporting Network (ACORN) were not included as these would be counted in the costs of identity crime and or personal conventional fraud.

In addition, this paper did not attempt to estimate the pure cybercrime costs incurred by large and medium-sized businesses and government entities, other than the costs counted in other sections of this paper. Large and medium-sized businesses and government entities can report experiences of pure cybercrime to CERT Australia, but these incidents would not be counted in ACORN data. These vulnerability disclosure reports can be made to CERT Australia where they relate to high-impact vulnerabilities, critical national infrastructure or physical safety (CERT Australia 2018). Such vulnerabilities could occur in software components, protocols or hardware, or in websites or systems used by big business or the Australian Government. These reports to CERT Australia should be examined and counted in any future cost of crime studies.

The data for the current study were sourced solely from the ACCC's (2018) *Targeting scams:* Report of the ACCC on scams activity for 2017, and from the ACIC, which administers ACORN. These data are limited to victimisation of individuals and small businesses only.

In order to account for unreported matters, the numbers reported below were inflated by a multiplier of 4.8—the figure used in the AIC's estimate of the cost of personal fraud in 2011 (Smith et al. 2014).

Using estimates of reported and unreported cases of pure cybercrime and estimated unit costs for each category, and applying the above proportions of serious and organised crime involvement, results in an estimated cost for 2016–17 of between \$521m (low), \$729m (medium) and \$937m (high). Detailed results are presented in Table 6.

Table 6: Cost of serious and organised crime involvement in pure cybercrime, 2016–17							
Pure cybercrime type	Incidents with loss (ACCC) (n)	Incidents with loss (ACORN) (n)	Mean loss 2017 (\$)	Total loss 2017 (\$m)			
Hacking	1,570	3,341	5,219	25.6			
Malware/ransomware	1,075	941	1,077	2.2			
Denial of service/distributed denial of service	-	974	180,458	175.8			
Business email compromise	-	4,622	175,682	812.0			
Remote access intrusion	3,394	4,080	3,454	25.8			
Total				1,041.4			
Serious and organised crime involvement	Low (50%)	Medium (70%)	High (90%)				
Cost 2016–17 (\$m)	520.7	729.0	937.3				

#### Serious and organised crime enabling costs

The cost of organised crime enablers included the costs of identity crime, commissions paid for laundering the proceeds of crime, and loss of taxation revenue through money laundering by serious and organised crime. The total cost of enabling crime for 2016–17 ranged between \$762.8m (low), \$1,074.7m (medium) and \$1,721.5m (high).

#### Identity crime

Misuse of personal information, popularly known as identity crime, was estimated to cost Australia \$2,059m in 2016–17 in direct costs alone, excluding prevention and response costs (Smith & Jorna 2018; Smith forthcoming). Table 7 presents the estimated direct costs of identity crime.

Table 7: Estimated direct costs of identity crime, 2016–17							
Category	Obtained ID cost (\$m) <sup>a</sup>	Additional ID cost (\$m) <sup>b</sup>	Total direct ID cost (\$m)				
Commonwealth entities	90.0	0.12	90.2				
Individuals	235.0	4.1	239.1				
Serious fraud	259.6	0.01	259.6				
Police-recorded	1,463.6	6.4	1,470.1				
Total	2,048.2	10.7	2,058.9				

a: Obtained ID 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 ID 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

This estimate excludes the indirect costs of preventing and responding to identity crime incurred by government, business and individuals. Those costs are included in the indirect costs of prevention and response, below.

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 ACIC estimated serious and organised crime involvement ranged from 20 percent (low), to 40 percent (medium) to 60 percent (high).

Applying these proportions of serious and organised crime involvement to the latest estimate of direct identity crime costs for 2016–17 results in a cost of between \$411.8m (20%), \$823.6m (40%) and \$1,235m (60%). These costs were not included in the consequential costs of serious and organised fraud (presented later).

#### Laundering the proceeds of crime

Although some estimates of the global proceeds of crime have been exceedingly high (King & Walker 2014; Reuter & Truman 2004), and organised crime is thought to be responsible for a high proportion of the criminal activity that generates these proceeds of crime, the bulk of these costs have been counted in other categories in the current assessment. The only element that has not already been counted is the money lost to the economy in respect of commissions charged by individuals who carry out money laundering.

Information provided by the ACIC estimated that serious and organised crime involvement in money laundering ranged from 50 percent (low), to 75 percent (medium) and 95 percent (high). Using estimates of the amount of money being laundered in or through Australia, and assuming an average commission charged by money launderers of five percent, it is estimated that the cost of money laundering attributable to serious and organised crime ranges between \$188m (low), \$302m (medium) and \$423m (high).

#### Corruption

Previous estimates of the cost of corruption have included the World Economic Forum's estimate of more than five percent of global gross domestic product (GDP), and that corruption adds up to 10 percent to the total cost of doing business globally (Australia Institute 2018). PricewaterhouseCoopers (PwC 2016) analysed the relationship between corruption and GDP per capita and found that a one-point increase in perceived corruption using Transparency International's Corruption Perceptions Index is associated with a US\$380 decrease in GDP per capita. The Australia Institute (2018) calculated that the six-point decline in Australia' rating between 2012 and 2016 would equate to the cost of corruption in Australia in 2016 being A\$72.3b (4% of GDP).

There is, however, a substantial overlap between such an estimate and other costs of crime, particularly the economic crimes of fraud and money laundering. There is also, at present, no evidence of the precise proportion of the cost of corruption that involves serious and organised crime. Accordingly, an estimate of the cost of corruption as an enabler of serious and organised crime is not included in this report, and awaits further research.

#### Violence as an enabler

The cost of some violent crimes that are not included in the consequential costs of serious and organised crime can be costed using recorded crime statistics. The ABS (2017c) estimated there were 482 victims of kidnapping and abduction offences in 2017 and 536 victims of blackmail and extortion. Both these crime types could relate to serious and organised criminal activity used to enable other serious crimes. If it is assumed that the same multiplier and cost elements apply as for assault offences, it could be estimated that the cost of organised crime involvement in these violent crimes is between \$93,167 and \$605,504 for 2016–17 (Table 8).

Table 8: Cost of s	Table 8: Cost of serious and organised violent crime enablers, 2016–17								
Serious and organised crime involvement	Low	Medium	High	Low	Medium	High	Low	Medium	High
Crime type	Kidna	pping/abd	uction	Blac	kmail/exto	ortion	Вс	oth crime ty	pes
Victims 2017 (n)	482	482	482	536	536	536			
Multiplier	1	1	1	5	5	5			
Total victims (n)	482	482	482	2,680	2,680	2,680			
Organised crime involvement (%)	1	2	5	1	2	5			
Organised crime victims (n)	5	10	24	27	54	134			
Unit cost 2013–14 (\$)	2,776	3,001	3,654	2,776	3,001	3,654	2,776	3,001	3,654
Cost 2013–14 (\$)	13,880	30,010	87,696	74,952	162,054	489,636	88,832	192,064	577,332
Cost 2016–17 (\$) <sup>a</sup>	14,557	31,474	91,975	78,610	169,962	513,529	93,167	201,436	605,504

a: 2016–17 costs were inflated from 2013–14 estimates using the RBA (2018) calculator

#### Financial resources

The cost of serious and organised crime enablers includes the income that could be generated by the investment of assets which are instead held by organised crime groups and therefore lost to the economy. Information provided by the ACIC estimated that \$8,726m in assets was at the disposal of Australian serious and organised crime groups in 2013–14. It was argued that these assets were beyond the reach of Australian authorities, thus enabling serious and organised crime groups to distort prices and markets.

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Assuming that these assets were invested with an average rate of return of five percent per annum, these organised crime groups would generate an annual income of \$400m. At the Australian corporate tax rate of 30 percent, this income not being declared for taxation purposes would result in a potential annual loss of taxation revenue of \$131m.

For the year 2016–17, if the estimated asset value is inflated using the RBA (2018) calculator to \$9,153.6m, and if an average return on investment of 2.5 percent is assumed (producing \$228.8m per annum), the small business tax rate of 27.5 percent would result in a potential annual loss of taxation revenue of \$62.9m.

# Consequential organised crime costs

Consequential organised crime costs relate to 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 in order to facilitate serious and organised criminal activities (eg using violence to intimidate businesses, or using identity crime to enable financial fraud).

The estimated costs of consequential organised crime for the year 2016–17 are shown in Table 9. These estimates were made by undertaking three calculations. First, figures provided by the ACIC on the total estimated cost of organised crime for each crime type for 2013–14 were inflated by 4.9 percent to 2016–17 values using the RBA (2018) calculator to account for cost of living increases. Secondly, the percentage change in the number of recorded victims/offenders for the crime types in question between 2013–14 and 2016–17 was calculated using recorded crime data (ABS 2017b, 2017c), as shown in Table 9. Thirdly, the inflated ACC (2015a, 2015b) estimated organised crime cost was varied according to the percentage change in recorded crimes. This provides a general indication of the change in the cost of organised crime over the three years for each crime type.

Table 9: Estimated cost of consequential serious and organised crime, 2016-17 (\$m)							
Crime category	Low	Medium	High				
Murder/manslaughter (8.18% \$ decrease)	15.3	42.3	139.5				
Driving causing death (0.48% \$ decrease)	0.57	16.9	76.8				
Attempted murder (4.73% \$ decrease)	27.0	72.4	179.2				
Assault <sup>a</sup> (9.84% \$ increase)	116.6	158.9	243.2				
Sexual assault (20.3% \$ increase)	0.67	2.7	8.9				
Robbery (2.97% \$ decrease)	26.7	52.8	96.7				
Burglary (3.16% \$ decrease)	336.6	669.3	1,021.1				
Vehicle theft (3.36% \$ increase)	72.5	196.5	328.8				
Theft from vehicles <sup>b</sup> (1.85% \$ increase)	0.26	0.67	3.84				
Shop theft <sup>c</sup> (1.85% \$ increase)	32.8	50.2	71.4				
Other theft <sup>d</sup> (8.65% \$ increase)	36.4	46.4	56.1				
Criminal damage <sup>e</sup> (18.42% \$ decrease)	91.2	141.4	401.9				
Arson <sup>f</sup> (0.96% \$ decrease)	10.9	32.3	226.3				
Conventional fraud <sup>g</sup>	927.0	1,884.0	3,642.0				
Total	1,694	3,367	6,496				

Note: Percentages in parentheses represent the change in the number of victims/offenders between 2013–14 and 2016–17 reported in recorded crime statistics (ABS 2017b, 2017c)

a: Changes in recorded assault offences based on ABS (2017b) offenders data (not available previously for assault), not crime victimisation survey data as was used by ACC (2015b), but ACC (2015b) costs for assault used for uprating b: ABS (2017b, 2017c) recorded crime data do not disaggregate thefts from vehicles, so the estimate for percentage change between 2011–12 (Smith et al. 2014: 34—168,666 incidents) and 2013–14 (ACC 2015a—171,778 incidents) of 0.92% per annum was applied to the estimated change between 2013–14 and 2016–17

c: ABS (2017b, 2017c) recorded crime data do not disaggregate shop theft, so the estimate for percentage change between 2011–12 (Smith et al. 2014: 34—80,625 incidents) and 2013–14 (ACC 2015a—82,113 incidents) of 0.92% per annum was applied to the estimated change between 2013–14 and 2016–17

d: This is the total of 'other theft' victims in ABS (2017c), less shop theft and theft from vehicles noted above e: ABS (2017b, 2017c) recorded crime data do not report criminal damage, so the estimate for percentage change between 2011–12 (Smith et al 2014: 44—249,220 incidents) and 2013–14 (ACC 2015a—218,621 incidents) of 6.14% per annum was applied to the estimated change between 2013–14 and 2016–17

f: Incidents are based on police statistics for 2014 and 2017, with 500 incidents estimated each year for ACT and a further 500 each year for the Northern Territory (neither of which had arson data available)

g: This excludes payment card fraud, identity fraud, and some frauds involving corruption that are included in direct serious and organised crime cost categories. The percentage change of 3.18% between 2013–14 and 2016–17 is based on all officially-recorded fraud and deception offences, which provide the best overall indication of the change in this offence category

# Indirect costs of preventing and responding to serious and organised crime

Prior cost of crime research has estimated various indirect costs of crime. These indirect costs generally include (Smith & Jorna 2018):

- prevention costs, sometimes known as defensive expenditure, including the costs
  associated with document security, computer security software, credit checks, awarenessraising campaigns, legislative and policy development by government, and other measures
  to guard against victimisation;
- **intangible impacts** not easily measured in monetary terms, such as the costs associated with 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. (U)

Information provided by the ACIC indicated the extent to which each of these elements of indirect costs of crime would be attributable to serious and organised crime involvement. In order 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: 40–41) have been maintained, while changes in government appropriations attributable to relevant agencies have been uprated using data from the Productivity Commission's *Report on government services* (Steering Committee for the Review of Government Service Provision 2018). The indirect costs associated with individuals and the private sector were also uprated to 2016–17 values by applying the RBA (2018) inflation calculator (Table 10). The detail of the methodology is contained in the ACC (2015b) report.

Table 10: Estimated indirect serious and organised crime costs, 2016–17 (\$m)						
	Serious and org	Serious and organised crime involvement				
	Low	Low Medium				
Public sector						
Australian government	3,390	3,914	4,229			
Criminal justice system	660	737	841			
Law enforcement	2,780	3,137	3,535			
Total public sector	6,830	7,788	8,605			
Private sector						
Security industry	1,855	2,211	2,568			
Finance/insurance	1,734	2,074	2,426			
Households	1,277	1,724	2,302			
Total private sector	4,865	6,009	7,295			
Total indirect costs	11,695	13,797	15,900			

### Conclusion and summary

This paper sought to estimate the cost of serious and organised crime in Australia for the 2016–17 financial year. It was not possible to undertake new empirical research to provide more accurate baseline data to support the estimated costs, so in most cases uprating using the RBA (2018) inflation calculator was used in conjunction with the most recent reported crime statistics to assess the prevalence of the various crime types examined.

Table 11 shows the final summary totals for each crime category examined along with the lower, medium and upper estimated cost values corresponding to various levels of organised crime involvement in each criminal activity.

Each of the estimates for 2016–17 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 and unit cost estimates applied to each category. These are indicated in Table 11.

Crime category	Serious and org	ranised crime i	nvolvement	Confidence rating
	Low	Medium	High	
Direct serious and organised crimes (total)	10,372.3	16,020.6	25,037.2	
Illicit drugs	4,496	6,181	9,601	Good
Organised financial crime (totals)	2,551.3	4,948.9	8,616.2	
Tax and revenue crime	1,742	3,152	5,974	Poor
Superannuation fraud	346.1	1,038.2	1,730.4	Poor
Payment card fraud	122.1	244.3	366.4	Excellent
Other transaction fraud	483.9	514.4	545.4	Excellent
Crimes against the person (totals)	23.2	34.7	58.0	
Human trafficking	0.35	0.54	0.95	Poor
Child sexual exploitation	22.8	34.2	57.0	Good
Illicit commodities (totals)	2,018.0	3,052.3	4,103.5	
IP crime	315	945	1,575	Good
Environmental crime	614.3	617.5	618.5	Poor
Illicit tobacco	1,088.7	1,489.8	1,910	Excellent
Pure cybercrime (total)	521	729	937	Poor
Crime enablers (total)	762.8	1,074.7	1,721.5	
Violence	0.09	0.2	0.6	Poor
Identity crime	411.8	823.6	1,235	Excellent
Laundering commissions	288.0	188.0	423.0	Poor
Financial resources	62.9	62.9	62.9	Poor
Consequential costs of serious and organised crime (total)	1,694	3,367	6,496	Good
Prevention and response costs (total)	11,695	13,797	15,900	
Public sector	6,830	7,788	8,605	Good
Private sector	4,865	6,009	7,295	Poor
Total	23,761	33,185	47,433	

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