



# Costs of online child sexual exploitation and abuse in Australia: An initial review

Authors: Jonah R. Rimer Ethan Callaway

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#### About the authors

**Dr Jonah Rimer** is a Senior Lecturer in Criminology at the University of Queensland and Convenor of Cyber Criminology for the university's postgraduate Cyber Security programs. He holds a DPhil in Anthropology and an MPhil in Medical Anthropology from Oxford University. Jonah's primary research areas are online sexual offending, child abuse, the human factors and social elements of cybercrime, social science of the Internet, childhood and youth studies, and the justice system. He has been researching online child sexual exploitation and abuse since 2007. Jonah's work has been published in journals including *Child Abuse & Neglect, Sexual Abuse, International Journal of Offender Therapy and Comparative Criminology, International Criminal Justice Review, Journal of Sexual Aggression, and Journal of Child Sexual Abuse, as well as by book publishers including Oxford University Press and Routledge.* 

**Ethan Callaway** is a PhD Candidate in Cyber Criminology and Senior Research Assistant at the University of Queensland. He holds a Bachelor of Justice (Honours) from Queensland University of Technology. Ethan's primary research interests are cyber-enabled crimes, online drug trafficking, surface web versus dark web illicit activities, and policing.

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ICMEC Australia Level 15, 1 Castlereagh Street Sydney, NSW, 2000 Australia

School of Social Science The University of Queensland Brisbane, QLD, 4072 Australia

For enquiries related to this research: info@icmec.org.au

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#### List of abbreviations

Abbreviation	Meaning
CAD	Canadian dollar
CSA	Child sexual abuse
CSE	Child sexual exploitation
CSEM	Child sexual exploitation material
DALY	Disability-adjusted life years
EUR	Euro
GBP	Pound sterling (or Great Britain Pound)
ICMEC Australia	International Centre for Missing and Exploited Children Australia
ISP	
15P	Internet service provider
NZD	New Zealand dollar
NZD	New Zealand dollar
NZD OCSEA	New Zealand dollar  Online child sexual exploitation and abuse

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#### **Executive summary**

Online child sexual exploitation and abuse (OCSEA) is a serious and urgent issue. While more is continually being learned about victimisation, offending, and investigation, far less is known about the costs of OCSEA. This report presents the outcomes of a six-month ICMEC Australia-funded review into the costs of OCSEA, focusing on child sexual exploitation material, livestreaming, capping, online sexual solicitation/child luring and grooming, sextortion, and child sexual abuse tourism.<sup>1</sup> "Cost" was conceptualised as broadly and holistically as possible to include anything that has or is likely to have a monetary, financial, economic, or expenditure impact in some way. The review did not strictly limit what this meant, nor limit the analysis to particular societal groups or populations. It is intended to be a "conversation starter."

The goal of this initial review was to establish the existing knowledge base about costs of OCSEA, particularly in/for Australia, as well as to conceptualise the multifaceted meaning of what a "cost" may be. The aim was to create a baseline of what is currently known, and equally important, what is not known and what is missing. To do so, four research questions were investigated:

- 1. What are the broad cost categories and sectors relevant to OCSEA?
- 2. What are the specific components within each of these cost categories?
- 3. Is it possible to decipher how various cost categories and components impact different OCSEA crimes similarly or differently? If so, how? If not, why not?
- 4. Can costs be estimated for each category, component, and OCSEA crime? If so, what are these estimates? If not, why not?

To explore these questions, a methodology was devised that included multiple phases:

- 1. A comprehensive literature review covering local and international research from academic, government, private sector, and NGO/charity/non-profit sources.
- 2. Using both the literature and extensive subject matter expertise, the identification of cost categories, cost components, the people likely to be most affected, and the professional sectors involved.
- 3. A comprehensive search for publicly available and applicable Australian data that, in combination with data/information from the first two steps, could help to explicate and elaborate on the identified costs.
- 4. The creation of preliminary, tentative, and incomplete hypothetical costing scenarios for different potential OCSEA costs using the limited available information from the literature review and Australian data sources. More than providing definitive estimations, these are designed to show *the potential ways* of estimating certain costs.

From the analysis, it is clear that the first two research questions can be answered with a degree of certainty; however, with questions three and four, significant gaps in research, literature, and open-source data (especially when focusing on Australia) mean that the answer to these questions is currently "no," with the existence of these gaps speaking to the "why not." The literature review resulted in a final set of 136 total documents. Methodologically, over 40% were literature reviews themselves, with the others using surveys, government data, interviews, focus groups, data from NGOs or programs, or multiple methods. Regarding country or geographical focus, half of the sources were about the USA,

<sup>1.</sup> It is important to recognise that OCSEA often cannot exist without offline child sexual exploitation or abuse. While there are some offences that involve online elements only (e.g., child sexual exploitation material possession where an offender does not produce the material, but rather, obtains it online), behind the online elements is still the abuse of children (e.g., in the same example, a child must be abused for the material to exist). For this reason, it is not advisable to think of online and offline child sexual exploitation and abuse as entirely distinct or separate.

followed by Australia, the UK, the whole world, and Canada. Over half were framed broadly/generally in being about child abuse, child abuse and neglect, or child maltreatment. This was followed by child sexual abuse, then violence against women and children. Most crucially, only two sources about costs focused on any aspect of OCSEA specifically, and both were about the UK: what is glaringly missing from the literature are the specific costs distinctive to the digital age and which impact OCSEA uniquely.

The literature reported on costs using a wide variety of classifications, foci, and categories, with costs generally affecting victims, perpetrators, family/friends, employers, governments, and communities/societies. For Australia as a nation, lifetime cost estimates for child abuse or child abuse and neglect as a whole ranged from \$5.8 billion to \$17.4 billion depending on the study. Other cost estimate figures for New Zealand, the USA, Canada, the UK, the Netherlands, and Germany are summarised in the report. Cost estimates varied quite widely making generalisation and comparison difficult, and again, almost none of this literature looked at costs of OCSEA specifically.

The most significant contribution of the present review/report was identification of the various cost categories and costs themselves, along with who they may impact, and which professional sectors are likely to be involved. Overall, 73 different costs were identified as related to OCSEA, of which 37 were identified by both the researchers and in the literature, 25 by the researchers only, and 11 in the literature only. Given gaps, identified costs from the literature came mostly from sources that broadly addressed child sexual abuse, child sexual exploitation, and child maltreatment, but which were clearly still relevant to OCSEA.

Costs were grouped thematically to help the Australian professional response community in identifying where they are more or less likely to be involved. Sixty of the 73 costs were applicable to both OCSEA and child sexual abuse or exploitation without an online component, while 13 of the 73 costs applied only to OCSEA. The first category revolved around the administration of justice, child protection, and allied professionals, for which 22 unique costs were identified. The second centred on the immediate to shortterm health and wellbeing of victims and families after abuse is disclosed or discovered, for which six different costs were identified. The third focused on the more medium- to long-term health and wellbeing of victims, the impacts OCSEA may have, as well as the associated monetary losses that may result, for which 16 unique costs were identified. The fourth category revolved around prevention, education, and research, for which 16 different costs were identified. Up to this point, all costs were applicable to OCSEA, but could also be present in child sexual abuse or exploitation without an online element. Therefore, the final set (plus one extra that was not easily categorised) focused on newer and distinctive costs that would only exist for OCSEA, and not other cases without an online component. These were about the various technical, legal, business, regulatory, and enforcement costs unique to OCSEA, for which 12 were identified, plus the one extra that was not categorised. For these, all were determined by the researchers alone with none found in the literature.

Using all these costs, in the last step of searching for publicly available Australian data about them, there were again gaps. Of the 73 identified costs, relevant (but not necessarily complete) data was found for 10, all of which were related to justice, child protection, and allied professionals. The rest either had no relevant public data, or some data (e.g., costs of health services) which were not specific enough to be particularly meaningful or informative. Utilising the relevant available public data alongside the research literature, hypothetical costing scenarios were then created for aspects of mental health care, medical care, criminal justice, and child protection.

Combing all the research phases together, again what is glaringly missing in both the literature and publicly available data is robust information about the specific costs distinctive to the digital age and

which impact OCSEA uniquely. As such, one outcome of this review is a call to action for pertinent stakeholders, technology and social media companies, government, industry, and public sector agencies to prioritise this important area of inquiry by making more widely available relevant information and data. As a broad community of professionals, stakeholders, and researchers, we should all strive to get better at leaving siloes, working together, and sharing information. Broadening knowledge of OCSEA costs provides a pivotal opportunity to do so.

#### 1. Introduction

Online child sexual exploitation and abuse (OCSEA) is a pressing and serious issue. While reliable estimates of prevalence are difficult to ascertain due to OCSEA's clandestine and secretive nature, there is little debate that the proliferation and popularisation of digital technologies has allowed more people to engage in offending (Wortley, 2012). Statistics from agencies working to combat OCSEA are reflective of this. For their most recent annual report, the Internet Watch Foundation detected 275,652 URLs that contain child abuse material, link to it, or advertise it (IWF, 2024a). To date, the National Center for Missing and Exploited Children has reviewed over 322 million images and videos of child exploitation and abuse, and states that over 19,100 victims have been identified (NCMEC, 2024), a notable increase from 20 years ago when the estimated number of identified children worldwide was between 250 and 400 (Palmer, 2005).

Child sexual exploitation (CSE) and child sexual abuse (CSA) are also pervasive problems. Laird et al. (2023) suggests that CSE affects up to 5% of young people across the word, while in Australia, the recent nationally representative Australian Child Maltreatment Study found that 28.5% of all participants and 25.7% of those aged 16 to 24 had experienced CSA, with a significant gender disparity toward girls (Haslam et al., 2023). If conceptualising "costs" of CSE and CSA as the effects on victims, these have been well documented. Effects may be different, or have variable impacts, depending on the level of dependence between abuser and victim (e.g., family members), the child's developmental stage/age, the severity and recurrence of abuse, and the support a child may or may not have once abuse is disclosed (Martin, 2015; Plummer & Cossins, 2018; Zurbriggen et al., 2007). Impacts of CSA and CSE can include low self-esteem, depression, anxiety, invasive thoughts, fear, anger, aggression, dissociation, personality disorders, post-traumatic stress disorder (PTSD), eating disorders, self-harm, addiction and substance misuse, future risky sexual behaviour, future relationship issues, and problems at school (Finkelhor, 2008; Hamilton-Giachritsis et al., 2017; Lalor & McElvaney, 2010; Martin, 2015; Whitaker et al., 2008; Zurbriggen et al., 2007). As a result of grooming and manipulation, victims may also feel guilty, ashamed, and embarrassed, often blaming themselves for abuse and exploitation (Gewirtz-Meydan et al., 2018; Hamilton-Giachritsis et al., 2017; Hanson, 2017; Martin, 2015; Palmer, 2005; von Weiler et al., 2010).

With OCSEA, particularly if there are images or videos, there can be further intensified and ongoing trauma. This centres largely around the permanency of material after recording and distribution. Children, youth, and adults victimised in the past know that once an image or video is online, it is very difficult to be fully removed, with such a guarantee being virtually impossible. This knowledge, combined with the knowledge that an unknown number of offenders could view the material, can create ongoing feelings of privacy invasion, fear of recognition, lack of power, re-victimisation, re-traumatisation, lack of closure, and a sense that abuse is not limited to where it took place (Gewirtz-Meydan et al., 2018; Hamilton-Giachritsis et al., 2017; Hanson, 2017; Leonard, 2010; Martin, 2015; Palmer, 2005; von Weiler et al., 2010). This may then compound some of the impacts listed in the previous paragraph, particularly low self-esteem, anger, difficulty trusting others, and future relationship problems (Palmer, 2005).

If conceptualising "costs" as the impacts that OCSEA may have on families and non-offending partners, there is again existing research. In particular, interviews and surveys with non-offending family members demonstrate that they experience feelings of upheaval, shock, and trauma after an offender's actions become known (Armitage et al., 2024; Jones et al., 2023). Non-offending family members also report feeling grief and loss which at the same time is not supported by others or recognised by society; experiences of stigmatisation and blame-by-association; and feeling the need to keep a family

member's offending secret while also having a burden of responsibility to them (Armitage et al., 2023, 2024). Similarly, if understanding "costs" as the experiences of and difficulties faced by those who investigate OCSEA, there is again an existing literature base. Research has demonstrated that police investigating OCSEA (particularly abuse images and videos) experience shock and disgust after seeing the material (Parkes et al., 2019; Slane et al., 2018); can have symptoms of Secondary Traumatic Stress such as nightmares, flashbacks, fatigue, changes in mood, and intrusive thoughts (Brady, 2017; Burns et al., 2008; Denk-Florea et al., 2020; Perez et al., 2010); may show signs of PTSD (Mitchell et al., 2023); may develop a cynical/negative view of the world as a result of their work (Simonovska et al., 2023); and can experience stigma from other police who view them as "weird" for doing this work (Slane et al., 2018).

While all the impacts of OCSEA discussed thus far (or "costs" if framed this way) are well documented, what is far less clear are the costs of these crimes in financial and economic terms. There is a dearth of evidence about the financial and economic costs of OCSEA, especially in an Australian context; however, such information is crucial to a well-rounded understanding, ultimately helping to inform how best to prevent and respond to OCSEA, in what ways, and through which professional, public, private, and industry sectors. With the above as a backdrop, the present report focuses on the potential economic and financial costs of OCSEA, with a particular emphasis on Australia. It reports on a six-month scoping/pilot project focused on the financial and economic costs of OCSEA in/for Australia.

#### 1.1. Terminology

This report uses specific terminology. In understanding what a cost may be, we utilise a holistic and comprehensive framework. From this perspective, costs of OCSEA can exist for victims, families, offenders, offenders' families, professionals, the private sector, the public sector, the non-profit sector, communities, and societies. Thus, in being holistic and comprehensive, we conceptualise costs from as many perspectives as possible. As will be demonstrated, we take a multifaceted view of "cost" and all the potential categories/areas that could be included, including those that can impact individuals; families; professionals; justice systems, taxpayers, and governments; businesses, companies, and customers; charities, NGOs, and non-profits; and the larger economy.

## For this project, cost is defined as something that has or is likely to have a monetary, financial, economic, or expenditure impact in some way.

From this point forward, when referring to "cost" or "costs," we are employing this meaning. However, in focusing on this, we are in no way trying to delegitimise or downplay all the effects of OCSEA, nor minimising those which may not have a tangible monetary, financial, economic, or expenditure impact. We focus on financial cost because it presents a significant knowledge gap, but one which is important to better grasp if aiming for a holistic understanding and response to OCSEA.

We also employ the term OCSEA for specific reasons. Originally, the call for proposals and brief for this project was focused on "economic costs and impacts of child sexual exploitation, particularly facilitated online." CSE can be broadly defined as a form of CSA that involves "some combination of particular elements including power imbalance, grooming, manipulation, coercion, deception, fraud, force, threats, exchange, or status" (Rimer, 2024, p. 1). However, scholarship has shown that the way researchers, governments, and agencies define and use the term CSE is "widely inconsistent" (Laird et al., 2023, p. 2243). In addition, particularly with online crimes against children, the terms "abuse" and "exploitation"

are often used to describe the same offences and/or to have the same meaning (Hanson, 2019), reflecting the fact that demarcating clear boundaries between the two is both difficult and potentially counterproductive (Karsna & Kelly, 2021; Laird et al., 2023). For these reasons, we use the term OCSEA to be all-encompassing and comprehensive, as there is often overlap between CSA, CSE, and other crimes against children, whereby multiple types of abuse and offending can be present in one case or for one child. Arbitrarily excluding certain forms of exploitation or abuse in this review for terminological reasons would not be aligned to its holistic aims. We also use the term OCSEA for conciseness in comparison to the initial language/framing within the ICMEC Australia call for proposals.

As described by Rimer (2024), the meaning of OCSEA can also be ambiguous and inconsistent, as there are a multitude of crimes and behaviours this can encompass including child sexual exploitation material (CSEM), livestreaming, capping, online sexual solicitation/child luring and grooming, sextortion, child sexual abuse tourism, commercial sexual exploitation, human trafficking, and forced marriage. Similarly, CSE and CSA are often discussed as "online" or "offline," however there is a need to have a more nuanced view, as online and offline are not a dichotomy and offences are not confined to one domain (Rimer, 2024). Therefore, we are specific in what we mean by OCSEA for this report. We focus on the following because they have a primarily online component (though often alongside an offline component), and to necessarily limit the boundaries of this exploratory research (all definitions in quotes come from Rimer, 2024, pp. 7-8):

- CSEM: terminology for abusive images and videos varies based on jurisdiction. Different countries, as well as states/provinces within countries, use "CSEM," "child exploitation material," "child sexual abuse material," "indecent images of children," or the outdated but still present "child pornography." To be as encompassing as possible, we use CSEM, and define this as "images, pictures, films, videos, or computer-generated visual material that depict a child (often defined as younger than age 18 years) in a sexually explicit manner (e.g., sexual activity or acts, sexual posing, or focus on certain areas of the body for sexual purposes)."
- Livestreaming: this refers "either to the livestreaming of sexual abuse taking place offline in real time or to children who are coerced, manipulated, or forced into sexualized activity over a webcam or mobile phone camera in real time."
- Capping: this refers to "the recording or surreptitious screen capturing of a young person engaging in sexualized activity online (e.g., through video chatting or livestreaming)."
- Online sexual solicitation/child luring and grooming: this refers to "the process by which an offender grooms a child to engage in sexual conversations or online activities, take or share explicit pictures or videos of themself, meet face-to-face to then be abused, or some combination of these."
- **Sextortion:** this refers to "the extortion or blackmail of a victim by threatening to share or distribute sexual images or videos of them. This can involve the creation of CSEM in the extortion process or older material (e.g., from capping, online solicitation, livestreaming, or intimate images in the context of a previous or existing relationship)."
- Child sexual abuse tourism: this refers to "when an offender travels to another country for the purpose of sexually abusing a child...The abuse may also be recorded and become CSEM."

For this report, when referring to OCSEA, it is limited to the above list.

#### 1.2. Project background and research questions

This project stemmed from an ICMEC Australia call for applications and ideas to conduct an initial "Australian research piece into the economic costs and impacts of child sexual exploitation, particularly facilitated online." Given how understudied the topic is, ICMEC Australia envisions this report as a "conversation starter," whereby they welcome feedback from other professionals, researchers, and stakeholders in relevant CSA-related and CSE-related sectors.

The goal of this project was to establish the existing knowledge base about costs of OCSEA, particularly in/for Australia, as well as to conceptualise the multifaceted meaning of what a "cost" may be. Crucially, the aim was to create a baseline of what is currently known, and equally important, what is not known and what is missing. To do so, we reviewed the existing research, literature, resources, and publicly available data on the topic, investigating four questions:

- 1. What are the broad cost categories and sectors relevant to OCSEA?
- 2. What are the specific components within each of these cost categories?
- 3. Is it possible to decipher how various cost categories and components impact different OCSEA crimes similarly or differently? If so, how? If not, why not?
- 4. Can costs be estimated for each category, component, and OCSEA crime? If so, what are these estimates? If not, why not?

From our research and analysis, it has become clear that we are able to answer the first two questions with a degree of certainty. However, with questions three and four, significant gaps in research, literature, and open-source data (especially when focusing on Australia) mean that the answer to these questions is currently "no," with the existence of these gaps speaking to the "why not." Given what information is and is not available within the parameters of this research, we later provide considerable elaboration to answer questions one and two, and some partial explications in appropriately cautionary detail for the others. Therefore, one outcome of this research is a call to action for pertinent stakeholders, technology and social media companies, government, industry, and public sector agencies to prioritise this important area of inquiry by making more widely available relevant information and data. This is discussed more indepth in the final section of the report.

Finally, beyond empirical findings, another aim of this initial study was to make a methodological contribution. As research is in its infancy about costs of OCSEA specifically, we hope that our review and scoping methodology can be of use to other researchers and agencies who wish to replicate or adjust it for their given context/location. This methodology is detailed in the next section.

#### 2. Methodology and sources

This project spanned a total of six months from commencement to report delivery. It began with applying for ethics clearance from the University of Queensland. An ethics exemption was applicable, as there are no human participants, and all of the information and data that was going to be used would be in published formats: all literature and data potentially used was going to either be open-source and available to any member of the public (e.g., via the open Internet), published research, or secondary sources already anonymised and made available to researchers on official repositories. As such, we received an ethics exemption from University of Queensland Research Ethics and Integrity (number 2023/HE002297). We then conducted multiple phases of research, during which there were also two presentations and discussions with ICMEC Australia staff to update them and sense check the methodology. The first step of this research process was a literature review.

#### 2.1. Literature review

To begin addressing the project research questions, we first conducted an extensive review covering both local and international research from academic, government, private sector, and NGO/charity/non-profit literatures. This began by defining a set of search terms (including Boolean operators where relevant) for both the topic at a broad level, as well as the specific crimes and offending behaviours listed earlier. We did searches for more general terms reflecting OCSEA (where any of the words would be picked up by search engines and databases) combined with synonyms for costs, as well as searches for each individual crime type combined with synonyms for costs. In total, there were 16 sets of these search terms (see Appendix A for a full list).

To gather as much as possible, for each search term we only limited what was looked at to the first 400 results *or* to the end of the given set of results, whichever happened first on the platform/database being used. To maintain rigour and consistency, this was done for every search, even when a vast majority of pages did not return applicable results (400 was ample and beyond producing meaningful hits in most cases). Searches were first conducted on Google Scholar. Next, to ensure we covered as much as possible, the same searches were conducted via the following:

- The University of Queensland library database.
- Individual research databases and publishers (e.g., Scopus, Elsevier, Sage, Wiley).
- Databases and libraries of prominent organisations focused on CSA and CSE (e.g., CALiO Library of the USA's National Children's Advocacy Center, Library of the UK's National Society for the Prevention of Cruelty to Children, resources from the International Centre for Missing and Exploited Children, resources from the Australian Centre to Counter Child Exploitation).
- A normal Google search (i.e., the usual search engine distinct from Google Scholar), particularly to find government sources not available on other databases.

All of the above was conducted on the same browser of the same computer so duplicate results could more easily be identified. Throughout this process, an audit trail/log was also continually updated which, for each search term, kept track of the following: 1) how many documents/sources/pages were *found*; 2) of those, how many were deemed relevant enough to *open*; and 3) of those, how many were deemed relevant enough to *save and include*.

We were liberal in our interpretation of "relevant" to not exclude any possibly worthwhile sources. Documents were *opened* for initial review if they had a title or summary that spoke to the topic in any meaningful way. After initial opening of a given document, it was further assessed for applicability by all of the following means in the following order:

- Reading the abstract or executive summary.
- Performing a "find" (Ctrl+F) search function within it for the terms "cost," "econom," "finan," "pric," and "societ." Searching in this way was done to incorporate the roots of words, but not the words in full, which meant that any derivatives were included (e.g., "cost" would find "cost," "costs," "costings," etc.).
- A manual scan of the whole document.

If a document was deemed relevant or applicable at any of these steps (i.e., if it informed the project topic), it was then *saved* for in-depth reading and inclusion in the final review.

At the end of this process, we had **136 total documents** saved for the literature review. In terms of publication ages, 73 (53.7%) were published within the last 10 years, 45 (33.1%) were published between 11 and 20 years ago, and 18 (13.2%) were more than 20 years old. Based on initial reading, these were then split into four categories, but all still included in the full literature review:

- Very relevant (24; 17.6%): sources that provided relevant/useful costings, cost categories, data, tools, or methods; were highly cited; and/or were large economic reports. These were most often about CSA, CSE, and child abuse and neglect, but other topics such as violence against women and children may have also been included if the source was particularly applicable in other ways (e.g., if it had a robust costing methodology).
- Relevant (51; 37.5%): sources that provided some form of relevant/useful information such as a method of costing, some kind of list of cost categories, and/or some breakdown of certain costs.
- Tenuous link (24; 17.6%): sources that could, under certain circumstances, potentially be relevant but were often very broad or general (e.g., those that discussed impacts of "adverse childhood experiences" on wellbeing, but did not break this down into types, so did not provide specific information about CSE, CSA, or OCSEA).
- Likely not relevant (37; 27.2%): sources that focused solely on domestic or intimate partner violence against adults; were outdated; were opinion pieces, untrustworthy, or not rigorous; and/or were earlier publications of newer versions.

#### 2.2. Cost identification and mapping

To complement the literature, drawing on extensive expertise and experience in the field, the project's lead researcher then generated and mapped all potential cost categories, cost components, the people likely to be most affected, and the sectors involved. This was documented in an evolving database, shared with the project Research Assistant for any additions or queries, and was first done without reference to the literature. After this, all documents were read in-depth, the results of which are reported in section 3. An important part of this was reading all the literature to compile separate lists of all available cost categories, cost points, the people likely to be most affected, and the sectors involved, and also to assess applicability to forms of OCSEA. These were again documented in a separate database. After the literature review was finished, the two databases were combined into one, which categorised each cost as either identified by the literature and researchers, the literature only, or the researchers only. The final results of this are again discussed in section 3. This process was done so that no potentially relevant costs and

categories were ignored, regardless of whether or not they appeared in the literature, and so that they were included in searches for applicable publicly available Australian data.

#### 2.3. Searches for publicly available Australian costing data

The next step was to search for available and applicable data that, in combination with data/information from the literature review, could help to explicate and elaborate on the identified costs. Given project scope and remit, this focused solely on Australian data and sources. In looking for this information, we constructed 58 total search terms with Boolean operators that included combinations of the following (see Appendix B for a full list):

- Wording around OCSEA, CSA, and CSE.
- The cost categories and components stemming from both the literature review and our mapping.
- The word "cost" plus eight synonyms ("costs," "spending," "expenditure," "budget," "data," "price," "finance," "expenses").
- The word "Australia."
- Each State and Territory in Australia.
- Other words to specify or not specify particular crimes and forms of CSE/CSA.

For this round of searching, we limited what was looked at to the first 100 results *or* to the end of a given set of results, whichever happened first on the platform/database being used. We used a lower threshold than the first literature review because, in this stage, far fewer applicable results were produced. Like with the first literature review, to maintain rigour and consistency, this was done for every search, even when a vast majority of pages did not return applicable results. Searches were first conducted on the Google search engine. Next, to ensure we covered as much as possible, searches were conducted via the following means and resources:

- The Australian Bureau of Statistics.
- · Medicare.
- Federal, State, and Territory court websites.
- Databases and repositories of research data formally published and shared as secondary sources for re-analysis (e.g., the Australian Data Archive, the Inter-university Consortium for Political and Social Research data archive).
- Legal databases (e.g., Lexis+).
- Relevant professional association websites (e.g., Australian Association of Psychologists).
- Relevant government and government-adjacent websites (e.g., eSafety Commissioner, ThinkUKnow, Australian Taxation Office, Productivity Commission).
- Employment websites and job boards (e.g., Commonwealth and State/Territory job postings, Seek, CareerOne, Indeed, Glassdoor).

All of the above was conducted on the same browser and computer as the first literature review so duplicate results could easily be identified. As with before, an audit trail/log was continually updated which, for each search, kept track of the following: 1) how many documents/sources/pages were *found*; 2) of those, how many were deemed relevant enough to *open*; and 3) of those, how many were deemed relevant enough to *save and include*. Fewer documents, data, and webpages were found than in the first literature review. In total, 40 sources were saved, some of which are used in the penultimate section of the report, and some of which did not eventuate to be usable or pertinent. In section 3, we discuss the results of our cost mapping/identification, including what the categories and components are, and which have accessible Australian data.

#### 2.4. Tentative and incomplete costing scenarios

Finally, as the last methodological aspect of this research, we created hypothetical costing scenarios for different potential OCSEA costs. We did this using information from the literature review and Australian data sources, and by linking back to our finalised database of all costs and categories. There are some important caveats and limitations to these scenarios which, for full transparency, are as follows:

- The scenarios do not cover all costs categories, or individual costs within a category. They are also not exhaustive because, as will be seen in section 3, there is a large amount of missing data/information that could and should inform them.
- We have only been able to create scenarios for which we have data and information, and therefore
  they do not include aspects for which we do not. This means that, within the categories/sectors for
  which we create scenarios, there are still notable gaps and missing elements that would create a more
  complete picture.
- Given the amount of data that is not publicly or academically available, as well as the difficulty in obtaining reliable prevalence data, these scenarios are on a per person/child/case basis and do not attempt to estimate totals.
- As there are essentially infinite permutations in costs related to a given case or child, in the effects of OCSEA, and in individual pathways/trajectories, and because everyone involved in a given case will be different in their situations, needs, and outcomes, we have attempted to make these scenarios in a "formula" style such that aspects of them can be adjusted and changed, therefore scaling down or up. This is also another reason why scenarios are on a per person/child/case basis, and do not attempt to estimate totals.
- The scenarios only focus on the present year. They do not attempt to predict into the future.
- The scenarios are ultimately designed to *demonstrate the potential ways* of estimating certain costs as opposed to definitive estimations of the costs themselves.

Because each scenario is based on unique information and analyses, the data and associated sources are presented in the penultimate section of the report, and not here.

#### 2.5. Limitations

This research has notable limitations. First, because of project timeline and it being a scoping study, we were restricted to publicly available and published information. Therefore, we are not suggested that the missing data discussed in this report does not necessarily exist, but rather, that it is not easily accessible to researchers. Second and related, both timeline and ethics meant that we could not involve other subject matter experts (e.g., to interview or survey) to assess whether we had missed any categories or individual costs. It is feasible that we may not have been exhaustive, or have occasionally miscategorised, which is one reason why ICMEC Australia views this report as a "conversation starter." Third, as is elaborated in the next section, much of the existing research and information on costs comes from outside Australia. Assuming comparability or transferability from other countries without significant thought, moderation, and context is not advisable, as each country (and regions within a country) may be unique. Fourth, this report does not include specific analyses about the emerging phenomenon of Al-generated CSEM (e.g., IWF, 2023, 2024b). Finally, as also will be elaborated next, almost all existing research does not focus on OCSEA. While some transferability and comparability is possible between research on CSE, CSA, and OCSEA, consideration is again needed, as OCSEA presents some unique elements as detailed in section 1. A further discussion of these limitations, ideas for future directions, and the opportunities these limitations present, are outlined in the final report section.

#### 3. Current knowledge and proposed costs of OCSEA

This section discusses the results of our reviews, cost identification and mapping, and what information is available/unavailable in public and academic domains. We begin by detailing a breakdown of key information about the literature review sources, followed by pertinent costings research about OCSEA, CSA, CSE, child abuse, child abuse and neglect, and child maltreatment. We then present our proposed cost categories and components in full. The section ends with an explanation of the available Australian data about these, which sets up section 4 for the presentation of scenarios.

#### 3.1. Breakdown of literature review sources

Our literature review resulted in 136 total documents that were saved and read in-depth. Methodologically, over two-fifths (41.9%) were literature reviews, with the others using surveys, government data (e.g., administrative data), interviews and focus groups, data from NGOs or programs (e.g., evaluations of prevention programs), or multiple methods. The breakdown of methods and data is shown in Figure 1.

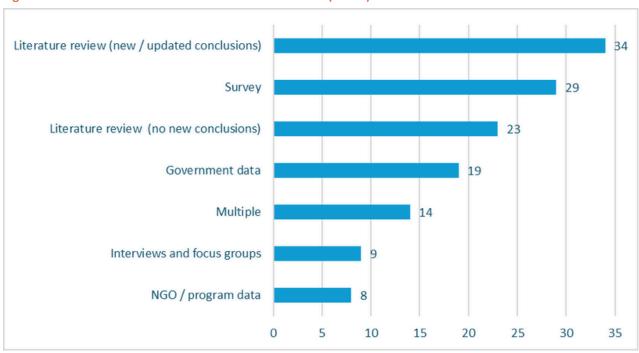


Figure 1: Methods and data sources of reviewed literature (n=136)\*

\*Note: we categorised two different forms of reviews. A "literature review (new/updated conclusions)" was one where new, different, or updated conclusions were drawn by reviewing previous research (e.g., it may have synthesised prior research into a new cost estimation, or may have updated old research to more contemporary figures). A "literature review (no new conclusions)" was one where prior research was summarised without any new, different, or updated conclusions presented.

Regarding the country or geographical area of focus, nearly half were about the USA (48.5%), and if combining this with the two studies that were about the USA and another country together, this represented half of the sources. This was followed by Australia and the UK. Figure 2 shows the country or geographical area of focus of the literature (note that some were about large areas, or combined multiple countries, so we have been as specific as possible in reporting this).

USA 66 Australia 23 UK 11 Global 7 Canada High income countries EU Netherlands Japan New Zealand India UK and USA Low and middle income countries Sweden Germany South Africa 1 Malaysia 1 China EU and North America 1 Not specified 0 5 10 20 25 30 35 40 45 50 15 55 60 65

Figure 2: Country or geographical area of focus of reviewed literature (n=136)

Finally, regarding the foci and topics of the literature, over half (52.9%) were framed broadly/generally in being about child abuse, child abuse and neglect, or child maltreatment. This was followed by CSA, then violence against women and children. Crucially, only two sources were about OCSEA or addressed OCSEA specifically (Giles & Alison, 2021; Giles et al., 2024). Both of these were about the UK, solely concentrated on offending and policing (with one being only about contact offending by CSEM users), had the same lead and second authors, and were published in the same journal. Figure 3 presents the primary topics and foci of the literature.

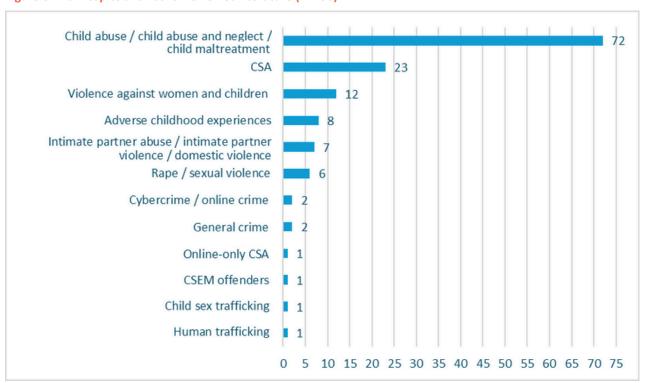


Figure 3: Main topics and foci of reviewed literature (n=136)

What is glaringly missing in the literature are the specific costs distinctive to the digital age and which impact OCSEA uniquely.

#### 3.2. Pertinent costings predictions and previous research

As can be seen above, the literature reviewed for this report was wide-ranging and expansive. Broadly, in the literature, costs and costings were approached in four main ways:

- Attempting to establish prevalence rates for the given topic of interest and then estimating costs based on these rates in combination with other data sources.
- Comparing those who had harmful childhood experiences with those who did not.
- Assessing quality of life, in particular using quality-adjusted life years (QALY), which is "a measure of the state of health of a person or group in which the benefits, in terms of length of life, are adjusted to reflect the quality of life. One quality-adjusted life year is equal to 1 year of life in perfect health" (NICE, 2024a, para. 7).
- Using disability-adjusted life years (DALY), which is "a measure of the impact of a disease or injury in terms of healthy years lost" (NICE, 2024b, para. 30). This concept attempts to quantify the amount of healthy life taken away "either through premature death or living with disability due to illness or injury" and is "often used synonymously with health loss" (AIHW, 2024a, para. 8).

Also when looking to the corpus of literature, we found that for the documents which estimated costs, at least some of these costs were always calculated using previous publications. In the largest and most comprehensive sources, costs were typically estimated by category and drew upon previous research; industry, NGO/charity/non-profit, government, or administrative data (e.g., operating costs of charities or police); and/or population data (e.g., using new or previous surveys). A notable proportion of the literature included medical and health costs (likely because such data is more readily accessible than other types of data). While we report some of the central findings from others below, it is important to note that costs incurred by medical and health systems are unlikely to be easily comparable or transferable between different countries. This is because countries will have different health systems and funding models (e.g., largely public such as the UK, largely private such as the USA, mixed public/private such as Australia), as well as variabilities in pricings, processes, and approvals for procedures, therapies, medications, and staff salaries.

Across the literature, there was also a range of ways costs were conceptualised and presented, as well as a range of specificity. Costs were largely placed into/reported through the following categorisations:

- Annual costs.
- Lifetime costs.
- Direct costs.
- Indirect costs.
- Long-term costs.
- Short-term costs.
- Health costs (physical health and mental health).
- Social service costs.
- Justice costs.

- Employment costs.
- Productivity costs.
- Consumption costs.
- Administrative costs.
- Transfer costs.
- Pain costs.
- Second generation costs.
- Anticipation of CSA.
- Consequences of CSA.
- In response to CSA.

In addition, costs generally fell into/affected one of six groups:

• Victims.

Perpetrators.

- Families and friends.
- Employers.

- Governments.
- Societies or communities.

We now break down the most relevant literature into thematic areas, focusing only on those where costs of OCSEA, CSA, CSE, child abuse, child abuse and neglect, or child maltreatment were estimated. While literature not reported here would likely prove helpful for less exploratory research (e.g., by utilising/adjusting a methodology applied to a different topic for OCSEA), instead for this report, concentrating on the above provides an overview centred on the most relevant areas for the present study. We focus on studies that are about Australia, and for the reasons already discussed, those from countries that are as close to comparable to Australia as possible (i.e., Western democratic nations, high-income economies). Note also that when monetary values are given, they are in Australian dollars unless otherwise specified.

#### 3.2.1. Literature most relevant to OCSEA costs

Only two studies addressed costs or economic burdens of OCSEA specifically. Both were about the UK, concentrated on offending and policing, and had the same lead and second authors. In one article, Giles et al. (2024) used police data to estimate a national prevalence rate for "online-only child sexual abuse," then used UK Home Office data to devise a "lower bound," "middle bound," and "upper bound" set of cost estimates. They broke down costs into four categories (education and prevention programs, offender prevention programs, CSA training, and victim services), and used the following components (Giles et al., 2024, p. 14): surveys, the National Crime Agency, volunteer hours, police training, physical and emotional harm, healthcare, lost output, policing, court, prison, and safeguarding. They then estimated that lifetime costs (in GBP) were £7.4 million for the lower, £59.6 million for the middle, and £1.4 billion for the upper bound.

In a separate study, Giles and Alison (2021) focused on *contact offending by CSEM users*, and conducted a systematic literature review to estimate the "socio-economic burden" of this offending. Utilising the 2013 estimate from the UK's Child Exploitation and Online Protection Command of 50,000 CSEM offenders in the UK, the authors focused on those who are likely dual offenders (committing both contact and online offences) and the costs of their contact crimes. They estimated that dual offenders' contact crimes have created an economic burden (in GBP) of £97 to £445 million in incident costs, rising to between £1.2 and £5.4 billion in lifetime costs, and again rising to between £1.4 and £6.2 billion when including QALY (Giles & Alison, 2021). The authors also attempted to predict costs of future contact offending by CSEM users, which they state may be £16 to £18.6 million in incident costs, rising to between £198 and £227 million in lifetime costs, and again rising to between £226 and £260 million when factoring in QALY.

Beyond these two studies, we were unable to find any others that estimated costs specific to OCSEA. Furthermore, these two studies focused on online sexual solicitation/luring and the contact offending of CSEM users. We were not able to find any studies particular to any of the other OCSEA crimes listed and defined in section 1.1, nor any research from/about Australia regarding any type of OCSEA costs.

We only found two publications about costs that focused on any aspect of OCSEA specifically. Neither were from or about Australia.

#### 3.2.2. Literature with encompassing cost estimates

Much of the literature attempted to provide encompassing cost estimates, most often about child abuse and neglect/child maltreatment broadly, across all abuse types. As will be seen, both analytical foci and estimates varied quite widely, making generalisation and comparison difficult. When reading estimates, it is also important to keep in mind the publication dates, as the monetary amounts are reflective of data from a particular time and have not been adjusted. Below we summarise key research, sorting it first by country, then chronologically for each country.

First looking to Australia, Taylor et al. (2008) used data from 2007, estimating that the annual cost of child abuse was just under \$4 billion, with lifetime costs of \$6 billion. When factoring in burden of disease, these numbers rose by \$6.7 and \$7.7 billion respectively. More recently and examining CSA, emotional abuse, and physical abuse, Kezelman et al. (2015) estimated that by better addressing these issues so that "adult survivors of childhood trauma and abuse experienced the same life outcomes as non-traumatised adults" (p. 10), State, Territory, and Commonwealth governments as a whole could save at minimum \$6.8 billion in lost tax revenue and government spending. Writing at a similar time, in looking at all forms of child maltreatment and analysing healthcare, out-of-home care, special education, criminal justice, child protection, housing, life quality, productivity, and early death, McCarthy et al. (2016) estimated that for 2012-2013, the lifetime financial costs were at minimum \$5.8 billion and best predicted to be \$9.3 billion. For costs related to early death and reductions in life quality, the authors estimated \$17.4 billion, with a minimum of \$5.3 billion (McCarthy et al., 2016).

Most recently in Australia, and focusing on violence against young people (i.e., not specifically CSA or CSE), annual prevalence and incidence rates, and the average duration of abuse, Deloitte (2019) estimated that in 2016-2017 violence against children and youth in New South Wales costed \$11.2 billion. This was broken down into \$8.2 billion paid for by individuals and communities, \$2.3 billion by the State government, and \$600 million by the Federal government (Deloitte, 2019). This report analysed a number of different cost areas including health, education, justice, child protection, housing, productivity, disease, mortality, life quality and span, future criminality and risky behaviour, future relationship problems, and intergenerational traumas (Deloitte, 2019). However, again, this source did not focus specifically on CSA, CSE, or OCSEA.

Regarding New Zealand, Kahui and Snively (2014) estimated that the total cost of child abuse and intimate partner violence (in NZD) was between \$4.1 and \$7 billion in 2014, which they predicted would rise to between \$5 and \$8.6 billion in 2024. However, the difficulty with this study for the present report is that it combines child abuse and intimate partner violence, making these challenging to disentangle.

A large amount of research on cost prediction comes from/is about the USA. An early estimate of the costs of child abuse and neglect comes from Wang and Holton (2007). They broke down costs (in USD) into direct (hospitalisation, mental health care system, child welfare system, policing) of \$33.1 billion, and indirect (special education, juvenile delinquency, mental health and health care, adult criminal justice system, and lost productivity) of \$70.7 billion, totalling \$103.8 billion. However, Corso and Fertig (2010) recalculated and adjusted these estimates citing methodological flaws. Using the same categories and components, they broke down costs (in USD) into direct of \$26.8 billion and indirect of \$38.4 billion, totalling just over \$65 billion (Corso & Fertig, 2010).

One of the most highly cited publications is by Fang et al. (2012). Analysing all new US child maltreatment cases from 2008, they estimated that the average lifetime cost for every non-fatal victim (in USD) was

\$210,012 and every fatal case was \$1,272,900. This incorporated expenses for special education, the justice system, child health, adult health, child protection, and lost productivity. Extrapolating this to total lifetime costs, the researchers suggested that the economic cost to the USA was \$124 billion (Fang et al., 2012). Another often-cited study is Gelles and Perlman (2012), for which they estimated the total cost of child abuse and neglect in the USA. They broke down costs (in USD) again into direct (medical treatment, mental health care, child protection, and policing) of \$33.3 billion and indirect (special education, early intervention, housing, health and mental health care, juvenile delinquency, future adult offending, and lost productivity) of \$46.9 billion, totalling over \$80 billion (Gelles & Perlman, 2012).

Most recently in the USA, Peterson et al. (2018a) published research on the economic burden of child maltreatment using both fatal and non-fatal cases from 2015. Examining health care, criminal justice, child protection, special education, productivity, and QALY, they suggested that if looking only at *substantiated cases* the cost was \$428 billion (USD). If expanding this to *investigated cases*, this rose to \$2 trillion (Peterson et al., 2018a). Published in the same year, Letourneau et al. (2018) examined *the costs of CSA specifically*, looking at health care, child protection, special education, productivity, crime and violence, and suicide in both fatal and non-fatal cases. They conclude that, in total, the lifetime cost of CSA was \$9.3 billion (USD). They also note that, if factoring in QALY, this adds a further \$1.6 billion (Letourneau et al., 2018).

In Canada, and analysing costs of CSA specifically for the 1997-1998 financial year, Hankivsky and Draker (2003) estimated that it was over \$3.6 billion (CAD) when examining the areas of justice, public and social services, health, education/research, employment, mortality, and morbidity. Published in the same year and focusing on 1998, Bowlus et al. (2003) conservatively estimated that child abuse (not only CSA) costed Canadian society considerably more at \$15.7 billion (CAD), which encompassed personal, employment, health, education, social services, and justice components.

Looking to the UK, one of the most highly cited studies comes from Saied-Tessier (2014). Focusing on CSA, and analysing mental health, physical health, criminal justice, social services, and lost productivity, they estimated the annual cost (in GBP) to be £3.2 billion, with a lower bound of £1.6 billion. In a more recent analysis but focusing on child maltreatment broadly and not only CSA, Conti et al. (2021) estimated that the lifetime cost per victim was £89,390, with the highest costs coming from short-term healthcare, social care and child protection, and labour outcomes. In the most recent UK analysis we could find, Radakin et al. (2021) predicted the lifetime costs (both financial and non-financial but monetised) for all children who were victimised by contact CSA in England and Wales in the year finishing 31 March 2019. Analysing CSA prevention, education, training, physical and emotional harm, victim services, healthcare, lost productivity, and the justice system, they estimated the total to be £10.1 billion (GBP). However, this study specifically does not cover OCSEA, stating that "this estimate does not include the costs associated with online and non-contact sexual abuse" (Radakin et al., 2021, p. 3).

Finally, in Europe, using Dutch survey data from 5,618 people and an exposure rate of 7%, Thielen et al. (2016) estimated that for every million people, the yearly costs (in EUR) of CSA were €111 million, and €395 million when there were multiple forms of abuse at once. In Germany, Habetha et al. (2012) focused on "trauma follow-up costs" for victims of child abuse and neglect, estimating that these were (in EUR) between €11.1 and €29.8 billion. The authors note that there is similarity in their results to those found in Australia for the lower bound, and to Canada for the higher bound, but not the USA (Habetha et al., 2012).

As can be seen, there are multiple ways researchers attempt to predict and analyse costs. They most often study child abuse and neglect broadly with fewer focusing specifically on CSA. However, although these studies provide important and thought-provoking information, it is again worth reiterating that none were about OCSEA specifically.

#### 3.2.3. Literature with health cost estimates only

In the Australian Child Maltreatment Study, the researchers found a higher rate of mental illness among abuse victims, with 21.6% of people who did not experience abuse meeting criteria for a mental disorder compared to 48% who did experience abuse (Haslam et al., 2023). They also note that "Australians who experienced maltreatment in childhood are more likely to smoke, binge drink, have obesity, to have engaged in self-harm in the prior 12 months, and to have attempted suicide in the prior 12 months" (Haslam et al., 2023, p. 4). Also in Australia, using data from the National Survey of Mental Health and Wellbeing, Reeve and van Gool (2013, p. 300) echoed such results a decade earlier, noting that "adults with a history of childhood abuse suffer from significantly more health conditions" and "incur higher annual health care costs." This suggests that one of the major areas of cost will be healthcare, both mental and physical, reinforced by the fact that health costs are consistently included in overall estimates summarised in the previous section.

Beyond the studies discussed already, two others attempted to predict health costs in isolation. In Australia, Gnanamanickam et al. (2023) examined linked administrative hospital data from 2003 to 2017 about all people born in South Australia between 1986 and 2017, along with child protection data. Focusing on child abuse and neglect, they found that people who had contact with child protection had higher average yearly hospital costs than those who did not: \$338 more from birth to age 12 and \$2,242 more at 25 to 31, which the authors totalled as \$124 million in excess costs to South Australian public hospitals. The researchers also modelled what this data may look like if going up to age 65 for the cohort, suggesting that additional costs to South Australian hospitals could be \$415 million by that time (Gnanamanickam et al., 2023).

Lastly, in the USA, Bonomi et al. (2008) found that, for women in their survey sample who had experienced childhood sexual and physical abuse, total yearly healthcare costs were 16% higher for those with a sexual abuse history and 36% higher for those with a history of both. However, again, none of these studies were about OCSEA specifically.

## 3.2.4. Literature with justice system and child protection estimates only

In a final area of isolated enquiry, three sources focused on either the justice system or child protection. AIFS (2018) developed a resource sheet about the costs of child abuse and neglect in Australia. This presents expenditure data for the amount spent on child protection, out-of-home care, and family support services over seven years for each State and Territory. For 2016-2017 (the most recent year provided), AIFS (2018) states that \$5.2 billion was spent nationally in these areas. Ainsworth (2020) similarly notes that in 2017-2018, \$5.8 billion was spent on child protective services in Australia. However, the difficulty with this article is that the figure covers all child protective services expenses, and does not break down costs by crime/abuse type.

Finally, one study focused solely on the costs of incarceration *for CSA crimes*. Letourneau et al. (2023) used government data and public information to estimate costs for US state prisons, federal prisons, and preventative detention/civil commitment facilities. They estimated the total cost (in USD), which they note is paid by the taxpayer, to be nearly \$5.4 billion. Putting this in perspective, they state that this only covers incarceration and not other costs such as investigation, prosecution, or post-release supervision, and that "This is an enormous amount of money, larger than the gross domestic products of 43 countries" (Letourneau et al., 2023, p. 68).

#### 3.3. Cost categories, components, and sectors

Beyond providing *cost predictions*, the research literature was much more useful for *substantiating*, *cross-referencing*, and documenting all the potential cost categories and components for OCSEA (i.e., answering project research questions one and two). From the literature, we documented where these were either stated directly as a cost, or where research corroborated it as reasonable to argue that it would be (e.g., studies demonstrating increased substance abuse or health care usage among CSA victims which, while not necessarily saying these were "costs," could reasonably be expected to incur a cost in some way to someone or some system). As discussed in section 2.2, our research process was such that the breadth of costs stemmed from both academic literature and the work of the project researchers. In total, 73 different kinds of costs were identified, with the breakdown of from where detailed in Figure 4.

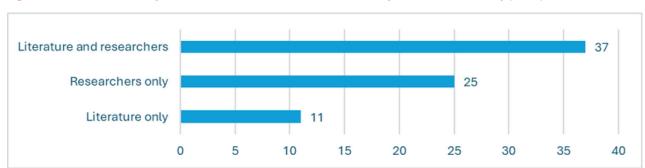


Figure 4: Costs identified by literature and researchers, literature only, or researchers only (n=73)

## 73 different kinds of costs were identified that are likely related to OCSEA.

Specific to the costs found in literature, given source limitations and gaps, identified costs rarely came from research directly addressing *OCSEA*; however, they did come from sources that more broadly addressed CSA, CSE, child maltreatment, and harmful experiences in childhood. As discussed in section 1.1, because it is no longer advisable or realistic to think about CSA/CSE as only "offline" or "online," these costs are clearly still relevant to OCSEA. When we list costs below, we do not go into a pedantic level of granularity about each micro-expenditure involved; rather, we identify meaningful costs that will, of course, incorporate other elements. For example, we list "population-level prevention programs and resources (victimisation)" along with the staffing, equipment, resources, infrastructure, and expertise/education/training required. But we do not go into a level of granularity beyond this, as that could be boundless (e.g., listing aspects like costs of paper and ink, electricity and gas to run an office, overtime for staff). As another example, we list "counselling or therapy (victim, victim's family, offender's family)," but do not then include every possible type of mental health difficulty, illness, or disorder, nor every type of therapeutic approach, as these will be unique and diverse to each person.

We now group costs by the most appropriate theme. For the first four sets (sections 3.3.1 to 3.3.4), the 60 costs are applicable to both OCSEA and CSA/CSE without an online element. For the final two (sections 3.3.5 and 3.3.6), the 13 costs would only exist for OCSEA and not offline-only CSA/CSE.

We also code each cost to indicate if it was identified in the literature only (blue square), by the researchers only (red circle), or by both the researchers and in the literature (green triangle). Instead of being listed by colour or in alphabetical order, costs are listed within a given thematic area such that related costs are grouped together.

- = Literature only.
- = Researchers only.
- = Both researchers and in literature.

For the thematic areas where any costs came from literature, we provide in a footnote an exhaustive list of sources. We have done this for thematic areas, instead of each individual cost, as doing the latter would create an inordinate amount of repetition and many large footnotes, thus distracting the reader for little advantage. By presenting and grouping costs in the way we have, we believe that it is more beneficial for the goals of the present report compared to other common ways (e.g., indirect vs direct): we provide a way of looking at costs to particularly help the Australian professional response community in identifying where they are more or less likely to be involved/utilised.<sup>4</sup>

60 of the 73 costs are applicable to *both* OCSEA and CSA/CSE without an online component, while 13 costs apply *only* to OCSEA.

#### 3.3.1. Justice, child protection, and allied professionals

This grouping of costs are ones likely to involve the justice system, the child protection system, and/or allied professionals (e.g., NGOs/charities/non-profits that provide related services). The processes and experiences that underpin these costs could feasibly impact victims, families, offenders, offenders' families, professionals, communities, and broader society. The most likely sectors involved will be law enforcement, child protection, courts, prosecutors, defence attorneys, judges, expert witnesses, corrections, psychologists/psychiatrists, counsellors/therapists, NGOs/charities/non-profits, and State, Territory, and Federal governments. We suggest the most likely people or entities to pay for these costs are governments, taxpayers, an NGO/charity/non-profit (or whoever funds them), or individuals/families themselves. We identified 22 of these costs as follows: <sup>5</sup>

- Investigation. ▲
- Intelligence.
- Legal prosecution. ▲
- Legal defence. ▲
- Court preparation programs (specifically for victims and families).
- Trial or trials (e.g., if there are multiple, if there are appeals).
- Victim's time (during legal proceedings).
- Jury and witness time (during legal proceedings; distinct from other trial costs as not all trials will have juries, and will have variable numbers of witnesses).
- Compensation for victims of crime.
- Victim re-victimisation through the judicial process (e.g., during trial).
- Prison and incarceration.

- Probation and community sentences.
- Sexual offender registration and monitoring.
- Offender treatment (in prison or in the community).
- Child protection services.
- Out-of-home care, emergency housing, or foster care
- Victim advocates/ombudspeople.
- NGO/charity/non-profit services. ▲
- Potential for reoffending (some or all the above over again).
- Staffing for all the above.
- Equipment, resources, and infrastructure for all the above.
- Expertise, education, and training for all the above.

We identified 22 different costs related to the administration of justice, child protection, and allied professionals.

<sup>4.</sup> A summary list of all costs is also available in Appendix C.

<sup>5.</sup> The following literature informed this set of costs: Access Economics, 2004b; AIFS, 2018; Ainsworth, 2020; Block et al., 2013; Bowlus et al., 2003; Busch-Armendariz et al., 2016; Cohen et al., 2010; Conrad, 2006; Corso & Fertig, 2010; Deloitte, 2019; Dixon, 2005; Fang et al., 2012; Fisher et al., 2017; Fromm, 2001; Gelles & Perlman, 2012; Gilbert et al., 2009; Giles et al., 2024; Habetha et al., 2012; Hankivsky & Draker, 2003; Harris & Pratt, 2023; Kahui & Snively, 2014; Kezelman et al., 2015; Letourneau et al., 2018; McCarthy et al., 2016; Miller et al., 1996, 2007; Peterson et al., 2018a; Radakin et al., 2021; Saied-Tessier, 2014; Taylor et al., 2008; Wang & Holton, 2007; WeProtect Global Alliance, 2019; World Health Organization, 2020.

## 3.3.2. Immediate to short-term health and wellbeing of victims and families

The next set of costs revolve around the immediate to short-term health and wellbeing of victims and families after abuse is disclosed or discovered. These most often relate to victims and victims' families, but some can also apply to offenders and offenders' families in particular. The processes and experiences that underpin these costs could feasibly impact victims, families, offenders, offenders' families, communities, and broader society. The most likely sectors involved will be medical practitioners, psychologists/psychiatrists, counsellors/therapists, child protection, NGOs/charities/non-profits, housing, education, and State, Territory, and Federal governments. We suggest the most likely people or entities to pay for these costs are governments, taxpayers, or individuals/families themselves. We identified six of these costs as follows: 7

- Medical examinations, procedures, and expenses (victim). ▲
- Counselling or therapy (victim, victim's family, offender's family). ▲
- Immediate educational impacts (victim, offender's family; e.g., missing school). ▲
- Immediate employment impacts (victim, victim's family, offender, offender's family; e.g., losing a job or missing work). ▲
- Change of residence (victim, offender, victim's family, offender's family).
- Potential reoffending (some or all the above over again).

We identified six different costs related to immediate health and wellbeing of victims and families. These are distinct from those related to medium- to long-term health and wellbeing and associated losses.

### 3.3.3. Medium- to long-term health and wellbeing and associated losses

The next set of costs centre around the more medium- to long-term health and wellbeing of victims, the impacts OCSEA may have, as well as the associated monetary losses that may result (e.g., tax revenue). We are not suggesting that all of these are guaranteed, but rather, that there is potential for them in a given case. It is also plausible that, given the potential for victims to feel intensified and ongoing trauma due to the permanency of online material (as discussed in the Introduction), some of the below costs could be exacerbated for OCSEA compared to offline-only CSA/CSE depending on the individual. The processes and experiences that underpin these costs could feasibly impact victims, families, offenders, offenders' families, professionals, communities, and broader society; however, most are focused on victims. The most likely sectors involved in these areas will be medical practitioners, psychologists/psychiatrists, counsellors/therapists, NGOs/charities/non-profits, housing, education, and State, Territory, and Federal governments. We suggest the most likely people or entities to pay for these

<sup>6.</sup> We have not included staffing, equipment, resources, infrastructure, expertise, education, or training for these costs because they are already covered by the previous set of costs. We do not want to artificially inflate the number of costs by including these in every thematic grouping. Instead, we only include these when such elements are distinctly unique or different for the given cost grouping (e.g., that which are needed for technology companies, vs for legal or health sectors, vs for prevention and research).

costs are governments, taxpayers, an NGO/charity/non-profit (or whoever funds them), employers, or individuals/families themselves. We identified 16 of these costs as follows: <sup>8</sup>

- Future mental health problems (victim).
- Future physical health problems (victim).
- Future addiction/substance abuse (victim).
- Future housing stress or homelessness (victim).
- Future relationship impairment (victim).
- Future criminality (victim).
- Special education (victim).
- Cost of living increases (e.g., single parenthood if offender is removed long-term, costs of divorce).
- Potential intergenerational abuse (victim).
- Potential future re-victimisation (victim).
- Damage to non-offending parent's family and friend relationships.

- Lost economic productivity and employment (e.g., victim being unable to work, offender being unable to work, parent being unable to work, knock-on consequences of impacted schooling/education).
- Needing to engage social services (e.g., welfare or other government benefits for victim or family).
- Early mortality (victim). ▲
- Tax revenue losses for government. ▲
- Potential for reoffending (some or all the above over again).

## We identified 16 different costs related to medium- to long-term health and wellbeing and associated losses.

#### 3.3.4. Prevention, education, and research

Other costs centre on prevention (of both offending and victimisation), education, and research. The processes and experiences that underpin these costs would depend on the specific details of each, but could most feasibly directly impact professionals, communities, and broader society, with potential tangible knock-on effects for victims, families, offenders, and offenders' families. The most likely sectors involved are NGOs/charities/non-profits, education, academia, private industry, the media, and State, Territory, and Federal governments. We suggest the most likely people or entities to pay for these costs are governments, taxpayers, an NGO/charity/non-profit (or whoever funds them), media companies, and public or private funders. We identified 16 of these costs as follows:

- Population-level prevention programs and resources (victimisation).
- Population-level education programs and resources (victimisation).
- School-based prevention and education programs and resources (victimisation).
- Population-level prevention programs and resources (offending).
- Population-level education programs and resources (offending).
- Community hotlines.
- Training programs and resources for professionals outside the OCSEA/CSE/CSA field (victimisation and offending).
- Media reporting.
- Academic research.

8. The following literature informed this and the previous set of costs: Access Economics, 2004a, 2004b; AIFS, 2018; Ainsworth, 2020; Bellis et al., 2019; Bonomi et al., 2008; Bowlus et al., 2003; Brown et al., 2011; Busch-Armendariz et al., 2016; Caneira & Myrick, 2015; Chartier et al., 2007; Chen et al., 2010; Cohen & Miller, 1998; Cohen et al., 2010; Coles et al., 2015; Conrad, 2006; Conti et al., 2021; Corso & Fertig, 2010; Corso & Lutzker, 2006; Currie & Widom, 2010; Deloitte, 2019; Devaney, 2008; Dixon, 2005; Fang et al., 2012, 2015; Fisher et al., 2017; Fromm, 2001; Gelles & Perlman, 2012; Gilbert et al., 2009; Giles & Alison, 2021; Gnanamanickam et al., 2023; Gospodarevskaya, 2013; Habetha et al., 2012; Hameed, 2018; Hankivsky & Draker, 2003; Harris & Pratt, 2023; Henkhaus, 2022; Hillis et al., 2017; Hughes et al., 2020, 2021; Hulme, 2000; Irazuzta et al., 1997; Julich et al., 2013; Kahui & Snively, 2014; Kezelman et al., 2015; Kothapalli et al., 2023; Letourneau et al., 2018; Lown et al., 2011; Loxton et al., 2019; Massat & Lundy, 1998; McCarthy et al., 2016; McCrone et al., 2005; Miller et al., 2007; Mo et al., 2020; Noor et al., 2003; Pereznieto et al., 2014; Petersen et al., 2017, 2018a; Radakin et al., 2021; Reeve & van Gool, 2013; Rovi et al., 2004; Saied-Tessier, 2014; Segal, 2015; Segal & Dalziel, 2011; Tang et al., 2006; Taylor et al., 2008; Walker et al., 1999; Wang & Holton, 2007; WeProtect Global Alliance, 2019; Westman, 2019; World Health Organization, 2020; Zielinski, 2009.

<sup>9.</sup> The following literature informed this set of costs: Access Economics, 2004a; AIFS, 2018; Ainsworth, 2020; Foster et al., 2008; Gelles & Perlman, 2012; Giles et al., 2024; Hankivsky & Draker, 2003; Kahui & Snively, 2014; Lane et al., 2021; Miller et al., 2007; Peterson et al., 2018b; Radakin et al., 2021; Westman, 2019.

- Private sector research.
- NGO/charity/non-profit research.
- Government research.
- Development of specific laws/policies to prevent/combat OCSEA.
- Staffing for all the above.
- Equipment, resources, and infrastructure for all the above.
- Expertise, education, and training for all the above.  $\blacktriangle$

## We identified 16 different costs related to prevention, education, and research.

## 3.3.5. Technical, legal, business, regulatory, and enforcement costs unique to OCSEA

All the costs thus far are applicable to OCSEA, but could also be present in CSA/CSE cases without an online element. Speaking to this, the final set of costs is about newer and distinctive considerations that would only exist for OCSEA, and not CSA/CSE without an online component. The processes and experiences that underpin these costs would most feasibly directly impact professionals, with potential knock-on effects for victims, families, offenders, offenders' families, communities, and broader society. The most likely sectors involved are "big tech" technology companies (e.g., Apple, Microsoft, Google), social media platforms and companies (e.g., Meta, Twitter/X, TikTok, Snapchat), website hosting services (e.g., Amazon Web Services, GoDaddy), Internet service providers (ISPs; e.g., Telstra, Optus), banks and the finance industry (e.g., Westpac, Commonwealth Bank, National Australia Bank, ANZ Bank), and State, Territory, and Federal governments. We suggest the most likely people or entities to pay for these costs are companies/businesses, customers of these companies/businesses (indirectly through using their services, not directly), governments, and taxpayers. We determined 12 of these costs, *all of which were identified by the researchers and none in the literature*, which are as follows:

- Detection/disruption of offending by technology companies.
- Detection/disruption of offending by social media companies.
- Detection/disruption of offending by ISPs.
- Detection/disruption of offending by financial institutions. •
- Takedown of illegal material by technology, social media, and ISP companies.
- Content moderation by technology, social media, and ISP companies.
- Technology, social media, ISP, and financial companies complying with subpoenas and directives (e.g., from eSafety Commissioner or police).
- Regulatory costs or penalties when subpoenas and directives are not followed (i.e., saved money otherwise).
- Dedicated public sector departments for OCSEA and related online harms (e.g., eSafety Commissioner, Australian Centre to Counter Child Exploitation, Queensland Police Service Task Force Argos).
- Staffing for all the above.
- Equipment, resources, and infrastructure for all the above.
- Expertise, education, and training for all the above.

We identified 12 different costs that are unique to OCSEA and are in technical, legal, business, regulatory, and/or enforcement domains. All of these were determined by the researchers alone with none found in the literature.

#### 3.3.6. Payment of blackmail or ransom

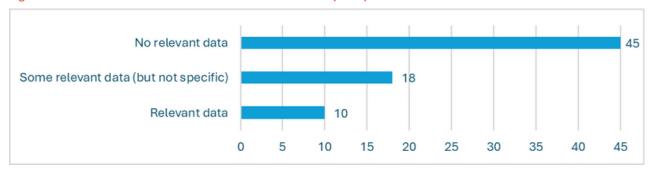
The final singular cost did not fit into any of the other categories and so is listed here on its own. This was identified by the researchers and not in the literature. The processes and experiences that underpin this cost will impact victims and families, who are also the ones who pay. There are no sectors involved. The cost we identified, which is specific to sextortion, is:

• The payment of blackmail or ransom (e.g., financial sextortion).

#### 3.4. Australian open-source costing information and data

With the research literature summarised and all costs identified, we now briefly turn to the available open-source costing information and data beyond the scholarly literature (methodological process described in section 2.3). Like with the literature review, in searching for Australian publicly available data to help inform the identified costs, we found major gaps. Of the 73 costs, we were only able to find relevant (but not necessarily complete) data for 10 of them (13.7%). The rest either had no relevant public data, or some data but which was not specific enough to be particularly meaningful or informative. Figure 5 shows the number of costs that had no relevant public Australian data, some potentially relevant but unspecific Australian data (e.g., not specific to CSA/CSE), and relevant Australian data.

Figure 5: Data relevance breakdown with number of costs (n=73)



The 10 costs for which we were able to find publicly available open-source data included the following, all of which were related to justice, child protection, and allied professionals (section 3.3.1), and were not necessarily about OCSEA but rather were more general:

- · Investigation.
- Intelligence.
- · Legal prosecution.
- · Legal defence.
- · Trial or trials.
- · Prison and incarceration.
- · Probation and community sentences.
- · Child protection services.
- Out-of-home care, emergency housing, or foster care.
- Potential for reoffending (some or all the above over again).

The remaining open-source data that was somewhat applicable related most to costs of mental and physical health treatment/care.<sup>11</sup> In terms of what is missing, we note the following important points:

- There was no data or information, either in the public domain or the research literature, about any of the technical, legal, business, regulatory, and enforcement costs unique to OCSEA from sections 3.3.5 and 3.3.6. This information is missing, yet is arguably the most applicable for helping to differentiate costs of OCSEA from other forms of CSA and CSE.
- There is also a dearth of information about costs related to research, prevention, training, education, and media reporting found in section 3.3.4. While some academic literature exists on some of these topics, particularly prevention programs, it is sometimes difficult to apply this to the Australian context.
- Costs that are more abstract from sections 3.3.1 and 3.3.3 (e.g., future relationship impairment, damage to non-offending parent's family and friend relationships, potential future re-victimisation, potential intergenerational abuse, victim re-victimisation through the judicial process, people's time) are also difficult to get information/data about.

## What is glaringly missing is data and information about the specific costs distinctive to the digital age and which impact OCSEA uniquely.

Having discussed the research literature, the open-source data, and the cost categories, components, and relevant sectors, we now turn to providing some limited and tentative Australian costing scenarios using available information.<sup>12</sup>

<sup>11.</sup> Pertinent sources of information for this aspect of the research included the following, which we are also sharing here so other researchers have a consolidated set of references to such information: AAPI, 2024; ACIC, 2022; AIHW, 2024b; Australian Government Department of Health and Aged Care, 2024; Criminal Defence Lawyers Australia, 2024; Criminal Justice Commission, 1997; Kruk, 2021; Legal Aid Queensland, 2023; Legal Services Commission South Australia, 2024; Martin Jenkins, 2020; Morgan, 2018; Moynihan, 2008; Office of the Guardian for Children and Young People, 2020, 2023; Parliament of Australia, 2013; Productivity Commission, 2024a, 2024b; Queensland Courts, 2024a, 2024b, 2024c; Queensland Sentencing Advisory Council, 2017, 2022; Schlicht, 2023, 2024; State of Queensland, 2023; Wan & Weatherburn, 2017.

<sup>12.</sup> One-page summaries of the research tailored for government and the banking, financial, and corporate sectors are also available in Appendices D and E respectively.

## 4. Hypothetical Australian costing scenarios using available data and information

In this penultimate section, we use information *about Australia* from the research literature review and available *Australian* public open-source data to present some costing scenarios. To create each one, we include particular assumptions/conditions, which are based on authoritative information where available, likely/realistic potentials, or to demonstrate different possibilities. We also include footnotes indicating from where data, costing amounts, and information was obtained for each scenario. As stated in section 2.4, there are important caveats and limitations to these scenarios, and **they should not be taken as definitive:** 

- The scenarios do not cover all costs categories, or individual costs within a category. They are also not exhaustive because, as has been explained, there is a large amount of missing data/information that could and should inform them.
- We have only been able to create scenarios for which we have data and information, and therefore
  they do not include aspects for which we do not. This means that, within the categories/sectors for
  which we create scenarios, there are still notable gaps and missing elements that would create a more
  complete picture.
- Given the amount of data that is not publicly or academically available, as well as the difficulty in obtaining reliable prevalence data, these scenarios are on a per person/child/case basis and do not attempt to estimate totals.
- As there are essentially infinite permutations in costs related to a given case or child, in the effects of OCSEA, and in individual pathways/trajectories, and because everyone involved in a given case will be different in their situations, needs, and outcomes, we have attempted to make these scenarios in a "formula" style such that aspects of them can be adjusted and changed, therefore scaling down or up. This is also another reason why scenarios are on a per person/child/case basis, and do not attempt to estimate totals.
- The scenarios only focus on the present year. They do not attempt to predict into the future.
- The scenarios are ultimately designed to *demonstrate the potential ways* of estimating certain costs as opposed to definitive estimations of the costs themselves.

If original monetary amounts from cited sources come from 2023 or 2024 then they have not been adjusted. If earlier, we have used the Reserve Bank of Australia's Inflation Calculator (RBA, 2024) to estimate and adjust for differences to the most recent year possible.

#### 4.1. Mental health care

A common need for victims of OCSEA is ongoing mental health care. We have designed a related baseline hypothetical scenario with the following assumptions/conditions:<sup>13</sup>

- An individual will have an initial one-hour assessment consultation with a psychologist.
- They will then have one-hour follow-up appointments.
- The above together will total 12 appointments over one year (i.e., one per month).
- Prices are based on 2024 professional recommendations/guidelines.

Initial assessment (\$300) + subsequent 11 appointments (\$3,300; \$300 each) = \$3,600.

This formula is easily adjusted to reflect any permutations (but still in current dollars), including changes to the number of sessions within the year, as well as the introduction of family therapy instead of individual sessions. For example, for an individual who needs an initial assessment, then appointments twice per month (all one hour):

Initial assessment (\$300) + subsequent 24 appointments (\$7,200; \$300 each) = \$7,500.

For an individual who needs an initial assessment, then appointments four times per month (all one hour):

Initial assessment (\$300) + subsequent 48 appointments (\$14,400; \$300 each) = \$14,700.

For an individual who needs an initial assessment, then six months of subsequent individual appointments once per month, followed by six months of family therapy once per month (all one hour):

Initial assessment (\$300) + subsequent 6 individual appointments (\$1,800; \$300 each) + subsequent 6 family appointments (\$2,160; \$360 each) = \$4,260.

#### 4.2. Lasting medical costs

As noted in the literature, it is common for victims of OCSEA to experience lasting health impacts. We have designed this scenario with the following assumptions/ conditions: 14

- As a result of their OCSEA, an individual may experience alcohol abuse, an eating disorder, serious depression, or attempted suicide.
- The original monetary estimates come from 2015 and have been adjusted.

Alcohol abuse: estimated in 2015 to cost \$4,984 per year, adjusted to \$6,222.19.

Eating disorder: estimated in 2015 to cost \$6,042 per year, adjusted to \$7,543.03.

Depression: estimated in 2015 to cost \$7,687 per year, adjusted to \$9,596.70.

Attempted suicide: estimated in 2015 to cost \$5,281 per year, adjusted to \$6,592.97.

<sup>13.</sup> The information for these scenarios comes from AAPI (2024).

A different way to analyse these costs could use current Medicare rates.<sup>15</sup> For example, if utilising the July 2024 Medicare fee information for an eating disorder, it states that an individual treatment in a consulting room for over 50 minutes has a fee of \$166.85 per appointment. Using this figure, and the possibilities of one, two, or four appointments per month over one year, treatment for an eating disorder costed to the individual could be as follows in current dollars:

12 appointments (\$166.85 x 12) = \$2,002.20.

24 appointments (\$166.85 x 24) = \$4,004.40.

48 appointments ( $$166.85 \times 48$ ) = \$8,008.80.

#### 4.3. Criminal justice and child protection

As noted in the literature, costs involved in both the administration of justice and child protection are substantial. We provide hypothetical scenarios for court, prison, and out-of-home care. In the first focusing on a court case, we include trial costs with the following assumptions and limitations, for one case only, involving one victim and one accused: 16

- We assume a private criminal defence lawyer; one psychological assessment and report for the child; one social and family assessment with a report; one hour of an expert witness psychologist attending court; payment of 12 jurors; and prosecution and administration levy fees to the accused.
- This scenario is limited by the information that we do not have. For example, there is nothing about
  prosecutor or judge salaries. We also do not include granular information that would be very different
  for each trial, for example the price for inspecting a document or exhibit, certifying a document,
  preparing an appeal record, filing an application, meal allowances, accommodation allowances, or lost
  earnings.
- We have used the average length of a trial stated from literature at 8.2 days. This is not specific to OCSEA but rather a general figure. The jury payment is for nine days as partial days are paid in full.
- The sources of information largely come from Queensland and South Australia.
- We have used lower bounds where ranges are given (e.g., criminal defence lawyer fees).
- All figures are 2023 or 2024 dollars and have not been adjusted.

Criminal defence lawyer (8.2 days x \$4,400 per day) = \$36,080.

Psychologist assessment and report: \$775.

Social and family assessment and report: \$2,417.

Psychologist attendance in court for one hour: \$128.

Payment of 12 jurors (\$143.40 per person per day x 9 days) = \$15,487.20.

Prosecution and administration fees and levy: \$555.

Total: \$55,442.20.<sup>17</sup>

<sup>15.</sup> The information for these scenarios comes from Australian Government Department of Health and Aged Care (2024).

<sup>16.</sup> The information for this scenario comes from Criminal Defence Lawyers Australia (2024), Legal Aid Queensland (2023), Legal Services Commission South Australia (2024), Queensland Courts (2024a), and Wan and Weatherburn (2017).

In terms of incarceration, there are two scenarios that can be made, which change depending on the source. The following are the assumptions and conditions we are using in these hypothetical scenarios: 18

- The individual is a CSEM offender with no other convictions.
- The length of incarceration is 11.8 months (358.92 days), which is the reported average for these offences in Queensland as stated by the Queensland Sentencing Advisory Council in their most recent factsheet on the topic.
- The original monetary estimates come from 2012 and 2015, and have been adjusted.

Per day cost per person in prison: estimated with 2012 data as \$305, adjusted to \$405.84.

Scenario 1: incarceration for 358.92 days x \$405.84 per day = \$145,664.09.

Per day cost per person in prison: estimated with 2015 data as \$391.18, adjusted to \$488.36.

Scenario 2: incarceration for 358.92 days x \$488.36 per day = \$175,282.17.

Finally, for a child's out-of-home care, there are two scenarios that can be made which again change depending on the source. The following are the assumptions and conditions we are using in these scenarios:<sup>19</sup>

- The individual is placed in out-of-home care for a full year continuously.
- The original monetary estimates come from 2013 and 2022, and have been adjusted.
- The 2022 figures come from South Australia and are reported in a nightly rate, whereas the 2013 figures come from the Parliament of Australia and are reported as yearly.

Per year cost per child in care: estimated in 2013 as \$104,443, adjusted to \$135,649.76.

Scenario 1: in care for 1 year x \$135,649.76 per year = \$135,649.76.

Per night cost per child in care: estimated in 2022 as \$329.49, adjusted to \$347.93.

Scenario 2: in care for 365 nights x \$347.93 per night = \$126,994.45.

While the above are incomplete and non-exhaustive, we hope that in presenting all these scenarios, they will help other researchers, professionals, and stakeholders consider how as a broad community we can come to eventually comprehend the costs of OCSEA. With that in mind, we now move to the final section of the report, which outlines ideas for future research and collaboration.

<sup>18.</sup> The information for these scenarios comes from Morgan (2018), Parliament of Australia (2013), and Queensland Sentencing Advisory Council (2017), and where relevant has been adjusted using RBA (2024).

<sup>19.</sup> The information for these scenarios comes Office of the Guardian for Children and Young People (2023) and Parliament of Australia (2013), and where relevant has been adjusted using RBA (2024).

#### 5. Conclusion and future directions

From our research review into the costs of OCSEA in Australia, it is clear that there is some good foundational knowledge to build upon, but also that there are significant gaps. Prevention of OCSEA, or any crime, is always better than reaction; however, for effective prevention, we must have a solid foundational knowledge base. Part of this is increasing the limited understanding of the costs of OCSEA to complement the more well-developed corpus of research on OCSEA victimisation and offending. Focusing on the gaps uncovered in this review, we suggest multiple potential ways forward.

First, each individual OCSEA crime can (and arguably should) be studied, not only broad categories of CSA, CSE, child abuse, or child maltreatment. At present, there is mostly an international literature base on these broad topics, including some cost estimates; but there is almost nothing specifically about CSEM, livestreaming, capping, online sexual solicitation/luring and grooming, sextortion, and child sexual abuse tourism. While it is of course no longer possible to separate the online from the offline, including in CSA/CSE (Rimer, 2024), it is nevertheless still true that these crimes do have unique elements compared to CSA/CSE without an online component. So that we have more costing information about OCSEA, these crimes could be studied in consultation with our identified unique OCSEA cost categories and types (as well as building/updating our initial list). Eventually, a goal could be to try and assess what is similar and different about all these crimes in terms of costs, where they overlap, and where they are distinct.

Second, we were unable to find enough open-source publicly available data and information to aid in robust estimation analyses, particularly for the costs unique to OCSEA, for which we could not find anything. While such information very well may exist, we could not find it in the public domain. This points to an urgent and widespread need for better information sharing in an open, transparent, and generous way. This is particularly the case for those most involved in the distinctive aspects of OCSEA detection, disruption, and response such as technology companies, social media companies, ISPs, and financial institutions, as well as government departments and NGOs/charities/non-profits that primarily work in areas most connected to OCSEA. We suggest that there needs to be more and better ways for key industries and stakeholders to share what may traditionally be internal data with researchers, and for researchers and industries/stakeholders to partner. For example, this could be administrative data, corporate data, expenditure information, staffing statistics, and other such information relevant to OCSEA. This would, of course, be done with the appropriate vetting, training, and legal agreements, as well as robust ethics procedures. There is precedent for this in Criminology and Social Science, including in Australia, where researchers are given access to restricted systems, data, and resources to study, evaluate, and/or examine. For example, there is ample collaboration between researchers and policing agencies in Australia, where access to sensitive data is provided under appropriate agreements (e.g., in the OCSEA area, see Mount et al., 2021). There is little reason to think that such working relationships, which have proven successful, would not also be fruitful with other industries/sectors and when applied to cost research.

Third, there is a need to build upon this initial review by doing long-term analysis of empirical, primary, first-hand, and ideally longitudinal data. Part of this could be analysing data described in the previous paragraph. However, this could also include other methods to establish even more about costs of OCSEA. For example, research could be done with experts from across the various sectors representing the cost categories to determine their perspectives. This could be through focus groups, interviews, or a Delphi study (a method that tries to measure/identify consensus). Or, another method could include in-depth analyses into the costs and benefits of approaches to OCSEA taken by various countries (e.g., a more preventative outlook to offending in some European countries vs more punitive approaches elsewhere).

Such an analysis could potentially point to better ways for not only saving money, but also to preventing victimisation and/or creating better outcomes for victims, families, offenders, and communities while doing so. Crucially, no matter what happens next, it would ideally involve multidisciplinary teams with members from relevant disciplines and sectors including, among others, Criminology and Social Science, Economics, Social Policy, Social Work, Law, Education, Psychology, Medicine, Public Health, Cyber Security, Data Science, and Computer Science. If OCSEA is a whole-of-society problem, then we need a whole-of-research response. This would also ideally involve partnerships with key industries and sectors involved in OCSEA. Such a research agenda provides a rare chance for often disparate groups to come together, share information, and try to better protect children.

In coming to a better understanding of OCSEA costs, this would not only potentially provide opportunity to save money, but more importantly, create opportunity to help people and better prevent and respond to OCSEA. It is clear that what is missing in both the research literature and publicly available data is robust information about the specific costs *distinctive to the digital age and which impact OCSEA uniquely.* As a broad community of professionals, stakeholders, and researchers, we should all strive to get better at leaving siloes, working together, and sharing information. Broadening knowledge of OCSEA costs provides a pivotal opportunity to do so.

What is missing in both the literature and publicly available data is robust information about the specific costs *distinctive to the digital age and which impact OCSEA uniquely*. As a broad community of professionals, stakeholders, and researchers, we should all strive to get better at leaving siloes, working together, and sharing information. Broadening knowledge of OCSEA costs provides a pivotal opportunity to do so.

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# 7. Appendices

# 7.1. Appendix A: Searches for research and literature

- 1. Online child abuse costs
- 2. Costs of online child sexual exploitation
- 3. Costs of online child sexual abuse
- 4. Economic costs of online child sexual abuse
- 5. Financial costs of online child sexual abuse
- 6. Societal costs of online child sexual abuse
- 7. Economic costs of online child sexual exploitation
- 8. Financial costs of online child sexual exploitation
- 9. Societal costs of online child sexual exploitation
- 10. (economic OR financial OR societal) burden of online child sexual (abuse OR exploitation OR pornography)
- 11. (economic OR financial OR societal) (costs OR burden) of online child sexual (live streaming OR capping OR capture OR webcam)
- 12. (economic OR financial OR societal) (costs OR burden) of online child (sextortion OR blackmail OR extortion)
- 13. (economic OR financial OR societal) (costs OR burden) of online child (grooming OR solicitation OR luring)
- 14. (economic OR financial OR societal) (costs OR burden) of online child (exploitation OR abuse) material
- 15. (economic OR financial OR societal) (costs OR burden) of online child abuse tourism
- 16. (economic OR financial OR societal) (costs OR burden) of online child enticement

# 7.2. Appendix B: Searches for Australian data

- 1. (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia) police investigation (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses)
- 2. (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of police investigation in (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **3.** Court (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) for a child psychologist
- **4.** Police hotline (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **5.** Police investigation (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **6.** Task Force Argos (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses)
- 7. (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of police intelligence operation (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **8.** Police (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) by crime (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **9.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of (legal OR state) prosecution (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **10.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of child abuse (legal) defence (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- 11. (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of criminal (legal) defence (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **12.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of criminal trial (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)

- **13.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of prison (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **14.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of probation (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **15.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of community corrections (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **16.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of sex offenders (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- 17. (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of child sex offender treatment (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **18.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of child protective services (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **19.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of out of home care (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **20.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of Child Sexual Exploitation Material (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **21.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of police training (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **22.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of victim counselling (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **23.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) for (special OR assisted) (primary OR secondary) education (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **24.** Victim of child abuse (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) for (special OR assisted) (primary OR secondary) education (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)

- **25.** Students with (special OR assisted OR additional OR disability) needs (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) for (primary OR secondary) education (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **26.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of (content moderation OR takedown OR detection OR disruption) by (ISP OR social media OR financial institutions OR tech)
- **27.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of (fines OR penalties OR sentences OR punishments) for (ISP OR social media OR financial institutions OR tech) for failing (guard OR moderation)
- **28.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of (staffing OR staff OR employment OR employees) for (ISP OR social media OR financial institutions OR tech)
- **29.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of (training OR education OR expertise) for (ISP OR social media OR financial institutions OR tech)
- **30.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of (equipment OR digital infrastructure OR resources) for (ISP OR social media OR financial institutions OR tech)
- **31.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of (lost economic productivity OR lost job efficiency OR lost performance OR loss of capability) for victims of (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation)
- **32.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of (providing benefits OR redress schemes OR compensation) for victims of (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **33.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of loss of tax revenue from victims of (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **34.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of living increases for victims of (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **35.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of (parenting OR care for) victims of (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)

- **36.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of (education OR prevention) programs for (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **37.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of school-based (education OR prevention) programs for (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **38.** Training (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of (professionals OR staff) for (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **39.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of (education OR prevention) programs for the prevention of offending (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **40.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) to media reporting on (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **41.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) to (academic OR private sector OR charity OR government) research on (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australia OR Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia)
- **42.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) to (law OR policy) development on (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia OR Australia)
- **43.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) to (staffing OR equipment for OR infrastructure for OR resources for) (academic OR private sector OR charity OR government) research on (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australia OR Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia)
- **44.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) to (expertise OR education OR training for) (academic OR private sector OR charity OR government) research on (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australia OR Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia)

- **45.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) to (expertise OR education OR training for) media reporting on (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australia OR Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia)
- **46.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) to (staffing OR equipment for OR infrastructure for OR resources for) media reporting on (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australia OR Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia)
- **47.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) to (substance OR drug) (addictions OR abuse) for victims of (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australia OR Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia)
- **48.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) to (substance OR drug) (addictions OR abuse) in (Australia OR Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia)
- **49.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) to (substance OR drug) (addictions OR abuse) for victims in (Australia OR Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia)
- **50.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) for mental health (treatment OR care) for victims of (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australia OR Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia)
- **51.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) for physical (injuries OR health) (treatment OR care) for victims of (child abuse OR child maltreatment OR child sexual abuse OR child sexual exploitation) in (Australia OR Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia)
- **52.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) for media sensitivity training in (Australia OR Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia)
- **53.** (Costs OR Cost OR Spending OR Expenditure OR Budget OR Data OR Price OR Finance OR Expenses) of (blackmail OR ransom OR sextortion OR sexual extortion) of children in (Australia OR Australian Capital Territory OR New South Wales OR Northern Territory OR Queensland OR South Australia OR Tasmania OR Victoria OR Western Australia)

- **54.** Medicare subsidisation costing document
- **55.** Recommended fee schedule
- **56.** Seek, CareerOne, Indeed, employment, staffing costs (e.g., for content moderators)
- **57.** Cost to run 1800RESPECT
- **58.** Task Force ARGOS (jobs OR budget)

# 7.3. Appendix C: Listing of all cost categories and costs

A total of 73 different kinds of costs were identified. The first four sets are applicable to both OCSEA and CSA/CSE without an online element (60 costs). The final two would only exist for OCSEA and not offline-only CSA/CSE (13 costs).

#### 1. Justice, child protection, and allied professionals (n=22):

- Investigation.
- Intelligence.
- · Legal prosecution.
- · Legal defence.
- Court preparation programs (specifically for victims and families).
- Trial or trials (e.g., if there are multiple, if there are appeals).
- Victim's time (during legal proceedings).
- Jury and witness time (during legal proceedings; distinct from other trial costs as not all trials will have juries, and will have variable numbers of witnesses).
- Compensation for victims of crime.
- Victim re-victimisation through the judicial process (e.g., during trial).
- · Prison and incarceration.
- Probation and community sentences.
- · Sexual offender registration and monitoring.
- Offender treatment (in prison or in the community).
- · Child protection services.
- Out-of-home care, emergency housing, or foster care.
- Victim advocates/ombudspeople.
- NGO/charity/non-profit services.
- Potential for reoffending (some or all the above over again).
- Staffing for all the above.
- Equipment, resources, and infrastructure for all the above.
- Expertise, education, and training for all the above.

#### 2. Immediate to short-term health and wellbeing of victims and families (n=6):

- Medical examinations, procedures, and expenses (victim).
- Counselling or therapy (victim, victim's family, offender's family).
- Immediate educational impacts (victim, offender's family; e.g., missing school).
- Immediate employment impacts (victim, victim's family, offender, offender's family; e.g., losing a job or missing work).
- Change of residence (victim, offender, victim's family, offender's family).
- Potential reoffending (some or all the above over again).

#### 3. Medium- to long-term health and wellbeing and associated losses (n=16):

- Future mental health problems (victim).
- Future physical health problems (victim).
- Future addiction/substance abuse (victim).
- Future housing stress or homelessness (victim).
- Future relationship impairment (victim).
- Future criminality (victim).
- Special education (victim).
- Cost of living increases (e.g., single parenthood if offender is removed long-term, costs of divorce).
- Potential intergenerational abuse (victim).
- Potential future re-victimisation (victim).
- Damage to non-offending parent's family and friend relationships.
- Lost economic productivity and employment (e.g., victim being unable to work, offender being unable to work, parent being unable to work, knock-on consequences of impacted schooling/education).
- Needing to engage social services (e.g., welfare or other government benefits for victim or family).
- Early mortality (victim).
- Tax revenue losses for government.
- Potential for reoffending (some or all the above over again).

#### 4. Prevention, education, and research (n=16):

- Population-level prevention programs and resources (victimisation).
- Population-level education programs and resources (victimisation).
- School-based prevention and education programs and resources (victimisation).
- Population-level prevention programs and resources (offending).
- Population-level education programs and resources (offending).
- Community hotlines.
- Training programs and resources for professionals outside the OCSEA/CSE/CSA field (victimisation and offending).
- · Media reporting.
- · Academic research.
- Private sector research.
- NGO/charity/non-profit research.
- Government research.
- Development of specific laws/policies to prevent/combat OCSEA.
- Staffing for all the above.
- Equipment, resources, and infrastructure for all the above.
- Expertise, education, and training for all the above.

# 5. Technical, legal, business, regulatory, and enforcement costs unique to OCSEA (n=12):

- Detection/disruption of offending by technology companies.
- Detection/disruption of offending by social media companies.
- Detection/disruption of offending by ISPs.
- Detection/disruption of offending by financial institutions.
- Takedown of illegal material by technology, social media, and ISP companies.
- Content moderation by technology, social media, and ISP companies.
- Technology, social media, ISP, and financial companies complying with subpoenas and directives (e.g., from eSafety Commissioner or police).
- Regulatory costs or penalties when subpoenas and directives are not followed (i.e., saved money otherwise).
- Dedicated public sector departments for OCSEA and related online harms (e.g., eSafety Commissioner, Australian Centre to Counter Child Exploitation, Queensland Police Service Task Force Argos).
- Staffing for all the above.
- Equipment, resources, and infrastructure for all the above.
- Expertise, education, and training for all the above.

#### 6. Payment of blackmail or ransom (n=1):

• Payment of blackmail or ransom (e.g., financial sextortion).

# 7.4. Appendix D: One page summary for government



# Costs of online child sexual exploitation and abuse in Australia: An initial review



Authors: Jonah R. Rimer Ethan Callaway

November 2024

This ICMEC Australia funded research project focused on identifying the costs of online child sexual exploitation and abuse (OCSEA) in Australia. "Cost" is defined as something that has or is likely to have a monetary, financial, economic, or expenditure impact in some way.

#### The goals

- Establish the existing knowledge base.
- Conceptualise the multifaceted meaning of "cost" in the context of OCSEA.
- Create a baseline of what is currently known and not known.

#### The methodology

- An extensive literature review.
- Identification of cost categories, cost components, people likely affected, and professional sectors involved.
- A comprehensive search for publicly available Australian costing data.
- Creation of preliminary and incomplete hypothetical costing scenarios.

## Key findings for government

One. Very little research exists on the costs of OCSEA specifically. Only two articles were found that focused on OCSEA, neither of which were about Australia. Most research was instead broad and about costs of child abuse, child abuse and neglect, child maltreatment, child sexual abuse, and violence against women and children.

**Two.** In the research literature, for Australia, lifetime costs for child abuse or child abuse and neglect as a whole ranged from \$5.8 to \$17.4 billion depending on the study.

**Three.** A total of 73 different costs were identified either in the literature or by the researchers. Of these, 60 were applicable to both OCSEA and child sexual abuse or exploitation without an online component, while 13 applied only to OCSEA.

**Four.** Of the 73 costs, robust publicly accessible (but not necessarily complete) data was found for 10, all related to administration of justice and child protection.

**Five.** For the aforementioned 60 costs, 22 revolved around administration of justice, child protection, and allied professionals; 6 centred on the immediate to short-term health and wellbeing of victims and families after abuse is disclosed; 16 focused on medium- to long-term health and wellbeing of victims; and 16 revolved around prevention, education, and research. Whether directly or indirectly, government is a main entity likely to pay for these costs and be involved in their management.

Six. For the 13 costs unique to OCSEA, 12 were about the technical, legal, business, regulatory, and enforcement costs with OCSEA, and 1 was about payment of sexual extortion/blackmail by victims. While government is less likely to pay for some of these because they are managed by the private sector, government still has costs for the enforcement of associated laws, policies, rules, and regulations.

#### What's next?

As a holder of information, government can make costing data more readily available for analysis, thereby facilitating a better understanding of OCSEA costs. This could, in turn, lead to better evidence-based approaches to both protect children and lower expenses. Government can also prioritise funding in this area for initiatives that increase knowledge and facilitate best practice.

Given gaps in knowledge, government has a unique opportunity to prioritise this area, bring sectors together to facilitate better collaboration, and make Australia a world leader at the forefront of combatting OCSEA.

For the full report visit the ICMEC Australia website: www.icmec.org.au

# 7.5. Appendix E: One page summary for banking, financial, and corporate sectors



# Costs of online child sexual exploitation and abuse in Australia: An initial review



#### Authors: Jonah R. Rimer Ethan Callaway

November 2024

This ICMEC Australia funded research project focused on identifying the costs of online child sexual exploitation and abuse (OCSEA) in Australia. "Cost" is defined as something that has or is likely to have a monetary, financial, economic, or expenditure impact in some way.

#### The goals

- Establish the existing knowledge base.
- Conceptualise the multifaceted meaning of "cost" in the context of OCSEA.
- Create a baseline of what is currently known and not known.

#### The methodology

- An extensive literature review.
- Identification of cost categories, cost components, people likely affected, and professional sectors involved.
- A comprehensive search for publicly available Australian costing data.
- Creation of preliminary and incomplete hypothetical costing scenarios.

### Key findings for the corporate industry

One. Very little research exists on the costs of OCSEA specifically. Only two articles were found that focused on OCSEA, neither of which were about Australia. Most research was instead broad and about costs of child abuse, child abuse and neglect, child maltreatment, child sexual abuse, and violence against women and children.

**Two.** A total of 73 different costs were identified either in the literature or by the researchers. Of these, 60 were applicable to both OCSEA and child sexual abuse or exploitation without an online component, while 13 applied only to OCSEA.

**Three.** Of the 73 costs, robust publicly accessible (but not necessarily complete) data was found for 10, all related to administration of justice and child protection.

Four. For the 13 costs unique to OCSEA, 12 were about the technical, legal, business, regulatory, and enforcement costs with OCSEA, and 1 was about payment of sexual extortion/blackmail. The private sector is the main entity likely to pay for these costs and be central to their management.

Five. For the remaining 60 costs, 22 revolved around administration of justice, child protection, and allied professionals; 6 centred on the immediate to short-term health and wellbeing of victims and families after abuse is disclosed; 16 focused on medium- to long-term health and wellbeing of victims; and 16 revolved around prevention, education, and research. While the private sector is less likely to pay for many of these directly, there is possibility for indirect impact, as victims, offenders, and family members are customers, users, and/or employees.

#### What's next?

Accessible data about the 13 costs that uniquely impact OCSEA is missing. The private sector holds important data that would help illuminate this area, and information can (under appropriate agreements) be made more readily available for analysis, thereby facilitating a better understanding of unique OCSEA costs. This could, in turn, lead to better evidence-based approaches to both protect children and lower expenses. The private sector will have data and information that can inform the least known aspects of this topic.

The private sector can also prioritise philanthropic funding in this area for initiatives that increase knowledge and facilitate best practice.

For the full report visit the ICMEC Australia website: www.icmec.org.au