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**Document Title:** Estimating the Financial Costs of Crime

**Victimization, Executive Summary** 

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**Document Number: 254011** 

Date Received: October 2019

Award Number: 2016-V3-GX-K005

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## Estimating the Financial Costs of Crime Victimization

**Executive Summary** 

Prepared for The National Institute of Justice

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#### **December 2018**

This report was supported by Cooperative Agreement No. 2016-V3-GX-K005, awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice to the Justice Research and Statistics Association. The opinions, findings, and conclusions or recommendations expressed are those of the authors and do not necessarily represent the official positions or policies of the U.S. Department of Justice.







# Estimating the Financial Costs of Crime Victimization Executive Summary

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### **Executive Summary**

#### **Overview**

Despite reductions in U.S. crime rates in recent decades, crime victimization continues to be a pressing problem with enormous societal costs. Currently available national estimates of victimization costs are in the hundreds of billions of dollars each year – equivalent to between 2 percent and 6 percent of the nation's gross domestic product (Chalfin, 2014). Understanding the costs of victimization and the components that comprise them can help policymakers and practitioners use resources more efficiently (Wilson & Krsulich, 2011).

This project, conducted by the Justice Research and Statistics Association (JRSA) in partnership with the Urban Institute (Urban) and the National Center for Victims of Crime (NCVC), is an assessment of the field of cost of victimization research and a menu of recommendations for future research to advance the field. One objective of the project was to keep the focus squarely on the victims, and consider what information is most needed by those who serve them. Relatedly, another objective was to recognize that even if the proximate victim is a business, the government, or non-profit organization, individuals still suffer as when insurance fraud drives up insurance rates or when taxpayers foot the bill when contractors defraud the government.

Given the victim-centered focus, the project team conducted some primary data collections, which are described in Volume I. These data collections were designed to obtain input from practitioners and victims about their experiences. Focus groups were conducted with three practitioner groups: Victims of Crime Act (VOCA) compensation and assistance administrators, State Administering Agency (SAA) and state Statistical Analysis Center (SAC) directors, and civil attorneys who pursue tort claims for damages for crime victims. As well, the project team conducted a nationwide survey of victim service providers and a smaller survey of victimization survivors. The insights gained from these primary data collection efforts are presented as part of Volume I of this report.

Volume I also contains a presentation of the taxonomy of victimization costs pioneered and revised by Cohen over the years (Cohen, 2005, e.g.). The presentation of the taxonomy is reframed from the perspective of various practitioner users – based on who covers which proportions of different costs – and adds factors that may increase or decrease costs they may be estimating. It is presented as a reference for use with the remainder of the report.

The project team also conducted a literature review, which is provided in Volume II. The literature review consists of two major sections. The first surveys the state of the literature on how costs of victimization are estimated. The second focuses on estimation methods and data sources concerning the amount of victimization, including the incidence, prevalence, and concentration of victimization, both generally and in relation to different victimization and subpopulation types. Volumes I and II then inform a set of research recommendations, which are provided in Volume III.

Initially, the aim of the project was to produce a recommendation for the design of one large new study of victim costs. However, it soon became clear that the existing literature has multiple gaps that cannot be filled through a single study. Moreover, cost-of-victimization estimates are used for multiple policy purposes, such as gauging the severity of victimization relative to other social problems, informing funding decisions about victim compensation and assistance, and informing government spending on crime prevention efforts.

Because different limitations of existing estimates are more consequential for some policy uses than for others, addressing gaps in the literature may be prioritized differently by different consumers with different policy interests. Therefore, with the National Institute of Justice's input and approval, rather than producing a single, large research design, Volume III contains a set of research recommendations that would each fill different gaps in the existing literature thereby enhancing our understanding of the costs of victimization and the utility of cost estimates for a broad range of users and decision-making contexts. These recommendations essentially provide NIJ and the field with a menu of possible research projects that would advance the field in various, complementary ways.

Finally, the team wishes to thank the Advisory Board of practitioner and academic experts, who generously shared advice from a variety of perspectives throughout the project. Many of their insights are incorporated throughout the report. A list of members is found in Volume I. Key highlights from each of the three volumes are summarized in the following sections.

#### Volume I

#### **Field Perspectives: Focus groups**

The objective of the three focus groups, fielded by JRSA, Urban, and NCVC, was to gain the perspectives of specialized practitioner groups on how they currently use or would use data on the costs of victimization. Overall, the three focus groups provided valuable insight on several topics. The key takeaways from each group are presented below.

#### **VOCA Administrators**

VOCA administrators distribute VOCA funds to victim service programs in their states and administer state victim compensation programs that reimburse eligible crime victims for certain expenses. Their input is thus framed in terms of what expenses or services federal VOCA regulations, state statutes, and other directives allow them to cover. VOCA administrators use cost estimates to report on spending to state and federal bodies, to inform policy makers regarding state caps on allowable costs, or for coverage of new categories.

Expenses that state VOCA compensation programs cover vary widely. For example, some state administrators reported that their statutes cover transportation to and from services, respite care, and relocation assistance, while others do not. Many also stressed that there are significant costs that they cannot compensate for, such as lost quality of life, loss of a parent or spouse, or

loss of long-term childcare; it may also be that many lifelong costs exceed statutory limits on what VOCA compensation programs can cover. VOCA administrators expressed additional concern about particular victimization types, such as co-victims of homicide and identity theft, as well as populations with unique needs, such as individuals with disabilities or limited English proficiency. Finally, it should be noted that differences among states in their compensation caps and in their allowable cost categories make it difficult to compare costs between them.

#### Civil Attorneys

The objective of the civil attorneys focus group was to learn how victims' damages are quantified in tort claims. Costs identified by participants included tangible costs (expenses that can easily assigned a dollar value, such as medical and mental health expenses or lost wages), and non-economic damages, or intangible costs (such as pain and suffering) that are more difficult to quantify. They also expressed that awards for non-economic damages are highly dependent on jury sympathy for the victim. Several barriers to victims receiving an award were identified by the group, including the absence of a viable defendant with assets to draw on, state or jurisdictional caps on awards for some damage types, institutional biases based on socioeconomic status (people with lower incomes may have lower calculations of future earnings than higher-income victims), and expenses like caregiver costs requiring more proof or expert witnesses to justify. Civil attorneys said that they would find access to more research-based cost estimation methods useful for reducing some institutional bias in jury awards.

#### SAAs/SAC Directors

SAAs, who administer several federal funding allocations within their respective states, and SAC directors, who head up certain criminal justice research initiatives within their state, described using victimization cost data for several purposes. Those purposes included explaining the benefits of victimization programs and support the expansion/funding of services for victims of emerging crimes; responding to requests from state legislatures; showing the value of policies and programs to the community; and encouraging state legislatures to consider the consequences of new policies and programs. Current challenges expressed by the group included not having up-to-date and accurate dollar figures for different victimization costs, explaining the difference between tangible and intangible costs to policy makers, and ensuring that cost estimates are correctly understood and properly used. SAC directors also felt that the ability to better quantify the impact of new bills on victim costs would be useful in working with the legislature, as would the ability to give more concrete estimates of the return on investment for different programs.

#### **Field Perspectives: Surveys**

#### Service Provider Survey

In June and July 2018, Urban conducted a national survey of victim service providers. The 36-question survey was distributed electronically, with additional outreach via hard-copy letters, emails, postcards, and phone calls. The survey inquired about service providers' characteristics, perspectives on direct and indirect victimization consequences, factors that mitigate or exacerbate harms, and their knowledge of cost estimates of harms and services.

A total of 550 agencies were randomly selected from NCVC's VictimConnect database and the Office for Victims of Crime (OVC's) online directory to receive the survey. Of these, 179 agencies responded to the survey and comprise the sample. The respondents were geographically diverse and included traditional and non-traditional provider types. They were proportionately representative of victim types served by agencies as recorded in the full database, though it is possible that the distribution of agency types in the database may not fully represent the distribution of victim types in the United States. Most were small nonprofits, and respondents were primarily directors or mid-level managers with long tenures. Nearly all served victims of violent crimes, while nearly half served property and financial crime victims. Cumulatively, the sample reflected a variety of foci.

Results showed that service providers were interested in research and tools that better capture the full scope of victimization costs, including a broader consideration of harms, multiple victimization experiences, varied time frames over which harms occur, and broadened understanding of all individuals indirectly affected by crime experiences. Although respondents reported a wide range of harms experienced by their clients, the most frequently reported were intangible and included emotional suffering, fear of crime or revictimization, and social problems. Other important harms identified by provider respondents included economic impacts, trauma, and long-term, health-related harms. Victimizations with the most misunderstood harms, in providers' opinions, were polyvictimization experiences and gender-based violence. A majority of respondents reported that victims' family members, especially children, were also negatively affected by victimization.

Service provider respondents agreed that a diversity of services, especially mental healthcare, housing, and crisis intervention, may reduce harms, but many suggested that broader economic-related support and comprehensive case management are also important. Most respondents also believed that a range of factors *increased* experiences of harm, including fear of retaliation, limited social support, and harm from participating in the justice system – a repeatedly submitted comment.

More respondents indicated that their agencies had calculated the costs of victim services rather than the costs of victimization harms, although a large percentage did not know if their organization had calculated victimization costs. The primary purpose for which agencies reported calculating the costs of harms was to support victim financial assistance, mostly using restitution request forms and receipts on the individual victim level, or by institutional reports and payouts on the community level. Service providers who had measured victim service costs reported doing so primarily for funding or program evaluation purposes, and they operationalized them as labor costs divided by the number of victims served.

Suggestions for other ways to measure costs included capturing both immediate and long-term outcomes, as well as concrete expenses and intangible benefits. Respondents' biggest concerns about calculating victimization costs were 1) the ability to generate accurate numbers, and 2) the unintended consequences of emphasizing cost data, such as increasing victim-blaming – blaming victims of certain crimes, those who experience certain harms, or those who have

certain vulnerabilities for costing too much. As a result, researchers need to consider how they present these data and what context they provide with the numbers.

#### Survivor Survey

A nine-question survey of a convenience sample of victimization survivors was also fielded by Urban and NCVC from April to June 2018. A link to the brief survey was distributed to survivors by a sample of service providers who agreed to assist the project team, and 52 survivors responded. No demographic information was collected, and respondents did not have to answer all questions. The purpose was simply to gather input from a convenience sample of victimization survivors, not to make generalizable claims about survivor experiences as a whole.

The survey responses received reflected beliefs also found in the literature: that emotional suffering, such as anxiety or stress, is the most frequently experienced harm associated with crime victimization, and that the burden of victimization also extends to friends, family, and extended family members. The harms experienced that were reported also included problems with friends or family, mental health costs, fear of crime, and physical injuries that did not require medical attention. Respondents also indicated that their immediate family members, friends, and extended family members experienced harms including emotional difficulties, sexual difficulties with a partner, and financial harms.

#### **Volume II: Literature Review**

#### **Cost Estimation Methods**

Urban's researchers conducted a literature review of tangible and intangible cost estimation. When researchers estimate the "costs" of crime or victimization, whether for crime in general or for specific types of crimes, they are describing magnitudes of the harm caused in dollar terms. This is generally done to allow comparisons along a common metric, such as comparing the amount of harm caused by different crimes, comparing the crime problem to other social problems, or comparing the costs imposed by a crime to the costs of efforts to prevent it. Although researchers have made enormous strides in increasing the breadth and depth of this literature over the past few decades, given that the nature of victimizations experiences are intensely personal it is still difficult to quantify the costs and harms of crime to victims, as well as the social costs that extend to society at large.

In addition to estimating the total aggregate cost of victimization across crime types, scholars have focused on estimating the costs of specific types of violent victimization, including sexual violence, intimate partner or domestic violence, child abuse, and gun violence. We describe next some of the common types of harm included in victimization cost estimates.

#### Tangible Costs

Tangible costs are those that can be measured directly in dollar terms. The primary tangible costs that have been examined are victims' medical costs (physical and mental health), lost property, lost wages, and services sought. Medical expenditures figure prominently, and research in the field of victimization cost estimation relies heavily on methods developed in health

economics to estimate the cost of illness. Lost wages and productivity can be estimated by looking at time lost from work or the size of workers compensation claims for similar injuries suffered on the job. The costs of missing work due to injury and emotional distress comprise a large part of the economic burden of victimization, and these findings have ramifications for victims, families of victims, businesses, and the economy at large.

The costs of victim services, such as services to aid emotional or physical recovery or to receive restitution, are less commonly explored. Victim services represent a variety of supports including legal aid, counseling, case management, support groups, and housing. Studies so far have found low levels of victim services usage when compared to victimization incidence. Victim service data has not generally been used in cost estimation due to a lack of data collected from providers. In addition, this data is often not broken down by victim or offense type.

#### Intangible Costs

Intangible costs are those such as pain and suffering that cannot be measured directly in dollar terms. Placing a dollar amount on pain and suffering is a daunting task, and this difficulty is demonstrated by the wide variation of estimates in the literature. Despite these challenges, measuring intangible costs is an important part of generating a complete picture of the costs of crime victimization.

Several methods for quantifying intangible costs have been utilized, each with its own set of strengths and limitations. Three primary methods include 1) analyzing jury awards to crime victims in civil court cases, including the separate awards for pain and suffering, to understand the value that juries place on harms incurred for various crimes, 2) surveys asking people how much they would be willing to pay (WTP) to avoid victimization (*stated* preferences), and 3) analyzing the relationship between crime and market prices for goods or services, such as the relationship between housing prices and neighborhood crime rates (*revealed* preferences). The latter two methods generate holistic cost estimates that include both tangible and intangible costs. The jury compensation and revealed preference methods have largely been used to examine the costs of assault and fatalities.

Given the difficult nature of the task, there are a number of critiques of each of these main methods. Nonetheless, one major conclusion from the research on tangible and intangible costs of victimization is that estimates of intangible costs are generally much larger than those of tangible costs. For example, in 1996 the average robbery resulting in injury was estimated to result in \$9,000 in tangible costs and \$24,000 in intangible costs (Miller et al., 1996).

#### Gaps in the Existing Costs Research

Several elements of victimization costs have not been explored extensively, and some involve significant measurement difficulties.

*Crime Types*. There has been much more research on the tangible and intangible costs of some crimes, such as murder or intimate partner violence, than others. This is partially because these crimes are some of the costliest or have the largest impact on public fear. One important area that is often missing in cost estimation research is white-collar crime, which encompasses

many types of fraudulent activity. White-collar crimes are difficult to track because it is often not immediately obvious to a person that they have been a victim (Cohen, 2016).

Further, there are several crime types in which the victim may not be an individual, but a business or government. The costs associated with those may be passed down to consumers or taxpayers. These may again include white-collar crime, but also environmental crime, cybercrime, financial crimes including tax evasion, Medicare and insurance fraud, and other frauds known to be very costly but about which more information is needed. Mass violence is another crime type known to be very costly both for those who are directly victimized and those who are indirectly impacted by the event, but about which more information is also needed.

Sub-population variation. There are reasons to believe that costs of victimization may differ between different subpopulations, such as victims in different geographic areas, victims from different demographic groups, or those who differ economically. To date there has not been significant research in this area. This is a substantial limitation for policymakers concerned with costs for constituencies who may be impacted by specific policies or programs. The typical estimates of average victimization costs may not suffice. It is important to note that there are several challenges in capturing meaningful information here, given the complexity of intersections between victimization, poverty, and forms of marginalization which may face certain populations of interest to policymakers and advocates.

Additional Costs. Some cost types have not been covered extensively in the literature in part because they impact an unknown percentage of all victimizations. For example, substantial but less researched costs might include increased risk of suicide, increased vulnerability to future victimization, long-term health impacts such as obesity or chronic pain, or substance abuse.

In addition, the costs to friend and family and the societal cost of crime also includes substantial primary and secondary avoidance costs (Kleiman, Caulkins, & Gehred, 2014). Second-order costs are costs borne by people who have not been directly victimized and do not know the victim. These may include fear, social hostility, and reduced job opportunities when a business moves due to crime. These costs are not captured frequently in the literature. Some methods discussed above move past these questions by instead generating holistic estimates that implicitly include all possible costs. For example, WTP surveys implicitly ask about willingness to pay for all of a particular crimes' costs. However, when people estimate the lump sum amount whether as survey respondents, home purchasers, or jurors, they may fail to factor in all possible costs.

#### Policy Implications

Finally, it is important to step back and consider how any estimates of the financial cost of victimization will be used. Different methods may be better suited for different purposes, and the limitations of existing research may be more consequential for different purposes. How important it is to address different gaps in the research may depend on the policy purposes in which one is interested, and how the direction of any current bias impacts policy decisions.

#### Victimization Prevalence, Incidence, and Concentration

This second major section of the literature review, conducted by JRSA, looks at measurement issues in estimating the prevalence, incidence, and concentration of victimization. This is the other major category of data used to create total estimates of victimization costs. Three major topical areas are covered: data sources, initiatives to reach underrepresented or difficult-to-reach subpopulations, and technical issues with prevalence estimates.

#### Data sources

The NCVS and national Uniform Crime Reports (UCR) statistics, including both summary and incident-based data collections, are the primary and most widely used data sources for crime prevalence data. Within the UCR, the National Incident Based Reporting System (NIBRS) is a great improvement over the Summary Reporting System (SRS), which for decades has been the primary source of national and state data on crimes reported to law enforcement. The federal government is working hard to help more jurisdictions move to the incident-based system that provides much more detail and collects information using behavioral classifications that allow for comparisons of incidents, even while state and local criminal codes vary. The NCVS, which has been redesigned and refined a number of times, now collects detailed information on victimizations experienced by a large and largely representative sample in all 50 states. It collects not only incident-level data about victimization experiences, which importantly captures experiences not reported to law enforcement, but also some information about losses suffered and services sought. Current work by the Bureau of Justice Statistics on the NCVS is also focused on improving the ability to generate subnational and local estimates using NCVS data, and on more meaningfully capturing repeat and series victimizations.

Many states conduct their own victimization surveys, and states highly desire the ability to perform these more regularly, according to the SAA and SAC director focus group. A number of public health data sources are covered in Volume II: emergency department data, the National Survey of Children's Exposure to Violence (NatSCEV), mental health system data such as from the Substance Abuse and Mental Health Services Administration (SAMHSA), violent death data such as from the National Violent Death Reporting System (NVDRS), and many others. Public health data are a particularly rich source of information on victimization incidence, treatments, outcomes, and more that can be fruitfully used alongside criminal justice data to assess not only the prevalence of different victimizations, but several impacts on victims, their families, and communities.

Additional under-utilized data sources include several for emerging crime types, such as white-collar crime (the National White Collar Crime Center), financial crime (Federal Trade Commission and the Financial Crimes Enforcement Network, or FinCEN), environmental crime (Environmental Protection Agency), cybercrime (the Federal Bureau of Investigation's Internet Crime Complaint Center, or IC3), and many more also covered in Volume II. Note that many of these sources provide data only about cases discovered, investigated, and made, not about true incidence. And, while NIBRS and the NCVS are beginning to collect some data on some of these crime types, they are not yet included in a robust way.

#### Initiatives to reach difficult-to-capture subpopulations

Sampling and survey methods have been developed to reach marginalized or difficult-to-reach populations not always fully captured in major surveys, such as public housing residents, victims of sexual offenses, mentally ill individuals, and others. These methods generally include ways to build trust with gatekeepers, refining and testing instruments to be comprehensible by target populations, ethical concerns, and triangulation with other administrative data. Other potentially marginalized groups that may be difficult to reach through the NCVS or other methods include individuals in congregate living arrangements such as nursing homes or prisons, the homeless, individuals who identify as Lesbian, Gay, Bisexual, Transgender or Queer (LGBTQ), individuals with undocumented immigrant status or limited English proficiency, individuals with dementia or disabilities, individuals living on American Indian reservations, and victims of more hidden victimization types like human trafficking or child pornography. Reaching these groups in prevalence studies is critical to assess the magnitudes of the victimization problems faced and ensure that sampling in larger studies or in the body of smaller studies is representative.

#### Technical issues affecting estimates

A few issues can distort estimates if not addressed or built into the research design. These include accounting for different units of analysis, such as whether a victimization type occurs as a discrete event or an ongoing process (repeat or polyvictimization), or whether certain victimization costs are incurred at the individual or community level. Further, there are concerns about unequal or inequitable distributions both in victimization incidence, prevalence, and concentration and in services delivered. Measurements of overdispersion and other statistical techniques can help uncover some of these patterns in victimization data. The ability to do this can enable policy makers and service providers to better target services and funding to the areas with the most concentrated need, as well as to groups that may have been traditionally more neglected.

#### Volume III, The Roadmap: A Menu of Recommendations for Future Work

Flowing from the work in Volumes I and II, and from discussions with the advisory board, Volume III contains recommendations for a series of possible research studies and practitioner-friendly tools that would advance the field of victimization cost estimation – both the generation of estimates and their appropriate use by practitioners and researchers. The intent is to propose recommendations that would be useful for providing the information and data most needed by policy makers and service providers on the ground to improve recovery and resilience outcomes for crime victims in the United States.

Each of the recommendations below would fill an identified gap in the field, either independently or overlapping with other proposed ideas. Some of these recommendations may be of higher priority for some uses of cost estimates than for others, and therefore priorities may differ for different consumers of this research.

This "roadmap" proceeds in three main categories. First are topical studies on identified areas where more information is needed about victimization types, experiences, and populations. Second are studies to develop or refine the methods needed to address some of the most important issues identified, and to make estimates more precise and translatable for different policy and practice purposes. Third, we propose a series of practitioner friendly translational, technical assistance and calculator tools to assist with the use or generation of cost estimates in the field for policy and practice.

Note that the recommendations proposed for future research are not mutually exclusive; some studies that might flow from this project can include both topical and methodological elements. The project team presents a menu of recommended work below; full detail on each of these items is found in Volume III of this report.

#### **Topical Studies**

Repeat/Series and Polyvictimization

Gap identified: Developing cost estimates for repeat and series victimization experiences depends on a comprehensive understanding of the frequency at which events occur and the cumulative harms associated with multiple victimization experiences over time (i.e., polyvictimization). Research on the frequency of events and harms associated with repeat/series and polyvictimization experiences is still in its infancy, though studies have shown that those who have been victimized in the past are more likely to be victimized again, such as in child maltreatment and intimate partner violence situations.

#### Why important:

- Series victimizations may occur at a frequency that makes it difficult to differentiate between discrete events. As a result, it is challenging to estimate incidence and prevalence accurately, though strides are being made to improve measurement in these areas.
- Difficulty in disaggregating the physical, psychological, financial, and behavioral
  harms from repeat and series victimizations impacts the ability to attribute harms
  experienced by victims to specific victimizations, especially in the case of
  polyvictimization. Further, estimates of the cumulative trauma of multiple
  victimization experiences and exacerbation of harms in subsequent victimizations are
  also needed.

#### Short-term recommendation: Summarize existing research and data sources

• Recognizing that work has been done in recent years on these topics, develop a comprehensive summary—including an annotated bibliography or literature database—that reviews information on repeat/series victimizations from multiple fields, including criminal justice, public health, social work, and education.

 Create a conceptual model for disaggregating harms from repeat/series victimizations and/or polyvictimization for use in longer-term studies. The model should include a framework for exploring how harms from continued victimization experiences compound each other.

## Long-term recommendation: Conduct specific longitudinal studies that examine experiences of repeat and series victimizations over the life course and that:

- Focus on differences in frequencies and experiences of harm between:
  - a. Diverse populations of survivors and potential victims
  - b. Individuals from varying urban/rural/tribal backgrounds
- Apply conceptual framework disaggregating harms to specific research questions, for example:
  - a. What are the lifetime costs of domestic violence for a victim, disaggregated by length and frequency of abuse and by types of abuse experienced?
  - b. What are the impacts of sexual and/or intimate partner victimization experiences in childhood, adulthood, and as an older adult?

#### Underrepresented and Hard-to-Reach Subpopulations

**Gap identified**: Hard-to-reach subpopulations of individuals may be both disproportionately victimized and underrepresented in cost estimates based on traditional surveys. Some examples of these subpopulations include:

- Public housing residents
- Homeless individuals
- LGBTO communities
- People with immigrant status

- People with disabilities or dementia
- Tribal communities
- Institutionalized populations (incarcerated, nursing homes)

Why important: Failure to proportionately include these populations in the body of victimization cost and prevalence work may lead to skewed cost estimates and artificially low prevalence and concentration estimates. Further, cost estimates may present a skewed understanding of how different populations experience various victimizations and harms. In turn, this may result in misallocations of resources to reach and serve these subpopulations of victims.

## Short-term recommendation: Synthesize existing information on costs specific to these subpopulations.

Capitalize on existing studies of specialized subpopulations by synthesizing key findings from them to develop a more comprehensive understanding of hard-to-reach subpopulations'

victimization costs and experiences, and to identify specific research and policy questions for longer-term work.

#### **Long term recommendations:**

- Modify sampling procedures, wherever possible, in future data collection efforts to include representation from hard-to-reach subpopulations. Although general population surveys may still be limited in the ability to capture meaningful detail on the experiences of very small subpopulations, purposively ensuring their inclusion may still improve count and cost estimates, particularly when combined with the following studies.
- Conduct new, specifically targeted studies in the form of comprehensive surveys and interviews with hard-to-reach subpopulations to accurately capture the prevalence, incidence, harms, costs, and services associated with their victimization experiences. Research efforts might involve:
  - a. Conducting experiments with question wording and order that can lead to the development of more useful questions, that can then be incorporated into community-based surveys. There will be cultural differences between groups that will impact how well the same question elicits valid responses from each group.
  - Comparing data sources that attempt to capture this information on victimization in different subpopulations, and the ability of those data sources to provide information that sufficiently answers questions about their victimization costs
  - c. Strengthening future studies by consulting experts experienced in researching vulnerable populations to develop ethical and transparent practices
- Compare victimization impacts across different groups of hard-to-reach subpopulations
  - a. Develop an understanding of differences in the experiences and needs arising from victimization for hard-to-reach subpopulations and compare this understanding with that for traditionally researched individuals.
- Examine service data on hard-to-reach subpopulations from victim service providers nationwide
  - a. Compare expenditures on different subpopulations vs. information about each population's needs and incidence of victimization

Underrepresented, Hard to Classify & Emerging Crime Types

**Gap identified**: Certain types of victimizations may be handled outside the judicial system, victims may not know where they should report the crime, or the victim may not recognize that a crime occurred or identify themselves as a victim. Other victimization types are

challenging for the criminal justice system to handle due to their complexity. Examples include:

- Environmental crime
- Mass violence
- Terrorism
- White-collar crime

- Financial crime, fraud
- Cybercrime
- Hidden victimizations such as child porn and human trafficking

Why important: As with hard-to-reach subpopulations, failure to include these victimization types and find methods of accurately counting and costing them can lead to skewed cost estimates and low prevalence and concentration estimates, and further to skewed understanding of who is affected by these victimizations and the nature and costs of their harms. A recent National Academies of Sciences report (Lauritsen and Cork, 2016) also stressed the importance of these crimes and the need to broaden victimization cost work to address them.

#### Short-term recommendation: Inventory of costs unique to specialized victimizations

- Create crime-specific taxonomies of costs for each understudied crime type
- Conduct conceptual work on how to think about non-traditional crimes. This is important for operationalization of concepts before trying to collect data.
- Identify data needed to capture these operationalized costs

**Why important**: This information is requested by federal and state policy makers and administrators, such as victim compensation administrators, and is important background work before undertaking long-term studies recommended below.

#### **Long term recommendations:**

- Make creative use of existing datasets from other fields that capture parts of this
  information. This may entail new surveys, the addition of questions to existing
  surveys in other fields, and creative use of standard and non-standard (for
  victimization research) datasets to create valid estimates of the scopes of these
  problems. Examples of data sources that might be tapped include:
  - a. EPA data (environmental crimes)
  - b. FINCEN, FTC, consumer complaint reports (fraud, financial crime)
- Undertake new data collections, designed to answer understudied cost and prevalence-related questions, their associated costs, and their differential effects on various groups and locales in the United States.

**Why important**: These would inform design for potential programs or policies to better serve victims who may now often fall through the cracks.

• Conduct new *qualitative* research by victimization type on the *nature* of direct/indirect and short term/long term costs and their *impacts* on victims.

Why important: Victimization is a highly personal experience that resists quantification. In-depth qualitative work on how various victimizations are experienced and the nature of their resulting costs can help identify potential missing data and research considerations in the design of new quantitative data collections, as well as putting numerical estimates in context with victim's lived experiences. Also, improving the effectiveness of service delivery can save costs measurable in costbenefit analyses (CBA) and cost of victimization (CoV) studies. Information about long-term effects in particular is needed to continually improve responses to primary victims, secondary and tertiary victims, and communities in high-profile events.

#### **Methodological Studies**

These recommendations aim to improve the accurate generation and interpretation of victimization cost estimates.

Why important: These are quite technical, but their purpose is to enable practitioners in the field to 1) have more confidence in victimization cost estimates, 2) be better able to translate and use victimization cost estimates to answer their policy and practice questions, and 3) better be able to describe victimization cost estimates to others.

There are two categories of methodological recommendations, both concerned with different sources of uncertainty in estimates.

Sampling Error and Confidence Intervals

#### **Gaps Identified**

- 1. CoV and CBA results are often presented as point estimates, without associated standard errors and confidence intervals. Some researchers have recommended presenting a high-low range that particular victimization costs may fall in, rather than a single point-estimate for greater clarity and accuracy.
- 2. There are no conventions in common use for reporting confidence intervals around the cost-of-victimization part of the benefit calculations. When estimates are produced via different methods, it is not obvious how to compare them. The complexity of this challenge increases as victim cost research incorporates new methods and blends datasets from more diverse sources.
- 3. It is difficult for consumers to understand whether estimates from different studies are consistently derived and therefore comparable.

Why important: Improvements in consistency and reporting and translating the meanings of estimates are important for practitioners to use estimates accurately and appropriately.

## Recommendation: Develop *conventions* for quantifying, describing, and reporting uncertainty in victimization cost estimates and CBAs of crime prevention programs.

The immediate users of this work are in the research community, but the ultimate audiences are the practitioner users of CoV and CBA results. In addition to incorporating uncertainty in CoV estimates, describing uncertainty in cost-benefit estimates also requires incorporating sources of uncertainty around:

- Costs of interventions
- Estimates of effectiveness for interventions

Developing conventions may involve activities such as commissioning a volume of technical recommendations (cf. Gold, Siegel, Russell, and Weinstein 1996, in health economics), or the use of expert panels such as through the National Academies of Science (cf. Steuerle and Jackson, 2016).

#### Recommendation: Develop improved methods for assessing and describing uncertainty.

Estimates are often produced via different methods, including estimates which incorporate multiple kinds of data. It is technically challenging to produce common measures of uncertainty across different types of data and methods. Conduct methodological research and innovation to describe uncertainty on a common basis, perhaps by more widely incorporating simulations and probability-based Monte Carlo methods that can be used across methodologies to calculate standard errors.

Understanding Non-Sampling Error or Variability, and Sensitivity

**Gap Identified**: There has been relatively little empirical study of the sources of *bias or nonsampling error* in victim cost estimates, and the sensitivity of estimates to different assumptions and methods. Some reviewers believe intangible costs may be overestimated by the major methods (e.g., Domingo & Rafael, 2015). For example, survey respondents may report willingness to pay more for crime prevention than taxpayers are actually willing to pay.

**Why important:** Estimates must be assessable for validity and reliability for use in the field and must be able to be compared to one another.

**Recommendation: Research on sensitivity of estimates to assumptions and minor methodological choices.** Conduct research, potentially including experiments, to understand how sensitive CoV estimates are to changes in:

- Methods used
- Assumptions (implicit and explicit)
- Sampling procedures
- Definitions used, question wording, etc.

This would help improve estimates and give the field more confidence in using estimates generated using one method over another. It would also identify specific methodological improvements needed as the field evolves. Below are a few examples of research questions that might be tested:

- Do respondents to WTP surveys use different assumptions about *time horizons* of costs and *present value of future costs* than economists use in bottom-up studies?
- What costs are *implicitly* captured in holistic estimates, such as WTP or hedonic (revealed preference) studies, that may be missing from bottom-up estimates?
- Does expressed WTP vary by the likelihood that those surveyed would actually have to pay if the prevention effort were implemented?

#### **Practitioner Tools/Technical Assistance**

**Gaps Identified**: Non-researchers sometimes have difficulty understanding the technicalities of victimization cost estimates and how to use them accurately. While some concerns are addressed in academic literature, these resources have not been disseminated well to practitioners. SAA/SAC focus group respondents noted a strong need for updated costs numbers and calculator tools, and ways to package data for stakeholders' needs.

Why important: Practitioners need victimization cost data and tools that are easy to use, help them meet stakeholders' needs accurately and easily, help them adequately and accurately support funding requests, help them allocate resources, and enable them to provide appropriate, useful, and timely answers to policy and practice questions.

#### Recommendations for practitioner tools and technical assistance initiatives:

- Compile standard definitions for costs for use across studies and estimation methods and disseminate them to the field in a practitioner-friendly guide.
  - a. For example, what expenses are included in lost productivity, pain and suffering, lost caregiver resources, and other costs?
  - b. Focus group participants stated that standardization would instill more confidence in estimates.
- Set conventions for time frames to use in producing cost estimates. Provide guidance on questions that practitioners should consider when interpreting estimates, i.e.:
  - a. In what time frame do the bulk of victim costs usually incur?
  - b. In what time frame does the greatest benefit accrue from services?
  - c. How far out does one need to look to see if a program pays for itself?<sup>2</sup>

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<sup>&</sup>lt;sup>1</sup> *Note*: Sensitivity of *estimates* across different types of samples is different from variation in *actual costs* that are experienced by different types of victims.

<sup>&</sup>lt;sup>2</sup> This will vary depending on program.

- d. What long-term expenses might be prevented with more timely delivery of services?
- e. Ending services to a victim too early may cause increased costs in the future if needs remain unmet. How many years should a program be funded for a community, or services provided to a victim, in order to prevent or mitigate such future costs?

Create calculator tools for field use in estimating victimization costs. Practitioners need updated costs data and tools to create localized estimates, package data to meet needs/requests of stakeholders, and support funding requests. Some ideas:

- *Bottom-up approach tools*: Create tools that allow input of tangible costs for local or population-specific estimates, e.g., local labor, medical, criminal justice costs.
- *Tools or sub-tools* for specific purposes, including guidance on which options to use for different policy/practice purposes; how to account for differences between crime types, victim groups, and service delivery versus just presenting averages; and anticipating potential misuse or misunderstanding of data, offering cautions and advice to mitigate against such problems.
- Whenever possible, tools that can incorporate presentation of uncertainty of estimates, i.e., ranges instead of point estimates. Include guidance on translation.
- *Meta-analysis tool or other resource* that can summarize existing studies for practitioners for certain uses.

It is important to note that some of the proposed topical and methodological work should probably be completed first, in order to feed more updated and reliable base information into these calculator tools for practitioners. Reliable calculator tools, once created, could be used by practitioners for legislative prioritization, program planning, calculating aspects of service impacts, break-even analysis, and program evaluation.

#### Conclusion

The goal of this project was to make recommendations for future research and translation activities that would help move the field of crime victimization cost measurement and documentation forward, with a focus on improvements in the field that are most useful for directly improving responses to victims. The recommendations presented here, including topical studies, methodological research, and practitioner tools, comprise a menu of options for advancing the field to produce victimization cost estimates that can be used for a variety of policy purposes aimed at improving service to crime victims and more effective crime prevention in the United States.

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