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AN ESTIMATION OF THE ECONOMIC IMPACT OF VIOLENT VICTIMIZATION IN CANADA, 2009

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Finally, everyone listed in the acknowledgements section of our related report on the costs of spousal violence played an important role in this report, whether they know it or not, as so much of this current report is based on the hard work and dedication that made that earlier report such a success.

Highlights

- Victimizations of five violent crimes are analyzed in this report: **assault, criminal harassment, homicide, robbery, and sexual assault and other sexual offences**. Only incidents that occurred in 2009, that involved adult victims, and that involved no spousal relationship between the offender and victim are included.
- Self-reported data show that there were 1,418,794 incidents of assault, 668,088 criminal harassment victims (data only allows for a victim count), 143,421 incidents of robbery, and 561,807 incidents of sexual assault and other sexual offences in 2009; 62% of assaults were directed against male victims, 74% of criminal harassment victims were female, 56% of robbery incidents were against male victims, and 68% of sexual assault and other sexual offences incidents were directed against female victims.
- There were 160,027 incidents of assault, 69,742 incidents of criminal harassment, 453 incidents of homicide, 20,067 incidents of robbery, and 8,777 incidents of sexual assault and other sexual offences reported to the police in 2009; 58% of assaults were directed against male victims, 82% of homicides were directed against male victims, 92% of sexual assaults and other offences were directed against female victims.
- The total cost associated with victimization of these five crimes occurred in 2009 is estimated to be **\$12.7 billion**, or \$376 per Canadian. Assault victimization cost \$2.1 billion; criminal harassment victimization cost \$0.5 billion; homicide victimization cost \$3.7 billion; robbery victimization cost \$1.6 billion; sexual assault and other sexual offences victimization cost \$4.8 billion. Note that these figures are not annual costs, and they capture all the associated costs resulted from the victimization in 2009.
- This report analyzes costs attributed to the party that bears the impact, not the actual monetary loss for three cost categories for each crime: **justice system costs, victim costs, and third-party costs**. Across all five crimes, justice system costs were \$1.9 billion, victim costs were \$10.6 billion, and third-party costs were \$0.2 billion.
- The report also provides a breakdown by tangible and intangible costs. Tangible costs accounted for 26% of all costs (\$3.3 billion); intangible costs accounted for 74% of all costs (\$9.4 billion), mostly due to pain and suffering costs for assault, robbery, and sexual assault and other sexual offences (\$5.9 billion) and loss of life costs for homicide (\$3.5 billion).
- Tangible costs are also further analyzed by who actually paid and bore the monetary burden: the state paid for 64% (\$2.1 billion), individuals (including victims) paid for 33% (\$1.1 billion), and businesses paid for 4% (\$116 million).

Executive Summary

The costs of victimization of five violent crimes are analyzed in this report: assault, criminal harassment, homicide, robbery, and sexual assault and other sexual offences. Incidents that occurred in 2009 are included, and all costs, or impacts, of those incidents are included, regardless of when the costs were incurred. Only incidents involving adult victims (18 and up) and a non-spousal relationship between the victim and offender are included. For the costs of spousal violence, see Zhang et al. (2012).

Measuring the costs of social phenomena is a well-established and important exercise that increases the understanding of social issues and, when used in conjunction with other informative research, can assist policymakers and allow for insight into resource allocation.

Methodology

There are three cost categories for each crime: justice system costs, victim costs, and third-party costs. There are many individual cost items under each of these cost categories. The cost categories are defined by who bears the impact of the cost, not by who actually pays for the cost. Therefore, medical costs are placed under victim costs, not third-party costs, because, although much of the cost is actually paid for by a third party (e.g., the state or a business), the victim bears the impact of the cost item (e.g., the injury).

All costs, both tangible and intangible, that can be reasonably attributed to the crime incident are included. For example:

- Justice system costs include:** police costs, court costs, and corrections costs;
- Victim costs include:** medical costs, lost wages, and pain and suffering;
- Third-party costs include:** lost additional output to employers, victim services operating costs, and funeral service costs.

Each cost item uses a different methodology, with the methodology dependent on the nature of the cost item, the available data sources, and resource constraints. For example, due to extremely limited data, medication costs for assault are estimated by first estimating the number of victims who may have sustained a fracture, and multiplying that number by a certain dosage and cost of pain relief medicine. A perfect estimate would involve querying each assault victim about the medication they used because of the incident, but this method is beyond the available resources. The approaches taken due to this and many other data limitations mean that the estimates in this report should be considered conservative.

The two main data sources used are the police-reported Revised Uniform Crime Reporting Survey (UCR2) and the self-reported General Social Survey on Victimization (GSS). The UCR2 covers 99% of the Canadian population and provides data useful for estimating criminal justice system costs; the most notable data being the numbers of incidents, separated by gender of victim, that were brought to the attention of police. The 2009 GSS, Victimization Cycle, is a national random population survey that attempts to capture the victimization experiences of Canadians. Detailed questions are asked of the respondents regarding the nature and outcomes of victimizations, such as whether or not they

received medical attention due to the criminal incident, whether or not they reported to the police or received counselling, and if they began experiencing depression or anxiety attacks because of the incident. Based on the results of this survey, it is possible to estimate many costs associated with victimization of these crimes.

Many other data sources are used as well, such as the Adult Criminal Court Survey (ACCS), the Youth Court Survey (YCS), Statistics Canada documents, other government-produced resources, and academic journal articles and books.

Results – incident counts

For all crimes except criminal harassment, the number of “incidents” is the measure of prevalence. For criminal harassment, where typically the offence involves one or more stalking incidents, the number of “victims” is the measure. An incident is a single crime event and can involve any number of offenders or victims. A victim is one person who has been victimized in an incident or incidents. The self-reported GSS estimates the following incident (or victim) numbers for Canada in 2009:

- Assault:** 541,202 against females, 877,592 against males, 1,418,794 total;
- Criminal harassment:** 493,296 female victims, 174,792 male victims, 668,088 total victims;
- Robbery:** 62,575 against females, 80,846 against males, 143,421 total;
- Sexual assault and other sexual offences:** 382,066 against females, 179,741 against males, 561,807 total.

The GSS numbers show that 62% of assaults were against males, 74% of criminal harassment victims were female, and 68% of sexual assault and other sexual offences incidents were against females.

The police-reported UCR2 finds the following incident numbers for Canada in 2009:

- Assault:** 67,083 against females, 92,944 against males, 160,027 total;
- Criminal harassment:** 37,001 against females, 32,741 against males, 69,742 total;
- Homicide:** 83 against females, 370 against males, 453 total;
- Robbery:** 6,723 against females, 13,344 against males, 20,067 total;
- Sexual assault and other sexual offences:** 8,054 against females, 723 against males, 8,777 total.

The UCR2 numbers show that 58% of assaults were against males, 82% of homicides were against males, and 92% of sexual assaults and other offences were against females.

Results – costs

The total cost of victimization of all five crimes was \$12,682,992,307 (**\$12.7 billion**) in 2009, amounting to \$376 per Canadian.

Victimization of assault cost \$2.1 billion; victimization of criminal harassment cost \$0.5 billion, victimization of homicide cost \$3.7 billion, victimization of robbery cost \$1.6 billion, and victimization of sexual assault and other sexual offences cost \$4.8 billion. **Tables ES.1** present a summary of all costs.

Across all five crimes, and based on which party bears the impact and not the actual financial cost, justice system costs were \$1.9 billion, victim costs were \$10.6 billion, and third-party costs were \$0.2 billion.

It is also useful to know the breakdown by tangible and intangible costs. Across all five crimes, tangible costs were \$3.3 billion, accounting for 26% of total costs. Intangible costs were \$9.4 billion, accounting for 74% of total costs. Intangible costs include pain and suffering, the value of lost life, and loss of affection and enjoyment to family members.

The tangible costs can further be analyzed by which party bears the actual financial burden of the costs, that is, by who actually pays. It is estimated that the state pays for \$2.1 billion of the tangible costs (64%), individuals (including victims) pay for \$1.1 billion (33%), and businesses pay for \$116 million (4%).

TABLE ES.1A: SUMMARY OF COSTS - ASSAULT

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Criminal justice system costs	\$224,008,173	\$333,028,499	\$557,036,672
Total Justice system costs	\$224,008,173	\$333,028,499	\$557,036,672
Victim costs			
Medical costs	\$64,869,527	\$39,852,413	\$104,721,940
Lost productivity	\$173,222,452	\$172,601,470	\$345,823,922
Intangible costs	\$350,108,996	\$687,974,515	\$1,038,083,511
Other costs	\$1,679,936	\$4,717,205	\$6,397,141
Total Victim costs	\$589,880,912	\$905,145,603	\$1,495,026,515
Third-party costs			
Employer losses	\$11,764,694	\$6,920,336	\$18,685,030
Social services operating costs	\$14,482,078	\$3,450,860	\$17,932,938
Total Third-party costs	\$26,246,772	\$10,371,197	\$36,617,969
Total Assault	\$840,135,857	\$1,248,545,299	\$2,088,681,156

TABLE ES.1B: SUMMARY OF COSTS - CRIMINAL HARASSMENT

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Criminal justice system costs	\$156,532,189	\$119,114,118	\$275,646,307
Civil justice system costs	\$3,503,935	\$423,801	\$3,927,735
Total Justice system costs	\$160,036,124	\$119,537,918	\$279,574,042
Victim costs			
Medical costs	\$60,794,438	\$12,087,013	\$72,881,451
Other costs	\$90,047,177	\$30,309,464	\$120,356,641
Total Victim costs	\$150,841,616	\$42,396,476	\$193,238,092
Total Criminal Harassment	\$310,877,739	\$161,934,394	\$472,812,134

TABLE ES.1C: SUMMARY OF COSTS - HOMICIDE

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Criminal justice system costs	\$33,193,046	\$138,375,464	\$171,568,510
Total Justice system costs	\$33,193,046	\$138,375,464	\$171,568,510
Victim costs			
Medical costs	\$494,445	\$3,312,184	\$3,806,629
Intangible costs	\$628,253,405	\$2,830,835,929	\$3,459,089,333
Total Victim costs	\$628,747,850	\$2,834,148,113	\$3,462,895,962
Third-party costs			
Social services operating costs	\$882,081	\$2,480,852	\$3,362,932
Intangible costs	\$12,558,750	\$56,588,250	\$69,147,000
Other costs	\$465,592	\$2,098,050	\$2,563,643
Total Third-party costs	\$13,906,423	\$61,167,152	\$75,073,575
Total Homicide	\$675,847,318	\$3,033,690,729	\$3,709,538,047

TABLE ES.1D: SUMMARY OF COSTS - ROBBERY

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Criminal justice system costs	\$249,278,137	\$463,584,107	\$712,862,245
Total Justice system costs	\$249,278,137	\$463,584,107	\$712,862,245
Victim costs			
Medical costs	\$24,006,280	\$6,601,236	\$30,607,516
Lost productivity	\$76,190,058	\$85,437,553	\$161,627,612
Intangible costs	\$250,778,892	\$300,575,966	\$551,354,858
Other costs	\$31,362,523	\$95,538,942	\$126,901,466
Total Victim costs	\$382,337,754	\$488,153,697	\$870,491,451
Third-party costs			
Employer losses	\$4,679,644	\$3,684,526	\$8,364,170
Social services operating costs	\$3,141,049	\$509,228	\$3,650,277
Total Third-party costs	\$7,820,693	\$4,193,754	\$12,014,447
Total Robbery	\$639,436,585	\$955,931,559	\$1,595,368,143

TABLE ES.1E: SUMMARY OF COSTS - SEXUAL ASSAULT AND OTHER SEXUAL OFFENCES

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Criminal justice system costs	\$137,693,965	\$12,355,133	\$150,049,098
Total Justice system costs	\$137,693,965	\$12,355,133	\$150,049,098
Victim costs			
Medical costs	\$64,133,011	\$48,988,297	\$113,121,308
Lost productivity	\$210,169,873	\$676,900	\$210,846,773
Intangible costs	\$3,140,618,999	\$1,151,014,152	\$4,291,633,150
Other costs	\$576,966	\$0	\$576,966
Total Victim costs	\$3,415,498,849	\$1,200,679,349	\$4,616,178,197
Third-party costs			
Employer losses	\$8,872,446	\$9,555,258	\$18,427,704
Social services operating costs	\$26,208,747	\$5,729,081	\$31,937,827
Total Third-party costs	\$35,081,192	\$15,284,339	\$50,365,531
Total Sexual assault and other sexual offences	\$3,588,274,006	\$1,228,318,820	\$4,816,592,826

TABLE ES.1F: SUMMARY OF COSTS

Cost category or item	Female victims	Male victims	Total
Assault	\$840,135,857	\$1,248,545,299	\$2,088,681,156
Criminal Harassment	\$310,877,739	\$161,934,394	\$472,812,134
Homicide	\$675,847,318	\$3,033,690,729	\$3,709,538,047
Robbery	\$639,436,585	\$955,931,559	\$1,595,368,143
Sexual assault and other sexual offences	\$3,588,274,006	\$1,228,318,820	\$4,816,592,826
Total costs	\$6,054,571,506	\$6,628,420,801	\$12,682,992,307

Note: Categories in bolded font are summations of the cost items listed under those categories.

Conclusion

Crime has a major impact on the lives of Canadians. This report finds that non-spousal, adult victimization of assault, criminal harassment, homicide, robbery, and sexual assault and other sexual offences in 2009 cost Canadians at least **\$12.7 billion** in the form of tangible and intangible costs.

It is hoped that this research will prove valuable to any parties interested in criminal justice issues, and especially to those committed to combating crime in Canada. This study is another step toward the goal of accurately quantifying the economic impacts of crime victimization. Together with future research on the cost effectiveness of crime prevention and justice programs, it can assist Canadians to better understand the potential economic effects of reducing crime.

List of Acronyms

2004 GSS or GSS 2004	2004 General Social Survey, Cycle 18, Victimization
2009 GSS or GSS 2009	2009 General Social Survey, Cycle 23, Victimization
ACCS	Adult Criminal Court Survey
CCJS	Canadian Centre for Justice Statistics
CPES	Courts Personnel and Expenditure Survey
GSS	2009 General Social Survey, Cycle 23, Victimization
GSS (alternate)	General Social Survey (“GSS” is used here in reference to the General Social Survey project in general, not to one specific cycle; the intended meaning will be clear from context)
PPES	Prosecutions Personnel and Expenditure Survey
UCR2	Uniform Crime Reporting Survey 2
VSS	Victim Services Survey
YCS	Youth Court Survey

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Notes

Framework

1. Five crime categories are analyzed in this report: assault, criminal harassment, homicide, robbery, and sexual assault and other sexual offences. Each crime category may contain several specific crimes.
2. Only adult victims (18 and up) of incidents involving non-spousal relationships between offender and victim are included.

Data and references

3. All police data that are not cited are from the UCR2, all court and corrections data that are not cited are from the ACCS or the YCS.
4. The UCR2 had national coverage of 99% of the Canadian population in 2009.
5. Following **Note 2**, all crime incident and court case data presented involves adult victims of non-spousal crime incidents unless explicitly stated otherwise.
6. When referring to sources, the terminology of the source is often used for accuracy. For example, when Dolan et al. (2005) is referenced in the **Sexual Assault and Other Sexual Offences** section, the terms “rape” and “sexual assault” are used to classify the different sexual offences despite the nature of Canadian law, which classifies sexual assaults based on the level of violence and not necessarily the sexual nature of the crime.
7. Adjustment for exchange rates is done with the Bank of Canada’s annual average exchange rate series¹. Adjustment for inflation is done with the Consumer Price Index (CPI) data series from Statistics Canada². For inflation, the seventh month is used to adjust periods covering calendar years, while the eleventh month of the earlier year is used to adjust periods covering the fiscal year. If adjustments are required for both exchange rate and inflation, the adjustment for exchange rate is done first.

Presentation

8. Numbers in tables and calculations may not add up to stated totals due to rounding.
9. Detailed calculation tables are available in the companion document to this report: *An Estimation of the Economic Impact of Violent Victimization in Canada, 2009: Technical Appendices* (Hoddenbagh et al. 2013).
10. *Table name conventions*: All categories, sub-categories, and cost groups are in bolded font, while cost items are in normal font. For example, the table displaying the estimation of the legal aid cost item for the crime homicide is named **Table H.J.1.4**. Titles for the appendix tables in *An Estimation of the Economic Impact of Violent Victimization in Canada, 2009: Technical Appendices* (Hoddenbagh et al. 2013) also include **AP** in the title, so the appendix table for the legal aid costs of homicide is named **Table AP.H.J.1.4**. Tables not related to a specific cost item are named for the appropriate section of the report (**G.** for general, the first letter of the crime for each crime) and for the order they appear in (**1, 2, 3**, etc.). Appendix tables not related to a specific cost item will indicate that they are expository by **E#** in the name. Figure names follow the same conventions as table names.

¹ Available at <http://www.bankofcanada.ca/rates/exchange/exchange-rates-in-pdf/>.

² Statistics Canada, 2301 — Consumer Price Index, Table 3260020 — Consumer Price Index (CPI), 2009 basket, monthly (2002=100 unless specified).

Limitations

11. For data limitations see **Limitations**.
12. Though the authors have taken all appropriate steps to avoid omitting any reasonable impacts of violent crime, it is possible that there have been inadvertent omissions. For this reason and the approaches taken due to the data limitations, the costs contained in this report are an underestimate of the true economic impacts.
13. The authors acknowledge that the responses about physical and mental impacts to the different crime types may be fundamentally different. Treating mental health issues (in the form of depression or anxiety, for example) caused by assault or robbery the same as those caused by sexual assault may understate (under certain circumstances) the true impact on a sexual assault victim's mental health.
14. Note that comparing the costs of the different crimes can be misleading, as the information and data used in the calculations are not comparable across crimes. The data limitations for each crime are unique to that crime. The range of costs included for one crime may be more comprehensive than the range of costs included for another crime, or the data for one crime may be more complete than the data for another crime even if the data source is the same for both crimes. For example, in the case of a homicide where the victim was employed, there will be costs to the employer (e.g., administrative, re-hiring, retraining, insurance, lost short-term productivity, etc.), but little information is available on the amount of these costs or on the employment status of homicide victims, so these costs cannot be estimated. Assault, robbery, and sexual assault, meanwhile, present their own limitations, as in the operating cost of support centres; since data are available on the number of victims using these services, there are reasonable grounds to make an estimate, but since there are no data on the cost of these services, a conservative assumption must be made. Though the nature of the problem is different in both cases, the result is an underestimation of the true costs of crime. Which specific crime has bigger limitations is impossible to know, as the true extent of the impacts of each crime is both difficult to ascertain and contentious. It is still useful and of interest to calculate these costs and to compare, but comparison must be done with this caveat in mind. For example, this report does not state categorically that one crime results in more costs to Canadians than another crime, it only gives an indication of the costliness of each crime based on the available data.
15. Note that comparison of the same cost items across different crime categories can be misleading. For the most part, the methods used for cost items are the same across crime categories, but in some cases a different method, or different sources or base numbers, are used. For example, **A.V.1.2.2 Medication costs** (medication costs for assault victims) has a different methodology than **S.V.1.2.2 Medication costs** (medication costs for sexual assault and other sexual offences victims). The report attempts to provide the best estimate of each cost item possible, so if a source or some data are available for a cost item in one crime category but not another crime category it will be used for the sake of accuracy.

Introduction

Despite the recent trend of decreasing violent crime rates across Canada — both the violent crime rate and the violent crime severity index decreased from 2006 to 2010 (Brennan and Dauvergne 2011) — violent crime continues to have a major impact on the lives of Canadians. In 2009, there were 444,508 total incidents of violent crime reported by police across Canada. Self-reported data from the nationwide 2009 General Social Survey (GSS) show that there were 2,792,110 reported incidents of violent crime fitting the following criteria: non-spousal relationships between offenders and victims, adult victims only, and four crime types (assault, robbery, criminal harassment, and sexual assault and other sexual offences only).³ The true prevalence of violent incidents across Canada exceeds this result as the criteria specified limit the estimate.

It is clear from these statistics that violent crime impacts the lives of many Canadians. The truth, as the current report will show, is that violent crime actually impacts all Canadians. It affects first and foremost the victims, and the physical and mental impacts for victims can be life-altering, if not life-threatening. It also affects the health of society more generally, redirecting vital resources away from more positive pursuits. These incident counts, while informative, do not capture the true impacts of violent crime. As a way to quantify the impacts that violent crime has on all Canadians, this report estimates the total cost, or “economic impact”, associated with victimization of five violent crimes (assault, criminal harassment, homicide, robbery, and sexual assault and other sexual offences) involving non-spousal relationships between perpetrators and victims and involving only adult victims. Every impact that can be justifiably attributed to the victimization of the criminal act is included, data permitting.

Victims suffer the most serious impacts of crime, the most significant impact for many victims being the intangible pain and suffering, and the primary victims should always remain the focal point of any discussion about criminal victimization. It is recognized, though, that everyone has a personal stake in the effort to reduce violent crime. Other individuals, businesses, and the public in general all feel the impacts of crime in one way or another. Family members may have to take on extra responsibility as the victim heals, businesses whose employees are victimized may lose production as the employee is off of work, and all taxpayers assist in paying for the criminal justice process and health and social services. It is hoped that providing an estimate of the costs of violent victimization will be useful to everyone interested in the issues surrounding criminal victimization.

Purpose

The purpose of this report is to estimate the total costs associated with victimization of five violent crimes (assault, criminal harassment, homicide, robbery, and sexual assault and other sexual offences) involving adult victims (18 and up) where there was no spousal relationship between the victim and the offender in Canada in 2009. For an estimate of the costs of violence in spousal relationships in Canada in 2009, see *An Estimation of the Economic Impact of Spousal Violence in Canada, 2009* (Zhang et al. 2012).

³ Though GSS questionnaires are administered to Canadians who are 15 years old and up, all statistics from and references to the GSS in this report have the condition that the respondents are adult (18 years old and up). Therefore, this is not the true number of victimization incidents found in the GSS, but only those involving adult victims and who were not victimized by a spouse.

Definitions

Cost (economic impact)

A **cost**, synonymous with the term **economic impact** in this report,⁴ is defined as a monetary value derived from a tangible or intangible impact that is lost (as in the case of “pain and suffering”) or exchanged between parties where no monetary value would have been lost or exchanged between those parties in the absence of the crime. For example, “police costs”, and various “social services operating costs” are included as costs because if the crimes had not been committed there would be no transfer of money from the public to the government and non-government institutions responsible for administering these services. The resources (both human and monetary) used in preventing and responding to the crime could have been used in a more positive manner if the crime had not been perpetrated.

Victims

The term **victim** in this report refers to adults (18 and up) who have sustained an incident of one of the five violent crimes analyzed (assault, criminal harassment, homicide, robbery, and sexual assault and other sexual offences) where there was no spousal relationship between the offender and the victim. All court and police-based data requested from the Canadian Centre for Justice Statistics (CCJS) meet these conditions, and appropriate conditions are set for the population-based data from the 2009 General Social Survey (AGEGR5 ≠ 1 to exclude ages 15 to 17). In addition, the term victim only refers to the “primary victim”, described above, though other parties not referred to as victims here may also be classified as “secondary victims” or “tertiary victims”.

Spousal relationships

Spousal relationships include relationships of married, common-law, separated, or divorced partners. Current and former marriage and common-law relationships are captured in the term spousal, and both heterosexual and same-sex relationships are included. Spousal relationships are not considered in this report to avoid redundancy and overlap with a previous related report, *An Estimation of the Economic Impact of Spousal Violence in Canada, 2009* (Zhang et al. 2012). All records in the Incident File of the GSS (which contains the crime incident reports and from which the self-reported data in this work are derived) are non-spousal by definition.⁵ Other accused-victim relationships, such as stranger, other family member, or even boyfriend/girlfriend are captured in the report.

⁴ It is understood that the term “economic impact” has a specific meaning in certain contexts that differs from the definition given in this report. For example, in cost-benefit studies, “economic impact” often refers to a net effect and not solely to a cost. However, for the purposes of this report, “economic impact” means solely a cost, and is also interchangeable with the term “cost”.

⁵ The *GSS Userguide* states, “Respondents are asked to exclude physical and sexual assaults committed by current and previous spouses or common-law partners because questions on these topics are asked separately” (Burns and Williams 2011, p. 9).

Offender

Technically, the term **offender** would only be used upon conviction in a criminal court. Until conviction, the allegations have not been proven, and terms such as “alleged perpetrator” or “accused” (once charges are laid) should be used. However, for ease of reading, this report often refers to offenders in the senses of “alleged perpetrator” and “accused” as well as in the standard sense of “offender”, but the distinctions noted above must be acknowledged. There are no age restrictions on the definition of offender here, so youth as well as adult offenders are included.

Methodology

Sources of Economic Impacts

Victimization of all five violent crimes previously mentioned (assault, criminal harassment, homicide, robbery, and sexual assault and other sexual offences), where the victims are adults (18 and over) and are not in a spousal relationship with the offender, are the sources of economic impacts that are captured in this report. The non-spousal relationship condition is imposed to avoid overlap with a previous costing report (Zhang et al. 2012), while the victim age condition is imposed to avoid overlap with any future costing research on the criminal victimization of children and youth. Offenders of all ages are included. If an impact is deemed to be mainly the result of a victimization then it is included. Any impact that does not derive from one of the five crimes is not included. Therefore, any costs or impacts incurred by the offender are not counted, as these do not result from the victimization of the offence, but from the perpetration of the offence. The decision to exclude offender costs is also supported by some economic theorists (Trumbull 1990) and, more importantly, by the lack of data that would be required to estimate offender costs.

One partial exception to this condition of not counting offenders costs is the inclusion of fines in the corrections sub-category of the criminal justice system category. Fines are theoretically a cost to the offender and a benefit to the criminal justice system (i.e., the rest of society), and because of this fines are included in this report as a partial exception only. They are included solely for illustrative purposes and are not actually included in the rest of the analysis or in the summations of total costs. Also, in practice, fine sentences can generate a net cost to the justice system due to high costs of enforcement.

To illustrate the sources of economic impacts, here are some concrete examples of crime scenarios that would be included in this report: an incident involving a 15 year old youth assaulting a 25 year old adult and an incident involving a 25 year old adult assaulting a 25 year old adult. However, given the definitions of victim and offender in **Definitions**, impacts associated with an assault by a 25 year old adult on a 15 year old youth would not be counted in this report, nor would an assault by a 15 year old youth on a 15 year old youth.

Geography

Theoretically, the scope of this study encompasses all Canadian provinces and territories. However, microdata for the 2009 GSS survey of the territories are not available for analysis, so all cost items based on the GSS encompass only the ten provinces. All cost items related to the criminal justice system are based on the Uniform Crime Reporting Survey 2 (UCR2) and court data and so encompass both the provinces and territories.

Time Period

The timing of the incident is the factor that determines what is included in the analysis; the timing of the impact or cost is irrelevant. Therefore, all incidents that occurred in 2009 are included, and, theoretically, all costs derived from these incidents are measured. For example, if an assault took place in 2009, all costs resulting from that assault would be included, regardless of when those costs were incurred. If the subsequent criminal court case took place in 2010, the costs associated with that court case are included; if the offender was sentenced to one year of provincial custody, to be served in 2011, those corrections costs are included as well.

Costs that are incurred long after 2009 do present some obstacles for accurate estimation. There are numerous interrelated factors influencing costs (e.g., prices, living costs, salaries, currencies, inflation) and these can change greatly over time. As the future levels of these factors cannot be known in the present, estimates of costs incurred in the future must be made based on current information of economic characteristics. Therefore, estimates of future cost items (e.g., lost future income due to mental health disability) are very tentative, as the true costs are tied to the future variation of economic factors.

Gender

All results throughout the report are calculated separately for male and female victims, to provide those in policy and programming with greater detail and context and allow them to target these issues more effectively. Some analyses in the corrections cost groups also take into consideration the gender of the offender.

Crime Categories

Five major crime categories are included in this report: assault, criminal harassment, homicide, robbery, and sexual assault and other sexual offences. These major crime categories contain specific crimes, which differ between the major data sources used. **Table G.1** lists the specific crimes under each crime category according to each data source. Note that data from self-reported sources, court-reported sources, and police-reported sources are not necessarily comparable, but for the purposes of this report the specific crimes in each data source have been matched up to allow for a more comprehensive costing exercise. Each major crime category is analyzed individually in a separate section of the report: **Assault, Criminal Harassment, Homicide, Robbery, Sexual Assault and Other Sexual Offences**. For complete definitions of the crimes and for full analyses of cost estimations, see the appropriate sections.

Assault

Assault is identified in the self-reported GSS by setting the most serious crime variable to “assault” (MSCRIME = 304). Assault in the court-reported Adult Criminal Court Survey (ACCS) and Youth Court Survey (YCS) is separated into two offences: “major assault” and “common assault”. Police-reported data in the UCR2 includes many different types of assaults, which, for this report, are placed into groups designed to be reasonably equivalent to the court-reported aggregations. “Assault level 3”, “assault level 2”, and “assault against a police officer” in the police-reported data are deemed to

be equivalent to “major assault” in the court-reported data; “assault level 1” and “other assaults” in the police-reported data are deemed to be equivalent to “common assault” in the court-reported data.

Criminal harassment

Criminal harassment is more commonly known as stalking, and is defined by the Department of Justice as behaviour that “consists of repeated conduct that is carried out over a period of time and that causes victims to reasonably fear for their safety but does not necessarily result in physical injury. It may be a precursor to subsequent violent acts” (Department of Justice 2004). For purposes of this report, three specific offences are included: criminal harassment (stalking), uttering threats, and threatening or harassing phone calls.

Criminal harassment is a unique crime in the self-reported GSS. It is not included as a reportable crime in the Incident File (where the crime incident reports are found for assault, robbery, and sexual assault), but there is a question asking “have you been stalked ... ?” in the Main File of the 2009 GSS. Unfortunately, no further details regarding the nature of the victimization are collected in the 2009 GSS, and so it is of limited use in calculating the costs of criminal harassment. However, the 2004 GSS contains an entire module on stalking, much of which is useful for costing. For the most complete costing results, the 2004 GSS module on stalking is used and the data are adjusted using the 2009 GSS question on stalking.

In the court data ACCS and YCS: only “criminal harassment” and “uttering threats” are categorized. On the other hand, the police-reported UCR2 has all three relevant offences – “criminal harassment”, “uttering threats” and “threatening or harassing phone calls” where the latter two offences will be grouped into “uttering threats” when estimating the costs at the court stage.

TABLE G.1: CRIMES AS SPECIFIED IN MAJOR DATA SOURCES

Category	Self-reported data ^A	Court-reported data ^B	Police-reported data ^C
Assault	Assault (MCRIME=304)	Major assault	Assault — level 3 — aggravated
			Assault — level 2 — weapon or bodily harm
			Assault against a police officer
		Common assault	Assault – level 1
			Other assaults
Criminal harassment	Stalking (OCE_Q180=1, GSS 2009) (STALKING=1, GSS 2004)	Criminal harassment	Criminal harassment
		Uttering threats	Uttering threats
			Threatening or harassing phone calls
Homicide	Not available	Homicide	Murder – 1st degree
			Murder – 2nd degree
			Manslaughter
Robbery	Robbery (MSCRIME=202)	Robbery	Robbery
Sexual assault and other sexual offences	Sexual assault (MSCRIME=101)	Sexual assault	Sexual assault — level 3 — aggravated
			Sexual assault — level 2 — weapon or bodily harm
			Sexual assault – level 1
		Other sexual offences	Incest
			Anal intercourse
			Voyeurism
			Other sexual violations

^A Source 1: GSS 2009.

Source 2: GSS 2004.

Note: Source 1 is the source for assault, robbery, and sexual assault data. Sources 1 and 2 are for criminal harassment data.

^B Includes data from:

Source 1: Statistics Canada, CCJS, ACCS.

Source 2: Statistics Canada, CCJS, YCS.

^C Includes data from:

Source 1: CCJS special data request.

Source 2: Statistics Canada, CCJS, UCR2.

Source 3: Statistics Canada, CCJS, *Police-reported information*.

Homicide

Homicide is one of the most difficult crimes to calculate economic impacts for because details surrounding the nature of the offence and information about the victim are often not available. Self-reported data being obviously non-existent, the only sources available for homicide are court-reported and police-reported. The court-reported ACCS and YCS list only one “homicide” offence, while three offences from the police-reported UCR2 are included here: “1st degree murder”, “2nd degree murder”, and “manslaughter”.

Robbery

Robbery should not be confused with theft or any of its related offences. Robbery is classified as a violent violation in the police-reported UCR2, while theft and other related crimes are classified as non-violent violations. Robbery can essentially be thought of as theft with violence or the threat of violence where both the victim and offender are physically present. In the court-reported ACCS and YCS robbery is classified as a crime against the person, while theft and other related offences are classified as crimes against property. Therefore, all theft and break and enter violations have been excluded.

Identifying and defining robbery is straightforward in the three main data types. Robbery is identified in the GSS by setting the most serious crime variable to “robbery” (MSCRIME = 202). The court-reported data sources contain only one “robbery” offence, while only the “robbery” offence is included here from the police-reported data (“robbery to steal a firearm”, while included theoretically, has been dropped as there were zero relevant incidents in 2009).

Sexual assault and other sexual offences

The sexual assault and other sexual offences category presents many difficulties for costing. One data issue is the recent reconfiguring of the crime formerly called “other sexual violations” in the police-reported data. According to the Uniform Crime Reporting Survey’s *2011 and Historical Canada/Province/CMA Note* document:

“Other sexual violations” officially expired in 2008 and divided into the following violations: sexual interference, invitation to sexual touching, sexual exploitation, incest, corrupting children, luring a child via a computer, anal intercourse, bestiality/commit/compel/incite a person, voyeurism. Police services have been able to utilise these new codes over the past few years as their Records Management Systems have been updated to allow it.

Comparison with previous years’ data should be done with caution. (Statistics Canada 2012, p. 6)

Though officially expired, there were still incidents recorded as “other sexual violations” in 2009, which causes challenges in the calculations of some cost items.

In the self-reported GSS there is one sexual offence, called “sexual assault”. In this report, victims were classified as sexual assault victims if the most serious crime variable was set to “sexual assault” (MSCRIME = 101). Sexual assaults in the GSS can be separated into two types (“sexual attacks” and “unwanted sexual touching”) based on victim responses about the nature of the crime, and these two types will be utilized when estimating pain and suffering. The court-reported ACCS and YCS simply record two types of sexual crimes: “sexual assault” and “other sexual offences”. As mentioned earlier, the police-reported UCR2 disaggregated the crime “other sexual violations” into many offences in 2008. Thus, apart from the three levels of sexual assault, this report is concerned with the police-reported crimes of “incest”, “anal intercourse”, “voyeurism”, and any residual counts of “other sexual violations”. These offences may involve adult or youth victims (though in this report only adult victims are included), but other crimes disaggregated from “other sexual violations” can only involve youth victims, such as “invitation to sexual touching” and “luring a child via a computer”. “Sexual exploitation of a person with a disability” would also be included in this report but there were no relevant counts in 2009.

Cost Categories

The costs of each crime are separated into three cost categories: justice system costs, victim costs, and third-party costs. Each of these cost categories contains sub-categories which might be further broken down into cost groups. For example, under the category “justice system costs” is the “criminal justice system costs” sub-category which contains “corrections costs” cost group. Finally, both sub-categories and cost groups may contain cost items which are the specific costs that are estimated. For example, both “court costs” and “correction costs” directly belong to the “criminal justice system costs” sub-category – while “court costs” is one cost item, many cost items such as “federal custody costs” are included under the cost group “corrections cost”.

Cost items are placed into cost categories on the basis of which party bears the actual impact of that cost item, not on the basis of who bears the financial burden of that cost item. For example, the sub-category “medical costs” and all of its cost items are placed in the “victim costs” cost category because the victim bears the impact of any medical costs (i.e., the injury or any physical or emotional pain resulting from the victimization that requires medical treatment) even though much of the actual expenditure is paid for by third-parties (the state or businesses through insurance).

Justice system costs

The justice system is comprised of the criminal justice system and the civil justice system. The criminal justice system is of more interest than the civil justice system for estimating the costs of crime. Although the civil justice system can play a major part in redressing some criminal acts (e.g., suing for damages in civil sexual assault cases), estimating the costs of many civil justice components is not possible at this time due to the lack of data in Canada.

Criminal justice system

The three major components of the criminal justice system are all included in this report: police (“police costs”), courts (including “court costs”, “prosecution costs”, and “legal aid costs”), and corrections. Corrections is further categorized into “federal custody costs”, “provincial custody costs”,

“conditional sentence costs”, “probation costs”, and “fines”. “Fines” are unique in that they are theoretically an economic benefit to the justice system, and are therefore not included in any cost summations (see **Sources of Economic Impacts**). All cost items under the criminal justice system are included for every crime.

In addition to the potential corrections outcomes already listed, there are certain “other” sentences that may be given to the offender, including restitution, absolute discharge, conditional discharge, suspended sentence, payment of legal costs, and suspension of drivers license for adults, and absolute discharge, restitution, prohibition, seizure, forfeiture, compensation, pay purchaser, essays, apologies, counselling programs, and conditional discharge, among others, for youth.⁶ The costs of all “other” sentences are not analyzed due to a lack of available data.

Civil justice system

The civil justice system differs from the criminal justice system in that the impetus for justice comes from the victim, not the state. For many victimization incidents covered in the scope of this report, the civil justice system will not play a role, while many victims who may find some aspect of the civil system useful also find barriers in the time, the cost, and the emotional toll. One specific scenario of the civil justice system that is relevant to this report is the case in which a victim of sexual assault sues the alleged offender for damages. However, due to lack of data and a lack of contextual clarity,⁷ no cost estimates are made for this scenario, but a brief discussion on the subject is provided in **Text Box S.1**.

The only cost item included in this report for the civil justice system is “restraining or protection order costs” for criminal harassment.

Victim costs

Victims bear the greatest and most direct impacts of violent crime. The traumatic experience of being a victim may itself cause severe pain and suffering, and in many cases this is actually the greatest impact of the crime. Pain and suffering is considered an intangible cost because no financial transaction takes place and therefore its “value” is not determined by a market. The loss of life of homicide victims is the other significant intangible cost in the victim cost category.

However, there are also many tangible costs of crime for victims. Medical treatment may be required for either a physical injury or a deterioration of mental health resulting from the victimization. The victim may be forced to take time off of work and consequently lose wages due to either physical incapacitation or emotional trauma, while longer term physical and mental effects may significantly impact future earnings. Victims may also incur other miscellaneous costs mostly related to property and possessions.

⁶ From ACCS and YCS definitions on the CCJS Statistics website.

⁷ The civil justice system is not as easily analyzed as the criminal justice system. Determining what cases to include in an analysis of sexual assault in the civil system is difficult as there are no rigid categories in which cases are placed, while in the criminal system it is easier to differentiate between different categories, such as “assault” cases, “robbery” cases, and “sexual assault” cases, because these crimes are definable and can be placed in certain categories. As the nuances and the specific context of each civil case may be unique, grouping certain civil cases may omit some relevant cases or include some inappropriate cases.

Medical costs

Though much of the medical payments are made by the state or businesses, victims bear the impacts (i.e., injuries or emotional effects) of those medical costs. Assault, robbery, and sexual assault victims may seek medical attention from doctors or nurses (“doctor or nurse service costs”), or in serious cases they may visit the emergency department (“emergency department costs”) or have to stay overnight in the hospital (“overnight hospitalization costs”). Homicide victims may also visit the emergency department in cases where the victim is not yet deceased and attempts are made to save his or her life in the hospital.

As for long-term medical impacts, victims of all crimes (except homicide) may be emotionally traumatized and may seek help in counselling (“counselling costs”); data from the GSS show that many victims do indeed utilize counselling services. Data for long-term “medication costs” and “physical therapy costs” are severely limited, but what little information is available is included for relevant crimes as they are important components of medical costs. The last cost item discussed is the “costs of suicide attempts” in cases of sexual assault victimization. Sexual assault is a crime that, depending on the specific circumstances, potentially involves elements beyond the physical, including sexual, emotional, and spiritual (Frampton 1998). With such severe impacts, victims of sexual assault may fall into emotional turmoil, depression, and suicidal thoughts and behaviour. Victims who attempt suicide may cause harm to themselves, and emergency medical treatment may be required.

Text Box G.1 gives a brief explanation of the different types of counselling services available, how the costs of these services can vary greatly, and the use of counselling within and beyond victims services.

Text Box G.1: Counselling for Victims of Violent Crime

The term “counselling” is used in everyday conversation to cover a myriad of services by many different professionals. Those who provide counselling are trained and in many instances registered with a professional body. The Canadian Psychology Association is an umbrella organization which focuses on research, practice and education. It provides important information to the public and to practising psychologists. For example, it provides links to information on licensing, which is different in each jurisdiction. In some jurisdictions, a psychologist requires a doctoral degree and in others, a Masters degree is sufficient to practise as a clinical psychologist. The website also provides information for the public on what to expect, how to find a psychologist and additional resources. See

<http://www.cpa.ca/practitioners/practiceregulation/>

Counsellors are also called therapists, who would have had specific university or other training. Many social workers provide counselling, as do organizations such as sexual assault centres. In some organizations, first-hand experience of victimization is important and in others, academic and professional credentials. In Canada, counselling services are regulated by the province or territory and there is significant diversity in terms of types of services, how these services are funded (if they are) and the qualifications of those providing the services. The cost of these services varies considerably from those that are supported through provincial health insurance or private insurance, to paying for the services oneself, or a combination thereof.

Providing emotional support is different from counselling. Victim services, both crisis response and system-based services and whether volunteers or staff, are trained to provide support through information and explanations, active listening and feedback. Where there are mental health or other health issues, victim services can help with referrals to appropriate professional care.

For more information on working with victims of crime, please see:

HILL, J. 2009. *Working with victims of crime: A manual applying research to clinical practice (Second Edition)*. Accessed February 25, 2014 at [http://www.justice.gc.ca/eng/rp-pr/cj-
jp/victim/res-rech/index.html](http://www.justice.gc.ca/eng/rp-pr/cj-
jp/victim/res-rech/index.html).

Lost productivity

Victims of assault, robbery, and sexual assault may all experience lost wages for taking time off work to recover in the short term (“lost current income”), but they may also experience long-term work loss or decreased earnings if they are permanently impacted either physically (“long-term physical disability costs”) or mentally (“mental health disability costs”). Victims of these three crimes who are not employed may also suffer from decreased productivity, whether in school (“lost education”) or in

the home (“lost household services” and “lost child care services”). The lost productivity of criminal harassment victims is not estimated due to insufficient data.

Intangible costs

Much of the impact felt by victims is intangible. The two intangible victim costs estimated in this report are “pain and suffering costs” and “loss of life costs”. These intangible costs are very difficult to measure for a number of reasons, and even attempts to measure them can be contentious, as discussed in **Valuation of Intangibles**. To provide as comprehensive an estimate as possible, though, intangibles such as these must be included as they are a large component of the actual costs of crime. For details on the methods and sources used to estimate intangibles in this report, and brief discussions of the literature, see **Valuation of Intangibles**.

Other costs

“Stolen, damaged, or destroyed property” is one of the main costs in robbery cases and criminal harassment cases, but there may also be incidental property costs in assault and sexual assault cases. Criminal harassment victims attempting to avoid their stalker may activate special phone features such as caller ID (“special phone feature costs”), or in severe cases may actually move away from his or her current home. This latter action involves measurable costs (“moving and change of address costs”), but significant intangible costs are also involved (e.g., relocation stress, loss of contact with friends and family, loss of familiarity with home area, new schools for children, etc.) that cannot be estimated due to data limitations.

Third-party costs

Though third parties do not experience any direct impacts of someone’s victimization, they can be affected in significant ways. Employers can experience many potential costs when their employee is victimized, from lost wage expenditures to less productivity on the job. Social services, funded by governments, businesses, non-profit organizations, and individual donors, play a major role in providing support for victims. Governments are also active in providing funds for prevention, awareness, and assistance programs and campaigns. Family members may sustain costs beyond the intangible costs and funeral service costs included here.

Employer losses

Victims who are employed and who take time off of work to recover may incur a cost to employers if they have paid leave time available (“lost wage expenditure”), and for all victims who take time off of work there will be “administration costs” to the employer for the work days missed. Crimes that have major psychological impacts on victims may cause victims to be late for work and to become distracted while at work (“tardiness and distraction costs”). All employers whose employees are absent due to victimization will face “lost additional output” as their workers are not producing the expected returns on their work. As the stalking module of GSS does not contain questions on time lost and daily main activity, the available data permit estimation of employer losses only for assault, robbery, and sexual assault.

Social services operating costs

Many entities are active in providing support and care through social services. The costs of two types of social services are found in this report: “victim services costs” and “crisis centre and crisis line costs”. Usage numbers for these services are gathered from the GSS, which asks victims if they contacted or used these services, and from other government reports. Some confusion exists between the GSS questions on social services usage and the GSS question asking respondents if they had contacted or used a counsellor or psychologist because counselling services may also be available through some social services. In order to obtain estimates, it is assumed that the questions are exclusive of each other, and that counselling costs are borne by the victim, while social services operating costs are not.

Text Box G.2 provides information on criminal injuries compensation and financial benefit programs that are administered through social services. These programs are not included in the cost analysis as most of the reasons for giving compensation are already included as cost items in the report, and including compensation would therefore lead to double counting of the economic impact of victimization. For example, compensation for pain and suffering accounts for the majority of the total monetary awards, but pain and suffering is already calculated as a separate cost item in this report, so including compensation would count the value of pain and suffering twice. Similarly, compensation is often given for medical expenses or lost wages, both of which are also already included in the report.

Text Box G.2: Criminal Injuries Compensation and Financial Benefit Programs

The following text is taken directly from Munch (2012).

“Criminal injuries compensation programs are a type of victim service that provide monetary awards and benefits to victims of crime to help ease financial hardship incurred as a result of victimization. This category of service includes programs designated to pay fees for specific services for victims of crime. Examples include professional counselling, transportation to hearings, child maintenance and paying fees for legal counsel. Criminal injuries compensation programs exist in all provinces except Newfoundland and Labrador. They do not exist in the three territories, although Northwest Territories does provide emergency financial assistance.

While there are provincial differences in eligibility criteria, compensation programs are generally open to victims of criminal offences (usually violent crimes). Applications may stem from either physical or psychological injuries, though the injury must be more than transient in nature. Compensation may be awarded whether or not the offender is prosecuted or convicted, or even if no charges are laid (Canadian Resource Center for Victims of Crime 2011).

...

From April 1, 2009 to March 31, 2010, over 16,000 applications were received or brought forward from a previous year by compensation and other financial benefit programs for victims of crime. Of the applications for which the outcome was reported, almost 11,000 (81%) were approved...

Among adjudicated applications, 64% were submitted by women and 36% by men. Women who received assistance from a compensation or benefit program were most likely to request services in relation to an assault (44%) or a sexual assault (28%). While men were also most likely to turn to a compensation or benefit program in response to an assault (61%), the proportion of those who sought compensation for a sexual assault was much lower (11%).

Together, all compensation and benefit providers indicated that they had awarded more than \$63 million to victims of crime in 2009/2010. The largest proportion of this amount was awarded for pain and suffering (61%), followed by medical, rehabilitation, dental or eyewear costs (9%) and loss of wages (8%). The remaining compensation amount was awarded for other reasons, such as child maintenance, counselling services, and funeral and burial costs.”

Intangible costs

Though less contentious than the intangible costs of victims (see **Intangible costs**), the intangible “loss of affection and enjoyment to family” for the families of homicide victims still brings difficulties. The methods for measuring this cost are less developed than the more mature methods of valuing

pain and suffering and loss of life. For details on the methods and sources used in this report see **H.T.3.1 Loss of Affection and Enjoyment to Family**.

Other costs

An additional cost applicable to homicide, usually borne by the family of the victim or government assistance, is “funeral service costs”.

Other government expenditures

Both the federal and provincial/territorial levels of government are active in crime prevention, education and raising awareness for victims of crime and their families, as well as the general public. In addition, governments undertake research, the rehabilitation of violent offenders and provide assistance to victims of violent crime through services and also project funding. The vast majority of both government funding for third-party service delivery and direct government expenditures on programs and policies related to violent victimization are already included elsewhere in this report, one example being the large amount of funding provided by governments for the delivery of social services, including support centres, crisis lines, and victim services.

This report examines each of five categories of violent victimization: homicide, sexual assault, assault, criminal harassment and robbery. Data on other government expenditures were not available by category of victimization or by gender. While there was information on expenditures related to sexual assault for some jurisdictions, overall the information was too vague to be of specific use. As such, this section will provide a qualitative description of federal and provincial/territorial expenditures beyond the expenditures already captured in the report.

Federal government expenditures

As noted above, it was not possible to estimate specific federal government expenditures associated with violent victimization. Focusing on one work unit, the Policy Centre for Victim Issues (PCVI) at the Department of Justice Canada, will provide an in-depth example of the additional expenditures by the federal government for victims of violence.

The PCVI was established in 2000 in response to the parliamentary report *Victims Rights – A Voice Not a Veto*, which recommended the development of both a victims of crime strategy and an office to respond to victims issues within federal jurisdiction. The current mandate of the PCVI is to work toward giving victims a more effective voice in the criminal justice system by:

- helping victims and their families understand their role in the criminal justice system and the laws, services and assistance available to support them;
- ensuring that the perspectives of victims will be fully considered when relevant federal laws and policies are developed.
- increasing awareness both within Canada and internationally about the needs of victims of crime and effective approaches to respond to those needs.⁸

⁸ For more information see <http://canada.justice.gc.ca/eng/pi/pcvi-cpcv/index.html>.

A key component of the PCVI is its collaborative approach to justice system issues for victims of crime. The PCVI works with federal department and agency partners to ensure a shared federal perspective, foster collaboration and provide opportunities for joint action. Other federal partners include: Correctional Services Canada, the Royal Canadian Mounted Police, the Parole Board of Canada and the National Office for Victims at Public Safety Canada. In addition, the PCVI works closely with its provincial and territorial counterparts as responding to the needs of victims is a shared responsibility in Canada.

In 2009, federal victimization expenditures included direct and cost shared amounts related to a wide variety of activities and programming directed to prevention and awareness, services, research, policy development, consultations, symposia, education and training. The operational budget of the PCVI in 2009/10 was approximately \$4M, the same as in 2008/09.

The Victims Fund, which is the funding program of the PCVI, totalled \$7.75M in the same year. While not all components of the Victims Fund are relevant to adult victims of violence in Canada (e.g. Canadians Victimized Abroad), there are many components that are relevant. Descriptions of these components follow with the dollar amounts and are taken from the 2009-2010 Department of Justice Canada Departmental Performance Report which is tabled in the House of Commons each year.⁹

Provincial and Territorial Funding

In 2009/2010, the Victims Fund provided \$712,997 in contribution funding to provinces and territories to help meet the needs of under-served victims of crime and/or to help support victims in attending sentencing hearings and in submitting their Victim Impact Statements

In addition, the Victims Fund provided \$367,941 in contribution funding to provinces and territories to support implementation of legislation to benefit victims or to advance the Canadian Statement of Basic Principles of Justice for Victims of Crime.

Finally, a total of \$421,596 in financial assistance was provided to seven provinces and territories to implement victim-related *Criminal Code* provisions in 2009-2010.

Victims Fund Project Funding

The Victims Fund provides funding through grants and contributions to support projects and activities that encourage the development of new approaches, promote access to justice, improve the capacity of service providers, foster the establishment of referral networks, and/or increase awareness of services, legislation and assistance available to victims of crime and their families.

In 2009/10, a total of 67 projects began or were underway for a total amount of \$2,198,000.

Financial Assistance for Victims to Attend Parole Board of Canada Hearings

In Canada, victims are entitled to attend hearings conducted by the Parole Board of Canada as observers or to present a victim impact statement. Attending Parole Board of Canada hearings often involves travel and accommodation away from home. The Victims Fund provides financial assistance

⁹ Archived 2009-2010 Departmental Performance Report on the Treasury Board Secretariat website

to registered victims who wish to attend hearings for the offender who harmed them in order to help victims participate more fully in the criminal justice system.

Financial assistance is also available for a support person to accompany registered victims to Parole Board hearings or to provide child or dependent care to enable victims to attend hearings.

In 2009/10, 346 victims and 89 support persons attended parole hearings with funding from the Victims Fund for a total cost of \$233,202.

Financial Assistance to Host National Victims of Crime Awareness Week Events

The Government of Canada provides funding for organizations to host National Victims of Crime Awareness Week events. In 2009, the National Victims Awareness Week took place April 26 to May 2 with the theme of *Supporting, Connecting, Evolving*. Through the Victims Fund, funding up to \$10,000 was available for projects that promoted community awareness, recognition of victims of crime or victim services, and which supported the goals of the Week. A total of 76 organizations/communities across Canada received funding for a total of \$619,072.

Text Box G.3 provides information on the federal government's commitment to parents of murdered or missing children.

Text Box G.3: Federal Income Support for Parents of Murdered or Missing Children

The federal government recognizes the economic impacts of crime on families and has introduced the new Federal Income Support for Parents of Murdered or Missing Children.

As of January 1, 2013, this grant provides assistance to eligible parents who suffer a loss of income as they take time away from work to cope with the death or disappearance of a child as a result of a probable Criminal Code offence.

This new grant is expected to support an estimated 1,000 families annually. It will provide \$350 per week in income support for up to 35 weeks. To receive this new benefit, affected parents will need to have earned a minimal level of income (\$6,500) in the previous calendar year or the previous 52 weeks and take leave from their employment.

In addition, through the *Helping Families in Need Act*, the *Canada Labour Code* has been amended to allow for unpaid leave and to protect the jobs of parents whose child dies or disappears as a result of a probable *Criminal Code* offence. This will allow parents who work in a federally regulated company to take time away from work to focus on what matters the most — their family — while knowing that their job is protected.

For more information, see <http://www.servicecanada.gc.ca/eng/sc/pmmc/index.shtml>.

Provincial and territorial government expenditures

As with the federal government, provincial and territorial governments are committed to addressing violent victimization. In some jurisdictions, this commitment may be approached from a gendered perspective, as in addressing violence against women and girls.

As part of their work on violent victimization, the provinces and territories have also implemented numerous programs focusing on awareness, prevention, intervention, services or assistance. These programs vary across the country in order to take into account different needs in different communities. Operating costs associated with the provision of victim services, including sexual assault centres and Sexual Assault Nurse Examiners, have been included under Social Services Operating Costs and Medical Costs. Other costs, such as autopsies in the case of homicides are also included under Medical Costs. In addition to the revenues generated by the federal and provincial surcharges, some provincial and territorial governments also contribute funding to the operating costs of victim services. Most jurisdictions receive funding from the federal Victims Fund to support the implementation of federal and provincial/territorial legislation for victims of crime and to reach underserved victims. Jurisdictions use this funding for specific projects that can include the development of public legal education and information, the development of services, training, research, evaluation, and other activities.

Estimation methods

Each cost item has a unique estimation method based on the nature of the cost item, the available data sources, and resource constraints. Detailed explanations of each estimation method are available in the main sections of the report.

Data Sources

Uniform Crime Reporting Survey 2 (UCR2)

The UCR2 survey is an administrative survey that captures detailed information (incidence, accusation, and charge statistics) on all *Criminal Code* violations reported to and substantiated by police services across Canada. The individual-level microdata indicate the age and gender of both the victim and the offender as well as the relationship of the accused to the victim, which allows identification of non-spousal relationships. The survey is comprehensive in both detail and in geographic scope, as national (provincial and territorial) coverage of the UCR2 survey was 99% in 2009. This study uses UCR2 data to find the number of incidents requiring police resources and to estimate the number of initiated criminal court cases and corrections sentences.

General Social Survey (GSS)

The GSS is a regular annual population survey conducted by Statistics Canada; each year or cycle focuses on a particular social subject. The victimization cycle was first conducted in 1988 and now occurs every five years. The 2009 cycle of the GSS is used in this study, along with the stalking section and some sexual assault questions from the 2004 cycle. The GSS is the only national survey of self-reported victimization.

The GSS target population is non-institutionalized Canadians aged 15 and over who are able to conduct an interview in one of the official languages and who can be reached by landline telephone. GSS respondents are asked about their personal experiences of criminal victimization, regardless of whether or not the incident was reported to police. As not all crimes are brought to the attention of the police, the GSS is an important complement to police-reported crime statistics found in the UCR2 survey. Since victimizations not reported to police have no less of an effect on victims, family, and employers than those incidents that are reported to police, self-reported data recorded in the GSS give a more comprehensive and accurate reflection of the prevalence and impact of violent victimization in Canada.

The GSS victimization cycle contains two questionnaires and corresponding data files. The Main File includes all of the demographic information for respondents (such as sex, age, work status, annual income, education, and family size), details about spousal violence incidents and situations, details about criminal harassment (in the 2004 cycle but not the 2009 cycle), and screener questions that are used to determine which respondents also need to complete incident reports in the Incident File. The Incident File includes details about all reports of non-spousal victimization (excluding criminal harassment). If a respondent indicates in the Main File screener questions that they were victimized by anyone who isn't their spouse in the past year, they are asked to complete an incident report. The Incident File contains most of the information relevant to the current study as it asks respondents about the nature and outcomes of their victimization. The Incident File contains 7,096 incident reports, each of which may contain multiple reports of "similar incidents". These multiple reports can be taken into account with the weighting variable ADJWTVIC, which caps the number of incidents in each incident report at three.¹⁰ When weighted, the Incident File contains 9,692,321 crime incidents. The Main File has a count of 19,422 respondents, with each respondent representing an average of approximately 1,400 non-institutionalized Canadians when weighted to the total population 15 years of age and older.

Cases of criminal harassment, or stalking, do not follow the same weighting conventions as other crimes and are unique in the GSS. In the 2009 GSS, respondents were asked if they had been victims of stalking in the Main File; the only additional information provided was the number of times they were stalked in the past 12 months. This was an attempt to obtain estimates of lifetime victimization more broadly without putting a burden on respondents to provide details for each incident.

Stalking victims in the 2009 GSS did not complete a crime incident report in the Incident File. However, a stalking module was included in the 2004 GSS, and victims did provide additional details of the crime, but this was also only available in the Main File, and outcomes were given only for each victim, not for each incident. For example, if a victim activated special phone features at three separate times to avoid harassment, the 2004 GSS will only record that the victim activated special phone features at some time to avoid harassment. Therefore, all estimates for criminal harassment are based on the number of victims, not the number of incidents.

¹⁰ For further discussion of weighting variables and an explanation of why ADJWTVIC is used for cost items calculated per incident and WGHT_PER is used for cost items calculated by victim in this report, see the 2009 GSS User Guide (Burns and Williams 2011).

Other data sources

The Adult Criminal Court Survey (ACCS) and the Youth Court Survey (YCS) are statistical databases of the main court-related measures such as charges and convictions. They both contain demographic information of the accused (age and sex) and information on the nature and outcome of each case. However, court surveys were not designed to gather information about victims of crime, and some of the estimates based on court data also require the use of police data to approximate certain elements of the estimate. The data are collected from all jurisdictions responsible for criminal courts. The ACCS and YCS are used in many of the cost items in the criminal justice system sub-category.

Many other data sources are used in the estimates of one or a few cost items. Canadian and international government reports, academic journal articles, and independent research organizations are all represented in this study. Some of the other surveys used are:

- Adult Correctional Services Survey (ACS) and the Integrated Correctional Services Survey (ICS)
- Court Personnel and Expenditure Survey (CPES)
- Legal Aid Survey (LAS)
- Police Administration Survey (PAS)
- Prosecutions Personnel and Expenditure Survey (PPES)
- Victim Services Survey (VSS)

Limitations

Costing exercises of the scope and magnitude of the current study all face limitations related to data availability, data reliability, resource constraints, and method. As a product of these limitations, some estimates will be conservative and some estimates will not be possible at all.

The term “resource constraints” refers to the resources (time, money, data access, etc.) available to the researchers for the purposes of carrying out the costing work, and these constraints can also be causes or results of data availability and data reliability. For example, due to extremely limited data, medication costs for assault are estimated by first estimating the number of victims who may have sustained a fracture, and multiplying that number by a certain dosage and cost of pain relief medicine. Obviously, a perfect estimate would involve querying each assault victim about the medication they used because of the incident, but this method is beyond the available resources.

It is also regrettable that the current study is unable to analyze the different impacts that victimization has on different groups of the population, with the exception of the breakdown by gender. It is recognized that there is importance in estimating the costs for a variety of diverse groups (e.g., Aboriginal groups, the elderly, students, etc.) in order to examine where the impacts of victimization are the greatest, but the data sources do not permit such analyses.

Data availability

Data that are not available can influence the study in one of two ways: either the relevant cost item must be underestimated based on some other data source or a reasonable assumption, or the cost item cannot be estimated at all.

One example of the first problem is the lack of data available in situations of losses to employers where employed victims are so affected by the incident that they become unemployed, either due to resignation or layoff. No data are available in such cases, and therefore costs associated with an employee leaving, such as rehiring costs, retraining costs, and lost interim productivity while the position is unfilled, are not estimated, so only limited estimations are made for cost items concerning losses to employers.

Another example of the first problem is the average number of calls made by victims to a crisis line, which is necessary information for estimating “crisis centre and crisis line costs”. The number of victims who contacted crisis lines at least once is available from the GSS. However, as crisis lines are anonymous, the number of calls made by each person who uses the service is not recorded. Therefore, some of the information needed to estimate this cost item is available, but the other information needed must be assumed based on anecdotal evidence from front-line crisis line workers. This kind of data unavailability may result in cost estimate inaccuracies.

An example of the second problem, where the cost item cannot be estimated at all, is civil sexual assault cases. Victims of sexual assault may sue the offender in a civil court in order to obtain damages for the pain and suffering experienced by the victim. This is an important element of the justice system, allowing victims a chance for financial redress. Unfortunately, the civil justice system is fragmented (as it is administered provincially) and it is difficult to both record and compile data in the civil context. Identifying those cases involving victims of sexual assault is therefore difficult, and determining the number of cases nationally and the cost to the civil justice system is not advisable. This report only provides a discussion on the topic and presents what information is available for interest only.

Data reliability

Several factors affect the reliability of the UCR2 survey. First, each police jurisdiction in Canada reports their own data to the CCJS (who oversees the UCR2), so any differences in the collection and compiling of that data between the jurisdictions will not be reflected in the UCR2. Second, differences in the way police activities are carried out between jurisdictions may cause the UCR2 to show aggregations of dissimilar data. For example, the individual responsible for deciding whether to lay a charge or not is not the same across jurisdictions. In British Columbia and Québec, the Crown decides whether or not to lay charges, while in New Brunswick the police, after consultation with the Crown, are ultimately responsible for the decision (Department of Justice 2003). Note also that the UCR2 data tables used for the calculations in this report only record the most serious offence (MSO) for each incident.

The GSS has more numerous and more serious data reliability issues than the UCR2. The main issue is the possible bias or misrepresentation of certain demographic groups (or of victimization rates and experiences) in the GSS, and this issue has many contributing factors.

The GSS is conducted by landline telephone. More and more Canadians are not using landline telephones, relying solely on cellular phones instead. The percentage of households using cellular phones only increased from 6.4% to 13.0% from 2007 to 2010.¹¹ Any demographic groups that

¹¹ Statistics Canada, “Residential Telephone Service Survey”, *The Daily*, 15 June 2009 and 5 April 2011.

disproportionately avoid using landline telephones are in danger of being misrepresented in the GSS. Young people have been shown to be just such a demographic (Arcturus Solutions 2008), and if certain groups within that demographic have different victimization characteristics but cannot be reached on a landline telephone, then the GSS results may not be representative of this group. The GSS data is also weighted according to age to be more representative of the general population, but this actually exacerbates the previous issue if the results for youth are not representative of the true victimization experiences of youth.

The GSS does not cover individuals residing in institutions at the time of the survey, where an institution may be a shelter, retirement home, hospital, correctional facility, or some other non-traditional residence. If these individuals are more or less likely to have been victims of violent crime, and have different victimization experiences, the GSS will present a biased picture of victimization in Canada.

The non-response rate of the GSS is 38%. The victimization rates and victimization experiences of these non-responders is unknown. If victims or certain types of victims are more likely to avoid responding to the survey, the results will undercount victimization incidents and may possibly misrepresent the nature of victimization.

One further limitation of the GSS is the reliance on respondents to accurately recall events that may have been emotionally traumatizing. For many reasons, victims may not remember the events of their victimization or the outcomes of that victimization with perfect accuracy (Perreault and Brennan 2010). If, for example, a victim remembers that she was supported by victim services but does not remember that she visited a counsellor separately, the resulting social service operating costs and victims costs will be underestimates.

The previous limitation is closely related to another GSS reliability issue. Some victims of certain crimes (such as sexual assault or stalking) may be unwilling to disclose their experiences of criminal victimization to an interviewer due to the sensitivity of the crime and their experiences, and the incidence of these crimes is therefore likely to be underestimated.¹²

Note also that the GSS weighting variable used, ADJWTVIC, caps the number of incidents in each report at three. It is possible that the true number of incidents exceeds the number of incidents obtained using the ADJWTVIC weighting variable.

One final important limitation is the quality of the data themselves. The GSS *User's Guide* states the benchmark for minimum sample sizes to be used when presenting GSS data:

Users should determine the number of records on the microdata file which contribute to the calculation of a given estimate. This number should be at least 15 in the case of persons or households, and at least 40 in the case of victimization incidents. When the number of contributors to the weighted estimate is less than this, the weighted estimate should generally not be released regardless of the value of the Approximate Coefficient of Variation.

¹² One related reliability issue of the GSS that does not directly affect this study is the potential changes in victim reporting over time. The measuring of victim experiences across time may not be consistent due to different population samples, changes in demographics, changes in culture, and a number of other reasons.

If it is, it should be with great caution and the insufficient number of contributors associated with the estimate should be prominently noted. (Burns and Williams 2011, p. 25).

Many of the estimates in this report use GSS victimization results that contain less than 40 records when not weighted. The GSS estimates are simply “best estimates”. Sampling error is reduced with large samples, which is the case for many of the broader GSS variables, but as sub-sample sizes decrease (for narrower variables), sampling error increases. Therefore, many GSS results in this report should be read with extreme caution. Any reproduction of the GSS results contained in this report should only be done with full knowledge of the data quality, and should carry the same warning of caution to other readers.

Valuation of Intangibles

Intangible costs make up the largest proportion of costs in this analysis, and therefore it is important to understand the different methods used by economists to estimate the value of each intangible impact in order to choose the most appropriate one. This section contains a discussion on how pain and suffering and loss of life are valued in this report and some alternative methods that are not used.

Intangible impacts have no market price at which “values” are determined. Estimating these “values” is difficult since every victimization experience is different, and the intangible impacts felt by each victim are consequently different. Therefore, there are many different methods to estimate the values of intangibles. The very act of placing a monetary value on intangible costs can be considered inappropriate or insensitive, but it is vital to do so when estimating the costs of social phenomena. Great effort has been made in this report to treat these issues with proper respect and sensitivity. Intangible impacts are obviously very personal and affect victims profoundly, and in no way is this report implying that the impacts are “worth” the values assigned to them; the values assigned simply provide a somewhat standard way to compare the magnitudes of different social issues, and without including intangible costs these cost analyses would be extremely incomplete. By including intangible costs for all social issues, a more accurate comparison across issues can be made.

Pain and suffering

Pain and suffering costs are relevant to assault (**A.V.3.1 Pain and Suffering Costs**), robbery (**R.V.3.1 Pain and Suffering Costs**), and sexual assault and other sexual offences (**S.V.3.1 Pain and Suffering Costs**). Pain and suffering costs are also relevant to criminal harassment, but data are not available in order to include them in the estimation.

In this report, the values of pain and suffering for assault and robbery come from McCollister et al. (2010). McCollister et al. (2010) uses the method developed in Cohen (1988) and updates it by using more recent data. The method involves taking the compensation amounts awarded by juries for different crimes (by way of the injuries incurred and the likelihood of each crime resulting in each injury) and subtracting all likely tangible costs (e.g., medical, etc.) associated with those victimizations to get the juries’ valuations of pain and suffering. Though both Cohen (1988) and McCollister et al. (2010) focus on the US, it is assumed that pain and suffering in Canada is similar due to lack of Canadian information.

An alternative approach for estimating pain and suffering is to analyze Disability Adjusted Life Years (DALYs), or the converse measure Quality Adjusted Life Years (QALYs). DALYs are measures of the

amount of healthy life lost due to an injury or disease (including psychological injury or disease), or the amount of life lost due to premature death caused by that injury or disease. Access Economics (2004) uses DALYs and the value of one year of life to calculate the pain and suffering costs of domestic violence victims in Australia. This is possible in the Australian case as Access Economics (2004) had access to detailed data on the injuries sustained by victims of domestic violence, but there is no such detailed information available for victims of crime in Canada. Dolan et al. (2005), however, uses the QALY method to estimate general values of pain and suffering for victims of rape and sexual assault.

The approach used by McCollister et al. (2010) is not suitable for use in the sexual assault and other sexual offences section because it only includes the value of pain and suffering for “rape/sexual assault” and does not distinguish between the two. Though Canadian law classifies three levels of sexual assault and does not distinguish between rape and sexual assault, the GSS does distinguish between “sexual attacks” and “unwanted sexual touching”. In this report, a proportion of “sexual attacks” are further estimated to be “rape”. All sexual offences not deemed “rape” are then classified as “sexual assault”. The values of pain and suffering for sexual assault and other sexual offences are therefore taken from Dolan et al. (2005), which distinguishes between the more serious offence “rape” and “sexual assault” and is based on the QALY method described above. This method is used to guarantee a conservative estimate, as classifying all GSS incidents as “rape” and assigning the pain and suffering value of rape to those incidents may cause the pain and suffering of some of the less serious incidents to be overestimated.

A third method not used in this report, also described in Dolan et al. (2005), is the stated or revealed preferences (“willingness to pay”) approach, which measures how much people are willing to pay for some intangible benefit of reducing crime based on their actual statements or behaviour.

Loss of life

Loss of life costs are relevant to homicide (**H.V.2.1 Loss of Life Costs**).

The value of a statistical life (VSL) in this report is taken from Viscusi (2008). Viscusi (2008) uses the common “willingness to pay” or “willingness to accept” method. In its simplest terms, the willingness to pay method measures how much money a person is willing to pay to reduce the risk of death in some event, activity, or job; by stating a monetary amount that a person would pay to reduce the risk of death the person has revealed how much he or she values life. For example, as stated in Zhang et al. (2012), “if an individual is willing to pay \$500 to eliminate a 0.01% risk of death, the implicit VSL for that person is $\$500 / 0.01\% = \5 million .” There is no standard method for calculating the VSL, and many different values for life have been proposed.

There are complications with calculating the VSL through this willingness to pay method. The most important issue is that the willingness to pay method is income constrained; that is, people with lower incomes would place lower valuations on reducing the risk of death because of their lower incomes. A related problem is that the valuation of life is not constant across the population (not only due to income levels but other characteristics as well) and time (as age is one determinant in an individual’s willingness to pay). The nature of the risk is also a factor in the valuation of life, as seen in Viscusi (2009), where deaths resulting from some events (such as natural disasters) have a much lower valuation than deaths resulting from other events (such as terrorist attacks). An example of other factors affecting individual willingness to pay may include a person’s happiness level. All of these issues

mostly pertain to an individual's assessment of willingness to pay, but in this report the VSL is derived from an average willingness to pay based on a sample of labour force participants; this method mitigates some of the problems associated with income constraints, population, age, and nature of death that arise when willingness to pay is defined on an individual basis. In the absence of alternative methods, the willingness to pay method is considered suitable for use in this report.

Results

See *An Estimation of the Economic Impact of Violent Victimization in Canada, 2009: Technical Appendices* (Hoddenbagh et al. 2013) for further details related to each cost item calculation.

Incident and Case Numbers

The two major data sources for crime incidents (the police-reported UCR2 and the self-reported GSS) show very different incident numbers due to the nature of each survey (see **Data (p. 30)** for a description of the data sources). Court and corrections numbers must be estimated using police-reported data, court-reported data, and corrections data.

Attrition pyramid

Chart G.1 illustrates the attrition in incident and case numbers from actual incidents and self-reported data to police data and court data. While it is natural that there are more self-reported incidents than incidents that are brought to the attention of the police, the large disparity between the two numbers supports the decision to use both police-reported and self-reported data sources in the costing context. The costs to the criminal justice system can then be based on police and courts data, while the costs to the victims and to third parties can more appropriately be based on the responses of the victims themselves.

Each level of **Chart G.1** is calculated using different data sources and methods. All data in the chart are for non-spousal, adult victim crimes only. "Self-reported incidents" is a summation of assault, robbery, and sexual assault incident counts and criminal harassment victim counts in the self-reported GSS. "Police-reported incidents" is a summation of the incidents for all five crime types reported by police in the UCR2, obtained by a special request in order to specify the proper conditions (adult victims, non-spousal). "Incidents cleared by charge" is also a summation of requested police-reported UCR2 data. "Court cases" is an estimate calculated by applying the "rate of charges resulting in court cases" for all crimes (i.e., no conditions) from police data and court data to the number of incidents resulting in charges for non-spousal, adult victim crimes; this is a necessary method because court data is not available with the desired conditions. "Convictions" is also an estimate, and is calculated from the estimated "court cases" for non-spousal, adult victim cases, and the percentage of court cases resulting in convictions for all cases (i.e., no conditions).

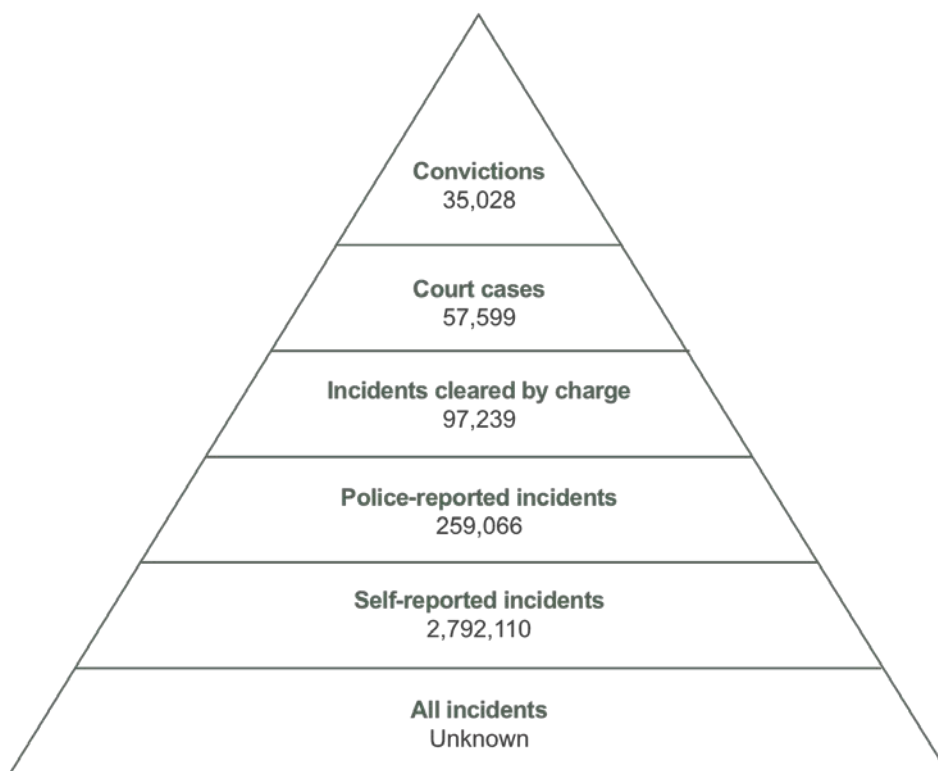
The units of count for each source also differ: the self-reported GSS has incident counts, the police-reported UCR2 has both incident counts and charge counts, and the court-reported ACCS and YCS have case counts. The *UCR Incident-Based survey: Research Data Centre User Manual* notes some limitations for comparison and aggregation of crime statistics across data sources:

It is difficult to make comparisons between data reported by police and data from other sectors of the criminal justice system (i.e., courts and corrections). There is no single unit of count (i.e., incidents, offences, charges, cases or persons) which is defined consistently across the major sectors of the justice system. As well, charges actually laid can be different from the most serious offence by which incidents are categorized. In addition, the number and type of charges laid by police may change at the pre-court stage or during the court process. Time lags between the various stages of the justice process also make comparisons difficult.

— Statistics Canada (2013), p. 5.

Chart G.1 is modeled on a similar chart (specifically for sexual assault) published in Johnson (2012).

CHART G.1: ATTRITION PYRAMID FOR VIOLENT VICTIMIZATION IN CANADA, 2009



Note 1: Includes assault, criminal harassment, homicide, robbery, and sexual assault and other sexual offences. The category of self-reported incidents excludes homicide.

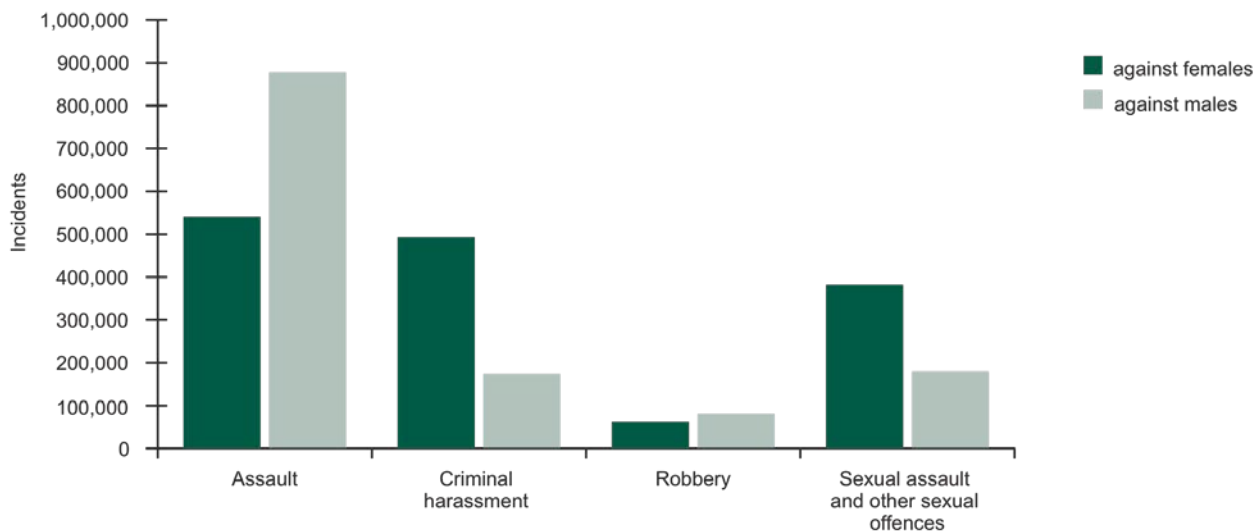
Note 2: This chart is modeled on a similar chart published in Johnson (2012).

Self-reported and police-reported incidents

Chart G.2 shows the self-reported incident counts derived from the GSS. There were 541,202 incidents of assault against females, 877,592 against males, and 1,418,794 total; 62,575 incidents of robbery against females, 80,846 against males, and 143,421 total; and 382,066 incidents of sexual

assault and other sexual offences against females, 179,741 against males, and 561,807 total. As criminal harassment is not included as a potential crime in the crime incident reports of the GSS, it is counted only by victim in this analysis (see **Data** for an explanation of how incidents and victims are counted in the GSS). There were 493,296 female criminal harassment victims, 174,792 male victims, and 668,088 total victims in the 2009 GSS. This data suggests that 62% of assaults were directed against males, 74% of criminal harassment victims were female, and 68% of sexual assault and other sexual offences incidents were directed against females.

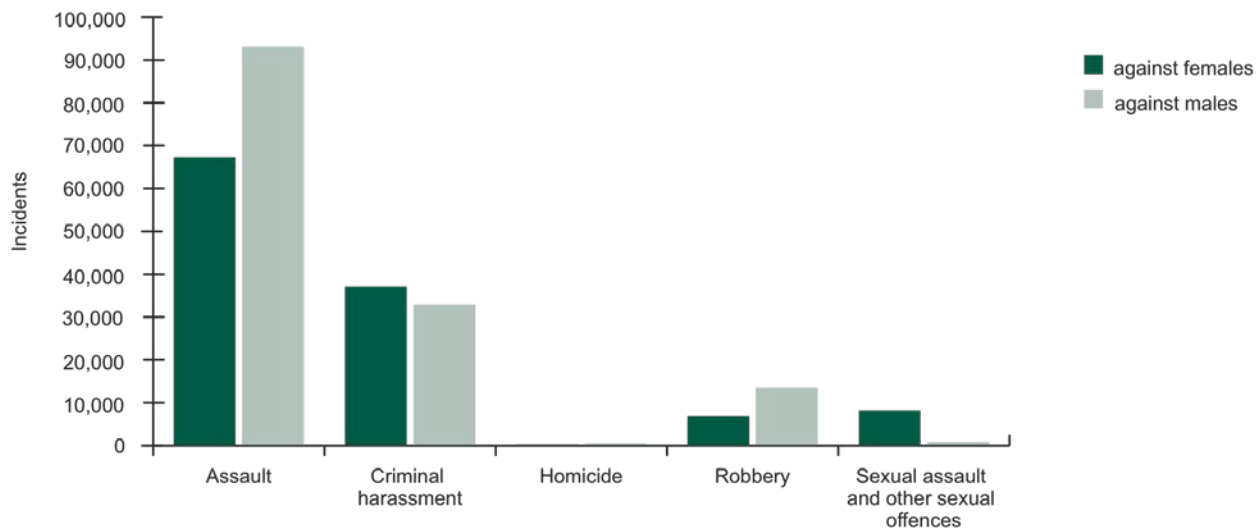
CHART G.2: GSS (SELF-REPORTED) INCIDENTS



Source: Statistics Canada. 2005. 2011. GSS 2004, Cycle 18, Victimization, Main File: SEX(1,2), AGEGR5(#1), WGHT_PER, STK_RELAT(#2,3), STALKING(1). GSS 2009, Cycle 23, Victimization, Main File: SEX(1,2), AGEGR5(#1), OCE_Q180(1), WGHT_PER; Incident File: MSCRIME(101,202,304), ADJWTVIC.

Chart G.3 illustrates the police-reported incident counts derived from the UCR2 (from a special CCJS data request). There were 67,083 incidents of assault against females, 92,944 against males, and 160,027 total; 37,001 incidents of criminal harassment against females, 32,741 against males, and 69,742 total; 83 incidents of homicide against females, 370 against males, and 453 total; 6,723 incidents of robbery against females, 13,344 against males, and 20,067 total; and 8,054 incidents of sexual assault and other sexual offences against females, 723 against males, and 8,777 total. The majority of assaults (58%), homicides (82%), and robberies (66%) were directed against male victims, while the majority of criminal harassment (53%) and sexual assault and other sexual offences incidents (92%) were directed against female victims.

CHART G.3: UCR2 (POLICE-REPORTED) INCIDENTS



Source: Statistics Canada, CCJS, special data request.

Table G.2 further details the number of police-reported incidents by listing each specific offence separately. It also shows the severity weight of each offence, which is used in the derivation of the police cost per incident of each offence. CCJS generates severity weights to distinguish between the relative severities of offence types. Severity weight calculations are based on the sentences given in court for each offence type, so offences that are generally awarded more serious sentences will have a higher severity weight. To calculate police costs per incident, a measure of “total severity” is calculated for all offences, and the proportion of “total severity” that is attributable to each offence is multiplied by total police expenditures to get the police expenditures on each crime type. Dividing the police expenditures on each crime type by the number of incidents of each respective crime type gives the police costs per incident.

From the method just described it is clear that police costs are first estimated as totals for each offence type, and are then subsequently calculated per incident of each offence type. It may seem unnecessary to calculate police costs per incident if the total police costs for the offence are already estimated, but this is done in order to provide a way to exclude the spousal and youth victim incidents. Per incident costs can be multiplied by the number of non-spousal, adult victim incidents so as to include only these in the cost estimates.

TABLE G.2: SEVERITY WEIGHTS AND POLICE COSTS PER OFFENCE

Offence	Severity weight ^A	Police costs per incident ^B	Number of incidents against females ^C	Number of incidents against males ^C
Assault				
Assault – level 1	23	\$1,139	53,664	56,918
Assault — level 2 — weapon or bodily harm	77	\$3,761	10,362	24,681
Assault — level 3 — aggravated	405	\$19,677	519	2,150
Assault against a police officer	42	\$2,019	1,992	7,777
Other assaults	58	\$2,834	545	1,419
Criminal harassment				
Criminal harassment	45	\$2,205	9,806	3,608
Uttering threats	46	\$2,255	17,917	24,507
Threatening or harassing phone calls	17	\$843	9,278	4,626
Homicide				
Murder – 1st degree	7,042	\$342,224	53	158
Murder – 2nd degree	7,042	\$342,224	26	166
Manslaughter	1,822	\$88,526	4	46
Robbery				
Robbery	583	\$28,349	6,723	13,344
Sexual assault and other sexual offences				
Sexual assault – level 1	211	\$10,253	7,565	648
Sexual assault — level 2 — weapon or bodily harm	678	\$32,967	170	25
Sexual assault — level 3 — aggravated	1,047	\$50,894	68	12
Incest	678	\$32,967	43	3
Anal intercourse	211	\$10,253	5	1
Voyeurism	86	\$4,156	168	26
Other sexual violations	296	\$14,391	35	8

^A Source: CCJS special data request.

^B Source 1: Statistics Canada, CCJS, UCR2 – Incident-based crime statistics, by detailed violations, CANSIM 252-0051.

Source 2: Burczycka (2010).

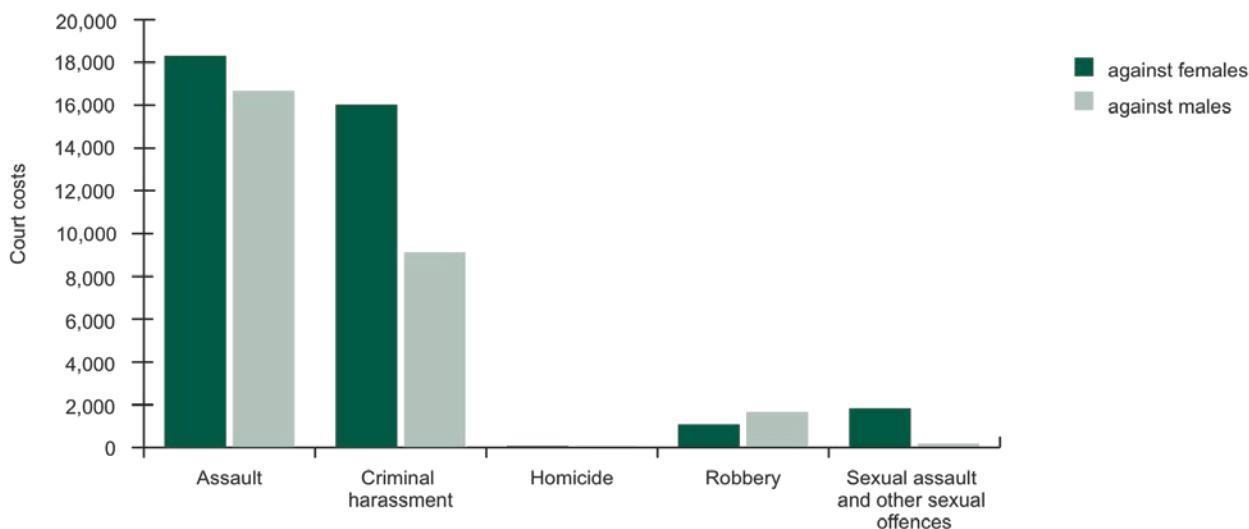
Source 3: Ottawa Police Service correspondence.

^c Source: CCJS special data request.

Court cases and sentences

As court data cannot be specified by the relationship of the accused to the victim, the number of court cases must be estimated using UCR2, ACCS, and YCS data. Fiscal year information at the court stage has been converted into calendar year information. **Chart G.4** displays the number of court cases for each crime by gender of victims.

CHART G.4: COURT CASES



Source 1: CCJS special data request.

Source 2: Statistics Canada, CCJS, ACCS – Number of cases and charges by type of decision, CANSIM 252-0053

Source 3: Statistics Canada, CCJS, YCS – Number of cases and charges by type of decision, CANSIM 252-0064.

Court cases resulting in a finding of guilt will lead to sentencing. The sentence types of interest for the current study are custody (provincial and federal), conditional sentence, probation, and fine. Each offence type has different likelihoods of resulting in each sentence type. **Table G.3** shows the sentence type proportions (using the most serious sentence) for each crime in cases with adult offenders (by gender), all crimes (i.e., spousal and non-spousal), and all victims (all ages). **Table G.4** shows the same information for cases with youth offenders. These sentence proportions are then applied to the estimated court cases of non-spousal crimes with adult victims to get estimates of the number of offenders. One limitation with this method is that the offence type may actually change over the course of the justice system proceedings due to plea bargaining, and court data may therefore record different offence types than police data for the same incidents due to the Most Serious Offence (MSO) rule for recording offences.

The measures in **Tables G.3** and **G.4** must be calculated for all incidents and victims (i.e., no conditions) because the ACCS and YCS data do not include the age of the victim and do not

distinguish between cases where the victim was in a spousal relationship with the accused and cases where the relationship was non-spousal. The results in these tables are later applied to the police and court-estimated data of non-spousal, adult victim incidents and cases to get estimates of sentences pertaining specifically to offenders of non-spousal, adult victim crimes. The method used to obtain the results in these tables is straightforward: for each crime type, the number of offenders sentenced to each type of sentence is divided by the total number of offenders sentenced to get the proportion that each sentence is given, with all cases included (i.e., no conditions) and separately for male and female offenders.

TABLE G.3: SENTENCE PROPORTIONS (CONVICTED ADULT OFFENDERS, ALL CRIMES AND VICTIMS), BY GENDER OF OFFENDER

Offence	Custody		Conditional sentence		Probation		Fine		Other	
	M	F	M	F	M	F	M	F	M	F
Assault										
Major assault	47.3%	25.9%	8.6%	11.2%	35.2%	52.5%	3.1%	3.4%	5.9%	7.1%
Common assault	16.0%	6.3%	3.2%	2.0%	68.2%	73.1%	3.6%	4.3%	8.9%	14.4%
Criminal harassment										
Criminal harassment	28.1%	11.6%	5.0%	5.8%	61.6%	74.5%	0.8%	0.2%	4.6%	7.9%
Uttering threats	32.9%	19.4%	3.7%	4.2%	54.1%	64.4%	3.4%	3.1%	5.9%	8.9%
Homicide										
Homicide	79.5%	85.5%	1.7%	1.8%	2.4%	7.3%	2.8%	0.0%	13.7%	5.5%
Robbery										
Robbery	79.8%	67.0%	4.8%	9.1%	10.3%	16.2%	0.2%	0.7%	4.9%	7.1%
Sexual assault and other sexual offences										
Sexual assault	56.2%	33.3%	12.5%	21.2%	21.4%	43.9%	0.4%	0.0%	9.5%	1.5%
Other sexual offences	64.4%	56.3%	5.3%	2.7%	19.8%	18.8%	2.5%	7.1%	8.1%	15.2%

Source: Statistics Canada, CCJS, ACCS – Guilty cases by most serious sentence, CANSIM 252-0057.

TABLE G.4: SENTENCE PROPORTIONS (CONVICTED YOUTH OFFENDERS, ALL CRIMES AND VICTIMS), BY GENDER OF OFFENDER

Offence	Custody		Conditional sentence		Probation		Fine		Other	
	M	F	M	F	M	F	M	F	M	F
Assault										
Major assault	21.7%	19.3%	0.3%	0.0%	50.9%	55.6%	0.4%	1.0%	26.7%	24.2%
Common assault	7.6%	4.0%	0.2%	0.1%	55.8%	56.4%	1.5%	1.0%	35.0%	38.5%
Criminal harassment										
Criminal harassment	1.9%	7.4%	0.0%	0.0%	61.5%	76.3%	1.6%	0.0%	34.9%	16.3%
Uttering threats	14.9%	12.6%	0.1%	0.0%	60.3%	61.1%	0.8%	0.3%	23.9%	26.0%
Homicide										
Homicide	32.2%	0.0%	0.0%	0.0%	6.2%	0.0%	0.0%	0.0%	61.6%	100%
Robbery										
Robbery	39.5%	27.1%	0.1%	0.0%	36.8%	45.5%	0.1%	0.0%	23.6%	27.3%
Sexual assault and other sexual offences										
Sexual assault	15.6%	21.9%	0.0%	0.0%	57.0%	55.6%	0.2%	0.0%	27.2%	22.5%
Other sexual offences	10.1%	9.0%	0.0%	0.0%	62.2%	54.4%	0.0%	0.0%	27.7%	36.6%

Source: Statistics Canada. CCJS, YCS – *Guilty cases by most serious sentence*, CANSIM 252-0068.

Costs

The total costs of violent victimization in Canada in 2009 (for assault, criminal harassment, homicide, robbery, and sexual assault and other sexual offences) where the victim was an adult (18 and up) and the relationship between the victim and offender was non-spousal were \$12,682,992,307.

Overall costs

Tables G.5 present an overall summary of costs by crime category, and **Tables G.6** present an overall summary of costs by cost category.

TABLE G.5A: SUMMARY OF COSTS - ASSAULT

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Criminal justice system costs	\$224,008,173	\$333,028,499	\$557,036,672
Total Justice system costs	\$224,008,173	\$333,028,499	\$557,036,672
Victim costs			
Medical costs	\$64,869,527	\$39,852,413	\$104,721,940
Lost productivity	\$173,222,452	\$172,601,470	\$345,823,922
Intangible costs	\$350,108,996	\$687,974,515	\$1,038,083,511
Other costs	\$1,679,936	\$4,717,205	\$6,397,141
Total Victim costs	\$589,880,912	\$905,145,603	\$1,495,026,515
Third-party costs			
Employer losses	\$11,764,694	\$6,920,336	\$18,685,030
Social services operating costs	\$14,482,078	\$3,450,860	\$17,932,938
Total Third-party costs	\$26,246,772	\$10,371,197	\$36,617,969
Total Assault	\$840,135,857	\$1,248,545,299	\$2,088,681,156

TABLE G.5B: SUMMARY OF COSTS - CRIMINAL HARASSMENT

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Criminal justice system costs	\$156,532,189	\$119,114,118	\$275,646,307
Civil justice system costs	\$3,503,935	\$423,801	\$3,927,735
Total Justice system costs	\$160,036,124	\$119,537,918	\$279,574,042
Victim costs			
Medical costs	\$60,794,438	\$12,087,013	\$72,881,451
Other costs	\$90,047,177	\$30,309,464	\$120,356,641
Total Victim costs	\$150,841,616	\$42,396,476	\$193,238,092
Total Criminal Harassment	\$310,877,739	\$161,934,394	\$472,812,134

TABLE G.5C: SUMMARY OF COSTS - HOMICIDE

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Criminal justice system costs	\$33,193,046	\$138,375,464	\$171,568,510
Total Justice system costs	\$33,193,046	\$138,375,464	\$171,568,510
Victim costs			
Medical costs	\$494,445	\$3,312,184	\$3,806,629
Intangible costs	\$628,253,405	\$2,830,835,929	\$3,459,089,333
Total Victim costs	\$628,747,850	\$2,834,148,113	\$3,462,895,962
Third-party costs			
Social services operating costs	\$882,081	\$2,480,852	\$3,362,932
Intangible costs	\$12,558,750	\$56,588,250	\$69,147,000
Other costs	\$465,592	\$2,098,050	\$2,563,643
Total Third-party costs	\$13,906,423	\$61,167,152	\$75,073,575
Total Homicide	\$675,847,318	\$3,033,690,729	\$3,709,538,047

TABLE G.5D: SUMMARY OF COSTS - ROBBERY

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Criminal justice system costs	\$249,278,137	\$463,584,107	\$712,862,245
Total Justice system costs	\$249,278,137	\$463,584,107	\$712,862,245
Victim costs			
Medical costs	\$24,006,280	\$6,601,236	\$30,607,516
Lost productivity	\$76,190,058	\$85,437,553	\$161,627,612
Intangible costs	\$250,778,892	\$300,575,966	\$551,354,858
Other costs	\$31,362,523	\$95,538,942	\$126,901,466
Total Victim costs	\$382,337,754	\$488,153,697	\$870,491,451
Third-party costs			
Employer losses	\$4,679,644	\$3,684,526	\$8,364,170
Social services operating costs	\$3,141,049	\$509,228	\$3,650,277
Total Third-party costs	\$7,820,693	\$4,193,754	\$12,014,447
Total Robbery	\$639,436,585	\$955,931,559	\$1,595,368,143

TABLE G.5E: SUMMARY OF COSTS - SEXUAL ASSAULT AND OTHER SEXUAL OFFENCES

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Criminal justice system costs	\$137,693,965	\$12,355,133	\$150,049,098
Total Justice system costs	\$137,693,965	\$12,355,133	\$150,049,098
Victim costs			
Medical costs	\$64,133,011	\$48,988,297	\$113,121,308
Lost productivity	\$210,169,873	\$676,900	\$210,846,773
Intangible costs	\$3,140,618,999	\$1,151,014,152	\$4,291,633,150
Other costs	\$576,966	\$0	\$576,966
Total Victim costs	\$3,415,498,849	\$1,200,679,349	\$4,616,178,197
Third-party costs			
Employer losses	\$8,872,446	\$9,555,258	\$18,427,704
Social services operating costs	\$26,208,747	\$5,729,081	\$31,937,827
Total Third-party costs	\$35,081,192	\$15,284,339	\$50,365,531
Total Sexual assault and other sexual offences	\$3,588,274,006	\$1,228,318,820	\$4,816,592,826

TABLE G.5F: SUMMARY OF COSTS BY CRIME CATEGORY

Cost category or item	Female victims	Male victims	Total
Assault	\$840,135,857	\$1,248,545,299	\$2,088,681,156
Criminal Harassment	\$310,877,739	\$161,934,394	\$472,812,134
Homicide	\$675,847,318	\$3,033,690,729	\$3,709,538,047
Robbery	\$639,436,585	\$955,931,559	\$1,595,368,143
Sexual assault and other sexual offences	\$3,588,274,006	\$1,228,318,820	\$4,816,592,826
Total costs	\$6,054,571,506	\$6,628,420,801	\$12,682,992,307

Note: Categories in bolded font are summations of the cost items listed under those categories.

TABLE G.6A: SUMMARY OF COSTS - JUSTICE SYSTEM

Cost category or item	Female victims	Male victims	Total
Criminal justice system costs			
Police costs	\$492,970,120	\$788,430,048	\$1,281,400,168
Court costs	\$62,369,269	\$46,694,089	\$109,063,358
Prosecution costs	\$42,384,179	\$31,654,687	\$74,038,866
Legal aid costs	\$30,048,268	\$22,441,593	\$52,489,861
Corrections costs	\$172,933,674	\$177,236,905	\$350,170,579
Total Criminal justice system costs	\$800,705,511	\$1,066,457,321	\$1,867,162,832
Civil justice system costs			
Restraining or protective order costs	\$3,503,935	\$423,801	\$3,927,735
Total Civil justice system costs	\$3,503,935	\$423,801	\$3,927,735
Total Justice system costs	\$804,209,445	\$1,066,881,122	\$1,871,090,567

TABLE G.6B: SUMMARY OF COSTS - VICTIM COSTS

Cost category or item	Female victims	Male victims	Total
Medical costs			
Initial health care costs	\$17,932,125	\$22,425,498	\$40,357,622
Long-term health care costs	\$191,396,276	\$87,937,205	\$279,333,482
Costs of suicide attempts	\$4,969,301	\$478,439	\$5,447,740
Total Medical costs	\$214,297,702	\$110,841,142	\$325,138,844
Lost productivity			
Lost current income	\$172,551,974	\$112,708,513	\$285,260,487
Lost household services	\$13,917,456	\$3,159,170	\$17,076,626
Lost education	\$7,611,753	\$2,377,031	\$9,988,785
Lost child care services	\$3,232,687	\$651,927	\$3,884,614
Lost future income	\$262,268,513	\$139,819,282	\$402,087,795
Total Lost productivity	\$459,582,384	\$258,715,923	\$718,298,307
Intangible costs			
Pain and suffering costs	\$3,741,506,888	\$2,139,564,632	\$5,881,071,520
Loss of life costs	\$628,253,405	\$2,830,835,929	\$3,459,089,333
Total Intangible costs	\$4,369,760,292	\$4,970,400,561	\$9,340,160,853
Other costs			
Stolen, damaged, or destroyed property costs	\$46,277,170	\$107,658,680	\$153,935,850
Special phone feature costs	\$21,725,622	\$4,518,872	\$26,244,493
Moving and change of address costs	\$52,865,435	\$17,575,348	\$70,440,783
Burglar alarm installation costs	\$2,798,376	\$812,711	\$3,611,087
Total Other costs	\$123,666,603	\$130,565,611	\$254,232,214
Total Victim costs	\$5,167,306,980	\$5,470,523,237	\$10,637,830,217

TABLE G.6C: SUMMARY OF COSTS - THIRD-PARTY COSTS

Cost category or item	Female victims	Male victims	Total
Employer losses			
Administration costs	\$9,573,573	\$4,849,286	\$14,422,859
Tardiness and distraction costs	\$6,770,508	\$9,449,992	\$16,220,500
Lost additional output	\$8,972,703	\$5,860,843	\$14,833,545
Total Employer losses	\$25,316,784	\$20,160,120	\$45,476,904
Social services operating costs			
Victim services costs	\$42,688,675	\$11,425,541	\$54,114,216
Crisis centre and crisis line costs	\$2,025,280	\$744,480	\$2,769,760
Total Social services operating costs	\$44,713,955	\$12,170,021	\$56,883,976
Intangible costs			
Loss of affection and enjoyment to family	\$12,558,750	\$56,588,250	\$69,147,000
Total Intangible costs	\$12,558,750	\$56,588,250	\$69,147,000
Other costs			
Funeral service costs	\$395,335	\$1,781,333	\$2,176,668
Family medical service costs	\$6,235	\$28,243	\$34,479
Family counselling costs	\$64,022	\$288,474	\$352,496
Total Other costs	\$465,592	\$2,098,050	\$2,563,643
Total Third-party costs	\$83,055,081	\$91,016,442	\$174,071,523

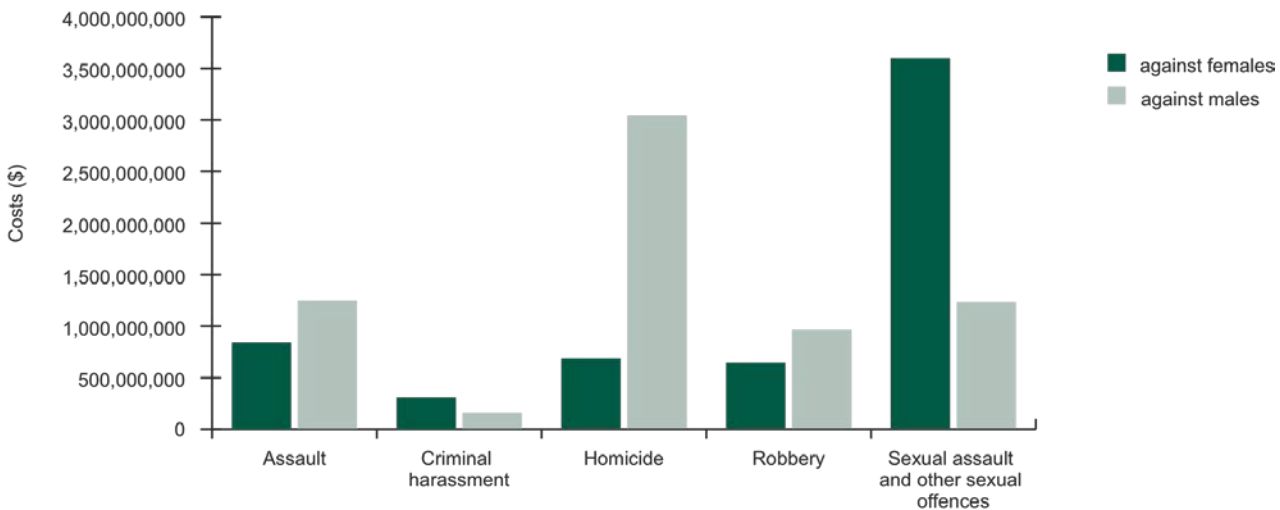
TABLE G.6D: SUMMARY OF COSTS BY COST CATEGORY

Cost category or item	Female victims	Male victims	Total
Justice system costs	\$804,209,445	\$1,066,881,122	\$1,871,090,567
Victim costs	\$5,167,306,980	\$5,470,523,237	\$10,637,830,217
Third-party costs	\$83,055,081	\$91,016,442	\$174,071,523
Total costs	\$6,054,571,506	\$6,628,420,801	\$12,682,992,307

Note: Categories in bolded font are summations of the cost items listed under those categories.

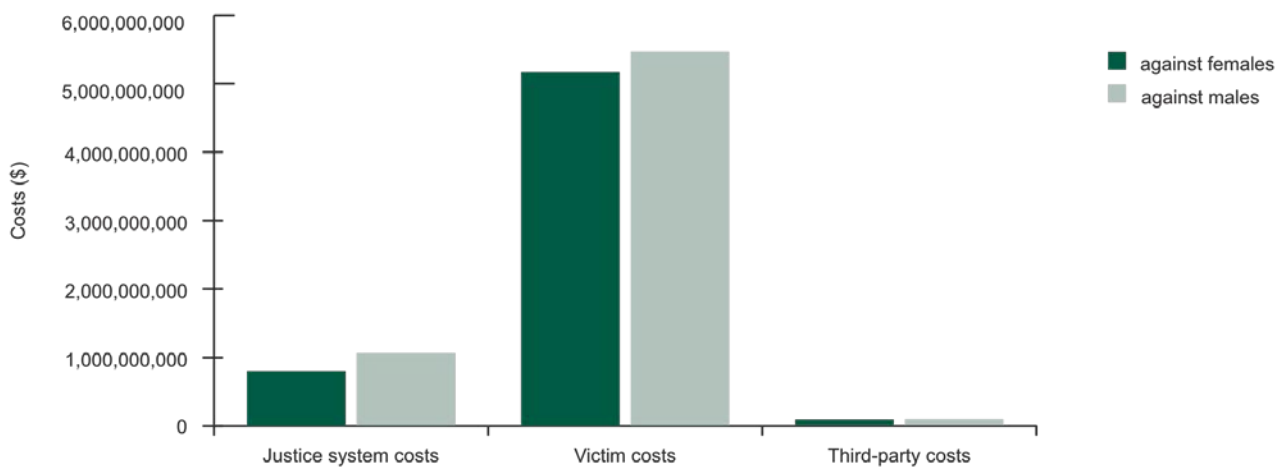
Similarly, **Chart G.5** also illustrates the total victimization costs of each crime, and **Chart G.6** illustrates the total victimization costs by category.

CHART G.5: COSTS BY CRIME



Note: Direct comparison of costs across crimes must be done responsibly as there is a wide disparity in the sources, data limitations, and calculations of each crime.

CHART G.6: COSTS BY CATEGORY



Tangible vs. intangible costs

Intangible costs account for a large proportion (74%) of overall costs. **Table G.7** shows breakdown between tangible and intangible costs for each crime, and **Table G.8** presents the tangible costs by gender of the victim for each crime.

TABLE G.7: TANGIBLE VS. INTANGIBLE COSTS

Type of cost	Tangible costs	Intangible costs	Total costs	% of intangible costs
Assault	\$1,050,597,644	\$1,038,083,511	\$2,088,681,156	50%
Criminal harassment	\$472,812,134	\$0	\$472,812,134	0%
Homicide	\$181,301,714	\$3,528,236,333	\$3,709,538,047	95%
Robbery	\$1,044,013,286	\$551,354,858	\$1,595,368,143	35%
Sexual assault and other sexual offences	\$524,959,676	\$4,291,633,150	\$4,816,592,826	89%
Total	\$3,273,684,454	\$9,409,307,853	\$12,682,992,307	74%

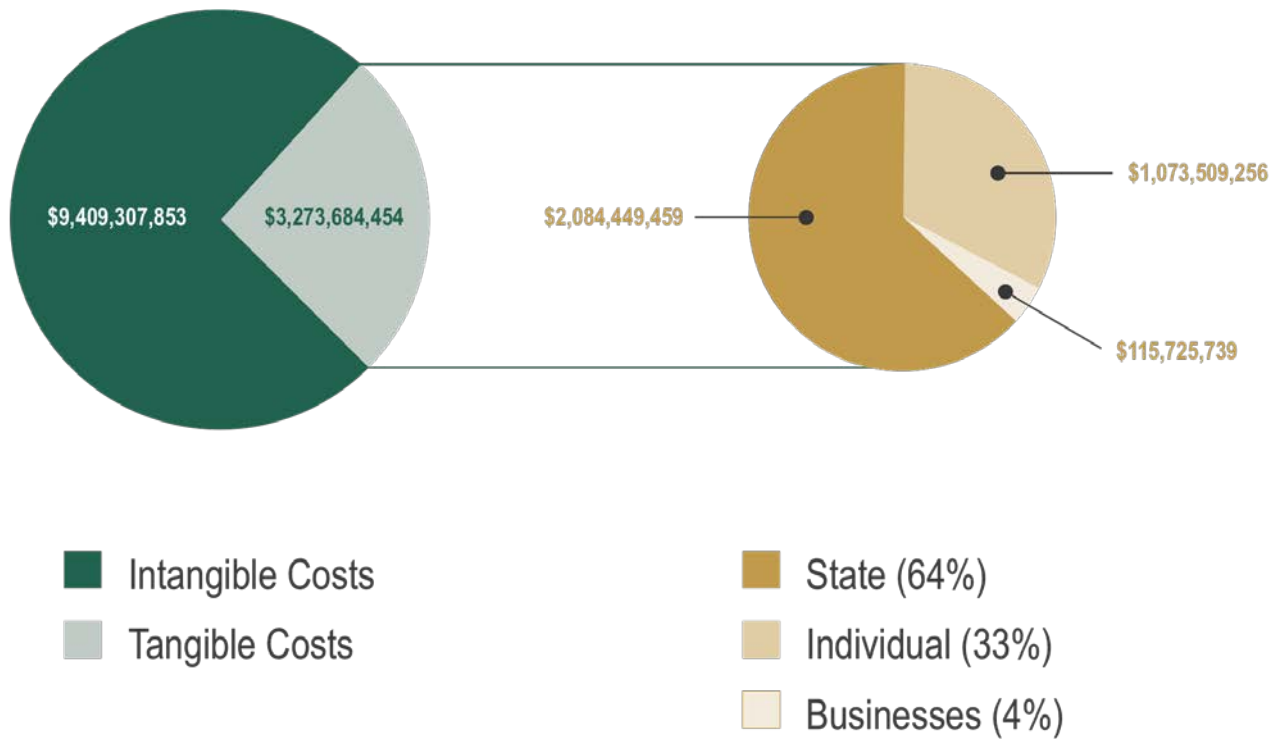
Note: Intangible costs include pain and suffering and loss of life under victim costs, and loss of affection and enjoyment to family under third-party costs.

TABLE G.8: TANGIBLE COSTS BY CRIME AND GENDER

Type of cost	Tangible costs Female victims	% of total tangible costs	Tangible costs Male victims	% of total tangible costs	Total
Assault	\$490,026,861	47%	\$560,570,784	53%	\$1,050,597,644
Criminal harassment	\$310,877,739	66%	\$161,934,394	34%	\$472,812,134
Homicide	\$35,035,164	19%	\$146,266,551	81%	\$181,301,714
Robbery	\$388,657,693	37%	\$655,355,593	63%	\$1,044,013,286
Sexual assault and other sexual offences	\$447,655,007	85%	\$77,304,669	15%	\$524,959,676
Total	\$1,672,252,464	51%	\$1,601,431,990	49%	\$3,273,684,454

The left pie chart in **Chart G.7** shows the proportion of tangible and intangible costs, and the tangible costs are further broken down in the right pie by who actually pays for the cost, as opposed to who bears the burden of the impact. Three groups of parties who pay are analyzed: the state, individuals (including victims), and businesses.

CHART G.7: TANGIBLE VS. INTANGIBLE COSTS AND TANGIBLE COSTS BY WHO PAYS



Assault

Introduction

Five crimes (as listed in police sources) are included in the estimation of the Criminal Justice System Costs section: level 3 (aggravated) assault, level 2 (use of weapon or causing bodily harm) assault, level 1 assault, assault against a police officer, and other assaults¹³. Note that some of these crimes might not be equivalent to the definition of assault defined in the GSS, which is the main data source for the estimation of Victim Costs and Third-party Costs.

Assault is defined generally in the *Criminal Code* (s. 265) as:

(1) A person commits an assault when

- (a) without the consent of another person, he applies force intentionally to that other person, directly or indirectly;
- (b) he attempts or threatens, by an act or a gesture, to apply force to another person, if he has, or causes that other person to believe upon reasonable grounds that he has, present ability to effect his purpose; or
- (c) while openly wearing or carrying a weapon or an imitation thereof, he accosts or impedes another person or begs.

This definition also applies to sexual assault and threats. Each level and type of assault has a more specific definition as well.

Assault is one of the most common violent crimes in Canada. According to the GSS, there were 541,202 incidents against females, 877,592 against males, and 1,418,794 total incidents in 2009. The severity of assault can vary greatly, and, as listed above, there are a range of assault offences to account for the level of violence, weaponry used, and level of injury inflicted.

For details on the offences included in this section and for the matching of offences across data sources, see **Crime Categories** and **Assault**.

See *An Estimation of the Economic Impact of Violent Victimization in Canada, 2009: Technical Appendices* (Hoddenbagh et al. 2013) for detailed technical tables with explanations of the data sources and methodology used in each cost item calculation.

Results

Tables A.1 present a comprehensive summary of the costs of victimization of adults who were assaulted by persons other than a spouse in 2009.

¹³ “Other Assaults” refers to *Criminal Code* sections:

245(a) Administering noxious thing: to endanger the life or cause bodily harm

245(b) Administering noxious thing: to aggrieve or annoy

246(ab) Overcoming resistance to commission of offence

248 Interfering with transportation facilities

269.1(1) Torture by or authorized by official

270(1bc) Assault of a person with intent to resist or prevent the lawful arrest or detention of himself or another person or assault of a person engaged in the lawful execution of a process against lands or goods or in making a lawful distress or seizure or with intent to rescue anything taken under lawful process, distress or seizure.

TABLE A.1A: ASSAULT – SUMMARY OF COSTS - JUSTICE SYSTEM COSTS

Cost category or item	Female victims	Male victims	Total
Criminal justice system costs			
Police costs	\$115,857,836	\$219,668,038	\$335,525,874
Court costs	\$28,343,415	\$27,546,738	\$55,890,153
Prosecution costs	\$19,214,464	\$18,674,385	\$37,888,849
Legal aid costs	\$13,622,096	\$13,239,207	\$26,861,303
Corrections costs	\$46,970,362	\$53,900,132	\$100,870,494
Federal custody costs	\$11,477,990	\$18,782,415	\$30,260,405
Provincial custody costs	\$18,782,653	\$20,841,191	\$39,623,844
Conditional sentence costs	\$2,047,450	\$2,276,056	\$4,323,506
Probation costs	\$14,662,269	\$12,000,469	\$26,662,738
Fines*	\$153,780	\$134,061	\$287,842
Total Justice system costs	\$224,008,173	\$333,028,499	\$557,036,672

TABLE A.1B: ASSAULT – SUMMARY OF COSTS - VICTIM COSTS

Cost category or item	Female victims	Male victims	Total
Medical costs			
Initial health care costs	\$7,019,322	\$7,019,322	\$24,140,717
Doctor or nurse service costs	\$425,619	\$77,127	\$502,745
Emergency department costs	\$6,593,703	\$11,050,316	\$17,644,019
Overnight hospitalization costs	\$0	\$5,993,952	\$5,993,952
Long-term health care costs	\$57,850,205	\$22,731,019	\$80,581,224
Counselling costs	\$57,163,931	\$21,919,170	\$79,083,101
Medication costs	\$13,456	\$15,919	\$29,375
Physical therapy costs	\$672,818	\$795,930	\$1,468,748
Lost productivity	\$173,222,452	\$172,601,470	\$345,823,922
Lost current income	\$109,879,170	\$73,831,599	\$183,710,769
Lost household services	\$9,689,925	\$2,570,664	\$12,260,589
Lost education	\$4,271,540	\$2,377,031	\$6,648,571
Lost child care services	\$3,232,687	\$651,927	\$3,884,614
Lost future income	\$46,149,131	\$93,170,248	\$139,319,379
Long-term physical disability costs	\$41,131,651	\$59,320,439	\$100,452,090
Mental health disability costs	\$5,017,480	\$33,849,809	\$38,867,289
Total Medical costs	\$64,869,527	\$39,852,413	\$104,721,940
Intangible costs			
Pain and suffering costs	\$350,108,996	\$687,974,515	\$1,038,083,511
Total Intangible costs	\$350,108,996	\$687,974,515	\$1,038,083,511
Other costs			
Stolen, damaged, or destroyed property costs	\$1,679,936	\$4,717,205	\$6,397,141
Total Other costs	\$1,679,936	\$4,717,205	\$6,397,141
Total Victim costs	\$589,880,912	\$905,145,603	\$1,495,026,515

TABLE A.1C: ASSAULT – SUMMARY OF COSTS - THIRD-PARTY COSTS

Cost category or item	Female victims	Male victims	Total
Employer losses			
Administration costs	\$6,050,977	\$3,081,093	\$9,132,070
Lost additional output	\$5,713,717	\$3,839,243	\$9,552,960
Total Employer losses	\$11,764,694	\$6,920,336	\$18,685,030
Social services operating costs			
Victim services costs	\$13,323,398	\$3,178,380	\$16,501,778
Crisis centre and crisis line costs	\$1,158,680	\$272,480	\$1,431,160
Total Social services operating costs	\$14,482,078	\$3,450,860	\$17,932,938
Total Third-party costs	\$26,246,772	\$10,371,197	\$36,617,969

TABLE A.1D: ASSAULT – SUMMARY OF COSTS

Cost category or item	Female victims	Male victims	Total
Justice system costs	\$224,008,173	\$333,028,499	\$557,036,672
Victim costs	\$589,880,912	\$905,145,603	\$1,495,026,515
Third-party costs	\$26,246,772	\$10,371,197	\$36,617,969
Total costs	\$840,135,857	\$1,248,545,299	\$2,088,681,156

* Not included in any cost summations.

Note: Categories in bolded font are summations of the cost items listed under those categories.

The results in **Tables A.1** may raise some questions by readers. Specifically, male victims have much higher initial health care costs than females, while the opposite is true for long-term health care costs. Similarly, female victims have much higher lost current income than male victims, but the opposite is true for lost future income. There are many possible explanations for these results but it is unknown what the true reasons are. One potential explanation is the nature of the data sources, specifically the GSS. GSS results with low counts (before weighting) are relatively unreliable compared to GSS results with high counts, and for some of these measures the GSS counts are quite low. The unreliability of these GSS returns may be a factor in some of the seemingly contradictory results. Another explanation for the first set of interesting results may be that females are more likely than males to seek and receive counselling services due to violent victimization, even if the injuries incurred were did not require medical services. For the second set of interesting results, the fact that females were less likely than males to be hospitalized but more likely than males to take time off of work may explain the greater lost current income, but males may potentially sustain more severe injuries in general, thus having a greater affect on their future lost income.

A.J. Justice System Costs

A.J.1 Criminal Justice System Costs

It is necessary to calculate the police, court, prosecution, and legal aid resources spent per incident for each crime type as doing so allows for distinction of non-spousal, adult victim incidents, whereas only calculating the total resources spent on each crime would not exclude incidents involving spousal relationships and youth victims.

The numbers of court cases, used in calculations of court, prosecution, and legal aid costs, are adjusted upwards by 5% to account for the 95% national coverage of the data sources.

A.J.1.1 Police Costs

Total police expenditures in Canada in 2009 were \$12,316,896,000 (Burczycka 2010). The proportion of police expenditures directly related to combating and responding to criminal activity is estimated to be 65%¹⁴, based on consultations with the Ottawa Police Service, which means that an estimated \$8,005,982,400 was spent on crime-related police activities in 2009.

In order to determine how much police money was spent on preventing, combating, and responding to each crime, CCJS severity weights and the number of incidents (all incidents, including spousal and youth victims) from the UCR2 are used. CCJS generates severity weights to distinguish between the relative severities of offence types. Severity weight calculations are based on the sentences given in court for each offence type, so offences that are generally awarded more serious sentences will have a higher severity weight. Severity weights are used here to approximate the differences in police resource use between crimes, though in reality severity weights do not necessarily reflect the relative level of expenditures on each offence type.

The severity weight of an offence is multiplied by the number of incidents to get a “total severity” measure for that offence. Then, the “total severity” measure for that offence is divided into the sum of all offences’ “total severity” measures, giving the proportion of summed “total severity” attributable to that offence. This proportion is then multiplied by the police funds spent on crime-related activities to get the total police expenditures attributable to that crime. The last step, to obtain the police expenditures per incident of the crime, is simply done by dividing the total police expenditures attributable to that crime by the number of police-reported incidents of that crime.

The police costs per incident for that crime are then multiplied by the number of non-spousal, adult victim incidents to get the total police costs for non-spousal, adult victim incidents of that crime.

Table A.2 shows all of the pertinent police cost information, by gender.

¹⁴ A new project to develop better estimates on police expenditure allocation has been initiated by the Research and Statistics Division, Department of Justice Canada. The results of the project will improve the estimation credibility of our future costing studies.

TABLE A.2: ASSAULT – SEVERITY WEIGHTS AND POLICE COSTS A

Offence	Severity weight ^A	Police cost per incident ^B	Number of incidents against ^C		Police costs for incidents against	
			Females	Males	Females	Males
Assault – level 1	23	\$1,139	53,664	56,918	\$61,110,161	\$64,815,081
Assault – level 3 – aggravated	405	\$19,677	519	2,150	\$10,209,592	\$42,307,507
Assault against a police officer	42	\$2,019	1,992	7,777	\$4,022,963	\$15,705,064
Other assaults	58	\$2,834	545	1,419	\$1,545,025	\$4,020,447
Total			67,083	92,944	\$115,857,836	\$219,668,038

^A Source: CCJS special data request.

^B Source 1: Statistics Canada, CCJS, UCR2 – Incident-based crime statistics, by detailed violations, CANSIM 252-0051.
Source 2: Burczycka (2010).

Source 3: Ottawa Police Service correspondence. ^C Source: CCJS special data request.

^C Source: CCJS special data request.

The police costs for non-spousal, adult victim incidents of assault that occurred in 2009 are estimated to be \$335,525,874.

Assault – justice system – criminal justice system – police	
Female victims	\$115,857,836
Male victims	\$219,668,038
Total	\$335,525,874

A.J.1.2 Court Costs

The most recent court expenditure data available are from 2002/2003 (Statistics Canada 2004a). When adjusted for inflation and the increased average time in court from 2002/2003 to 2009 (a factor of 1.23), total court expenditures for 2009 are estimated to be \$1,601,074,756. This figure includes both criminal and civil courts, though this section is only concerned with criminal courts, and it does exclude some significant capital costs, such as building maintenance costs.

Since the court expenditures figure (\$1,601,074,756) includes all court cases for both criminal and civil courts (including all ages of offenders and victims and all relationships between offenders and victims), any cost per case estimations must account for and distinguish between criminal and civil cases and the different crime types within criminal court in order to allow more precise estimations of the court costs of adult victim, non-spousal cases for each offence. Therefore, calculations are made to determine the cost per case of each offence type for criminal court and the cost per civil case for civil court. As there are many offence types for criminal court and only one civil case type in this analysis, civil court is referred to here as another “crime type” to simplify the explanation. The end

result is an estimate of the cost per case for each criminal offence type and the cost per case for civil cases.

This first part of the estimation must be done for cases involving all ages and relationships (including spousal relationships and youth victims), is conducted for youth and adult offenders separately, and is done for each crime type separately. First, the average number of days in court is determined for each crime type (from the ACCS, YCS, Statistics Canada (2010b), and Statistics Canada (2011a)). The average court time for a crime is then multiplied by the number of cases of that crime to get the total court time for that offence. Next, the total court time for that offence is divided into the sum of total court times for all crimes to get the proportion of court time devoted to that offence. Next, this proportion is multiplied by the total court expenditures in 2009 to get the total court expenditures on that crime, which is then divided by the number of cases to get the court expenditures per case for that crime, separately for adult and youth offenders. As all of the previous steps were done separately for youth and adult offenders, the final step to obtain the court expenditures per case is to find the weighted average of the court expenditures per case for adult and youth offenders.

The court expenditure per case must be applied to the number of cases involving non-spousal relationships and adult victims. Court data from the ACCS and the YCS do not provide these details, so these case numbers must be estimated. This is done with UCR2 charge data and court data from the ACCS and the YCS, all of which are for all incidents and all cases (i.e., no relationship or age conditions), and are separate for male and female offenders. For each crime type, the number of incidents resulting in a charge (from police data) is divided by the number of court cases for the corresponding crime in the court data to get an estimated “rate of charges resulting in court cases”. This “rate of charges resulting in court cases” for each crime type, calculated for all incidents and cases (i.e., no relationship or age conditions), is then applied to police-reported incidents of non-spousal, adult victim crimes (obtained by special request to CCJS) to get the estimated number of court cases for non-spousal, adult victim crimes.

The final calculation is applying the costs per court case to the estimated number of court cases for each crime. The court costs for cases that took place due to incidents of non-spousal, adult victim assault that occurred in 2009 are estimated to be \$55,890,153.

Assault – justice system – criminal justice system – court	
Female victims	\$28,343,415
Male victims	\$27,546,738
Total	\$55,890,153

A.J.1.3 Prosecution Costs

The most recent prosecution expenditure data available are from 2002/2003 (Statistics Canada 2004b). In addition to being slightly dated, the expenditure data do not have national coverage. A comprehensive national expenditure must therefore be estimated.

The prosecution costs from Statistics Canada (2004b) are broken down by province. First, these costs are summed across all available provinces. The number of criminal court cases in 2002/2003 in those same provinces (from the ACCS and the YCS) is also summed. The summation of costs is then divided by the summation of court cases to get the prosecution costs per court case in 2002/2003. This number is adjusted for inflation and the increased average time in court from 2002/2003 to 2009 (a factor of 1.23) and then multiplied by the number of criminal court cases in 2009 (also from the ACCS and YCS) to get the estimated national prosecution costs in 2009. This estimate is \$558,911,198.

The method for calculating the prosecution costs per case for each offence is identical to the method used for calculating the court costs per case for each offence, except total prosecution costs are used in place of total court costs. The number of court cases is also calculated in the court costs section. See **A.J.1.2 Court Costs** for details.

The prosecution costs per case are multiplied by the relevant number of court cases to get the prosecution costs for non-spousal, adult victim cases. The prosecution costs for cases that took place due to incidents of non-spousal, adult victim assault that occurred in 2009 are estimated to be \$37,888,849.

Assault – justice system – criminal justice system – prosecution	
Female victims	\$19,214,464
Male victims	\$18,674,385
Total	\$37,888,849

A.J.1.4 Legal Aid Costs

Legal aid expenditure data are available for the 2008/2009 and 2009/2010 fiscal years (Statistics Canada 2011c). Legal aid is available for both criminal and civil matters, but this section is only concerned with criminal matters. Legal aid data are separated into three categories: direct, central administrative, and other. Only the data for the direct category are enumerated by criminal and civil matters, so the amount of criminal legal aid in the central administrative and other categories (which are here just combined into one category, called “other”) must be estimated. To do this, the proportion of direct legal aid spent on criminal matters (out of criminal and civil) is applied to the amount of “other” legal aid, resulting in an estimate of \$396,240,142 in legal aid spent on criminal matters when the criminal proportion of direct and other are added together.

The method for calculating the legal aid costs per case for each offence is identical to the method used for calculating the court costs per case for each offence, except criminal legal aid costs are used in place of total court costs. The number of court cases is also calculated in the court costs section. See **A.J.1.2 Court Costs** for details.

The legal aid costs per case are multiplied by the relevant number of court cases to get the legal aid costs for non-spousal, adult victim cases. The legal aid costs for cases that took place due to incidents of non-spousal, adult victim assault that occurred in 2009 are estimated to be \$26,861,303.

Assault – justice system – criminal justice system – legal aid	
Female victims	\$13,622,096
Male victims	\$13,239,207
Total	\$26,861,303

A.J.1.5 Corrections Costs

Offenders convicted in criminal court can be sentenced to federal custody, provincial custody, a conditional sentence, probation, a fine, or some other sentence; the five specified sentences are analyzed in this report. **Table A.3** shows the proportion that each sentence is given for each crime type (calculated from the ACCS and the YCS), for all incidents and victims (i.e., no age or relationship conditions), by the victim of offender.

These measures must be calculated for all incidents and victims (i.e., no conditions) because the ACCS and YCS data do not include the age of the victim and do not distinguish between cases where the victim was in a spousal relationship with the accused and cases where the relationship was non-spousal. The results in this table are later applied to the police and court-estimated data of non-spousal, adult victim incidents and cases to get estimates of sentences pertaining specifically to offenders of non-spousal, adult victim crimes (shown in **Tables A.4**). The method used to obtain the results in **Table A.3** is straightforward: for each crime type, the number of offenders sentenced to each type of sentence is divided by the total number of offenders sentenced to get the proportion that each sentence is given, with all cases included (i.e., no conditions) and separately for male and female offenders.

TABLE A.3: ASSAULT SENTENCE PROPORTIONS (ALL CRIMES AND VICTIMS), BY GENDER OF OFFENDER

Offence	Custody		Conditional sentence		Probation		Fine		Other	
	M	F	M	F	M	F	M	F	M	F
Adult offenders										
Major assault	47.3%	25.9%	8.6%	11.2%	35.2%	52.5%	3.1%	3.4%	5.9%	7.1%
Common assault	16.0%	6.3%	3.2%	2.0%	68.2%	73.1%	3.6%	4.3%	8.9%	14.4%
Youth offenders										
Major assault	21.7%	19.3%	0.3%	0.0%	50.9%	55.6%	0.4%	1.0%	26.7%	24.2%
Common assault	7.6%	4.0%	0.2%	0.1%	55.8%	56.4%	1.5%	1.0%	35.0%	38.5%

Source 1: Statistics Canada, CCJS, ACCS – Guilty cases by most serious sentence, CANSIM 252-0057.

Source 2: Statistics Canada, CCJS, YCS – Guilty cases by most serious sentence, CANSIM 252-0068

The results from **Table A.3** are used to estimate the number of offenders receiving each type of sentence for non-spousal, adult victim crimes. Due to the nature of the data, the method used to obtain the estimates in **Tables A.4** involves many steps.

First, for each crime type, the number of incidents resulting in charges (from police data) is divided by the number of court cases to get a “rate of charges resulting in cases” for all crimes (i.e., no relationship or age conditions). This rate is calculated for all crimes (i.e. no conditions) because court case data, the numerator, is not available with age or relationship restrictions. This rate is then multiplied by the number of police incidents cleared by charge for non-spousal, adult victim crimes to get the estimated number of court cases for non-spousal, adult victim crimes. Another measure for all crimes (i.e., no conditions) is then calculated: the percentage of cases resulting in convictions for each crime type is calculated using court data (convictions divided by court cases). Again, this measure must be calculated for all crimes (i.e., no conditions) because court data are not available with victim age and relationship conditions. Next, this percentage is multiplied by the estimated number of non-spousal, adult victim court cases to get the estimated number of offenders convicted for non-spousal, adult victim crimes. All of the previous steps are calculated by the gender of the offender (which is available in both police and court datasets) to be consistent with the information in **Table A.3**, which is used in the final step. The estimated number of convicted offenders of non-spousal, adult victim crimes is multiplied by the results of **Table A.3** to get the estimated number of offenders sentenced to each type of sentence for non-spousal, adult victim crimes in 2009; these estimates are shown in **Tables A.4**, by the gender of the victim.

The results of **Tables A.4** are used as the base counts in the estimations of the costs of each sentence type. Note that the terminology used when discussing federal custody and provincial custody may not always be precise in name, but it is generally accurate in concept. For example, the analysis takes into consideration time served in the community through “parole” and “statutory release”, and assigns a lower cost to these than to the time spent in incarceration. However, in the youth corrections field, the terms “parole” and “statutory release” do not exist; the concepts, though, do exist. A youth offender can be released from custody into the community prior to the completion of his or her sentence, but through different procedures that have different names than adult offenders. Federal and provincial corrections services also differ in the use and meaning of the parole and statutory release concepts, but again the general idea is similar. The terms and procedures of “parole” and “statutory release” are used for all offenders as the general structure of custody is similar across offenders.

TABLE A.4A: ASSAULT SENTENCE NUMBERS (NON-SPOUSAL CRIMES AND ADULT VICTIMS) - ADULT OFFENDERS

Offence		Custody	Conditional sentence	Probation	Fine	Other
Adult offenders						
Female victims	Major assault	907	185	778	64	125
	Common assault	1,037	215	4,796	257	667
Male Victims	Major assault	1,527	310	1,300	107	209
	Common assault	631	134	3,153	171	461
Total Victims	Major assault	2,434	496	2,078	171	334
	Common assault	1,668	350	7,949	428	1,127

TABLE A.4B: ASSAULT SENTENCE NUMBERS (NON-SPOUSAL CRIMES AND ADULT VICTIMS) - YOUTH OFFENDERS

Offence		Custody	Conditional sentence	Probation	Fine	Other
Youth offenders						
Female victims	Major assault	50	0	127	2	62
	Common assault	30	1	284	6	185
Male Victims	Major assault	86	1	207	2	106
	Common assault	33	1	276	7	177
Total Victims	Major assault	136	1	334	3	168
	Common assault	63	2	560	13	362

Source 1: Statistics Canada, CCJS, UCR2 – Incident-based crime statistics, by detailed violations, CANSIM 252-0051.

Source 2: CCJS special data request.

Source 3: Statistics Canada, CCJS, ACCS – Number of cases and charges by type of decision, CANSIM 252-0053.

Source 4: Statistics Canada, CCJS, YCS – Number of cases and charges by type of decision, CANSIM 252-0064.

Source 5: Statistics Canada, CCJS, ACCS – Guilty cases by most serious sentence, CANSIM 252-0057.

Source 6: Statistics Canada. CCJS, YCS – Guilty cases by most serious sentence, CANSIM 252-0068

Source 7: Table A.3.

Note: See Table AP.A.J.E3 for a more detailed version of this table, with offenders separated by gender.

A.J.1.5.1 Federal custody costs

There are many aspects of the federal corrections system that must be taken into account when estimating costs, such as time actually spent in custody versus time served in the community (due to parole or statutory release), and the difference in costs of incarcerating a female offender versus a male offender (partially due to the economies of scale driven by higher numbers of male offenders).

The estimated average length of federal custody sentences for assault was 1,277 days (derived from Thomas (2010) and ACCS court data) in 2009. The numbers of offenders sentenced to federal custody for assault are as follows: 42 males for violence against females, 3 females for violence against females, 68 males for violence against males, and 4 females for violence against males. The daily cost for holding a male in federal incarceration was \$292 and the cost for a female was \$556 in 2009 (Public Safety Canada 2010). The cost of supervising an offender on parole was \$81 (Public Safety Canada 2010), and the cost of supervising an offender with statutory release is assumed to be the same as the cost of probation, which was \$6.94 in 2009 (see **A.J.1.5.4 Probation costs** for calculation details).

After calculating how many total days were spent by offenders in custody and parole and on statutory release, the daily costs of each were applied to get the total costs of federal custody sentences. The federal custody costs due to incidents of non-spousal, adult victim assault that occurred in 2009 are estimated to be \$30,260,405.

Assault — justice system — criminal justice system – corrections – federal custody	
Female victims	\$11,477,990
Male victims	\$18,782,415
Total	\$30,260,405

A.J.1.5.2 Provincial custody costs

The provincial corrections system is similar to the federal one in its complexity, and paroles and statutory releases must be accounted for. The average number of days sentenced to custody differs between male and female offenders, but only one daily cost value is available for all offenders.

For assault, the average length of provincial custody sentences was 90 days for male offenders and 71 days for female offenders (from the ACCS and YCS). The numbers of offenders sentenced to provincial custody for assault are as follows: 1,824 males for violence against females, 156 females for violence against females, 2,002 males for violence against males, and 202 females for violence against males. The daily cost for holding an offender in provincial custody was \$161 in 2009 (Statistics Canada 2010a). The daily cost of parole was \$32, based on information from the John Howard Society¹⁵, and the daily cost of supervising an offender with statutory release is assumed to be the same as the cost of probation, which was \$6.94 in 2009 (see **A.J.1.5.4 Probation costs** for calculation details).

¹⁵ The John Howard Society of Ontario. 1997. *Fact Sheet, Reconsidering Community Corrections in Ontario*. <http://www.johnhoward.on.ca/pdfs/fctsh-9.pdf>.

After calculating how many total days were spent by offenders in custody and parole and on statutory release, the daily costs of each were applied to get the total costs of provincial custody sentences. The provincial custody costs due to incidents of non-spousal, adult victim assault that occurred in 2009 are estimated to be \$39,623,844.

Assault – justice system – criminal justice system – corrections – provincial custody	
Female victims	\$18,782,653
Male victims	\$20,841,191
Total	\$39,623,844

A.J.1.5.3 Conditional sentence costs

Roberts and LaPrairie (2000) provide information on the average length of conditional sentences for general categories of offences. Though dated, this is the most recent and most specific data available. The average conditional sentence length for “offences against the person”, which includes assault, is 210 days.

Conditional sentence daily costs are estimated by referring to provincial custody costs. It is estimated that supervising someone with a conditional sentence costs \$50,000 less per year than holding someone in custody.¹⁶ Calculating the annual costs of the incarceration of one offender in provincial custody from Statistics Canada (2010a), subtracting \$50,000, and converting from annual to daily costs, the daily cost of supervising an offender with a conditional sentence is estimated to be \$24.26.

Given the number of offenders sentenced to a conditional sentence from **Table A.4** (402 for violence against female victims and 447 for violence against males), the conditional sentence costs due to incidents of non-spousal, adult victim assault that occurred in 2009 are estimated to be \$4,323,506.

Assault – justice system – criminal justice system – corrections – conditional sentence	
Female victims	\$2,047,450
Male victims	\$2,276,056
Total	\$4,323,506

A.J.1.5.4 Probation costs

Probation length data are provided in the court-reported ACCS and YCS. Probation lengths are calculated separately for male and female offenders. The calculation process involves first determining the average probation length by gender of the offender, offence type (e.g., major assault), and age of the offender. Next, these averages are used to calculate the total length of all

¹⁶ Victims of Violence. 2011. *Research – Conditional Sentence*.

http://www.victimsofviolence.on.ca/rev2/index.php?option=com_content&task=view&id=332&Itemid=22.

probation sentences for youth and adults (and still separated by the crime and by gender). These total lengths for youth and adults are then summed and divided by the sum of the cases resulting in probation sentences for youth and adults to get the average probation sentence lengths for each police-source crime type separately (and for genders separately). The weighted average of these cases is then found to get the average probation sentence length for offenders convicted of assault, for male and female offenders separately. The average probation sentence length for males was 360 days and for females was 317 days.

There is no official data for the daily, per-offender costs of probation, and this figure is therefore estimated. Dauvergne (2012) contains information on the total cost of community supervision services (which includes the costs of conditional sentence, probation, and parole) as well as the daily average counts of offenders in each type of community supervision. The daily average counts for conditional sentence and parole are multiplied by their daily costs (found in **A.J.1.5.1 Federal custody costs**, **A.J.1.5.2 Provincial custody costs**, and **A.J.1.5.3 Conditional sentence costs** and 365 days to get the total expenditures on conditional sentence and parole. The total expenditures on conditional sentence and parole are then subtracted from the total cost of community supervision services (adjusted for inflation) taken from Dauvergne (2012), which leaves the total expenditure on probation and statutory release. Dividing the total expenditure on probation and statutory release by the average counts of offenders with these supervision types and 365 days gives a result of \$6.94 in daily, per-offender probation costs.

The number of offenders sentenced to probation is given in **Table A.4**. The probation costs due to incidents of non-spousal, adult victim assault that occurred in 2009 are estimated to be \$26,662,738.

Assault – justice system – criminal justice system – corrections – probation	
Female victims	\$14,662,269
Male victims	\$12,000,469
Total	\$26,662,738

A.J.1.5.5 Fines

Costs to the offender are not included in this report (see **Sources of Economic Impacts** for reasons), and fines are calculated here for illustrative purposes only. These results are not included in any summations of total costs.

The following steps are conducted separately for each police-source crime type. Mean fine amounts for adult offenders are available from Thomas (2010), and these amounts are multiplied by the number of fines given (from the ACCS) to get the total value of adult fines. The number of youth fines in each range is available from the YCS, and by using the midpoint of each range, the total value of youth fines can also be determined. The total value of youth and adult fines are summed and divided by the sum of the numbers of youth and adult fines. The resulting average fines for common and major assaults are averaged by weight to get the average fine amount for assaults in general (\$467).

This average fine amount is then multiplied by the number of offenders receiving fines from **Table A.4** (329 for violence against females, 287 for violence against males). The fine costs to offenders due to incidents of non-spousal, adult victim assault that occurred in 2009 are estimated to be \$287,842.

Assault – justice system – criminal justice system – corrections – fines	
Female victims	\$153,780
Male victims	\$134,061
Total	\$287,842

A.V. Victim Costs

A.V.1 Medical Costs

A.V.1.1 Initial Health Care Costs

A.V.1.1.1 Doctor or nurse service costs

The GSS finds that there were about 7,781 times physician visits of female victims and 1,410 times physician visits of male victims due to assault incidents in 2009. The cost of one physician visit in 2009, from Canadian Institute for Health Information (2007), was \$55 after inflation adjustment.

Multiplying the number of victims by the cost per visit, the doctor or nurse service costs due to incidents of non-spousal, adult victim assault that occurred in 2009 are estimated to be \$502,745.

Assault – victim – medical – initial health care – doctor or nurse service	
Female victims	\$425,619
Male victims	\$77,127
Total	\$502,745

A.V.1.1.2 Emergency department costs

Many victims of assault required medical attention at a hospital or health centre, which is deemed equivalent to visiting the emergency department. The GSS finds that there were 15,831 visits of female victims and 26,531 visits of male victims because of experiencing an assault incident in 2009. The cost of one emergency department (ER) visit was \$267 in 2009, based on data for Ontario and after an adjustment for inflation (Canadian Institute for Health Information 2010). In addition, it is assumed that 25% of emergency department visits due to assault involve ambulatory transportation, an assumption based on information from the Canadian Institute for Health Information (CIHI) which states that approximately 12% of ER patients arrived by ambulance¹⁷. As the usage of ambulance transportation for general ER visits might be lower than that for visits for injuries caused by assault incidents, it is assumed that 25% of the visits involve ambulance transportation. The cost of one ambulance trip varies across the country, so a representative value (\$600) is used based on information from several provinces.

Multiplying the appropriate numbers, the emergency department costs due to incidents of non-spousal, adult victim assault that occurred in 2009 are estimated to be \$17,644,019.

Assault – victim – medical – initial health care – emergency department	
Female victims	\$6,593,703
Male victims	\$11,050,316
Total	\$17,644,019

¹⁷ Source: Health Care in Canada, 2012 – A Focus on Wait Times, CIHI, available at https://secure.cihi.ca/free_products/HCIC2012-FullReport-ENweb.pdf.

A.V.1.1.3 Overnight hospitalization costs

The GSS finds that male victims spent 6,006 nights in hospital due to assaults in 2009 whereas no female victims stayed in a hospital overnight¹⁸. The Canadian Institute for Health Information (2008) gives the average acute (overnight) hospitalization stay cost at \$7,585 (after inflation adjustment), and Canadian Institute for Health Information (2009) gives the average nights spent in hospital per acute hospitalization stay at 7.6, which implies that the average cost per night spent in overnight hospitalization was \$998 in 2009.

Multiplying the number of days spent overnight in hospital by the cost per night, the overnight hospitalization costs due to incidents of non-spousal, adult victim assault that occurred in 2009 are estimated to be \$5,993,952.

Assault – victim – medical – initial health care – overnight hospitalization	
Female victims	\$0
Male victims	\$5,993,952
Total	\$5,993,952

A.V.1.2 Long-term Health Care Costs

A.V.1.2.1 Counselling costs

The GSS finds that female victims used counselling services 44,854 times and male victims used counselling services 17,199 times in response to an assault. New and Berliner (2000) find that the average number of counselling sessions for assault victims is 15, while information from the government of British Columbia suggests that the average counselling session costs \$85.¹⁹

After multiplication, the counselling costs due to incidents of non-spousal, adult victim assault that occurred in 2009 are estimated to be \$79,083,101.

¹⁸ Note that the relatively small count of GSS respondents used for calculations in this section may explain the result that there were no female victims who spent time in hospital due to an assault. As mentioned in the **Limitations** section, queries in the GSS that return less than a certain number of counts (before weighting) are not necessarily reliable, and the smaller the count the less reliable the result is, and this is a possible explanation for why there were no hospitalized females but there were many hospitalized males (after weighting).

¹⁹ Ministry of Public Safety and Solicitor General. 2003. *Crime Victims Assistance Program Counselling Guidelines 2003*. Government of British Columbia. <http://www.pssg.gov.bc.ca/victimservices/publications/docs/cvap-counselling-guidelines.pdf>.

Note: This value is the average of five different counselling services with varying levels of education and experience, adjusted for inflation.

Assault – victim – medical – long-term health care – counselling	
Female victims	\$57,163,931
Male victims	\$21,919,170
Total	\$79,083,101

A.V.1.2.2 Medication costs

The estimate for medication costs is extremely low because of the lack of data. The severity of injuries sustained from assaults varies widely, from no injuries to life-threatening injuries. Also, the cause of the injury (the assault) may be unknown to healthcare workers or to potential researchers, and the injury itself may be unknown if victims do not go to a hospital. Taken together, this means that studying the injury and medication outcomes of assault is very difficult, as there are many potential outcomes and medication requirements. Useable information was found for only one very limited outcome: medicine taken for pain relief when victims have a fracture.

The potential number of victims sustaining a fracture is assumed to be a proportion of the number of visits an emergency department (15,831 visits of female victims and 26,531 visits of male victims). It has been found that 34% of assault female victims and 24% of assault male victims visiting the emergency department have a fracture (Shepherd et al. 1990), which implies that 5,383 female victim visits and 6,367 male victim visits involved a fracture. A study (Drendel et al. 2009) on the impact of different types of medicine given to children with a fracture suggests that children take 12 doses in the three-day study period, and it is assumed that adult victims with a fracture will require just the same painkiller doses. One medicine found to be effective in the study is ibuprofen, which costs about \$0.21 per dose according to various online retail sources.

Applying the number of people with a fracture to the number and cost of doses, the medication costs due to incidents of non-spousal, adult victim assault that occurred in 2009 are estimated to be \$29,375.

Assault – victim – medical – long-term health care – medication	
Female victims	\$13,456
Male victims	\$15,919
Total	\$29,375

A.V.1.2.3 Physical therapy costs

The estimate for physical therapy costs is low because of the lack of data. As noted in the previous section, the severity of injuries sustained from assaults varies widely, from no injuries to life-threatening injuries. Also, the cause of the injury (the assault) may be unknown to healthcare workers or to potential researchers, and the injury itself may be unknown if victims do not go to a hospital. Taken together, this means that studying the injury and physical therapy outcomes of assault is very difficult, as there are many potential outcomes and physical therapy requirements. Useable

information was found for only one very limited outcome: physical therapy required when victims have a fracture.

Due to lack of data, the percentage of people with a fracture who use physical therapy to recover must be assumed; here it is assumed at 50%. Using the figures from the previous section, this implies that approximately 5,875 victims require physical therapy. Based on a requirement of 5 physical therapy sessions at \$50 per session,²⁰ the physical therapy costs due to incidents of non-spousal, adult victim assault that occurred in 2009 are estimated to be \$1,468,748.

Assault – victim – medical – long-term health care – physical therapy	
Female victims	\$672,818
Male victims	\$795,930
Total	\$1,468,748

A.V.2 Lost Productivity

A.V.2.1 Lost Current Income

GSS respondents who reported that their main activity during the last 12 months was either “working at a paid job or business” are included in this section. The amount of time that victims were unable to work includes days in the emergency department, hospitalization time, time spent recovering in bed outside of the hospital, and other time where victims found it difficult or impossible to carry out his/her main activity²¹. As the GSS data does not report the length of hospitalization if victims stayed in hospital overnight, 1 day as an assumption is used. For other questions on lost days, if respondents answered “X days and more”, the smallest number of that range is always chosen to ensure a conservative estimate.

The GSS finds that employed female victims of assault were unable to attend work for 821,526 work days, and employed male victims were unable to attend work for 418,313 work days. Subtracting the number of days that were covered by paid sick leave benefits, the figures become 711,277 lost days for females and 369,162 lost days for males.²² According to GSS, the average daily wage of female assault victims was \$154, and the average daily wage of male assault victims in the GSS was \$200.

²⁰ “Sprained or Broken Wrist Cost.” <http://health.costhelper.com/sprained-broken-wrist.html>.

²¹ As the GSS question does not allow a distinction between “difficult” and “impossible”, and the example reasons given for this type of lost days range from requiring medical treatment, visiting insurance agents to emotional and/or psychological distress, it is assumed that victims actually lost 50% of the days in this category for their main activities.

²² The American data show that 66% of all workers have paid sick leave benefits and on average workers with this benefits have 9 sick leave days per year. The average working days lost due to illness or disability in Canada is about 7.6 days, according to Statistics Canada. Therefore, assuming that 7.6 days were used for other illness not related to the violence, 1.4 sick leave days per worker can be used for the absence of the 66% of the victims due to injuries resulting from the incidents.

In this way, the lost current income to adult victims of non-spousal assault that occurred in 2009 is estimated to be \$183,710,769.

Assault – victim – lost productivity – lost current income	
Female victims	\$109,879,170
Male victims	\$73,831,599
Total	\$183,710,769

A.V.2.2 Lost Household Services

For those victims whose main activity was doing household services, 7.5 hours are assigned for each lost days, which include days in the emergency department, hospitalization days, days in bed outside of the hospital, and other time where victims found it difficult or impossible to carry out his/her main activity²³. For all other victims whose main activity was not conducting household services, number of hours spent on household activities is estimated from Labour Force Survey. According to Statistics Canada (2011b), females on average spend 3.89 hours per day on household activities and males spend 2.48 hours per day on household activities. As these figures cover those people with household services as their main activities, the numbers are adjusted to 3.68 hours for females and 2.44 for males for people whose main activities was not conducting household services.

The GSS finds that female victims lost 729,114 hours of household work and males lost 193,428 hours of household work due to assault victimization. At an hourly rate of \$13.29,²⁴ the value of the lost household services of adult victims of non-spousal assault that occurred in 2009 is estimated to be \$12,260,589.

Assault – victim – lost productivity – lost household services	
Female victims	\$9,689,925
Male victims	\$2,570,664
Total	\$12,260,589

A.V.2.3 Lost Education

The GSS finds that female student victims were unable to go to school for 108,042 school days, and male student victims were unable to go to school for 60,123 school days. Similar to the previous sections, these days include days in the emergency department, hospitalization days, days in bed

²³ See footnote 21.

²⁴ Statistics Canada, CANSIM: 3701 — *Labour Force Survey, Table 2820070 — Labour force survey estimates (LFS), wages of employees by type of work, National Occupational Classification for Statistics (NOC-S), sex and age group, annually (current dollars unless specified).*

outside of the hospital, and other time where victims found it difficult or impossible to carry out his/her main activity, and have been adjusted to take into account potential school days.

Information from Statistics Canada²⁵ and academic calendars at major universities shows that the average daily cost of education is approximately \$40. The lost education to adult victims of non-spousal assault that occurred in 2009 is estimated to be \$6,648,571.

Assault – victim – lost productivity – lost education	
Female victims	\$4,271,540
Male victims	\$2,377,031
Total	\$6,648,571

A.V.2.4 Lost Child Care Services

For those victims whose main activity was “caring for children”, the GSS finds that female victims were unable to carry out that activity for 85,468 days and male victims were unable to carry out that activity for 17,236 days. Given a \$38 average daily cost of child care²⁶ the lost child care services of adult victims of non-spousal assault that occurred in 2009 is estimated to be \$3,884,614.

Assault – victim – lost productivity – lost child care services	
Female victims	\$3,232,687
Male victims	\$651,927
Total	\$3,884,614

A.V.2.5 Lost Future Income

A.V.2.5.1 Long-term physical disability costs

The numbers of employed victims estimated to have sustained an injury, where sustaining an injury is based on the criterion of requiring medical attention at a hospital, are 14,774 female victims and 20,756 male victims. It is assumed that out of the total medically treated injuries, 0.3% of the injuries would have caused permanent or long-term disability, according to Corso et al. (2006). The average income of female assault victims was \$34,875, while the average income of male assault victims was \$28,524. The GSS also provides the average age of victims, and assuming that careers last until age 65, that incomes never change, and that inflation is equal to the discount rate, the expected

²⁵ Statistics Canada. “University tuition fees.” The Daily, Thursday, September 16, 2010. Catalogue no. 11-001-XIE.

²⁶ Surrey Board of Trade and Burnaby Board of Trade. <http://bc.ctvnews.ca/childcare-should-cost-10-day-boards-urge-1.1144370>.

The article states that the Surrey Board of Trade and the Burnaby Board of Trade estimate that childcare in BC costs \$40 per day on average (2013).

remaining lifetime income is calculated. The lost future income (due to physical disabilities) of adult victims of non-spousal assault that occurred in 2009 is estimated to be \$100,452,090.

Assault – victim – lost productivity – lost future income – long-term physical disability costs	
Female victims	\$41,131,651
Male victims	\$59,320,439
Total	\$100,452,090

A.V.2.5.2 Mental health disability costs

Studying the mental health outcomes of victimization is difficult and can involve subjectivity. To estimate the future costs of mental health degradation, the number of victims developing a mental health problem must first be estimated. To do this, the numbers of victims who are assumed to be participants in the labour force, who had reported getting “depression/anxiety attacks” because of the incident, and who had never before sustained an assault, robbery, or sexual assault were obtained from the GSS; the results are 2,327 female victims and 11,384 male victims, and these are defined as the victims potentially affected by a mental health issue. To calculate the number of victims actually assumed to have developed a mental health issue, the percentage of assault victims who have mental health needs for a “severely disabling mental illness” is taken from Miller et al. (1993) (0.7%). Applying this latter number to the numbers of victims who potentially have a mental illness, the estimated numbers of victims who developed or will develop a serious mental illness are 16 female victims and 80 male victims.

The annual income lost due to mental health issues developed by assault victims is calculated by applying the proportion of annual income lost due to mental health issues in general (from Kessler et al. 2008) to the annual income of GSS respondents, and the results are \$11,575 for female victims and \$13,834 for male victims. Taking the average age of the appropriate respondents and assuming that careers last until age 65, that incomes never change, and that inflation is equal to the discount rate, the lost future income (due to mental disabilities) of adult victims of non-spousal assault that occurred in 2009 is estimated to be \$38,867,289.

Assault – victim – lost productivity – lost future income – mental health disability costs	
Female victims	\$5,017,480
Male victims	\$33,849,809
Total	\$38,867,289

A.V.3 Intangible Costs

A.V.3.1 Pain and Suffering Costs

For a brief discussion on the issues raised when valuing intangibles and the methods used to do so, see **Valuation of Intangibles**.

All assault victims in the GSS are assumed to experience pain and suffering. Victims of each level of assault are assigned different values of pain and suffering.

The GSS finds that there were 351,031 female victims and 588,209 male victims of assault in 2009. Of these victims, the incidents for 150,687 females and 227,797 males were brought to the attention of police. The GSS does not distinguish between each level of assault, so the UCR2 is used to determine the proportion of assaults that are level 1, the proportion that are level 2, and the proportion that are level 3. These proportions are then applied to the GSS numbers of victims with incidents brought to the attention of police (victims with incidents that were not brought to the attention of police are assumed to have sustained the less serious level 1 assault) to get the estimated number of victims in the entire population who sustained level 1, 2, and 3 assaults. The resulting estimates are 1,211 female and 5,848 male victims of level 3 assault, 24,191 female and 67,132 male victims of level 2 assault, and 325,628 female and 515,229 male victims of level 1 assault.

The value of pain and suffering for level 3 (aggravated) assault is taken from McCollister et al. (2010); after adjustment for inflation, this value is \$14,186. The values for assaults level 1 and 2 must be estimated based on the value for level 3 because pain and suffering costs for assault are only available for level 3. To do this, the severity weights of assaults level 1 and 2 are compared to the severity weight of assault level 3, and the \$14,186 value of pain and suffering for level 3 is then adjusted for levels 1 and 2. The value assigned to level 2 is \$2,711, and the value assigned to level 1 is \$821.

Multiplying the numbers of victims by the values of pain and suffering, the total pain and suffering of adult victims of non-spousal assault that occurred in 2009 is estimated to be \$1,038,083,511.

Assault – victim – intangible – pain and suffering	
Female victims	\$350,108,996
Male victims	\$687,974,515
Total	\$1,038,083,511

A.V.4 Other Costs

A.V.4.1 Stolen, Damaged, or Destroyed Property Costs

The GSS finds that property was stolen during 860 assault incidents for male victims at an average cost of \$25. In addition, the property was damaged or destroyed during 8,869 incidents for female victims and 22,046 incidents for male victims, at the average cost of \$189 and \$213 respectively. Multiplying the appropriate measures, the stolen, damaged, or destroyed property costs of adult victims of non-spousal assault that occurred in 2009 are estimated to be \$6,397,141.

Assault – victim – other – stolen, damaged or destroyed property	
Female victims	\$1,679,936
Male victims	\$4,717,205
Total	\$6,397,141

A.T. Third-Party Costs

A.T.1 Employer Losses

A.T.1.1 Administration Costs

When employees are not able to work, managers and administrators must spend time reorganizing the work of other employees, rescheduling, and doing other administrative tasks.

The GSS finds that employed female victims were unable to do their main activities for 821,526 working days, and employed male victims were unable to do their main activities for 418313 working days.

With average hourly wage rates of \$37 for managers and \$22 for administrators,²⁷ and assuming 0.125 hours of time spent for managers and 0.125 hours for administrators (a conservative estimate based on estimation in Health and Safety Executive (1999)), the administration costs of employers due to adult victim, non-spousal assault that occurred in 2009 are estimated to be \$9,132,070.

Assault – third-party – employer losses – administration	
Female victims	\$6,050,977
Male victims	\$3,081,093
Total	\$9,132,070

A.T.1.2 Lost Additional Output

To calculate the lost additional output to employers, lost wages of employees are multiplied by the expected marginal rate of return to the employer. The total lost wages (from **A.V.2.1 Lost Current Income**) are \$109,879,170 for female victims and \$73,831,599 for male victims, and the expected marginal rate of return is 5.2% (Boardman et al. 2008). A marginal rate of return on investment of 5.2% means that if an employer invests (disinvests) an additional \$100, as through employee wages, the employer expects to gain (lose) \$5.20 in net returns.

Multiplying the lost wages by the expected rate of return, the lost additional output of employers due to adult victim, non-spousal assault that occurred in 2009 is estimated to be \$9,552,960.

Assault – third-party – employer losses – lost additional output	
Female victims	\$5,713,717
Male victims	\$3,839,243
Total	\$9,552,960

²⁷ Statistics Canada, CANSIM: 3889 — *Survey of Labour and Income Dynamics, Table 2020106 — Earnings of individuals, by selected characteristics and National Occupational Classification (NOC-S), Management occupations, 2009 constant dollars, annually.*

A.T.2 Social Services Operating Costs

One important cost that cannot be estimated here is the cost of support centres. The GSS finds that 21,930 female and 8,157 male victims of assault in 2009 used one of the various categories of support centres listed in the GSS: “community centre, CLSC or family centre”, “women’s centre”, or “men’s centre/men’s support group or seniors’ centre”. There is no available information on the operational costs of these services or on the average duration of use by clients.

A.T.2.1 Victim Services Costs

The GSS finds that female victims used victim services 29,230 times and male victims of assault used the services 6,973 times in 2009. Information from Sauv  (2009) is used to calculate the operating cost per victim service agency, which is \$269,767 after inflation adjustment to 2009. Dividing by the number of victims assisted per agency (592), the operating cost per victim was \$456 in 2009.²⁸

Multiplying the number of victims using victim services by the operating cost per victim, the victim services costs due to adult victim, non-spousal assault that occurred in 2009 are estimated to be \$16,501,778.

Assault – third-party – social services – victim services	
Female victims	\$13,323,398
Male victims	\$3,178,380
Total	\$16,501,778

A.T.2.2 Crisis Line Costs

The GSS finds that female victims visited a crisis centre or called a crisis line 28,967 times because of the crime and male victims visited a crisis centre or called a crisis line 6,812 times. As these two services are not separated in the GSS question, an assumption is made in this report that all respondents who answered that they had used either of these services only called a crisis line to ensure a conservative estimate. Expenditure information for crisis lines is not accessible, so only the hourly wage of a crisis line coordinator is taken into consideration. From various job postings, this hourly wage is estimated at \$20.²⁹ The average length of phone calls to crisis lines is set at 0.4 hours, based on a report from a US-based crisis line.³⁰ The last piece of information needed is the average

²⁸ It is reasonable to assume that victims of more serious crimes may use victim services more than victims of less serious crimes, and therefore that using the average cost of victim services per victim may underestimate the costs to some victims and overestimate the cost to other victims. Averaging over entire crime categories (assault, robbery, etc.) alleviates the internal inconsistencies of each crime category (e.g., the inconsistencies between assault level 3 and assault level 1), but not between crime categories.

²⁹ Charity Village. charityvillage.com.

³⁰ Crisis Call Center (Reno, Nevada, US). “Profile Report 2004-2005.” <http://www.crisiscallcenter.org/documents/04-05Profilereport.pdf>.

number of calls that a service user makes to a crisis line, but obtaining this information is complicated by the fact that calls to crisis lines are anonymous, and so the caller's name is not recorded. Therefore, anecdotal evidence from crisis line workers must be used, and this indicates that each caller makes about 5 calls to a crisis line during an issue.

Multiplying the number of victims calling a crisis line by the average length of a call and number of calls made, the crisis line costs due to adult victim, non-spousal assault that occurred in 2009 are estimated to be \$1,431,160

Assault – third-party – social services – crisis lines	
Female victims	\$1,158,680
Male victims	\$272,480
Total	\$1,431,160

Criminal Harassment

Introduction

Three crimes (as listed in police sources) are included in this section: criminal harassment (stalking), uttering threats, and threatening or harassing phone calls. Uttering threats is often considered an offence of assault, but it is included under criminal harassment in this report because there is a common aspect to all three of the crimes listed: the violent element in each of these crimes does not involve physical contact. It is reasoned that this common aspect makes the costs of uttering threats fundamentally more similar to criminal harassment than to assault.

Criminal harassment is defined in the *Criminal Code* (s. 264) as:

- (1) No person shall, without lawful authority and knowing that another person is harassed or recklessly as to whether the other person is harassed, engage in conduct referred to in subsection (2) that causes that other person reasonably, in all the circumstances, to fear for their safety or the safety of anyone known to them.
- (2) The conduct mentioned in subsection (1) consists of
 - (a) repeatedly following from place to place the other person or anyone known to them;
 - (b) repeatedly communicating with, either directly or indirectly, the other person or anyone known to them;
 - (c) besetting or watching the dwelling-house, or place where the other person, or anyone known to them, resides, works, carries on business or happens to be; or
 - (d) engaging in threatening conduct directed at the other person or any member of their family.

Criminal harassment is commonly referred to as “stalking”. Both terms will be used in this report. The Department of Justice Canada provides a plain language definition of this crime as behaviour that “consists of repeated conduct that is carried out over a period of time and that causes its targets to reasonably fear for their safety but does not necessarily result in physical injury. It may be a precursor to subsequent violent and/or lethal acts” (Department of Justice 2004).

Uttering threats is defined in the *Criminal Code* (s. 264.1) as:

- (1) Every one commits an offence who, in any manner, knowingly utters, conveys or causes any person to receive a threat
 - (a) To cause death or bodily harm to any person;
 - (b) To burn, destroy or damage real or personal property; or
 - (c) To kill, poison or injure an animal or bird that is the property of any person.

Threatening or harassing phone calls is defined in the *Criminal Code* (s. 372) as:

- (2) Every one who, with intent to alarm or annoy any person, makes any indecent telephone call to that person is guilty of an offence punishable on summary conviction.
- (3) Every one who, without lawful excuse and with intent to harass any person, makes or causes to be made repeated telephone calls to that person is guilty of an offence punishable on summary conviction.

Cost items in this section are estimated based on the number of criminal harassment (stalking) victims, not number of incidents. As a victim can experience multiple stalking incidents (be victimized more than one time), using victim counts instead of incident count might understate the true impacts of criminal harassment. According to the GSS, there were 493,296 female victims, 174,792 male victims, and 668,088 total victims in 2009. “Stalking” in the GSS is assumed to include all incidents of uttering threats and threatening or harassing phone calls in addition to criminal harassment; this is

supported by the inclusion of “uttering threats” as a reason for contacting police about stalking in the 2004 GSS.³¹

Criminal harassment is not included as a reportable crime in the Incident File of the GSS (where details are provided for individual incidents of assault, robbery, and sexual assault), but there is a question about stalking victimization in the Main File of the 2009 GSS. Unfortunately, no further details regarding the nature of the victimization are acquired in the 2009 GSS. The 2004 GSS, however, contains an entire module on stalking, much of which is useful for costing. For the most complete costing results, the 2004 GSS module on stalking is used and the data are adjusted using the 2009 GSS question on stalking.

There are no third-party costs included in this section because data are not available. Their exclusion does not mean that there are no third-party costs (e.g., social services are available to victims of criminal harassment), just that there is no information available to estimate the costs. There are also many other probable costs missing due to lack of data. Criminal harassment victims experience pain and suffering, but no sources were found to estimate the average value of this intangible cost for criminal harassment victims. Costs to employers through such negative productivity effects as tardiness and distraction are also important to consider, but as the stalking module of the 2004 GSS is not in the Incident File, there is little information on how the criminal harassment may affect the productivity of the victims.

For details on the offences included in this section and for the matching of offences across data sources, see **Crime Categories** and **Criminal harassment**.

See *An Estimation of the Economic Impact of Violent Victimization in Canada, 2009: Technical Appendices* (Hoddenbagh et al. 2013) for detailed technical tables with explanations of the data sources and methodology used in each cost item calculation.

Results

Tables C.1 present a comprehensive summary of the costs of victimization of adults who were criminally harassed by persons other than a spouse in 2009.

³¹ The actual question about stalking in the 2009 GSS is: “In the past 12 months, have you been stalked, that is, have you been the subject of repeated and unwanted attention that caused you to fear for your safety or the safety of someone you know?” The 2004 GSS asks a similar question, but allows for more detail in the response, including such specific victimizations as “has anyone phoned you repeatedly”, “has anyone followed you or spied on you”, “has anyone waited outside your home”, “has anyone persistently asked you for a date and refused to take no for an answer”, “has anyone attempted to intimidate or threaten you by hurting your pet(s) or damaging your property”, among others.

TABLE C.1A: CRIMINAL HARASSMENT – SUMMARY OF COSTS - CRIMINAL JUSTICE SYSTEM COSTS

Cost category or item	Female victims	Male victims	Total
Criminal justice system costs			
Police costs	\$69,834,544	\$67,106,168	\$136,940,712
Court costs	\$26,504,079	\$14,982,200	\$41,486,279
Prosecution costs	\$17,967,549	\$10,156,678	\$28,124,227
Legal aid costs	\$12,738,095	\$7,200,578	\$19,938,673
Corrections costs	\$29,487,922	\$19,668,494	\$49,156,416
Federal custody costs	\$1,929,022	\$1,764,828	\$3,693,850
Provincial custody costs	\$12,182,312	\$9,391,511	\$21,573,823
Conditional sentence costs	\$962,911	\$865,444	\$1,828,355
Probation costs	\$14,413,677	\$7,646,711	\$22,060,388
Fines*	\$55,934	\$48,936	\$104,870
Total Criminal justice system costs	\$156,532,189	\$119,114,118	\$275,646,307
Civil justice system costs			
Restraining or protective order costs	\$3,503,935	\$423,801	\$3,927,735
Total Civil justice system costs	\$3,503,935	\$423,801	\$3,927,735
Total Justice system costs	\$160,036,124	\$119,537,918	\$279,574,042

TABLE C.1B: CRIMINAL HARASSMENT – SUMMARY OF COSTS - VICTIM COSTS

Cost category or item	Female victims	Male victims	Total
Medical costs			
Long-term health care costs	\$60,794,438	\$12,087,013	\$72,881,451
Counselling costs	\$60,794,438	\$12,087,013	\$72,881,451
Total Medical costs	\$60,794,438	\$12,087,013	\$72,881,451
Other costs			
Stolen, damaged, or destroyed property costs	\$15,456,121	\$8,215,244	\$23,671,365
Special phone feature costs	\$21,725,622	\$4,518,872	\$26,244,493
Moving and change of address costs	\$52,865,435	\$17,575,348	\$70,440,783
Total Other costs	\$90,047,177	\$30,309,464	\$120,356,641
Total Victim costs	\$150,841,616	\$42,396,476	\$193,238,092

TABLE C.1C: CRIMINAL HARASSMENT – SUMMARY OF COSTS

Cost category or item	Female victims	Male victims	Total
Justice system costs	\$160,036,124	\$119,537,918	\$279,574,042
Victim costs	\$150,841,616	\$42,396,476	\$193,238,092
Total costs	\$310,877,739	\$161,934,394	\$472,812,134

* Not included in any cost summations.

Note: Categories in bolded font are summations of the cost items listed under those categories.

C.J. Justice System Costs

C.J.1 Criminal Justice System Costs

It is necessary to calculate the police, court, prosecution, and legal aid resources spent per incident for each crime type as doing so will be able to allow for distinction of non-spousal, adult victim incidents, whereas only calculating the total resources spent on each crime would not exclude incidents involving spousal relationships and youth victims. No spousal relationships can include strangers, boyfriends/girlfriends, neighbours/friends/acquaintances/co-workers and other relatives. Special data obtained from UCR2 is able to distinguish between spousal and non spousal relationship.

The numbers of court cases, used in calculations of court, prosecution, and legal aid costs, are adjusted upwards by 5% to account for the 95% national coverage of the data sources.

C.J.1.1 Police Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.1 Police Costs](#).

Table C.2 shows all of the pertinent police cost information, by gender.

TABLE C.2: CRIMINAL HARASSMENT – SEVERITY WEIGHTS AND POLICE COSTS

Offence	Severity weight ^A	Police cost per incident ^B	Number of incidents against ^C		Police costs for incidents against	
			Females	Males	Females	Males
Criminal harassment	45	\$2,205	9,806	3,608	\$21,618,795	\$7,952,938
Uttering threats	46	\$2,255	17,917	24,507	\$40,394,888	\$55,254,049
Threatening or harassing phone calls	17	\$843	9,278	4,626	\$7,820,861	\$3,899,181
Total			37,001	32,741	\$69,834,544	\$67,106,168

^A Source: CCJS special data request.

^B Source 1: Statistics Canada, CCJS, UCR2 – Incident-based crime statistics, by detailed violations, CANSIM 252-0051.
Source 2: Burczycka (2010).

Source 3: Ottawa Police Service correspondence.

^C Source: CCJS special data request.

The police costs for non-spousal, adult victim incidents of criminal harassment that occurred in 2009 are estimated to be \$136,940,712.

Criminal harassment – justice system – criminal justice system – police	
Female victims	\$69,834,544
Male victims	\$67,106,168
Total	\$136,940,712

C.J.1.2 Court Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.2 Court Costs](#).

The court costs for cases that took place due to incidents of non-spousal, adult victim criminal harassment that occurred in 2009 are estimated to be \$41,486,279.

Criminal harassment – justice system – criminal justice system – court	
Female victims	\$26,504,079
Male victims	\$14,982,200
Total	\$41,486,279

C.J.1.3 Prosecution Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.3 Prosecution Costs](#).

The prosecution costs for cases that took place due to incidents of non-spousal, adult victim criminal harassment that occurred in 2009 are estimated to be \$28,124,227.

Criminal harassment – justice system – criminal justice system – prosecution	
Female victims	\$17,967,549
Male victims	\$10,156,678
Total	\$28,124,227

C.J.1.4 Legal Aid Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.4 Legal Aid Costs](#).

The legal aid costs for cases that took place due to incidents of non-spousal, adult victim criminal harassment that occurred in 2009 are estimated to be \$19,938,673.

Criminal harassment – justice system – criminal justice system – legal aid	
Female victims	\$12,738,095
Male victims	\$7,200,578
Total	\$19,938,673

Text Box C.1 details circumstances where legal aid provides counsel for self-represented accused provided in criminal harassment cases so that the victim does not have to face the accused, and further harassment, in cross-examination. First introduced in 1993, this provision has been amended on several occasions. In 2005/2006, the *Criminal Code* was amended to permit the judge or justice to appoint counsel for self-represented accused in certain situations. In the specific case of criminal harassment, the language in the *Criminal Code* is mandatory. This cost is included in the general legal aid expenditures data, but it cannot be separated so as to be specifically estimated for criminal harassment cases.

Text Box C.1: Legal Aid for Accused in Criminal Harassment Cases

Section 486.3 of the *Criminal Code* gives the court authority to appoint counsel to cross-examine the witness where the accused is self-represented and the witness is under the age of 18 years, or where the judge or justice is of the opinion that a full and candid account cannot be obtained from the witness (of any age) if the accused is allowed to personally conduct the cross-examination.

Where the accused is charged with criminal harassment, s. 486.3(4) presumes that the self-represented accused should not personally conduct the cross-examination of the victim as this could be a continuation of the harassment.

First introduced in 1993, changes to this provision came into effect with *Bill C-2, An Act to Amend the Criminal Code (Protection of Children and other Vulnerable Persons)*, which received Royal Assent in July 2005 (SC 2005, c. 32) and was proclaimed in two stages, November 1, 2005, and January 2, 2006).

In many provinces, legal aid will pay the costs of defence counsel, but the costs may also be paid by the Crown Attorney. Data from provincial legal aid administrators indicates that there are about 300 cases across Canada per year where this type of legal aid is applicable, and that these cases are relatively costly to administer (approximately \$1,500 per case on average). Legal aid costs have been included in that section.

C.J.1.5 Correction Costs

For information on data sources and a description of the methodology used for **Table C.3** and **Table C.4**, see **A.J.1.5 Corrections Costs**.

Table C.3 shows the proportion that each sentence is given for criminal harassment crimes (calculated from the ACCS and the YCS), for all crimes and victims (i.e., no conditions).

TABLE C.3: CRIMINAL HARASSMENT SENTENCE PROPORTIONS (ALL CRIMES AND VICTIMS), BY GENDER OF OFFENDER

Offence	Custody		Conditional sentence		Probation		Fine		Other	
	M	F	M	F	M	F	M	F	M	F
Adult offenders										
Criminal harassment	28.1%	11.6%	5.0%	5.8%	61.6%	74.5%	0.8%	0.2%	4.6%	7.9%
Uttering threats	32.9%	19.4%	3.7%	4.2%	54.1%	64.4%	3.4%	3.1%	5.9%	8.9%
Youth offenders										
Criminal harassment	1.9%	7.4%	0.0%	0.0%	61.5%	76.3%	1.6%	0.0%	34.9%	16.3%
Uttering threats	14.9%	12.6%	0.1%	0.0%	60.3%	61.1%	0.8%	0.3%	23.9%	26.0%

Source 1: Statistics Canada, CCJS, ACCS – Guilty cases by most serious sentence, CANSIM 252-0057.

Source 2: Statistics Canada, CCJS, YCS – Guilty cases by most serious sentence, CANSIM 252-0068

Tables C.4 shows the number of offenders estimated to have been given each sentence for committing criminal harassment crimes in 2009, for non-spousal, adult victim incidents. These figures are used as the base counts in the estimations of the costs of each sentence type.

TABLE C.4A: CRIMINAL HARASSMENT SENTENCE NUMBERS (NON-SPOUSAL CRIMES AND ADULT VICTIMS) - ADULT OFFENDERS

Offence		Custody	Conditional sentence	Probation	Fine	Other
Adult offenders						
Female victims	Criminal harassment	255	48	587	7	45
	Uttering threats	1,166	138	2,042	124	231
Male Victims	Criminal harassment	56	12	144	1	12
	Uttering threats	1,369	158	2,328	144	260
Total Victims	Criminal harassment	311	59	731	8	57
	Uttering threats	2,534	296	4,370	268	491

TABLE C.4B: CRIMINAL HARASSMENT SENTENCE NUMBERS (NON-SPOUSAL CRIMES AND ADULT VICTIMS) - YOUTH OFFENDERS

Offence		Custody	Conditional sentence	Probation	Fine	Other
Youth offenders						
Female victims	Criminal harassment	16	0	503	13	285
	Uttering threats	493	3	2,001	25	795
Male Victims	Criminal harassment	0	0	2	0	1
	Uttering threats	62	0	253	3	101
Total Victims	Criminal harassment	16	0	506	13	286
	Uttering threats	555	3	2,254	28	896

Source 1: Statistics Canada, CCJS, Beyond 20/20 WDS: Police reported information. Incident-based crime statistics, by detailed violations – Canada and provinces, 1998 to 2010.

Source 2: CCJS special data request.

Source 3: Statistics Canada, CCJS, ACCS – Number of cases and charges by type of decision, CANSIM 252-0053.

Source 4: Statistics Canada, CCJS, YCS – Number of cases and charges by type of decision, CANSIM 252-0064.

Source 5: Statistics Canada, CCJS, ACCS – Guilty cases by most serious sentence, CANSIM 252-0057.

Source 6: Statistics Canada, CCJS, YCS – Guilty cases by most serious sentence, CANSIM 252-0068

Source 7: Table C.3.

Note: See Table AP.C.J.E3 for a more detailed version of this table, with offenders separated by gender.

C.J.1.5.1 Federal custody costs

For information on data sources and a description of the methodology used in this section, see **A.J.1.5.1 Federal custody costs**.

The estimated average length of federal custody sentences for criminal harassment was 1,280 days in 2009. The numbers of offenders sentenced to federal custody for criminal harassment are as follows: 7 males for violence against females, 0 females for violence against females, 6 males for violence against males, and 0 females for violence against males.

The federal custody costs due to incidents of non-spousal, adult victim criminal harassment that occurred in 2009 are estimated to be \$3,693,850.

Criminal harassment – justice system – criminal justice system – corrections – federal custody	
Female victims	\$1,929,022
Male victims	\$1,764,828
Total	\$3,693,850

C.J.1.5.2 Provincial custody costs

For information on data sources and a description of the methodology used in this section, see **A.J.1.5.2 Provincial custody costs**.

For criminal harassment, the average length of provincial custody sentences was 59 days for male offenders and 50 days for female offenders. The numbers of offenders sentenced to provincial custody for criminal harassment are as follows: 1,834 males for violence against females, 89 females for violence against females, 1,425 males for violence against males, and 55 females for violence against males.

The provincial custody costs due to incidents of non-spousal, adult victim criminal harassment that occurred in 2009 are estimated to be \$21,573,823.

Criminal harassment – justice system – criminal justice system – corrections – provincial custody	
Female victims	\$12,182,312
Male victims	\$9,391,511
Total	\$21,573,823

C.J.1.5.3 Conditional sentence costs

For information on data sources and a description of the methodology used in this section, see **A.J.1.5.3 Conditional sentence costs**.

The average conditional sentence length for “offences against the person”, which includes criminal harassment, is 210 days. Due to data limitations, the length of 210 days is used. Given the number of offenders sentenced to a conditional sentence from **Table C.4** (189 for violence against female victims and 170 for violence against males), the conditional sentence costs due to incidents of non-spousal, adult victim criminal harassment that occurred in 2009 are estimated to be \$1,828,355.

Criminal harassment – justice system – criminal justice system – corrections – conditional sentence	
Female victims	\$962,911
Male victims	\$865,444
Total	\$1,828,355

C.J.1.5.4 Probation costs

For information on data sources and a description of the methodology used in this section, see **A.J.1.5.4 Probation costs**.

The average probation sentence length for males was 409 days and for females was 348 days. The number of offenders sentenced to probation is given in **Table C.4** (4,804 males for violence against

females, 329 females for violence against females, 2,522 males for violence against males, 205 females for violence against males). The probation costs due to incidents of non-spousal, adult victim criminal harassment that occurred in 2009 are estimated to be \$22,060,388.

Criminal harassment – justice system – criminal justice system – corrections – probation	
Female victims	\$14,413,677
Male victims	\$7,646,711
Total	\$22,060,388

C.J.1.5.5 Fines

For information on data sources and a description of the methodology used in this section, see [A.J.1.5.5 Fines](#).

Costs to the offender are not included in this report (see [Sources of Economic Impacts](#) for reasons), and fines are calculated here for illustrative purposes only. These results are not included in any summations of total costs.

The average fines for criminal harassment in general are \$330.

This average fine amount is then multiplied by the number of offenders receiving fines from [Table C.4](#) (169 for violence against females, 148 for violence against males). The fine costs to offenders due to incidents of non-spousal, adult victim criminal harassment that occurred in 2009 are estimated to be \$104,870.

Criminal harassment – justice system – criminal justice system – corrections – fines	
Female victims	\$55,934
Male victims	\$48,936
Total	\$104,870

C.J.2 Civil Justice System Costs

C.J.2.1 Restraining or Protective Order Costs

This cost item is unique to criminal harassment in this report. Victims of persistent and unwanted contact by the offender can contact the police or courts to apply for a restraining or protective order that legally limits the rights of the offender with respect to the victim.³²

³² Perpetrators of criminal harassment may also be given protection orders through the criminal system. In the 2004 GSS there were 81,000 criminal protection orders for stalking against females and 55,000 for stalking against males. A cost estimate is not provided for these criminal protection orders because the costs are already included in other sections of the criminal justice system, albeit as an aggregate with other costs and not as separate calculations.

Data from select provinces obtained in a special data request suggest that a conservative estimate of the cost of issuing a civil restraining order is \$400. The GSS finds that 8,760 female stalking victims and 1,060 male stalking victims obtained restraining orders against their stalkers through the civil system in 2009. Note that while most applicants for civil protection orders are cohabitants in a spousal relationship, the GSS data are able to distinct between spousal and non-spousal applicants for the purpose of this study.

Multiplying the cost of issuing a restraining order by the number of orders obtained, the restraining or protective order costs due to incidents of non-spousal, adult victim criminal harassment that occurred in 2009 are estimated to be \$3,927,735.

Criminal harassment – justice system – civil justice system – restraining or protective order	
Female victims	\$3,503,935
Male victims	\$423,801
Total	\$3,927,735

C.V. Victim Costs

C.V.1 Medical Costs

Due to the nature of criminal harassment, where victims are threatened but not assaulted, there are no initial health care costs such as doctor or nurse service or emergency department visits associated with this crime. Impacts on victims who were assaulted in addition to being stalked would be counted in the assault section of the report.

C.V.1.1 Long-term Health Care Costs

C.V.1.1.1 Counselling Costs

For information on data sources and a description of the methodology used in this section, see

A.V.1.2.1 Counselling costs.

The GSS finds that 79,504 female victims and 15,807 male victims used counselling services in response to criminal harassment. New and Berliner (2000) find that the average number of counselling sessions for victims of “other crime categories” (which includes criminal harassment) is 9.

The counselling costs due to incidents of non-spousal, adult victim criminal harassment that occurred in 2009 are estimated to be \$72,881,451.

Criminal harassment – victim – medical – long-term health care – counselling	
Female victims	\$60,794,438
Male victims	\$12,087,013
Total	\$72,881,451

C.V.2 Other Costs

C.V.2.1 Stolen, Damaged, or Destroyed Property Costs

The GSS finds that property was damaged or pets injured for 83,389 female criminal harassment victims and 44,323 male victims by their stalkers. No data on stolen property are available, and no data regarding the average cost of property damage in criminal harassment cases are available.

Purcell et al. (2000) find in a survey that the most common types of property damage in stalking cases are damage to homes, damage to cars, and damage to properties. Considering the wide variety of possible specific damage and costs that these types of damage encompass and the lack of data on the costs of property damage in stalking cases, the average value of property damage in assault cases as found in the GSS is applied to criminal harassment cases.

The average value of property damage in assault cases was \$185. Note that no information on the value of damaged property in criminal harassment incidents is found, so the average value of damaged property in assault incidents in the 2009 GSS is used as a proxy. Multiplying the appropriate measures, the stolen, damaged, or destroyed property costs of adult victims of non-spousal criminal harassment that occurred in 2009 are estimated to be \$23,671,365.

Criminal harassment – victim – other – damaged or destroyed property	
Female victims	\$15,456,121
Male victims	\$8,215,244
Total	\$23,671,365

C.V.2.2 Special Phone Feature Costs

The GSS finds that 181,047 female criminal harassment victims and 45,189 male victims purchased special phone features such as Caller Identification and an unlisted phone number due to the stalking. Assuming an average cost of \$10 (based on information from Rogers) for each special phone feature and activation times of 12 months for females and 10 months for males (longer than the average duration of stalking as found in the GSS as it is assumed victims will retain special phone features for a certain period after the stalking has stopped), the special phone feature costs to adult victims of non-spousal criminal harassment that occurred in 2009 are estimated to be \$26,244,493.

Criminal harassment – victim – other – special phone features	
Female victims	\$21,725,622
Male victims	\$4,518,872
Total	\$26,244,493

C.V.2.3 Moving and Change of Address Costs

The GSS finds that 36,309 female criminal harassment victims and 12,071 male victims moved because of persistent stalking and the fear that their lives were in danger. An average moving cost of \$1,000 (based on quotes for a local move, Ottawa based, with minimal requirements by various moving companies) is chosen, and other costs associated with changing residents are also taken into consideration. Victims who move into a house will face installation and transfer fees for utilities and services ranging from hydro and gas to home phone; a general fee of \$25 is applied as a catch-all for such fees. Victims who move from an apartment may have to terminate a lease early or move out while still paying the lease and the penalty or cost of doing either of these is assumed to be one month's rent (\$887 on average in Ontario)³³. It is assumed that 50% of victims move from and to a house and that 50% of victims move from an apartment. The moving and change of address costs for

³³ Ontario Ministry of Municipal Affairs and Housing, 2011. *Average rents in Ontario for apartments – 2011 (For 2012 rents)*. Adjusted for inflation to 2009.

adult victims of non-spousal criminal harassment that occurred in 2009 are estimated to be \$70,440,783.

Criminal harassment – victim – other – moving and change of address	
Female victims	\$52,865,435
Male victims	\$17,575,348
Total	\$70,440,783

Homicide

Introduction

Three crimes (as listed in police sources) are included in this section: 1st degree murder, 2nd degree murder, and manslaughter.

Homicide is defined generally in the *Criminal Code* (s. 222) as:

- (4) Culpable homicide is murder or manslaughter or infanticide.
- (5) A person commits culpable homicide when he causes the death of a human being,
 - (a) by means of an unlawful act,
 - (b) by criminal negligence,
 - (c) by causing that human being, by threats or fear of violence or by deception, to do anything that causes his death,
or
 - (d) by wilfully frightening that human being, in the case of a child or sick person.

There are many specific scenarios that constitute homicide described in the *Criminal Code*.

Homicide, being the most severe offence, is relatively rare compared to other crimes. There were 83 police-reported incidents against females in 2009, 370 incidents against males, and 453 incidents total.

For details on the offences included in this section and for the matching of offences across data sources, see **Crime Categories** and **Homicide**.

See *An Estimation of the Economic Impact of Violent Victimization in Canada, 2009: Technical Appendices* (Hoddenbagh et al. 2013) for detailed technical tables with explanations of the data sources and methodology used in each cost item calculation.

Results

Tables H.1 present a comprehensive summary of the costs of victimization of adult victim, non-spousal homicide in 2009.

TABLE H.1A: HOMICIDE – SUMMARY OF COSTS - JUSTICE SYSTEM COSTS

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Police costs	\$27,379,189	\$114,963,465	\$142,342,654
Court costs	\$84,105	\$343,275	\$427,380
Prosecution costs	\$57,016	\$232,712	\$289,728
Legal aid costs	\$40,422	\$164,981	\$205,403
Corrections costs	\$5,632,313	\$22,671,032	\$28,303,346
Federal custody costs	\$5,585,085	\$22,474,419	\$28,059,503
Provincial custody costs	\$43,511	\$181,712	\$225,223
Conditional sentence costs	\$2,302	\$9,411	\$11,712
Probation costs	\$1,415	\$5,491	\$6,907
Fines*	\$194	\$822	\$1,016
Total Justice system costs	\$33,193,046	\$138,375,464	\$171,568,510

TABLE H.1B: HOMICIDE – SUMMARY OF COSTS - VICTIM COSTS

Cost category or item	Female victims	Male victims	Total
Medical costs			
Medical costs	\$494,445	\$3,312,184	\$3,806,629
Total Medical costs	\$494,445	\$3,312,184	\$3,806,629
Intangible costs			
Loss of life costs	\$628,253,405	\$2,830,835,929	\$3,459,089,333
Total Intangible costs	\$628,253,405	\$2,830,835,929	\$3,459,089,333
Total Victim costs	\$628,747,850	\$2,834,148,113	\$3,462,895,962

TABLE H.1C: HOMICIDE – SUMMARY OF COSTS - THIRD-PARTY COSTS

Cost category or item	Female victims	Male victims	Total
Social services operating costs			
Victim services costs	\$882,081	\$2,480,852	\$3,362,932
Total Social services operating costs	\$882,081	\$2,480,852	\$3,362,932
Intangible costs			
Loss of affection and enjoyment to family	\$12,558,750	\$56,588,250	\$69,147,000
Total Intangible costs	\$12,558,750	\$56,588,250	\$69,147,000
Other costs			
Funeral service costs	\$395,335	\$1,781,333	\$2,176,668
Family medical service costs	\$6,235	\$28,243	\$34,479
Family counselling costs	\$64,022	\$288,474	\$352,496
Total Other costs	\$465,592	\$2,098,050	\$2,563,643
Total Third-party costs	\$13,906,423	\$61,167,152	\$75,073,575

TABLE H.1D: HOMICIDE – SUMMARY OF COSTS

Cost category or item	Female victims	Male victims	Total
Justice system costs	\$33,193,046	\$138,375,464	\$171,568,510
Victim costs	\$628,747,850	\$2,834,148,113	\$3,462,895,962
Third-party costs	\$13,906,423	\$61,167,152	\$75,073,575
Total costs	\$675,847,318	\$3,033,690,729	\$3,709,538,047

* Not included in any cost summations.

Note: Categories in bolded font are summations of the cost items listed under those categories.

H.J. Justice System Costs

H.J.1 Criminal Justice System Costs

It is necessary to calculate the police, court, prosecution, and legal aid resources spent per incident for each crime type as doing so allows for distinction of non-spousal, adult victim incidents, whereas only calculating the total resources spent on each crime would not exclude incidents involving spousal relationships and youth victims.

H.J.1.1 Police Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.1 Police Costs](#).

Table H.2 shows all of the pertinent police cost information, by gender.

TABLE H.2: HOMICIDE – SEVERITY WEIGHTS AND POLICE COSTS

Offence	Severity weight ^A	Police cost per incident ^B	Number of incidents against ^C		Police costs for incidents against	
			Females	Males	Females	Males
Murder – 1st degree	7,042	\$342,224	53	158	\$18,136,289	\$54,073,009
Murder – 2nd degree	7,042	\$342,224	26	166	\$8,915,025	\$56,792,013
Manslaughter	1,822	\$88,526	4	46	\$327,875	\$4,098,443
Total			83	370	\$27,379,189	\$114,963,465

^A Source: CCJS special data request.

^B Source 1: Statistics Canada, CCJS, UCR2 – Incident-based crime statistics, by detailed violations, CANSIM 252-0051.

Source 2: Burczycka (2010).

Source 3: Ottawa Police Service correspondence.

^C Source: CCJS special data request.

The police costs for non-spousal, adult victim incidents of homicide that occurred in 2009 are estimated to be \$142,342,654.

Homicide – justice system – criminal justice system – police	
Female victims	\$27,379,189
Male victims	\$114,963,465
Total	\$142,342,654

H.J.1.2 Court Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.2 Court Costs](#).

The court costs for cases that took place due to incidents of non-spousal, adult victim homicide that occurred in 2009 are estimated to be \$427,380.

Homicide – justice system – criminal justice system – court	
Female victims	\$84,105
Male victims	\$343,275
Total	\$427,380

H.J.1.3 Prosecution Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.3 Prosecution Costs](#).

The prosecution costs for cases that took place due to incidents of non-spousal, adult victim homicide that occurred in 2009 are estimated to be \$289,728.

Homicide – justice system – criminal justice system – prosecution	
Female victims	\$57,016
Male victims	\$232,712
Total	\$289,728

H.J.1.4 Legal Aid Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.4 Legal Aid Costs](#).

The legal aid costs for cases that took place due to incidents of non-spousal, adult victim homicide that occurred in 2009 are estimated to be \$205,403.

Homicide – justice system – criminal justice system – legal aid	
Female victims	\$40,422
Male victims	\$164,981
Total	\$205,403

H.J.1.5 Corrections Costs

For information on data sources and a description of the methodology used for **Table H.3** and **Tables H.4**, see **A.J.1.5 Corrections Costs**.

Table H.3 shows the proportion that each sentence is given for homicide crimes (calculated from the ACCS and the YCS), for all crimes and victims (i.e., no conditions).

Tables H.4 show the number of offenders estimated to have been given each sentence for committing homicide crimes in 2009, for non-spousal, adult victim incidents. These figures are used as the base counts in the estimations of the costs of each sentence type.

TABLE H3: HOMICIDE SENTENCE PROPORTIONS (ALL CRIMES AND VICTIMS), BY GENDER OF OFFENDER

Offence	Custody		Conditional sentence		Probation		Fine		Other	
	M	F	M	F	M	F	M	F	M	F
Adult offenders										
Homicide	79.5%	85.5%	1.7%	1.8%	2.4%	7.3%	2.8%	0.0%	13.7%	5.5%
Youth offenders										
Homicide	32.2%	0.0%	0.0%	0.0%	6.2%	0.0%	0.0%	0.0%	61.6%	100.0%

Source 1: Statistics Canada, CCJS, ACCS – Guilty cases by most serious sentence, CANSIM 252-0057.

Source 2: Statistics Canada. CCJS, YCS – Guilty cases by most serious sentence, CANSIM 252-0068.

TABLE H4A: HOMICIDE SENTENCE NUMBERS (NON-SPOUSAL CRIMES AND ADULT VICTIMS) - ADULT OFFENDERS

Offence	Custody	Conditional sentence	Probation	Fine	Other
Adult offenders					
Female victims	9	0	0	0	1
Male Victims	37	1	1	1	6
Total Victims	46	1	2	2	8

TABLE H4B: HOMICIDE SENTENCE NUMBERS (NON-SPOUSAL CRIMES AND ADULT VICTIMS) - YOUTH OFFENDERS

Offence	Custody	Conditional sentence	Probation	Fine	Other
Youth offenders					
Female victims	0	0	0	0	1
Male Victims	1	0	0	0	3
Total Victims	2	0	0	0	4

Source 1: Statistics Canada, CCJS, *UCR2 – Incident-based crime statistics, by detailed violations*, CANSIM 252-0051.

Source 2: CCJS special data request.

Source 3: Statistics Canada, CCJS, *ACCS – Number of cases and charges by type of decision*, CANSIM 252-0053.

Source 4: Statistics Canada, CCJS, *YCS – Number of cases and charges by type of decision*, CANSIM 252-0064.

Source 5: Statistics Canada, CCJS, *ACCS – Guilty cases by most serious sentence*, CANSIM 252-0057.

Source 6: Statistics Canada. CCJS, *YCS – Guilty cases by most serious sentence*, CANSIM 252-0068.

Source 7: Table H.3.

Note: See Table AP.H.J.E3 for a more detailed version of this table, with offenders separated by gender.

H.J.1.5.1 Federal custody costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.5.1 Federal custody costs](#).

The estimated average length of federal custody sentences for homicide was 3,336 days in 2009. This might be a conservative estimate as the “Unknown” category for length of custody which includes indeterminate custody sentences is not used in the estimation. The numbers of offenders sentenced to federal custody for homicide are as follows: 7 males for violence against females, 1 female for violence against females, 30 males for violence against males, and 2 females for violence against males.

The federal custody costs due to incidents of non-spousal, adult victim homicide that occurred in 2009 are estimated to be \$28,059,503.

Homicide – justice system – criminal justice system – corrections – federal custody	
Female victims	\$5,585,085
Male victims	\$22,474,419
Total	\$28,059,503

H.J.1.5.2 Provincial custody costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.5.2 Provincial custody costs](#). There were no female offenders sentenced to provincial custody for homicide. For homicide, the average length of provincial custody sentences was 330 days for male offenders. The numbers of offenders sentenced to provincial custody for homicide are as follows: 1 male for violence against females, and 5 males for violence against males.

The provincial custody costs due to incidents of non-spousal, adult victim homicide that occurred in 2009 are estimated to be \$225,223.

Homicide – justice system – criminal justice system – corrections – provincial custody	
Female victims	\$43,511
Male victims	\$181,712
Total	\$225,223

H.J.1.5.3 Conditional sentence costs

For information on data sources and a description of the methodology used in this section, see **A.J.1.5.3 Conditional sentence costs**. The average conditional sentence length for “manslaughter” is 502 days, according to Roberts and LaPrairie (2000).

Given the number of offenders sentenced to a conditional sentence from **Table H.4** (0 for violence against female victims and 1 for violence against males), the conditional sentence costs due to incidents of non-spousal, adult victim homicide that occurred in 2009 are estimated to be \$11,712.

Homicide – justice system – criminal justice system – corrections – conditional sentence	
Female victims	\$2,302
Male victims	\$9,411
Total	\$11,712

H.J.1.5.4 Probation costs

For information on data sources and a description of the methodology used in this section, see **A.J.1.5.4 Probation costs**.

The average probation sentence length for males was 535 days and for females was 489 days. The number of offenders sentenced to probation is given in **Table H.4** (0 males for violence against females, 0 females for violence against females, 1 male for violence against males, 0 females for violence against males). The probation costs due to incidents of non-spousal, adult victim homicide that occurred in 2009 are estimated to be \$6,907.

Homicide – justice system – criminal justice system – corrections – probation	
Female victims	\$1,415
Male victims	\$5,491
Total	\$6,907

H.J.1.5.5 Fines

For information on data sources and a description of the methodology used in this section, see **A.J.1.5.5 Fines**.

Costs to the offender are not included in this report (see **Sources of Economic Impacts** for reasons), and fines are calculated here for illustrative purposes only. These results are not included in any summations of total costs. The average fine amount for homicide is \$665.

This average fine amount is then multiplied by the number of offenders receiving fines from **Table H.4** (0 for violence against females, 1 for violence against males). The fine costs to offenders due to incidents of non-spousal, adult victim homicide that occurred in 2009 are estimated to be \$1,016.

Homicide – justice system – criminal justice system – corrections – fines	
Female victims	\$194
Male victims	\$822
Total	\$1,016

H.V. Victim Costs

H.V.1 Medical Costs

H.V.1.1 Medical Costs

The method for estimating medical costs in cases of homicide is different from the method used for the other crimes because of the different nature of homicide.

Relevant information was obtained from the Centers for Disease Control and Prevention, United States – Costs of Violent Deaths in the United States, 2005. This study was able to differentiate the different external causes of death, including homicide, suicide and unintentional etc. Costs were computed separately for five different places of death identified in the data collected, such as on-scene, dead on arrival at a hospital, in emergency department, in a hospital after inpatient admission, and in a nursing home. Covering costs for coroner/medical examiner, medical transport, emergency department, inpatient hospitalization, and nursing home, the average medical cost was estimated at \$4,520USD for female victims and \$6,720USD for male victims. After adjusting for exchange rate and inflation, the average medical cost of homicide victims is \$5,817CAD for female victims and \$8,648CAD for male victims in 2009.

There were 85 female victims of non-spousal adult homicide in 2009 and 383 male victims (Note that these figures are victim counts, slightly larger than the homicide incident counts presented in the previous section). Using the cost information above, the total medical costs due to non-spousal, adult homicide that occurred in 2009 are estimated to be \$3,806,629.

Homicide – victim – medical – health care	
Female victims	\$494,445
Male victims	\$3,312,184
Total	\$3,806,629

H.V.2 Intangible Costs

H.V.2.1 Loss of Life Costs

For a brief discussion on the issues raised when valuing intangibles and the methods used to do so, see [Valuation of Intangibles](#). There are several methods for estimating the monetary value of the loss of life; in this report the value of a statistical life (VSL) willingness-to-pay method is used.

The VSL as determined by Viscusi (2008) is estimated to be \$7,391,217 for 2009 when adjusted for inflation and the exchange rate. With 85 female homicide victims and 383 male homicide victims in 2009, the loss of life costs due to incidents of non-spousal, adult victim homicide that occurred in 2009 are estimated to be \$3,459,089,333. In terms of monetary value, this figure can be interpreted as covering not only future income, but also quality of life, enjoyment and many other items that people value.

Homicide – victim – intangible – loss of life	
Female victims	\$628,253,405
Male victims	\$2,830,835,929
Total	\$3,459,089,333

H.T. Third-Party Costs

H.T.1 Social Services Operating Costs

H.T.1.1 Victim Services

Victim services are available for family and friends of homicide victims. In 2009/2010, 410,000 people used victim services in Canada (Munch 2012); of these, approximately 2.4% used the service due to the homicide of someone known to them, which suggests that 9,836 clients used victim services due to homicide. Accounting for only those homicides that did not involve spousal offender and victim relationships and for adult victims only, the number of relevant clients estimated to have used victim services is 7,378. Based on information from Sauvé (2009), victim services operating cost per victim assisted was about \$456 in 2009.³⁴

With this information taken together, the victim services costs due to incidents of non-spousal, adult victim homicide that occurred in 2009 are estimated to be \$3,362,932.

Homicide – third-party – social services – victim services	
Female victims	\$882,081
Male victims	\$2,480,852
Total	\$3,362,932

H.T.2 Intangible Costs

H.T.2.1 Loss of Affection and Enjoyment to Family

Family members and friends experience a heavy emotional cost when a loved one dies, particularly when the death is due to a criminal act. The value representing the loss of affection and enjoyment to family, which is used only for costing purposes and is not meant to imply that the loss of affection is “worth” this amount, is based on the *Alberta Fatal Accidents Act*. Under the *Act*, family members are entitled to court awards for damages when other family members die. Averaging the specified awards across all family members listed, the average value legislated to be awarded to family members was \$65,000. The average number of surviving members of a household in the UK is estimated to be 2.27,³⁵ calculated from Casey (2011), and will be used here in the absence of Canadian data.

³⁴ It is reasonable to assume that victims of more serious crimes may use victim services more than victims of less serious crimes, and therefore that using the average cost of victim services per victim may underestimate the costs to some victims and overestimate the cost to other victims. Averaging over entire crime categories (assault, robbery, etc.) alleviates the internal inconsistencies of each crime category (e.g., the inconsistencies between assault level 3 and assault level 1), but not between crime categories.

³⁵ This figure does not include extended family members.

Given 85 female homicide victims and 383 male homicide victims, the loss of affection and enjoyment to family due to incidents of non-spousal, adult victim homicide that occurred in 2009 is estimated to be \$69,147,000.

Homicide – third-party – intangible costs – loss of affection and enjoyment to family	
Female victims	\$12,558,750
Male victims	\$56,588,250
Total	\$69,147,000

H.T.3 Other Costs

Family members and others close to homicide victims may experience many other effects not listed in this report due to the homicide incident, including lost productivity and loss of future income. These and other potential costs could not be estimated due to lack of data.

H.T.3.1 Funeral service costs

Families (and other third parties when relevant) are responsible for any costs related to the burial of the deceased homicide victim. From the Ontario Board of Funeral Services, the average funeral and burial expenses in 2009 were estimated to be \$4,651.³⁶ With 85 female homicide victims and 383 male victims, the funeral service costs due to incidents of non-spousal, adult victim homicide that occurred in 2009 are estimated to be \$2,176,668.

Homicide – third-party – other costs – funeral expenses	
Female victims	\$395,335
Male victims	\$1,781,333
Total	\$2,176,668

H.T.3.2 Family medical service costs

Family members of homicide victims can be severely affected emotionally, physically, and financially by the violent and tragic event of the homicide. SAMM National (2011) conducts a survey of British families bereaved by homicide to understand more about the difficulties and pains that family members go through when a loved one is violently killed. The trauma following the homicide of a family member can lead to many physical symptoms of grief and stress, such as sleep disturbance (reported by 86% of respondents) and depression (reported by 76% of respondents). Family members can attempt to address these issues by visiting a doctor (GP), which 59% of respondents said they had. It is assumed that each family member who did visit a doctor made 1 visit, as it is

³⁶ Ontario Board of Funeral Services. 2009. "Ontario Funeral Sector – Quick Facts 2009."

known that they visited at least once, but to ensure a conservative estimate no further visits are assumed.

The cost of one physician visit in 2009, from Canadian Institute for Health Information (2007), was \$55 after inflation adjustment. Given 85 homicides of females and 383 homicides of males, and 2.27 estimated surviving family members (calculated from Casey 2011), the family medical service costs due to incidents of non-spousal, adult victim homicide that occurred in 2009 are estimated to be \$34,479.

Homicide – third-party – other costs – family medical service	
Female victims	\$6,235
Male victims	\$28,243
Total	\$34,479

H.T.3.3 Family counselling costs

Family members of homicide victims are greatly affected, and mental health in particular can deteriorate due to the trauma. The survey of British families bereaved by homicide conducted in SAMM National (2011) shows that 78% of family members³⁷ of homicide victims seek counselling to deal with the emotional effects of losing a loved one to violent homicide (49% went to bereavement counselling and 29% went to trauma counselling). It is assumed that each family member who received counselling attended 5 sessions on average, at the cost of \$85 per session.

There were 85 homicides of females and 383 homicides of males in 2009. Assuming there were 2.27 surviving family members of each homicide victim (based on calculations from Casey 2011), the family counselling costs due to incidents of non-spousal, adult victim homicide that occurred in 2009 are estimated to be \$352,496.

Homicide – third-party – other costs – family counselling	
Female victims	\$64,022
Male victims	\$288,474
Total	\$352,496

³⁷ Almost all family members surveyed in SAMM National (2011) were immediate family members (95%), while the remaining 5% were other relatives or friends.

Robbery

Introduction

Robbery, encompassing one offence (s. 343) in the *Criminal Code*, is included in this section.

Robbery is defined in the *Criminal Code* (s. 343) as:

343. Every one commits robbery who

- (a) steals, and for the purposes of extorting whatever is stolen or to prevent or overcome resistance to the stealing, uses violence or threats of violence to a person or property;
- (b) steals from any person and, at the time he steals or immediately before or immediately thereafter, wounds, beats, strikes or uses any personal violence to that person;
- (c) assaults any person with intent to steal from him; or
- (d) steals from any person while armed with an offensive weapon or imitation thereof.

Robbery should not be confused with theft or any of its related offences. Robbery is classified as a violent violation in the police-reported UCR2, while theft and other related crimes are classified as non-violent violations. In the court-reported ACCS and YCS robbery is classified as a crime against the person, while theft and other related offences are classified as crimes against property. S. 343 of the *Criminal Code* (stated above) shows clearly that violence or the threat of violence against a person is a necessary element in robbery. No theft or break and enter violations are included in this report.

Robbery is less common than the other violent crimes (except homicide). According to the GSS, there were 62,575 incidents against females, 80,846 incidents against males, and 143,421 total incidents in 2009.

For details on the offences included in this section and for the matching of offences across data sources, see **Crime Categories** and **Robbery**.

See *An Estimation of the Economic Impact of Violent Victimization in Canada, 2009: Technical Appendices* (Hoddenbagh et al. 2013) for detailed technical tables with explanations of the data sources and methodology used in each cost item calculation.

Results

Tables R.1 present a comprehensive summary of the costs of victimization of adults who were robbed by persons other than a spouse in 2009.

Tables R.1 reveal some interesting results that merit further discussion. While police-reported data used in the justice system cost estimates generally show that there are more male victims of robbery, the self-reported data in victim and third-party costs imply that female victims are more impacted by incidents of robbery. As previously mentioned in **Assault**, one potential explanation is the nature of the GSS. GSS results with low counts (before weighting) are relatively unreliable compared to GSS results with high counts, and for some of these measures the GSS counts are quite low. The unreliability of these GSS returns may be a factor in some of the seemingly contradictory results. Another potential cause of these differing results is that females may experience more violent or traumatic robberies on average, and therefore the personal and third-party impacts are greater for victimization of females despite there being less female robbery victims overall.

TABLE R.1A: ROBBERY – SUMMARY OF COSTS - CRIMINAL JUSTICE SYSTEM COSTS

Cost category or item	Female victims	Male victims	Total
Criminal justice system costs			
Police costs	\$190,585,576	\$378,290,569	\$568,876,145
Court costs	\$2,196,647	\$3,390,035	\$5,586,682
Prosecution costs	\$1,489,143	\$2,298,160	\$3,787,303
Legal aid costs	\$1,055,728	\$1,629,281	\$2,685,009
Corrections costs	\$53,951,045	\$77,976,061	\$131,927,106
Federal custody costs	\$45,949,445	\$65,746,258	\$111,695,703
Provincial custody costs	\$7,566,578	\$11,525,401	\$19,091,979
Conditional sentence costs	\$158,608	\$224,556	\$383,164
Probation costs	\$276,414	\$479,846	\$756,260
Fines*	\$747	\$1,072	\$1,818
Total Justice system costs	\$249,278,137	\$463,584,107	\$712,862,245

TABLE R.1B: ROBBERY – SUMMARY OF COSTS - TOTAL VICTIM COSTS

Cost category or item	Female victims	Male victims	Total
Medical costs			
Doctor or nurse service costs	\$85,714	\$0	\$85,714
Emergency department costs	\$2,981,349	\$773,451	\$3,754,800
Overnight hospitalization costs	\$4,199,559	\$1,190,607	\$5,390,166
Sub-Total Initial health care costs	\$7,266,622	\$1,964,058	\$9,230,680
Counselling costs	\$16,520,623	\$4,580,353	\$21,100,977
Medication costs	\$4,295	\$1,114	\$5,409
Physical therapy costs	\$214,740	\$55,710	\$270,450
Sub-Total Long-term health care costs	\$16,739,658	\$4,637,178	\$21,376,836
Total Medical costs	\$24,006,280	\$6,601,236	\$30,607,516
Lost productivity			
Lost current income	\$45,249,026	\$38,481,430	\$83,730,456
Lost household services	\$1,673,507	\$307,089	\$1,980,596
Lost education	\$1,487,655	\$0	\$1,487,655
Lost future income	\$27,779,871	\$46,649,034	\$74,428,905
Long-term physical disability costs	\$10,446,008	\$3,417,280	\$13,863,288
Mental health disability costs	\$17,333,863	\$43,231,754	\$60,565,617
Total Lost productivity	\$76,190,058	\$85,437,553	\$161,627,612
Intangible costs			
Pain and suffering costs	\$250,778,892	\$300,575,966	\$551,354,858
Total Intangible costs	\$250,778,892	\$300,575,966	\$551,354,858
Other costs			
Stolen, damaged, or destroyed property costs	\$28,564,148	\$94,726,231	\$123,290,379
Burglar alarm installation costs	\$2,798,376	\$812,711	\$3,611,087
Total Other costs	\$31,362,523	\$95,538,942	\$126,901,466
Total Victim costs	\$382,337,754	\$488,153,697	\$870,491,451

TABLE R.1C: ROBBERY – SUMMARY OF COSTS - THIRD-PARTY COSTS

Cost category or item	Female victims	Male victims	Total
Employer losses			
Administration costs	\$2,326,695	\$1,683,492	\$4,010,186
Lost additional output	\$2,352,949	\$2,001,034	\$4,353,984
Total Employer losses	\$4,679,644	\$3,684,526	\$8,364,170
Social services operating costs			
Victim services costs	\$2,855,209	\$475,868	\$3,331,077
Crisis centre and crisis line costs	\$285,840	\$33,360	\$319,200
Total Social services operating costs	\$3,141,049	\$509,228	\$3,650,277
Total Third-party costs	\$7,820,693	\$4,193,754	\$12,014,447

TABLE R.1D: ROBBERY – SUMMARY OF COSTS

Cost category or item	Female victims	Male victims	Total
Justice system costs	\$249,278,137	\$463,584,107	\$712,862,245
Victim costs	\$382,337,754	\$488,153,697	\$870,491,451
Third-party costs	\$7,820,693	\$4,193,754	\$12,014,447
Total costs	\$639,436,585	\$955,931,559	\$1,595,368,143

* Not included in any cost summations.

Note: Categories in bolded font are summations of the cost items listed under those categories.

R.J. Justice System Costs

R.J.1 Criminal Justice System Costs

It is necessary to calculate the police, court, prosecution, and legal aid resources spent per incident for each crime type as doing so allows for distinction of non-spousal, adult victim incidents, whereas only calculating the total resources spent on each crime would not exclude incidents involving spousal relationships and youth victims.

The numbers of court cases, used in calculations of court, prosecution, and legal aid costs, are adjusted upwards by 5% to account for the 95% national coverage of the data sources.

R.J.1.1 Police Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.1 Police Costs](#).

Table R.2 shows all of the pertinent police cost information, by gender.

TABLE R.2: ROBBERY – SEVERITY WEIGHTS AND POLICE COSTS

Offence	Severity weight ^A	Police cost per incident ^B	Number of incidents against ^C		Police costs for incidents against	
			Females	Males	Females	Males
Robbery	583	\$28,349	6,723	13,344	\$190,585,576	\$378,290,569
Total			6,723	13,344	\$190,585,576	\$378,290,569

^A Source: CCJS special data request.

^B Source 1: Statistics Canada, CCJS, *UCR2 – Incident-based crime statistics, by detailed violations*, CANSIM 252-0051.
Source 2: Burczycka (2010).

Source 3: Ottawa Police Service correspondence.

^C Source: CCJS special data request.

The police costs for non-spousal, adult victim incidents of robbery that occurred in 2009 are estimated to be \$568,876,145.

Robbery – justice system – criminal justice system – police	
Female victims	\$190,585,576
Male victims	\$378,290,569
Total	\$568,876,145

R.J.1.2 Court Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.2 Court Costs](#).

The court costs for cases that took place due to incidents of non-spousal, adult victim robbery that occurred in 2009 are estimated to be \$5,586,682.

Robbery – justice system – criminal justice system – court	
Female victims	\$2,196,647
Male victims	\$3,390,035
Total	\$5,586,682

R.J.1.3 Prosecution Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.3 Prosecution Costs](#).

The prosecution costs for cases that took place due to incidents of non-spousal, adult victim robbery that occurred in 2009 are estimated to be \$3,787,303.

Robbery – justice system – criminal justice system – prosecution	
Female victims	\$1,489,143
Male victims	\$2,298,160
Total	\$3,787,303

R.J.1.4 Legal Aid Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.4 Legal Aid Costs](#).

The legal aid costs for cases that took place due to incidents of non-spousal, adult victim robbery that occurred in 2009 are estimated to be \$2,685,009.

Robbery – justice system – criminal justice system – legal aid	
Female victims	\$1,055,728
Male victims	\$1,629,281
Total	\$2,685,009

R.J.1.5 Corrections Costs

For information on data sources and a description of the methodology used for **Table R.3** and **Tables R.4**, see **A.J.1.5 Corrections Costs**.

Table R.3 shows the proportion that each sentence is given for robbery crimes (calculated from the ACCS and the YCS), for all crimes and victims (i.e., no conditions).

Tables R.4 show the number of offenders estimated to have been given each sentence for committing robbery crimes in 2009, for non-spousal, adult victim incidents. These figures are used as the base counts in the estimations of the costs of each sentence type.

TABLE R.3: ROBBERY SENTENCE PROPORTIONS (ALL CRIMES AND VICTIMS), BY GENDER OF OFFENDER

Offence	Custody		Conditional sentence		Probation		Fine		Other	
	M	F	M	F	M	F	M	F	M	F
Adult offenders										
Robbery	79.8%	67.0%	4.8%	9.1%	10.3%	16.2%	0.2%	0.7%	4.9%	7.1%
Youth offenders										
Robbery	39.5%	27.1%	0.1%	0.0%	36.8%	45.5%	0.1%	0.0%	23.6%	27.3%

Source 1: Statistics Canada, CCJS, ACCS – Guilty cases by most serious sentence, CANSIM 252-0057.

Source 2: Statistics Canada, CCJS, YCS – Guilty cases by most serious sentence, CANSIM 252-0068

TABLE R.4A: ROBBERY SENTENCE NUMBERS (NON-SPOUSAL CRIMES AND ADULT VICTIMS) - ADULT OFFENDERS

Offence	Custody	Conditional sentence	Probation	Fine	Other
Adult offenders					
Female victims	484	31	66	2	31
Male Victims	692	44	93	2	44
Total Victims	1,176	75	159	4	74

TABLE R.4B: ROBBERY SENTENCE NUMBERS (NON-SPOUSAL CRIMES AND ADULT VICTIMS) - YOUTH OFFENDERS

Offence	Custody	Conditional sentence	Probation	Fine	Other
Youth offenders					
Female victims	22	0	22	0	14
Male Victims	62	0	59	0	38
Total Victims	84	0	81	0	52

Source 1: Statistics Canada, CCJS, UCR2 – Incident-based crime statistics, by detailed violations, CANSIM 252-0051.

Source 2: CCJS special data request.

Source 3: Statistics Canada, CCJS, ACCS – Number of cases and charges by type of decision, CANSIM 252-0053.

Source 4: Statistics Canada, CCJS, YCS – Number of cases and charges by type of decision, CANSIM 252-0064.

Source 5: Statistics Canada, CCJS, ACCS – Guilty cases by most serious sentence, CANSIM 252-0057.

Source 6: Statistics Canada. CCJS, YCS – Guilty cases by most serious sentence, CANSIM 252-0068

Source 7: Table R.3.

Note: See Table AP.R.J.E3 for a more detailed version of this table, with offenders separated by gender.

R.J.1.5.1 Federal custody costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.5.1 Federal custody costs](#).

The estimated average length of federal custody sentences for robbery was 1,282 days in 2009. The numbers of offenders sentenced to federal custody for robbery are as follows: 168 males for violence against females, 6 females for violence against females, 243 males for violence against males, and 7 females for violence against males.

The federal custody costs due to incidents of non-spousal, adult victim robbery that occurred in 2009 are estimated to be \$111,695,703.

Robbery – justice system – criminal justice system – corrections – federal custody	
Female victims	\$45,949,445
Male victims	\$65,746,258
Total	\$111,695,703

R.J.1.5.2 Provincial custody costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.5.2 Provincial custody costs](#).

For robbery, the average length of provincial custody sentences was 214 days for male offenders and 181 days for female offenders. The numbers of offenders sentenced to provincial custody for robbery are as follows: 308 males for violence against females, 23 females for violence against females, 477 males for violence against males, and 26 females for violence against males.

The provincial custody costs due to incidents of non-spousal, adult victim robbery that occurred in 2009 are estimated to be \$19,091,979.

Robbery – justice system – criminal justice system – corrections – provincial custody	
Female victims	\$7,566,578
Male victims	\$11,525,401
Total	\$19,091,979

R.J.1.5.3 Conditional sentence costs

For information on data sources and a description of the methodology used in this section, see **A.J.1.5.3 Conditional sentence costs**. The average conditional sentence length for “offences against the person”, which includes robbery, is 210 days.

Given the number of offenders sentenced to a conditional sentence from **Table R.4** (31 for violence against female victims and 44 for violence against males), the conditional sentence costs due to incidents of non-spousal, adult victim robbery that occurred in 2009 are estimated to be \$383,164.

Robbery – justice system – criminal justice system – corrections – conditional sentence	
Female victims	\$158,608
Male victims	\$224,556
Total	\$383,164

R.J.1.5.4 Probation costs

For information on data sources and a description of the methodology used in this section, see **A.J.1.5.4 Probation costs**. The average probation sentence length for males was 458 days and for females was 415 days.

The number of offenders sentenced to probation is given in **Table R.4** (77 males for violence against females, 11 females for violence against females, 141 males for violence against males, 11 females for violence against males). The probation costs due to incidents of non-spousal, adult victim robbery that occurred in 2009 are estimated to be \$756,260.

Robbery – justice system – criminal justice system – corrections – probation	
Female victims	\$276,414
Male victims	\$479,846
Total	\$756,260

R.J.1.5.5 Fines

For information on data sources and a description of the methodology used in this section, see **A.J.1.5.5 Fines**. Costs to the offender are not included in this report (see **Sources of Economic Impacts** for reasons), and fines are calculated here for illustrative purposes only. These results are not included in any summations of total costs.

The average fine amount for robbery is \$484. This average fine amount is then multiplied by the number of offenders receiving fines from **Table R.4** (2 for violence against females, 2 for violence against males). The fine costs to offenders due to incidents of non-spousal, adult victim robbery that occurred in 2009 are estimated to be \$1,818.

Robbery – justice system – criminal justice system – corrections – fines	
Female victims	\$747
Male victims	\$1,072
Total	\$1,818

R.V. Victim Costs

R.V.1 Medical Costs

R.V.1.1 Initial Health Care Costs

R.V.1.1.1 Doctor or nurse service costs

For information on data sources and a description of the methodology used in this section, see [A.V.1.1.1 Doctor or nurse service costs](#).

The GSS finds that female victims sought medical attention from a doctor or nurse 1,567 times due to robbery incidents in 2009, and no medical attention was required by male victims.³⁸

The doctor or nurse service costs due to incidents of non-spousal, adult victim robbery that occurred in 2009 are estimated to be \$85,714.

Robbery – victim – medical – initial health care – doctor or nurse service	
Female victims	\$85,714
Male victims	\$0
Total	\$85,714

R.V.1.1.2 Emergency department costs

For information on data sources and a description of the methodology used in this section, see [A.V.1.1.2 Emergency department costs](#).

The GSS finds that there were 7,158 visits of female robbery victims and 1,857 visits of male robbery victims at a hospital or health centre, which is deemed equivalent to visiting the emergency department. As with assault, it is assumed that 25% of emergency department visits due to robbery involve ambulatory transportation. Again, this is based on the CIHI information for general ER visits.

The emergency department costs due to incidents of non-spousal, adult victim robbery that occurred in 2009 are estimated to be \$3,754,800.

Robbery – victim – medical – initial health care – emergency department	
Female victims	\$2,981,349
Male victims	\$773,451
Total	\$3,754,800

³⁸ Note that the relatively small count of GSS respondents used for calculations in this section may explain the result that there were no male victims who received care from a doctor or nurse due to a robbery. As mentioned in the [Limitations](#) section, queries in the GSS that return less than a certain number of counts (before weighting) are not necessarily reliable, and the smaller the count the less reliable the result is, and this is a possible explanation for why there were no relevant males but there were relevant females in this section.

R.V.1.1.3 Overnight hospitalization costs

For information on data sources and a description of the methodology used in this section, see [A.V.1.1.3 Overnight hospitalization costs](#).

The GSS finds that female victims spent 4,208 nights and male victims spent 1,193 nights in hospital due to robbery in 2009. Note that this is an underestimate of the true hospitalization length as it is assumed that each victim stayed overnight in a hospital for only one night due to lack of data.

The overnight hospitalization costs due to incidents of non-spousal, adult victim robbery that occurred in 2009 are estimated to be \$5,390,166.

Robbery – victim – medical – initial health care – overnight hospitalization	
Female victims	\$4,199,559
Male victims	\$1,190,607
Total	\$5,390,166

R.V.1.2 Long-term Health Care Costs

R.V.1.2.1 Counselling costs

For information on data sources and a description of the methodology used in this section, see [A.V.1.2.1 Counselling costs](#).

The GSS finds that female victims used counselling services 12,963 times and male victims used counselling services 3,594 times in response to robbery occurred in 2009. New and Berliner (2000) find that the average number of counselling sessions for assault victims is 15. Due to lack of data, it is assumed a same number of counseling sessions for robbery victims.

The counselling costs due to incidents of non-spousal, adult victim robbery that occurred in 2009 are estimated to be \$21,100,977.

Robbery – victim – medical – long-term health care – counselling	
Female victims	\$16,520,623
Male victims	\$4,580,353
Total	\$21,100,977

R.V.1.2.2 Medication costs

For information on data sources and a description of the methodology used in this section, see [A.V.1.2.2 Medication costs](#).

It is estimated that 2,204 female victim visits and 572 male victim visits at ER involved a fracture due to a robbery incident in 2009. The medication costs due to incidents of non-spousal, adult victim robbery that occurred in 2009 are estimated to be \$5,409.

Robbery – victim – medical – long-term health care – medication	
Female victims	\$4,295
Male victims	\$1,114
Total	\$5,409

R.V.1.2.3 Physical therapy costs

For information on data sources and a description of the methodology used in this section, see **A.V.1.2.3 Physical therapy costs**. Following this, it is estimated that approximately 1,102 female and 286 male robbery victims require physical therapy.

The physical therapy costs due to incidents of non-spousal, adult victim robbery that occurred in 2009 are estimated to be \$270,450.

Robbery – victim – medical – long-term health care – physical therapy	
Female victims	\$214,740
Male victims	\$55,710
Total	\$270,450

R.V.2 Lost Productivity

R.V.2.1 Lost Current Income

Using a similar method as in the Assault section, the GSS finds that employed female victims of robbery were unable to attend work for 315,890 work days, and employed male victims were unable to attend work for 228,564 work days. Subtracting the number of days that were covered by paid sick leave benefits, the figures become 299,846 lost days for females and 216,099 lost days for males.³⁹ According to GSS, the average daily wage of female robbery victims was \$151, and the average daily wage of male robbery victims in the GSS was \$178.

³⁹ The American survey finds that 66% (Table 32) of all workers have paid sick leave benefits and on average workers with this benefits have 8-10 sick leave days (Table 35, depending on working years) per year. The Canadian data suggest that the average working days lost due to illness or disability is about 7.6 days per worker. Therefore, it is assumed in this report that 60% of the victims who worked at a paid job had paid sick leave and 1 sick leave day per worker can be used for the absence of these victims due to injuries resulting from the incidents.

In this way, the lost current income to adult victims of non-spousal assault that occurred in 2009 is estimated to be \$83,730,456.

Robbery – victim – lost productivity – lost current income	
Female victims	\$45,249,026
Male victims	\$38,481,430
Total	\$83,730,456

R.V.2.2 Lost Household Services

For those victims whose main activity was doing household services, 7.5 hours are assigned for each lost days, which include days in the emergency department, hospitalization days, days in bed outside of the hospital, and other time where victims found it difficult or impossible to carry out his/her main activity. For all other victims whose main activity was not conducting household services, it is estimated that females spend 3.68 hours per day and males spend 2.44 hours per day. See the method for Assault in section R.V.2.1.

The GSS finds that female victims lost 125,922 hours of household work and males lost 23,107 hours of household work due to robbery incidents in 2009. At an hourly rate of \$13.29, the value of the lost household services of adult victims of non-spousal assault that occurred in 2009 is estimated to be \$1,980,596

Robbery – victim – medical – lost productivity – lost household services	
Female victims	\$1,673,507
Male victims	\$307,089
Total	\$1,980,596

R.V.2.3 Lost Education

The GSS finds that female student victims were unable to go to school for 37,628 school days, and no school days were lost for male student victims. Similar to the previous sections, these days include days in the emergency department, hospitalization days, days in bed outside of the hospital, and other time where victims found it difficult or impossible to carry out his/her main activity, and have been adjusted to take into account potential school days.

It has been calculated earlier that the average daily cost of education is approximately \$40. The lost education to adult victims of non-spousal robbery incidents that occurred in 2009 is estimated to be \$1,487,655.

Robbery – victim – medical – lost productivity – lost education	
Female victims	\$1,487,655
Male victims	\$0
Total	\$1,487,655

Note that the relatively small count of GSS respondents used for calculations in this section may explain the result that there were no victims with lost child care services due to a robbery. As mentioned in the **Limitations** section, queries in the GSS that return less than a certain number of counts (before weighting) are not necessarily reliable, and the smaller the count the less reliable the result is, and this is a possible explanation for why there were no relevant victims in this section.

R.V.2.4 Lost Future Income

R.V.2.4.1 Long-term physical disability costs

The numbers of employed victims estimated to have sustained an injury, where sustaining an injury is based on the criterion of requiring medical attention at a hospital, are 5,055 female victims and 529 male victims. It is assumed that out of the total medically treated injuries, 0.3% of the injuries will have caused permanent or long-term disability, according to Corso et al. (2006). The average income of female robbery victims was \$25,000, while the average income of male assault victims was \$70,000. The GSS also provides the average age of victims, and assuming that careers last until age 65, that incomes never change, and that inflation is equal to the discount rate, the expected remaining lifetime income is calculated. The lost future income (due to physical disabilities) of adult victims of non-spousal robbery incidents that occurred in 2009 is estimated to be \$13,863,288.

Robbery – victim – lost productivity – lost future income – long-term physical disability costs	
Female victims	\$10,446,008
Male victims	\$3,417,280
Total	\$13,863,288

R.V.2.4.2 Mental health disability costs

Studying the mental health outcomes of victimization is difficult and can involve subjectivity. To estimate the future costs of mental health degradation, the number of victims developing a mental health problem must first be estimated. To do this, the numbers of victims who are assumed to be participants in the labour force, who had reported getting “depression/anxiety attacks” because of the incident, and who had never before sustained an assault, robbery, or sexual assault were obtained

from the GSS; the results are 5,055 female victims and 2,760 male victims, and these are defined as the victims potentially affected by a mental health issue. To calculate the number of victims actually assumed to have developed a mental health issue, the percentage of robbery victims who have mental health needs for a “severely disabling mental illness” is taken from Miller et al. (1993) (1.5%). Applying this latter number to the numbers of victims who potentially have a mental illness, the estimated numbers of victims who developed or will develop a serious mental illness are 76 female victims and 41 male victims.

The annual income lost due to mental health issues developed by robbery victims is calculated by applying the proportion of annual income lost due to mental health issues in general (from Kessler et al. 2008) to the annual income of GSS respondents, and the results are \$8,298 for female victims and \$33,950 for male victims. Taking the average age of the appropriate respondents and assuming that careers last until age 65, that incomes never change, and that inflation is equal to the discount rate, the lost future income (due to mental disabilities) of adult victims of non-spousal robbery that occurred in 2009 is estimated to be \$60,565,617.

Robbery – victim – lost productivity – lost future income – mental health disability costs	
Female victims	\$17,333,863
Male victims	\$43,231,754
Total	\$60,565,617

R.V.3 Intangible Costs

R.V.3.1 Pain and Suffering Costs

For a brief discussion on the issues raised when valuing intangibles and the methods used to do so, see [Valuation of Intangibles](#).

All robbery victims in the GSS are assumed to experience pain and suffering.

The GSS finds that there were 47,730 female victims and 57,208 male victims of robbery in 2009. The value of pain and suffering for robbery is taken from McCollister et al. (2010); after adjustment for inflation, this value is \$5,254.

Multiplying the numbers of victims by the value of pain and suffering, the total pain and suffering of adult victims of non-spousal robbery that occurred in 2009 is estimated to be \$551,354,858.

Robbery – victim – intangible – pain and suffering	
Female victims	\$250,778,892
Male victims	\$300,575,966
Total	\$551,354,858

R.V.4 Other Costs

R.V.4.1 Stolen, Damaged, or Destroyed Property Costs

This cost item is highly relevant to robbery, as the main purpose of most robberies is to steal property.

The GSS finds that property was stolen from 42,529 female victims and 57,092 male victims during robberies, at an average cost of \$667 to female victims and \$1,659 to male victims. In addition, the property of 1,005 female victims and 775 male victims was damaged or destroyed during robberies, at average costs of \$200 and \$40 respectively. Multiplying the appropriate measures, the stolen, damaged, or destroyed property costs of adult victims of non-spousal robbery that occurred in 2009 are estimated to be \$123,290,379.

Robbery – victim – other – stolen, damaged, or destroyed property	
Female victims	\$28,564,148
Male victims	\$94,726,231
Total	\$123,290,379

R.V.4.2 Burglar Alarm Installation Costs

The GSS finds that many respondents reported that they had installed a burglar alarm or motion detector light in the “last 12 months”. Most of these respondents have experienced property crime such as break and enter, theft of personal or household property, while a few of them were victims of violence. The GSS does not ask respondents what prompted them to install the device, but it is assumed that robbery victims (victims of robbery only) who stated they had installed one did so in response to the robbery.⁴⁰ In this case, 5,855 female victims and 1,700 male victims of robbery installed the device. The average cost of a burglar alarm or motion detector light is estimated at \$478, taking into account the many different options available (purchasing an alarm with a low monthly fee, leasing an alarm with a high monthly fee, purchasing an alarm with no activation, purchasing a motion detector light). Multiplying the number of people installing a device by the average cost, the burglar alarm installation costs to adult victims of non-spousal robbery that occurred in 2009 are estimated to be \$3,611,087.

Robbery – victim – other – burglar alarm installation	
Female victims	\$2,798,376
Male victims	\$812,711
Total	\$3,611,087

⁴⁰ If a person experienced both robbery and property crime, this respondent is not included here.

R.T. Third-Party Costs

R.T.1 Employer Losses

R.T.1.1 Administration Costs

For information on data sources and a description of the methodology used in this section, see [A.T.1.1 Administration Costs](#).

The GSS finds that employed female victims were unable to do their main activities for 315,890 working days, and employed male victims were unable to do their main activities for 228,564 working days.

With average hourly wage rates of \$37 for managers and \$22 for administrators, and assuming 0.125 hours of time spent for managers and 0.125 hours for administrators (a conservative estimate based on estimation in Health and Safety Executive (1999)), the administration costs of employers due to adult non-spousal robbery incidents that occurred in 2009 are estimated to be \$4,010,186.

Robbery – third-party – employer losses – administration	
Female victims	\$2,326,695
Male victims	\$1,683,492
Total	\$4,010,186

R.T.1.2 Lost Additional Output

To calculate the lost additional output to employers, lost wages of employees are multiplied by the expected marginal rate of return to the employer. The total lost wages (from [R.V.2.1 Lost Current Income](#)) are \$45,249,026 for female victims and \$38,481,430 for male victims, and the expected marginal rate of return is 5.2% (Boardman et al. 2008). A marginal rate of return on investment of 5.2% means that if an employer invests (disinvests) an additional \$100, as through employee wages, the employer expects to gain (lose) \$5.20 in net returns.

Multiplying the lost wages by the expected rate of return, the lost additional output of employers due to adult non-spousal robbery incidents that occurred in 2009 is estimated to be \$4,353,984.

Robbery – third-party – employer losses – lost additional output	
Female victims	\$2,352,949
Male victims	\$2,001,034
Total	\$4,353,984

R.T.2 Social Services Operating Costs

One important cost that cannot be estimated here is the cost of support centres. The GSS finds that 5,889 female victims of robbery in 2009 used one of the various categories of support centres listed in

the GSS: “community centre, CLSC or family centre”, “women’s centre”, or “men’s centre/men’s support group or seniors’ centre”. There is no available information on the operational costs of these services or on the average duration of use by clients.

R.T.2.1 Victim Services Costs

For information on data sources and a description of the methodology used in this section, see [A.T.2.1 Victim Services Costs](#).

The GSS finds that female victims used victim services 6,264 times and male victims used the services 1,044 times in 2009. The victim services costs due to adult victim, non-spousal robbery that occurred in 2009 are estimated to be \$3,331,077.

Robbery – third-party – social services – victim services	
Female victims	\$2,855,209
Male victims	\$475,868
Total	\$3,331,077

R.T.2.2 Crisis Line Costs

For information on data sources and a description of the methodology used in this section, see [A.T.2.2 Crisis Line Costs](#).

The GSS finds that female victims called a crisis line 7,146 times and male victims called a crisis line 834 times because of the crime

The crisis line costs due to adult victim, non-spousal robbery that occurred in 2009 are estimated to be \$319,200.

Robbery – third-party – social services – crisis lines	
Female victims	\$285,840
Male victims	\$33,360
Total	\$319,200

Sexual Assault and Other Sexual Offences

Introduction

The sexual assault and other sexual offences category presents some of the most serious difficulties for costing. The nature of these crimes means that victims may experience physical, emotional, psychological, and sexual impacts unique among crime victims. Compounding the difficulties is that the data for sexual assault and other sexual offences are themselves problematic. Sexual offences data suffer from severe underreporting; these crimes are less likely to be reported to police than both assault and robbery, and overall it is estimated that approximately only one in ten incidents are reported to police (Brennan and Taylor-Butts 2008). This lack of reporting is noticeable in specific cost items like police costs and court costs, where the true extent of the impacts of sexual offences is hidden, and other crimes may therefore seem comparatively more serious.⁴¹

Seven crimes (as listed in police sources) are included in this section: level 3 (aggravated) sexual assault, level 2 (weapon or bodily harm) sexual assault, level 1 sexual assault, incest, anal intercourse, voyeurism, and other sexual violations. Sexual exploitation of a person with a disability would also be included but there were no police-reported incidents of this offence involving adult victims in 2009.

Sexual assault in Canada as defined in the Canadian *Criminal Code* is fundamentally different than equivalent offences as defined in many other developed nations, and the factors that determine what level of sexual assault charge (or the equivalent in other nations) is given also differ. *Martin's Annual Criminal Code, 2010* (Greenspan and Rosenberg 2009) states in the annotations for s. 271 (p. 572) that

Sexual assault is an assault, within any one of the definitions of that concept in s. 265(1), which is committed in circumstances of a sexual nature such that the sexual integrity of the victim is violated.

For the definitions of assault in s. 265(1) see **Assault**. Level 1 sexual assault (s. 271) is not defined further than the definition of s. 265(1), though sexual objectives and nature are considered. The higher levels of sexual assault are defined in terms of the weapons used in the commission of the

⁴¹ One important aspect of the underreporting (and misreporting) of sexual assault incidents in victimization surveys is discussed in detail in Fisher and Cullen (2000). Modern victimization surveys (including the GSS) often utilize both a screener section and an incident section. Screener questions are used to determine if the respondent did experience a victimization (and what type), then they complete an incident report with detailed questions about each victimization, and the incident type is reclassified based on answers to these detailed questions. In a US survey, Fisher and Cullen (2000) find that, for women, only 25% of incidents classified as rape by the screener question were also classified as rape in the incident file, 50% were classified as other types of sexual victimization in the incident file, and 25% were not classified in the incident file. One possible explanation for this is that victims do not disclose details of the incident so as not to relive the victimization through the survey. In the GSS there is a screener question for incidents of being forced into unwanted sexual activity and another screener question for incidents of being touched against one's will in a sexual way. If a respondent was screened into the incident file with another crime type but their detailed incident responses clearly indicate that a sexual victimization took place, this respondent will also be classified as having experienced unwanted sexual activity or unwanted sexual touching. The incidents screened in via the sexual assault questions are then added to the incidents deemed as sexual assaults from the incident file to get total sexual assaults. With this method, the GSS should avoid the issues of other recent surveys where a sexual assault from the screener question is reclassified to a different crime, though the relative severity of the sexual assault is perhaps not as clear as in some other surveys that specifically define "rape".

offence or the severity of violence, threats, and harm to the victim. Level 2 sexual assault is called “sexual assault with a weapon, threats to a third party or causing bodily harm”, and is defined in s. 272:

- (1) Every person commits an offence who, in committing a sexual assault,
- (a) carries, uses or threatens to use a weapon or an imitation of a weapon;
 - (b) threatens to cause bodily harm to a person other than the complainant;
 - (c) causes bodily harm to the complainant; or
 - (d) is a party to the offence with any person.

Level 3 sexual assault, or “aggravated sexual assault” is defined in s. 273 as:

- (1) Every one commits an aggravated sexual assault who, in committing a sexual assault, wounds, maims, disfigures or endangers the life of the complainant.

Brennan and Taylor-Butts (2008, p. 7) summarize the definitions of sexual assaults in Canada, based on the *Criminal Code*:

Sexual assault level 1 (s. 271): An assault committed in circumstances of a sexual nature such that the sexual integrity of the victim is violated. Level 1 involves minor physical injuries or no injuries to the victim.

Sexual assault level 2 (s. 272): Sexual assault with a weapon, threats, or causing bodily harm.

Aggravated sexual assault (level 3): Sexual assault that results in wounding, maiming, disfiguring or endangering the life of the victim.

In contrast, many other nations’ sexual offence legislation uses definitions that are mainly based on the sexual nature of the crimes. The UK’s *Sexual Offences Act, 2003* contains definitions of rape (penetration by penis without consent), assault by penetration (penetration by any body part or anything else without consent), sexual assault (intentional sexual touching without consent), and causing a person to engage in sexual activity without consent. New Zealand’s *Crimes Act, 1961* s. 128 also defines rape essentially as penetration by penis without consent, while a sexual violation in general is defined as unlawful sexual connection without consent. California’s *Penal Code* s. 261 defines rape as “an act of sexual intercourse accomplished with a person not the spouse of the perpetrator ... (1) where a person is incapable ... of giving legal consent ... (2) where it is accomplished against a person’s will” among many other possible circumstances, while it also defines “rape of a person who is the spouse of the perpetrator is an act of sexual intercourse ... (1) where it is accomplished against a person’s will ...” among many other possible circumstances.

By the definition in the *Canadian Criminal Code* then, what would be defined as rape in other countries (and what used to be defined as rape in Canada) could fall under the *Criminal Code*’s sexual assault level 1, sexual assault level 2, or sexual assault level 3, depending on the severity of the assault. As stated in Johnson (2012),

A man who commits forced penetration, formerly legally known as rape, can be charged and prosecuted under any of these sections, including 271 if it is determined that the attack did not involve a weapon, bodily harm, or multiple assailants.

The other four sexual violations examined in this report are found in the *Criminal Code*: incest in s. 154, anal intercourse in section 159, and voyeurism in s. 162. The fourth violation, “other sexual violations”, was recently reconfigured into various crimes in the police-reported data. According to the Uniform Crime Reporting Survey’s *2011 and Historical Canada/Province/CMA Note* document:

“Other sexual violations” officially expired in 2008 and divided into the following violations: sexual interference, invitation to sexual touching, sexual exploitation, incest, corrupting children, luring a child via a computer, anal intercourse, bestiality/commit/compel/incite a person, voyeurism. Police services have been able to utilise these new codes over the past few years as their Records Management Systems have been updated to allow it.

Comparison with previous years’ data should be done with caution. (Statistics Canada 2012, p. 6)

Though officially expired, there were still incidents recorded as “other sexual violations” in 2009, which causes challenges in the calculations of some cost items.

The GSS contains two categories of sexual offences: “sexual attack” and “unwanted sexual touching”. Sexual attack is defined in the question posed to respondents by interviewers as, “During the past 12 months, has anyone forced you or attempted to force you into any unwanted sexual activity, by threatening you, holding you down or hurting you in some way?” Unwanted sexual touching is defined in the question posed to respondents as, “During the past 12 months, has anyone ever touched you against your will in any sexual way? By this I mean anything from unwanted touching or grabbing, to kissing or fondling.” (Brennan and Taylor-Butts (2008).)

According to the GSS, there were 382,066 sexual offence incidents (including both sexual attacks and unwanted sexual touching) against females in 2009, 179,741 incidents against males, and 561,807 total incidents.

For details on the offences included in this section and for the matching of offences across data sources, see **Crime Categories** and **Sexual assault and other sexual offences**.

See *An Estimation of the Economic Impact of Violent Victimization in Canada, 2009: Technical Appendices* (Hoddenbagh et al. 2013) for detailed technical tables with explanations of the data sources and methodology used in each cost item calculation.

The Canadian Centre for Policy Alternatives provides another resource that examines the costs of sexual assault against women in Canada. The report (McInturff 2013), titled *The Gap in the Gender Gap*, uses the methodology developed in Zhang et al. (2012).

Victims of sexual assault and other sexual offences can sue the offenders in civil court, and this scenario is described in **Text Box S.1**. This important mechanism provides victims, at least to a minimal extent, an alternative to the criminal justice system to receive recognition for their traumatizing experiences.

Text Box S.1: Sexual Assault and Civil Actions

Victims of sexual assault and other sexual offences can seek damages through civil actions. Civil action seeking damages are civil lawsuits initiated by plaintiffs against defendants for alleged wrongful conduct. Depending upon the jurisdiction, there may be other remedies available for victims as well, such as criminal proceedings, criminal injuries compensation,⁴² human rights complaints,⁴³ labour grievances, and public or private inquiries. The civil justice system plays an important role to determine how society compensates various claims, such as claims of sexual assault and other sexual offences (British Columbia Law Institute 2001). A civil action will frame the issues and develop principles for compensation. In the past two decades, civil actions for sexual assault have become more frequent and hence, a body of case law has developed that provides guidance to lower courts when assessing non-pecuniary damages (intangible losses such as pain and suffering) for the impacts of sexual assault.

Civil and criminal law recognize that sexual assault has a harmful impact — particularly psychological and emotional harm — on victims, and potentially on family and friends of victims. Yet despite years of court decisions, it remains difficult to quantify in monetary terms these intangible impacts. Aggravated or punitive damages may be awarded to punish the defendant and deter others from such actions. If there has been a conviction in a criminal process, the sentence may be deemed to serve the punitive function. Pecuniary damages are awarded for economic losses (e.g. lost wages, medical expenses, future loss of earning and future costs of care) with the goal of restoring the plaintiff to the same position they would have been in had the injury not occurred.

All these damages, if awarded, are costs to the defendant, which (like fines in the criminal justice system) have not been included in this report. There are significant costs to both the plaintiff and defendant in civil actions and legal aid is available in only a few jurisdictions (BC, Alberta, Quebec) provided the applicants meet eligibility and merit criteria. There are also costs to the court system. No data exist on the number of civil actions for sexual assault and other sexual offences in the country in 2009, so costs cannot be calculated. Yet readers will have an understanding of what civil actions entail.

A review of civil sexual assault cases in Canada found that between 2001 and 2011, there were 67 cases involving female plaintiffs where damages were awarded (average pain and suffering award: \$271,000) and 38 similar cases with male plaintiffs (average pain and suffering award:

⁴² Nine out of thirteen jurisdictions (all the provinces except Newfoundland and Labrador) have criminal injuries compensation systems, but each one offers different levels of compensation with no consistency across the country.

⁴³ In human rights legislation, it is a discriminatory practice, and thus contrary to the law, to harass an individual on any of the prohibited grounds, including sex (see for example, Canadian Human Rights Act R.S.C., 1985, c. H-6, s. 14).

\$193,000). The specific circumstances of these cases are unknown, and they could include cases of childhood sexual abuse in the past or current adult sexual assault.⁴⁴

Results

Tables S.1 present a comprehensive summary of the costs of victimization of adults who were sexually assaulted or otherwise sexually victimized by persons other than a spouse in 2009.

For most of the results in **Tables S.1** female victims of sexual assault and other sexual offences sustain a much greater impact than male victims. However, the most prominent anomaly to this pattern is counselling costs. The base number for counselling costs comes from the GSS question that asks respondents if they received counselling services due to the incident. In contrast to other results for this crime category, the number of male respondents who answered yes was relatively close to the number of female respondents who answered yes. As no data could be found on the different counselling characteristics of male and female patients, one average number of counselling sessions was applied to both genders. This results in total counselling costs that appear much closer between males and females than other effects of sexual assault and other sexual offences.

TABLE S.1A: SEXUAL ASSAULT AND OTHER SEXUAL OFFENCES – SUMMARY OF COSTS - JUSTICE SYSTEM COSTS

Cost category or item	Female victims	Male victims	Total
Justice system costs	\$137,693,965	\$12,355,133	\$150,049,098
Criminal justice system costs			
Police costs	\$89,312,975	\$8,401,808	\$97,714,784
Court costs	\$5,241,024	\$431,840	\$5,672,864
Prosecution costs	\$3,656,007	\$292,752	\$3,948,759
Legal aid costs	\$2,591,927	\$207,546	\$2,799,473
Corrections costs	\$36,892,032	\$3,021,186	\$39,913,218
Federal custody costs	\$27,284,956	\$2,228,513	\$29,513,469
Provincial custody costs	\$8,182,496	\$682,632	\$8,865,128
Conditional sentence costs	\$631,636	\$51,561	\$683,197
Probation costs	\$792,944	\$58,479	\$851,423
Fines*	\$2,002	\$205	\$2,207
Total Justice system costs	\$137,693,965	\$12,355,133	\$150,049,098

⁴⁴ Merritt, L. June 2011. *Do the Courts Favour Women Survivors?* AbuseHurts.com. Accessed December 14, 2012 at http://www.torkinmanes.com/practice_areas/resources/women_survivors.pdf.

TABLE S.1B: SEXUAL ASSAULT AND OTHER SEXUAL OFFENCES – SUMMARY OF COSTS - VICTIM COSTS

Cost category or item	Female victims	Male victims	Total
Victim costs	\$3,415,498,849	\$1,200,679,349	\$4,616,178,197
Medical costs			
Doctor or nurse service costs	\$93,628	\$27,861	\$121,489
Emergency department costs	\$1,374,390	\$0	\$1,374,390
Overnight hospitalization costs	\$1,683,717	\$0	\$1,683,717
Sub-Total Initial health care costs	\$3,151,735	\$27,861	\$3,179,597
Counselling costs	\$54,460,240	\$48,449,620	\$102,909,860
Medication costs	\$1,551,735	\$32,377	\$1,584,112
Costs of suicide attempts	\$4,969,301	\$478,439	\$5,447,740
Sub-Total Long-term health care costs	\$56,011,975	\$48,481,997	\$104,493,971
Total Medical costs	\$64,133,011	\$48,988,297	\$113,121,308
Lost productivity			
Lost current income	\$17,423,778	\$395,484	\$17,819,262
Lost household services	\$2,554,025	\$281,416	\$2,835,441
Lost education	\$1,852,558	\$0	\$1,852,558
Lost child care services	\$0	\$0	\$0
Lost future income	\$188,339,512	\$0	\$188,339,512
Long-term physical disability costs	\$6,936,275	\$0	\$6,936,275
Mental health disability costs	\$181,403,237	\$0	\$181,403,237
Total Lost productivity	\$210,169,873	\$676,900	\$210,846,773
Intangible costs			
Pain and suffering costs	\$3,140,618,999	\$1,151,014,152	\$4,291,633,150
Total Intangible costs	\$3,140,618,999	\$1,151,014,152	\$4,291,633,150
Other costs			
Stolen, damaged, or destroyed property costs	\$576,966	\$0	\$576,966
Total Other costs	\$576,966	\$0	\$576,966
Total Victim costs	\$3,415,498,849	\$1,200,679,349	\$4,616,178,197

TABLE S.1C: SEXUAL ASSAULT AND OTHER SEXUAL OFFENCES – SUMMARY OF COSTS - THIRD-PARTY COSTS

Cost category or item	Female victims	Male victims	Total
Third-party costs	\$35,081,192	\$15,284,339	\$50,365,531
Employer losses			
Administration costs	\$1,195,902	\$84,701	\$1,280,603
Tardiness and distraction costs	\$6,770,508	\$9,449,992	\$16,220,500
Lost additional output	\$906,036	\$20,565	\$926,602
Total Employer losses	\$8,872,446	\$9,555,258	\$18,427,704
Social services operating costs			
Victim services costs	\$25,627,987	\$5,290,441	\$30,918,427
Crisis centre and crisis line costs	\$580,760	\$438,640	\$1,019,400
Total Social services operating costs	\$26,208,747	\$5,729,081	\$31,937,827
Total Third-party costs	\$35,081,192	\$15,284,339	\$50,365,531

TABLE S.1D: SEXUAL ASSAULT AND OTHER SEXUAL OFFENCES – SUMMARY OF COSTS

Cost category or item	Female victims	Male victims	Total
Justice system costs	\$137,693,965	\$12,355,133	\$150,049,098
Victim costs	\$3,415,498,849	\$1,200,679,349	\$4,616,178,197
Third-party costs	\$35,081,192	\$15,284,339	\$50,365,531
Total costs	\$3,588,274,006	\$1,228,318,820	\$4,816,592,826

* Not included in any cost summations.

Note: Categories in bolded font are summations of the cost items listed under those categories.

S.J. Justice System Costs

S.J.1 Criminal Justice System Costs

It is necessary to calculate the police, court, prosecution, and legal aid resources spent per incident for each crime type as doing so allows for distinction of non-spousal, adult victim incidents, whereas only calculating the total resources spent on each crime would not exclude incidents involving spousal relationships and youth victims.

The numbers of court cases, used in calculations of court, prosecution, and legal aid costs, are adjusted upwards by 5% to account for the 95% national coverage of the data sources.

S.J.1.1 Police Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.1 Police Costs](#).

Table S.2 shows all of the pertinent police cost information, by gender.

TABLE S.2: SEXUAL ASSAULT AND OTHER SEXUAL OFFENCES – SEVERITY WEIGHTS AND POLICE COSTS

Offence	Severity weight ^A	Police cost per incident ^B	Number of incidents against ^C		Police costs for incidents against	
			Females	Males	Females	Males
Sexual assault – level 1	211	\$10,253	7,565	648	\$77,564,272	\$6,647,222
Sexual assault — level 2 — weapon or bodily harm	678	\$32,967	170	25	\$5,597,035	\$831,559
Sexual assault — level 3 — aggravated	1,047	\$50,894	68	12	\$3,475,715	\$595,837
Incest	678	\$32,967	43	3	\$1,417,587	\$98,901
Anal intercourse	211	\$10,253	5	1	\$51,267	\$10,253
Voyeurism	86	\$4,156	168	26	\$698,297	\$108,024
Other sexual violations	296	\$14,391	35	8	\$508,801	\$110,011
Total			8,019	715	\$88,804,174	\$8,291,797

^A Source: CCJS special data request.

^B Source 1: Statistics Canada, CCJS, UCR2 – Incident-based crime statistics, by detailed violations, CANSIM 252-0051.
Source 2: Burczycka (2010).

Source 3: Ottawa Police Service correspondence.

^C Source: CCJS special data request.

The police costs for non-spousal, adult victim incidents of sexual assault and other sexual offences that occurred in 2009 are estimated to be \$97,714,784.

Sexual assault and other sexual offences – justice system – criminal justice system – police	
Female victims	\$89,312,975
Male victims	\$8,401,808
Total	\$97,714,784

S.J.1.2 Court Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.2 Court Costs](#).

In this section, the “rate of charges resulting in court cases” for “sexual assault” must be applied to “other sexual offences” as well, since the definitions of “other sexual offences” between the police and court data are too disparate and therefore the data cannot be compared between the two.

The court costs for cases that took place due to incidents of non-spousal, adult victim sexual assault and other sexual offences that occurred in 2009 are estimated to be \$5,672,864.

Sexual assault and other sexual offences – justice system – criminal justice system – court	
Female victims	\$5,241,024
Male victims	\$431,840
Total	\$5,672,864

S.J.1.3 Prosecution Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.3 Prosecution Costs](#).

The prosecution costs for cases that took place due to incidents of non-spousal, adult victim sexual assault and other sexual offences that occurred in 2009 are estimated to be \$3,948,759.

Sexual assault and other sexual offences – justice system – criminal justice system – prosecution	
Female victims	\$3,656,007
Male victims	\$292,752
Total	\$3,948,759

S.J.1.4 Legal Aid Costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.4 Legal Aid Costs](#).

The legal aid costs for cases that took place due to incidents of non-spousal, adult victim sexual assault and other sexual offences that occurred in 2009 are estimated to be \$2,799,473.

Sexual assault and other sexual offences – justice system – criminal justice system – legal aid	
Female victims	\$2,591,927
Male victims	\$207,546
Total	\$2,799,473

Text Box S.2 describes a situation unique to sexual assault and other sexual offences in which a victim becomes a party in a criminal case and is provided with legal aid.

Text Box S.2: Motions for Third Party Records

In 1997, Bill C-46, An Act to amend the *Criminal Code* (*production of records in sexual offence proceedings*), S.C. 1997, c.30, came into effect putting in place a structured regime for judges to follow when the defence is seeking a complainant's personal records such as diaries, medical records, counselling records, or child protection records (see McDonald et al. 2006) in sexual offence cases, including sexual assault (levels 1, 2, 3). The legislation was immediately challenged as unconstitutional and the Supreme Court of Canada upheld the legislation in the case of *R. v. Mills* ((1999) 3 S.C.R. 668). The regime requires the defence to show "likely relevance" of the records in question in order for a judge to order their production. If the records are produced, the judge will then make a second decision as to whether all, or parts, or none of the records will be disclosed to the defence.

The procedure, including a list of factors that judges must take into consideration, is found in s. 278.1 to 278.91 of the *Criminal Code*. Two of the important considerations are "the accused's right to make full answer and defence and ... the right of privacy and equality of the complainant (s. 278.7(2)). In 2011, the Senate Standing Committee on Legal and Constitutional Affairs undertook a review of the legislation (December 2012).⁴⁵

The application for production and disclosure of third party records is raised by defence and a motion, or hearing takes place *in camera*. No data exist in terms of how many such motions took place in 2009.

From an economic impact perspective, these motions, but importantly, the complainant and the third party record holder, become parties to the proceedings and may be represented by counsel. Several provinces provide legal aid to complainants to select a private bar lawyer. Applicants do not need to meet financial eligibility criteria for legal aid in BC, Manitoba, Nova Scotia and Newfoundland and Labrador.

For example, in British Columbia, there were approximately eight complainants in the fiscal year 2009/10 who were provided legal aid for a third party records motion, at an average cost of \$693.42 per case. In Ontario, Legal Aid Ontario (LAO) will provide representation and coverage for complainants who cannot afford counsel in order to challenge the application. While applicants must be financially eligible, they do not have to establish merit. LAO has a panel of lawyers who are experienced in third party records applications. There were 28 completed cases in 2009 and the average cost per case was \$1,891.13. These legal aid costs have been included in the section on legal aid as they are part of the total cost of criminal legal aid.

⁴⁵ See Statutory Review on the Provisions and Operation of the *Act to amend the Criminal Code (production of records in sexual offence proceedings): Final Report*. Standing Senate Committee on Legal and Constitutional Affairs. December 2012.

S.J.1.5 Corrections Costs

For information on data sources and a description of the methodology used for **Table S.3** and **Table S.4**, see **A.J.1.5 Corrections Costs**.

Table S.3 shows the proportion that each sentence is given for sexual assault and other sexual offences crimes (calculated from the ACCS and the YCS), for all crimes and victims (i.e., no conditions).

TABLE S.3: SEXUAL ASSAULT AND OTHER SEXUAL OFFENCES SENTENCE PROPORTIONS (ALL CRIMES AND VICTIMS), BY GENDER OF OFFENDER

Offence	Custody		Conditional sentence		Probation		Fine		Other	
	M	F	M	F	M	F	M	F	M	F
Adult offenders										
Sexual assault	56.2%	33.3%	12.5%	21.2%	21.4%	43.9%	0.4%	0.0%	9.5%	1.5%
Other sexual offences	64.4%	56.3%	5.3%	2.7%	19.8%	18.8%	2.5%	7.1%	8.1%	15.2%
Youth offenders										
Sexual assault	15.6%	21.9%	0.0%	0.0%	57.0%	55.6%	0.2%	0.0%	27.2%	22.5%
Other sexual offences	10.1%	9.0%	0.0%	0.0%	62.2%	54.4%	0.0%	0.0%	27.7%	36.6%

Source 1: **Statistics Canada, CCJS, ACCS – Guilty cases by most serious sentence, CANSIM 252-0057.**

Source 2: **Statistics Canada, CCJS, YCS – Guilty cases by most serious sentence, CANSIM 252-0068**

Table S.4 shows the number of offenders estimated to have been given each sentence for committing sexual assault and other sexual offences crimes in 2009, for non-spousal, adult victim incidents. These figures are used as the base counts in the estimations of the costs of each sentence type.

TABLE S.4: SEXUAL ASSAULT AND OTHER SEXUAL OFFENCES SENTENCE NUMBERS (NON-SPOUSAL CRIMES AND ADULT VICTIMS)

Offence		Custody	Conditional sentence	Probation	Fine	Other
Adult offenders						
Female victims	Sexual assault	391	87	149	3	66
	Other sexual offences	34	3	10	1	4
Male Victims	Sexual assault	30	7	12	0	5
	Other sexual offences	6	0	2	0	1
Total Victims	Sexual assault	422	94	161	3	71
	Other sexual offences	39	3	12	2	5
Youth offenders						
Female victims	Sexual assault	5	0	18	0	9
	Other sexual offences	5	0	33	0	15
Male Victims	Sexual assault	0	0	2	0	1
	Other sexual offences	0	0	0	0	0
Total Victims	Sexual assault	5	0	20	0	9
	Other sexual offences	5	0	33	0	15

Source 1: Statistics Canada, CCJS, UCR2 – Incident-based crime statistics, by detailed violations, CANSIM 252-0051.

Source 2: CCJS special data request.

Source 3: Statistics Canada, CCJS, ACCS – Number of cases and charges by type of decision, CANSIM 252-0053.

Source 4: Statistics Canada, CCJS, YCS – Number of cases and charges by type of decision, CANSIM 252-0064.

Source 5: Statistics Canada, CCJS, ACCS – Guilty cases by most serious sentence, CANSIM 252-0057.

Source 6: Statistics Canada, CCJS, YCS – Guilty cases by most serious sentence, CANSIM 252-0068

Source 7: Table S.3.

Note: See Table AP.S.J.E3 for a more detailed version of this table, with offenders separated by gender.

S.J.1.5.1 Federal custody costs

For information on data sources and a description of the methodology used in this section, see **A.J.1.5.1 Federal custody costs**.

The estimated average length of federal custody sentences for sexual assault and other sexual offences was 1,290 days in 2009. The numbers of offenders sentenced to federal custody for sexual assault and other sexual offences are as follows: 105 males for violence against females, 0 females for violence against females, 8 males for violence against males, and 0 females for violence against males.

The federal custody costs due to incidents of non-spousal, adult victim sexual assault and other sexual offences that occurred in 2009 are estimated to be \$29,513,469.

Sexual assault and other sexual offences – justice system – criminal justice system – corrections – federal custody	
Female victims	\$27,284,956
Male victims	\$2,228,513
Total	\$29,513,469

S.J.1.5.2 Provincial custody costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.5.2 Provincial custody costs](#).

For sexual assault and other sexual offences, the average length of provincial custody sentences was 230 days for male offenders and 165 days for female offenders. The numbers of offenders sentenced to provincial custody for sexual assault and other sexual offences are as follows: 330 males for violence against females, 1 female for violence against females, 27 males for violence against males, and 0 females for violence against males.

The provincial custody costs due to incidents of non-spousal, adult victim sexual assault and other sexual offences that occurred in 2009 are estimated to be \$8,865,128.

Sexual assault and other sexual offences – justice system – criminal justice system – corrections – provincial custody	
Female victims	\$8,182,496
Male victims	\$682,632
Total	\$8,865,128

S.J.1.5.3 Conditional sentence costs

For information on data sources and a description of the methodology used in this section, see [A.J.1.5.3 Conditional sentence costs](#).

The average conditional sentence length for sexual assault is 289 days.

Given the number of offenders sentenced to a conditional sentence from [Table S.4](#) (90 for violence against female victims and 7 for violence against males), the conditional sentence costs due to incidents of non-spousal, adult victim sexual assault and other sexual offences that occurred in 2009 are estimated to be \$683,197.

Sexual assault and other sexual offences – justice system – criminal justice system – corrections – conditional sentence	
Female victims	\$631,636
Male victims	\$51,561
Total	\$683,197

S.J.1.5.4 Probation costs

For information on data sources and a description of the methodology used in this section, see **A.J.1.5.4 Probation costs**.

The average probation sentence length for males was 543 days and for females was 480 days.

The number of offenders sentenced to probation is given in **Table S.4** (210 males for violence against females, 1 female for violence against females, 15 males for violence against males, 1 female for violence against males). The probation costs due to incidents of non-spousal, adult victim sexual assault and other sexual offences that occurred in 2009 are estimated to be \$851,423.

Sexual assault and other sexual offences – justice system – criminal justice system – corrections – probation	
Female victims	\$792,944
Male victims	\$58,479
Total	\$851,423

S.J.1.5.5 Fines

For information on data sources and a description of the methodology used in this section, see **A.J.1.5.5 Fines**.

Costs to the offender are not included in this report (see **Sources of Economic Impacts** for reasons), and fines are calculated here for illustrative purposes only. These results are not included in any summations of total costs.

The average fine amount for sexual assault and other sexual offences in general is \$456.

This average fine amount is then multiplied by the number of offenders receiving fines from **Table S.4** (4 for violence against females, 0 for violence against males). The fine costs to offenders due to incidents of non-spousal, adult victim sexual assault and other sexual offences that occurred in 2009 are estimated to be \$2,207.

Sexual assault and other sexual offences – justice system – criminal justice system – corrections – fines	
Female victims	\$2,002
Male victims	\$205
Total	\$2,207

S.V. Victim Costs

S.V.1 Medical Costs

S.V.1.1 Initial Health Care Costs

The 2009 GSS shows that no sexual assault victims went to hospital. However, there is substantial evidence showing that sexual assault victims do sustain injuries. The GSS itself shows that female victims reported injuries for 19,852 incidents and males victims report injuries for 2,795 incidents (though they stated that they had received no medical attention at a hospital), and US Centers for Disease Control (2001) state that in the US “sexual assault was the fourth leading cause of violence-related, non fatal-injury related ED [emergency department] visits”.

Due to this evidence, it is assumed that there were sexual assault victims in 2009 who actually did require medical attention at a hospital, but for unknown reasons (e.g., GSS did not capture these people, sexual assault victims did not report their victimization or this specific aspect of victimization, etc.) this went unreported in the 2009 GSS. Therefore, responses to these particular questions regarding medical attention from the 2004 GSS are used to estimate the number of victims requiring medical attention in 2009. An adjustment involving the number of victims who reported an injury in the 2004 GSS and 2009 GSS is made to each 2004 GSS result to estimate the number of people relevant to each cost item in 2009.

S.V.1.1.1 Doctor or nurse service costs

Not included in the cost analysis for this section are the specific costs associated with Sexual Assault Nurse Examiners (SANEs). SANEs work out of hospitals and are usually on-call available 24 hours a day. They are fairly common across the country with the first nurse examiner program developed in Ontario in 1995. These medical professionals are trained in a range of services to provide victims of sexual assault with comprehensive and sensitive care. With victim consent, SANEs can perform a medical and forensic examination, and the resulting evidence may be legally accepted in a court of law. Nurses themselves may testify as expert witnesses in criminal cases. SANEs are also trained to provide medical and psychological care to the victim in a timely and comforting fashion. Sexual assault is a crime that engenders unique feelings in and consequences for victims, and SANEs provide help that is sensitive to the specific needs of these victims.

The 2004 GSS and 2009 GSS find there were about 1,712 times physician visits of female victims and 509 times physician visits of male victims nurse due to a sexual assault in 2009. The cost of one physician visit in 2009, from Canadian Institute for Health Information (2007), was \$55 after inflation adjustment.

Multiplying the number of victims by the cost per visit, the doctor or nurse service costs due to incidents of non-spousal, adult victim sexual assault and other sexual offences that occurred in 2009 are estimated to be \$121,489.

Sexual assault and other sexual offences – victim – medical – initial health care – doctor or nurse service	
Female victims	\$93,628
Male victims	\$27,861
Total	\$121,489

S.V.1.1.2 Emergency department costs

For information on data sources and a description of the methodology used in this section, see [A.V.1.1.2 Emergency department costs](#).

The 2004 GSS and 2009 GSS find that female victims of sexual assault required medical attention at a hospital or health centre 3,300 times, and no male victims visited hospital or health centre. As with assault, it is assumed that 25% of emergency department visits due to sexual assault involve ambulatory transportation.

The emergency department costs due to incidents of non-spousal, adult victim sexual assault and other sexual offences that occurred in 2009 are estimated to be \$1,374,390.

Sexual assault and other sexual offences – victim – medical – initial health care – emergency department	
Female victims	\$1,374,390
Male victims	\$0
Total	\$1,374,390

S.V.1.1.3 Overnight hospitalization costs

For information on data sources and a description of the methodology used in this section, see [A.V.1.1.3 Overnight hospitalization costs](#).

The 2004 GSS and 2009 GSS find that female victims spent 1,687 nights in hospital due to sexual assault and other sexual offences incidents in 2009.

The overnight hospitalization costs due to incidents of non-spousal, adult victim sexual assault and other sexual offences that occurred in 2009 are estimated to be \$1,683,717.

Sexual assault and other sexual offences – victim – medical – initial health care – overnight hospitalization	
Female victims	\$1,683,717
Male victims	\$0
Total	\$1,683,717

S.V.1.2 Long-term Health Care Costs

S.V.1.2.1 Counselling costs

For information on data sources and a description of the methodology used in this section, see [A.V.1.2.1 Counselling costs](#).

The 2009 GSS finds that female victims used counseling services 34,648 times and male victims used counselling services 30,824 times in response to a sexual assault incident. New and Berliner (2000) find that the average number of counselling sessions for sexual assault victims is 18.5.⁴⁶

The counselling costs due to incidents of non-spousal, adult victim sexual assault and other sexual offences that occurred in 2009 are estimated to be \$102,909,860.

Sexual assault and other sexual offences – victim – medical – long-term health care – counselling	
Female victims	\$54,460,240
Male victims	\$48,449,620
Total	\$102,909,860

S.V.1.2.2 Medication costs

Medication costs for sexual assault and other sexual offences are based on a specific scenario in which the crime committed was rape and in which the victimization results in the victim developing posttraumatic stress disorder (PTSD). It is recognized that this specific scenario captures only a relatively small proportion of the victims of sexual assault and other sexual offences who may develop PTSD or require medication for some other effect of the incident. All types and severities of sexual assault are traumatizing and can result in medication use, but the available data sources only indicate the rate of PTSD development for incidents of rape and not other types of sexual assault, so any other medication costs cannot be estimated with confidence.

In the GSS, sexual assault covers two types of violence – sexual attack and unwanted sexual touching. In 2009, there were about 44,455 female victims and 22,725 male victims reported that they had sustained “sexual attacks” as classified in the GSS.⁴⁷ Victims of “sexual attack” are assumed to have possibly sustained rape, while victims of “unwanted sexual touching” are not. The number of these victims who sustained rape is estimated using the information from the UK.⁴⁸ Specifically, data from the Office for National Statistics (UK) indicate that in 2009, 16.7% of all sexual offence against females aged 16 and above in England and Wales were rape and 0.68% of sexual offences against males aged 16 and above were rape.⁴⁹ **In this way, it is estimated that 7,406 females and 155 males were victims of rape.** Kilpatrick (2010), a source focusing specifically on women that is also

⁴⁶ No data source was available indicating the average number of counselling sessions for sexual assault victims that also distinguishes between male and female counselling use, so one average number of counselling sessions is used here for both male and female victims. It is recognized that male and female counselling use for sexual assault victimization may differ.

⁴⁷ Note that this is the number of victims, not incident for a conservative estimate, and some victims might have experienced multiple incidents.

⁴⁸ Canadian data from Statistics Canada show that 20.3% of sexual offences against females were classified as rape between 1977 and 1982. However, this information is very outdated, and hence, is not used in the estimation.

⁴⁹ While this age group is not the same as age scope (18 and plus), this is the only available information that can be broken down by age and gender at the time of this study.

used in the analysis for men, shows that 26% of rape victims develop (PTSD) as a result of the victimization. This implies that 1,926 females and 40 males developed PTSD due to a sexual assault in 2009.

Taking the daily cost of PTSD medication treatment from Lapierre et al. (1995) and adjusting for inflation to \$2.21, then multiplying by the common length of PTSD treatment (365 days) (National Institute for Clinical Excellence 2005) and the number of victims who developed PTSD, the medication costs due to incidents of non-spousal, adult victim sexual assault and other sexual offences that occurred in 2009 are estimated to be \$1,584,112.

Sexual assault and other sexual offences – victim – medical – long-term health care – medication	
Female victims	\$1,551,735
Male victims	\$32,377
Total	\$1,584,112

S.V.1.3 Cost of suicide attempts

Sexual assault can cause great emotional distress to victims, and this may result in depression, and in the most severe cases of depression the victim may suffer from ideations of suicide. The medical costs of suicide attempts are measured here.

For a conservative estimate and because of the nature of the sources used later in the analysis, the base number for victims potentially affected by suicidal thoughts is the number of victims experiencing depression or anxiety attacks due to the victimization. The GSS finds that 18,446 female victims and 6,196 male victims reported experiencing depression or anxiety attacks as a result of the sexual offence. The percentage of adult female sexual assault victims (victims of rape and other sexual violence combined) who attempt suicide is 15.2% (Ullman and Brecklin 2002); the percentage of adult male sexual assault victims who attempt suicide is estimated to be 10.9% and is obtained by multiplying the female percentage by the ratio of male to female suicide attempts in the general US population (Crosby et al. 2011). It follows that 2,804 females and 676 males attempted suicide due to sexual assault victimization in 2009. Using the GSS, Ullman and Brecklin (2002), and Zhang et al. (2012), it is estimated that 18.2% of female suicide attempts and 7.3% of male suicide attempts result in hospitalization, which further implies that 510 relevant female victims and 49 relevant male victims were hospitalized in 2009.

The average length of hospitalization for suicide attempts is 7.74 days (Canadian Institute for Health Information 2011). The average daily hospitalization cost was \$998 as estimated in **S.V.1.1.3 Overnight hospitalization costs**. The Canadian Institute for Health Information (2011) also finds that there are 2.5 emergency department visits due to suicide attempts for every overnight hospitalization. The average emergency department visit cost was \$267 as estimated in **S.V.1.1.2 Emergency department costs**. It is assumed, because of the severe nature of suicide attempts that require medical attention, that 90% of victims who attempt suicide and visit the emergency department require ambulance services, at a per use cost of \$600 based on information from several provinces.

Overall, the cost of suicide attempts due to incidents of non-spousal, adult victim sexual assault and other sexual offences that occurred in 2009 are estimated to be \$5,447,740.

Sexual assault and other sexual offences – victim – medical – suicide attempts	
Female victims	\$4,969,301
Male victims	\$478,439
Total	\$5,447,740

S.V.2 Lost Productivity

S.V.2.1 Lost Current Income

The GSS finds that employed female victims of sexual assault and other sexual offences were unable to attend work for 162,365 work days, and employed male victims were unable to attend work for 11,500 work days. Subtracting the number of days that were covered by paid sick leave benefits, the figures become 139,971 lost days for females and 1,747 lost days for males.⁵⁰ According to GSS, the average daily wage of female sexual assault and other sexual offences victims was \$124, and the average daily wage of male assault victims in the GSS was \$226.

In this way, the lost current income to adult victims of non-spousal sexual assault and other sexual offences that occurred in 2009 is estimated to be \$17,819,262.

Sexual assault and other sexual offences – victim – lost productivity – lost current income	
Female victims	\$17,423,778
Male victims	\$395,484
Total	\$17,819,262

S.V.2.2 Lost Household Services

For those victims whose main activity was doing household services, 7.5 hours are assigned for each lost days, which include days in the emergency department, hospitalization days, days in bed outside of the hospital, and other time where victims found it difficult or impossible to carry out his/her main activity. For all other victims whose main activity was not conducting household services, it is estimated that females spend 3.68 hours per day and males spend 2.44 hours per day. See the method for **Assault in section R.V.2.1**

⁵⁰ The American data show that 66% of all workers have paid sick leave benefits and on average workers with this benefits have 9 sick leave days per year. The average working days lost due to illness or disability in Canada is about 7.6 days, according to Statistics Canada. Therefore, assuming that 7.6 days were used for other illness not related to the violence, 1.4 sick leave days per worker can be used for the absence of the 66% of the victims due to injuries resulting from the incidents.

The GSS finds that female victims lost 192,176 hours of household work and males lost 21,175 hours of household work due to sexual assault and other sexual offences incidents in 2009. At an hourly rate of \$13.29, the value of the lost household services of adult victims of non-spousal sexual assault and other sexual offences that occurred in 2009 is estimated to be \$2,835,441.

Sexual assault and other sexual offences – victim – lost productivity – lost household services	
Female victims	\$2,554,025
Male victims	\$281,416
Total	\$2,835,441

S.V.2.3 Lost Education

The GSS finds that female student victims were unable to go to school for 46,858 school days, and male student victims did not lose any school days. Similarly, these days include days in the emergency department, hospitalization days, days in bed outside of the hospital, and other time where victims found it difficult or impossible to carry out his/her main activity, and have been adjusted to take into account potential school days.

Information from Statistics Canada and academic calendars at major universities shows that the average daily cost of education is approximately \$40. The lost education to adult victims of non-spousal sexual assault and other sexual offences that occurred in 2009 is estimated to be \$1,852,558.

Sexual assault and other sexual offences – victim – lost productivity – lost education	
Female victims	\$1,852,558
Male victims	\$0
Total	\$1,852,558

S.V.2.4 Lost Future Income

S.V.2.4.1 Long-term physical disability costs

The number of employed victims estimated to have sustained an injury, where sustaining an injury is based on the criterion of requiring medical attention at hospital, is 2,826 female victims. It is assumed that out of the total medically treated injuries, 0.3% of the injuries would have caused permanent or long-term disability, according to Corso et al. (2006). That is approximately 8 females who sustained a life time disability resulting from the injury. The average income of female sexual assault victims who were injured was \$25,625. The GSS also provides the average age of victims, and assuming that careers last until age 65, that incomes never change, and that inflation is equal to the discount rate, the expected remaining lifetime income is calculated.

The lost future income (due to physical disabilities) of adult victims of non-spousal assault that occurred in 2009 is estimated to be \$6,936,275.

Sexual assault and other sexual offences – victim – lost productivity – lost future income – long-term physical disability costs	
Female victims	\$6,936,275
Male victims	\$0
Total	\$6,936,275

S.V.2.4.2 Mental health disability costs

Studying the mental health outcomes of victimization is difficult and can involve subjectivity. To estimate the future costs of mental health degradation, the number of victims developing a mental health problem must first be estimated. To do this, the number of victims who are assumed to be participants in the labour force, who had reported getting “depression/anxiety attacks” because of the incident, and who had never before sustained an assault, robbery, or sexual assault was obtained from the GSS; the result is 6,680 female victims, and these are defined as the victims potentially affected by a mental health issue. To calculate the number of victims actually assumed to have developed a mental health issue, the percentage of sexual assault and other sexual offences victims who have mental health needs for a “severely disabling mental illness” is taken from Miller et al. (1993) (10.0%). Applying this latter number to the numbers of victims who potentially have a mental illness, the estimated number of victims who developed or will develop a serious mental illness is 668 female victims.

The annual income lost due to mental health issues developed by sexual assault and other sexual offences victims is calculated by applying the proportion of annual income lost due to mental health issues in general (from Kessler et al. 2008) to the annual income of GSS respondents, and the result is \$8,514 for female victims. Taking the average age of the appropriate respondents and assuming that careers last until age 65, that incomes never change, and that inflation is equal to the discount rate, the lost future income (due to mental disabilities) of adult victims of non-spousal sexual assault and other sexual offences that occurred in 2009 is estimated to be \$181,403,237.

It is important to note that, despite no male victims being identified through the GSS in this analysis, male victims of sexual assaults and other offences do experience mental and emotional traumas, and these traumas may be serious enough to cause a loss in future income. One possible explanation for the absence of male victims here is the condition requiring that a victim has not previously been victimized in an assault, robbery, or sexual assault. This condition is applied because including victims with past victimizations would overstate the costs associated with current victimization, as it would be unclear how much of the future effects of victimization (including lost future income) would be caused by the current victimization and how much would be caused by past victimizations. Given this, all of the male victims in the GSS who potentially develop a mental health problem due to a sexual assault and other sexual offences incident in 2009 may have also been victims of crime in the past, including childhood. Cook et al. (2001) show that, among males, the age group most vulnerable to and most sustaining sexual attacks is the 0-14 age group. The mental health impacts of

victimization are significant regardless of the age of victimization or how many times someone is victimized, but for accurate costing purposes, this analysis may omit male victims because of past experiences as crime victims. This problem also applies to female victims, which results in an underestimate of the true costs to female victims as well.

Sexual assault and other sexual offences – victim – lost productivity – lost future income – mental health disability costs	
Female victims	\$181,403,237
Male victims	\$0
Total	\$181,403,237

S.V.3 Intangible Costs

S.V.3.1 Pain and Suffering Costs

For a brief discussion on the issues raised when valuing intangibles and the methods used to do so, see [Valuation of Intangibles](#).

All sexual assault and other sexual offences victims in the GSS are assumed to experience pain and suffering. There are two categories of sexual crimes in the GSS, and a certain percentage of victims of “sexual attacks” is estimated to have sustained “rape” (as defined in Dolan et al. (2005)), while all other victims (the remaining “sexual attack” victims and all of the victims of “unwanted sexual touching”) are assumed to have sustained the less severe “sexual assault” (as defined in Dolan et al. (2005)). Victims who sustained rape are assigned different values of pain and suffering than those victims who did not. The two categories in the GSS (sexual attacks and unwanted sexual touching) are defined in [Introduction \(p. 134\)](#). Since the Canadian *Criminal Code* classifies sexual assaults based on factors other than the sexual nature of the crime, the number of rape victims of and sexual assault victims needs to be estimated.

The GSS finds that there were 233,632 female victims and 92,064 male victims of sexual assault and other sexual offences in 2009. The number of rape victims has been estimated in the previous section [S.V.1.2.2. \(p.145\)](#) – 7,406 female victims and 155 male victims are estimated to have sustained rape in 2009. The other victims amounting to 226,226 females and 91,909 males are assumed to have sustained general “sexual assaults”.

The values of pain and suffering are taken from Dolan et al. (2005). After adjusting for inflation and the exchange rate, the value of pain and suffering for rape is estimated to be \$43,769 in 2009 Canadian dollars, and the value of pain and suffering for sexual assault is estimated to be \$12,450 in 2009 Canadian dollars.

Multiplying the numbers of victims by the values of pain and suffering, the total pain and suffering of adult victims of non-spousal sexual assault and other sexual offences that occurred in 2009 is estimated to be \$4,291,633,150.

Sexual assault and other sexual offences – victim – intangible – pain and suffering	
Female victims	\$3,140,618,999
Male victims	\$1,151,014,152
Total	\$4,291,633,150

S.V.4 Other Costs

S.V.4.1 Stolen, Damaged, or Destroyed Property Costs

As in **S.V.1.1 Initial Health Care Costs**, the 2009 GSS does not find any sexual assault and other sexual offences victims whose property was stolen, damaged, or destroyed, and so this section must also refer back to the 2004 GSS. After adjusting the results of the 2004 GSS to account for the 2009 GSS, it is found that 5,320 female victims had property stolen and 2,395 female victims had property damaged during the crime. As no data on the values of property are available for cases of sexual offences, the values in assault cases must be used as a proxy. The average value of stolen property is therefore \$25, while the average value of damaged or destroyed property is \$185.

Multiplying the appropriate measures, the stolen, damaged, or destroyed property costs of adult victims of non-spousal sexual assault and other sexual offences that occurred in 2009 are estimated to be \$576,966.

Sexual assault and other sexual offences – victim – other – stolen, damaged, or destroyed property	
Female victims	\$576,966
Male victims	\$0
Total	\$576,966

S.T. Third-Party Costs

S.T.1 Employer Losses

S.T.1.1 Administration Costs

For information on data sources and a description of the methodology used in this section, see **A.T.1.1 Administration Costs**.

The GSS finds that employed female victims were unable to do their main activities for 162,365 working days, and employed male victims were unable to do their main activities for 11,500 working days.

With average hourly wage rates of \$37 for managers and \$22 for administrators, and assuming 0.125 hours of time spent for managers and 0.125 hours for administrators (a conservative estimate based on estimation in Health and Safety Executive (1999)), the administration costs of employers due to adult victim, non-spousal sexual assault and other sexual offences that occurred in 2009 are estimated to be \$1,280,603.

Sexual assault and other sexual offences – third-party – employer losses – administration	
Female victims	\$1,195,902
Male victims	\$84,701
Total	\$1,280,603

S.T.1.2 Tardiness and Distraction Costs

Due to a lack of relevant information, the tardiness and distraction costs of victims of sexual assault and other sexual offences must be based on a study of spousal violence victims (Reeves and O’Leary-Kelly 2007).

Reeves and O’Leary-Kelly (2007) examine the effect of spousal violence on worker productivity. The average value of work lost to tardiness and distraction for victims is compared to the average value of work lost for non-victims. It is calculated that female victims of spousal violence lose 3.9% more productivity than female non-victims and that male victims lose 2.2% more than their non-victim counterparts based on a four-week period of analysis.

An assumption is made, for the sake of a conservative estimate, that only victims of “sexual attacks” (as defined in the GSS) experience tardiness and distraction comparable to that of spousal violence victims. There were 22,449 employed females and 27,547 employed males who experienced sexual attacks. The monthly productivity loss beyond the productivity loss of the non-victim population is calculated with the average wages of sexual attack victims in the GSS, \$31,147 for females and \$61,332 for males, and the results obtained from the analysis of Reeves and O’Leary-Kelly (2007) above. It is found that employers lose \$101 per month for the tardiness and distraction of female victims, and \$114 per month for male victims.

Multiplying the number of relevant victims by the monthly losses (assuming only 3 months of tardiness and distraction), the tardiness and distraction costs to employers due to adult victim, non-

spousal sexual assault and other sexual offences that occurred in 2009 are estimated to be \$16,220,500.

Sexual assault and other sexual offences – third-party – employer losses – tardiness and distraction	
Female victims	\$6,770,508
Male victims	\$9,449,992
Total	\$16,220,500

S.T.1.3 Lost Additional Output

To calculate the lost additional output to employers, lost wages of employees are multiplied by the expected marginal rate of return to the employer. The total lost wages (from **S.V.2.1 Lost Current Income** are \$17,423,778 for female victims and \$395,484 for male victims, and the expected marginal rate of return is 5.2% (Boardman et al. 2008). A marginal rate of return on investment of 5.2% means that if an employer invests (disinvests) an additional \$100, as through employee wages, the employer expects to gain (lose) \$5.20 in net returns.

Multiplying the lost wages by the expected rate of return, the lost additional output of employers due to adult victim, non-spousal sexual assault and other sexual offences that occurred in 2009 is estimated to be \$926,602.

Sexual assault and other sexual offences – third-party – employer losses – lost additional output	
Female victims	\$906,036
Male victims	\$20,565
Total	\$926,602

S.T.2 Social Services Operating Costs

One important cost that cannot be estimated here is the cost of support centres. The GSS finds that 14,453 female and 25,722 male victims of sexual assault and other sexual offences in 2009 used one of the various categories of support centres listed in the GSS: “community centre, CLSC or family centre”, “women’s centre”, or “men’s centre/men’s support group or seniors’ centre”. There is no available information on the operational costs of these services or on the average duration of use by clients.

S.T.2.1 Victim Services Costs

The method used here to calculate victim services costs differs from the method used for the other crime categories because detailed information is available specifically for sexual offences in Munch (2012), which is based on the Victim Services Survey (VSS). Munch (2012) finds that 410,000 people used victim services in Canada in 2009/2010, of which 88.0% were over the age of 18 and 75.0% were female; this gives 270,600 female clients over 18 and 90,200 male clients over 18. The source

also finds that 20.8% of females and 12.9% of males, or 56,225 females and 11,607 males, used victim services in response to non-spousal sexual assault.

Information from Sauvé (2009) is used to calculate the operating cost per victim service agency, which is \$269,767 after inflation adjustment to 2009. Dividing by the number of victims assisted per agency (592), the operating cost per victim was \$456 in 2009.⁵¹

Multiplying the number of victims using victim services by the operating cost per victim, the victim services costs due to adult victim, non-spousal sexual assault and other sexual offences that occurred in 2009 are estimated to be \$30,918,427.

Sexual assault and other sexual offences – third-party – social services – victim services	
Female victims	\$25,627,987
Male victims	\$5,290,441
Total	\$30,918,427

S.T.2.2 Crisis Line Costs

For information on data sources and a description of the methodology used in this section, see [A.T.2.2 Crisis Line Costs](#).

The GSS finds that 14,519 female and 10,966 male victims of sexual assault and other sexual offences in 2009 visited a crisis centre or called a crisis line because of the crime.

The GSS finds that female victims visited a crisis centre or called a crisis line 14,519 times and male victims visited a crisis centre or called a crisis line 10,966 times because of the crime. Again, due to the GSS data limitations, an assumption is made that all respondents who answered that they had used either of these services only called a crisis line to ensure a conservative estimate.

The crisis line costs due to adult victim, non-spousal sexual assault and other sexual offences that occurred in 2009 are estimated to be \$1,019,400.

Sexual assault and other sexual offences – third-party – social services – crisis lines	
Female victims	\$580,760
Male victims	\$438,640
Total	\$1,019,400

⁵¹ It is reasonable to assume that victims of more serious crimes may use victim services more than victims of less serious crimes, and therefore that using the average cost of victim services per victim may underestimate the costs to some victims and overestimate the cost to other victims. Averaging over entire crime categories (assault, robbery, etc.) alleviates the internal inconsistencies of each crime category (e.g., the inconsistencies between assault level 3 and assault level 1), but not between crime categories.

Conclusion

Summary of Results

Tables G.5 present a summary of all economic impacts of victimization of assault, criminal harassment, homicide, robbery, and sexual assault and other sexual offences. The total economic impact of victimization of these five crimes in 2009 in Canada is estimated at **\$12.7 billion**.

TABLE G.5A: SUMMARY OF COSTS BY CRIME CATEGORY - ASSAULT

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Criminal justice system costs	\$224,008,173	\$333,028,499	\$557,036,672
Total Justice system costs	\$224,008,173	\$333,028,499	\$557,036,672
Victim costs			
Medical costs	\$64,869,527	\$39,852,413	\$104,721,940
Lost productivity	\$173,222,452	\$172,601,470	\$345,823,922
Intangible costs	\$350,108,996	\$687,974,515	\$1,038,083,511
Other costs	\$1,679,936	\$4,717,205	\$6,397,141
Total Victim costs	\$589,880,912	\$905,145,603	\$1,495,026,515
Third-party costs			
Employer losses	\$11,764,694	\$6,920,336	\$18,685,030
Social services operating costs	\$14,482,078	\$3,450,860	\$17,932,938
Total Third-party costs	\$26,246,772	\$10,371,197	\$36,617,969
Total Assault	\$840,135,857	\$1,248,545,299	\$2,088,681,156

TABLE G.5B: SUMMARY OF COSTS BY CRIME CATEGORY - CRIMINAL HARASSMENT

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Criminal justice system costs	\$156,532,189	\$119,114,118	\$275,646,307
Civil justice system costs	\$3,503,935	\$423,801	\$3,927,735
Total Justice system costs	\$160,036,124	\$119,537,918	\$279,574,042
Victim costs			
Medical costs	\$60,794,438	\$12,087,013	\$72,881,451
Other costs	\$90,047,177	\$30,309,464	\$120,356,641
Total Victim costs	\$150,841,616	\$42,396,476	\$193,238,092
Total Criminal Harassment	\$310,877,739	\$161,934,394	\$472,812,134

TABLE G.5C: SUMMARY OF COSTS BY CRIME CATEGORY - HOMICIDE

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Criminal justice system costs	\$33,193,046	\$138,375,464	\$171,568,510
Total Justice system costs	\$33,193,046	\$138,375,464	\$171,568,510
Victim costs			
Medical costs	\$494,445	\$3,312,184	\$3,806,629
Intangible costs	\$628,253,405	\$2,830,835,929	\$3,459,089,333
Total Victim costs	\$628,747,850	\$2,834,148,113	\$3,462,895,962
Third-party costs			
Social services operating costs	\$882,081	\$2,480,852	\$3,362,932
Intangible costs	\$12,558,750	\$56,588,250	\$69,147,000
Other costs	\$465,592	\$2,098,050	\$2,563,643
Total Third-party costs	\$13,906,423	\$61,167,152	\$75,073,575
Total Homicide	\$675,847,318	\$3,033,690,729	\$3,709,538,047

TABLE G.5D: SUMMARY OF COSTS BY CRIME CATEGORY - ROBBERY

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Criminal justice system costs	\$249,278,137	\$463,584,107	\$712,862,245
Total Justice system costs	\$249,278,137	\$463,584,107	\$712,862,245
Victim costs			
Medical costs	\$24,006,280	\$6,601,236	\$30,607,516
Lost productivity	\$76,190,058	\$85,437,553	\$161,627,612
Intangible costs	\$250,778,892	\$300,575,966	\$551,354,858
Other costs	\$31,362,523	\$95,538,942	\$126,901,466
Total Victim costs	\$382,337,754	\$488,153,697	\$870,491,451
Third-party costs			
Employer losses	\$4,679,644	\$3,684,526	\$8,364,170
Social services operating costs	\$3,141,049	\$509,228	\$3,650,277
Total Third-party costs	\$7,820,693	\$4,193,754	\$12,014,447
Total Robbery	\$639,436,585	\$955,931,559	\$1,595,368,143

TABLE G.5E: SUMMARY OF COSTS BY CRIME CATEGORY - SEXUAL ASSAULT AND OTHER SEXUAL OFFENCES

Cost category or item	Female victims	Male victims	Total
Justice system costs			
Criminal justice system costs	\$137,693,965	\$12,355,133	\$150,049,098
Total Justice system costs	\$137,693,965	\$12,355,133	\$150,049,098
Victim costs			
Medical costs	\$64,133,011	\$48,988,297	\$113,121,308
Lost productivity	\$210,169,873	\$676,900	\$210,846,773
Intangible costs	\$3,140,618,999	\$1,151,014,152	\$4,291,633,150
Other costs	\$576,966	\$0	\$576,966
Total Victim costs	\$3,415,498,849	\$1,200,679,349	\$4,616,178,197
Third-party costs			
Employer losses	\$8,872,446	\$9,555,258	\$18,427,704
Social services operating costs	\$26,208,747	\$5,729,081	\$31,937,827
Total Third-party costs	\$35,081,192	\$15,284,339	\$50,365,531
Total Sexual assault and other sexual offences	\$3,588,274,006	\$1,228,318,820	\$4,816,592,826

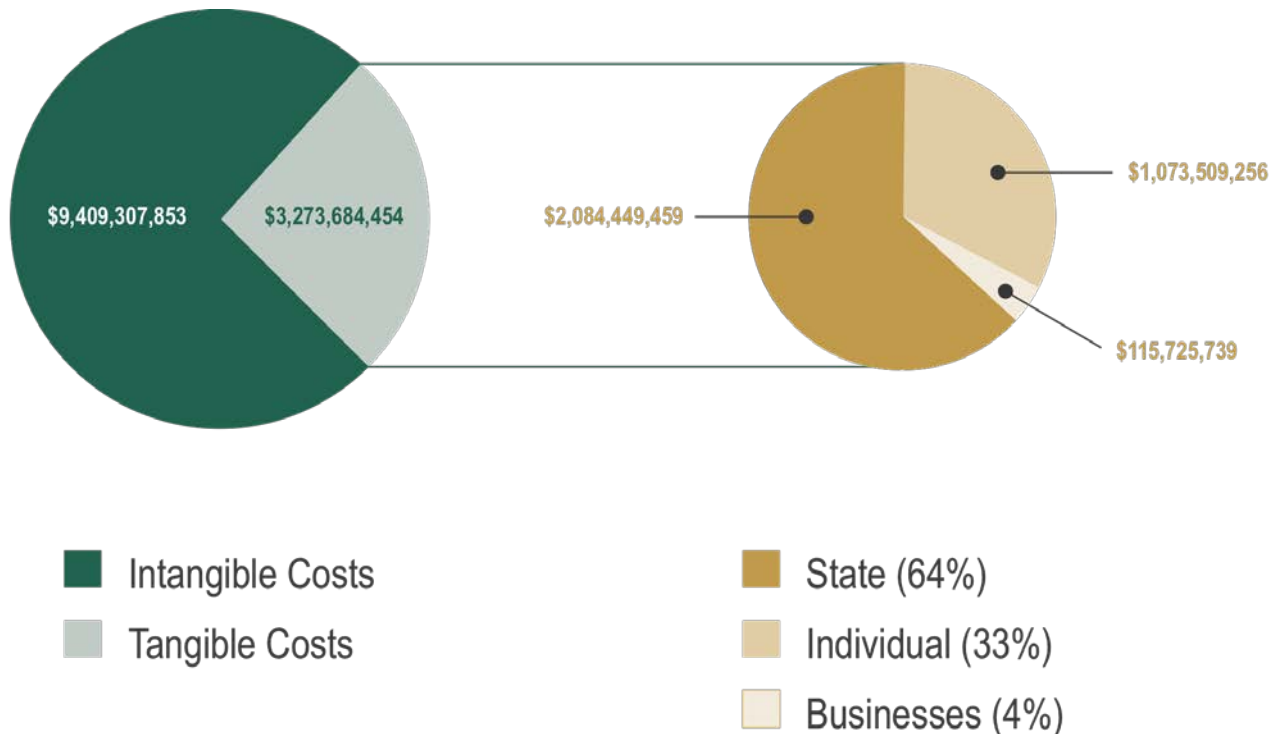
TABLE G.5F: SUMMARY OF COSTS BY CRIME CATEGORY

Cost category or item	Female victims	Male victims	Total
Assault	\$840,135,857	\$1,248,545,299	\$2,088,681,156
Criminal Harassment	\$310,877,739	\$161,934,394	\$472,812,134
Homicide	\$675,847,318	\$3,033,690,729	\$3,709,538,047
Robbery	\$639,436,585	\$955,931,559	\$1,595,368,143
Sexual assault and other sexual offences	\$3,588,274,006	\$1,228,318,820	\$4,816,592,826
Total costs	\$6,054,571,506	\$6,628,420,801	\$12,682,992,307

Note: Categories in bolded font are summations of the cost items listed under those categories.

The left pie chart in **Chart G.7** shows the proportion of tangible and intangible costs, and the tangible costs are further broken down in the right pie by who actually pays for the cost, as opposed to who bears the burden of the impact. Three groups of parties who pay are analyzed: the state, individuals (including victims), and businesses.

CHART G.7: TANGIBLE VS. INTANGIBLE COSTS AND TANGIBLE COSTS BY WHO PAYS



Concluding Remarks

Crime is a major issue in Canada and it has a major impact on the lives of Canadians. This report finds that non-spousal, adult victimization of assault, criminal harassment, homicide, robbery, and sexual assault and other sexual offences in 2009 cost Canadians at least **\$12.7 billion** in the form of tangible and intangible costs. The victims bear the greatest burden of the impacts, much of it intangible, and family, friends, and employers can also be burdened. The impacts are eventually felt by all Canadians in the form of public spending on the justice system and social services.

Costing, the process of estimating the economic impacts of some program or social phenomenon, has seen improvements in methodology and data availability since it was introduced as a research tool, and recent interest in and support for costing from official parties has increased the demand for this type of work. While Canada, historically, has not been as active in the cost analysis field as the UK, Australia, and the US, the Department of Justice Canada has completed a number of important costing reports since Zhang's (2011) *Costs of Crime in Canada, 2008*. Zhang et al.'s (2012) *An Estimation of the Economic Impact of Spousal Violence in Canada, 2009* focuses specifically on spousal violence, and contributes research to the intimate partner violence literature that will help guide future discussion and scholarship. By providing a measurement of the cost magnitude of social phenomena (e.g., crime), interested parties can better understand the issues and relevant problems.

With a common unit of measurement (i.e., money), the results of costing work on different social issues can be compared to better understand the wider societal picture.

While great progress has been made in the costing field, challenges still remain. The greatest challenges are data limitations, which are significant despite the increase in data available for research. A lack of data across topics and jurisdictions still restricts the possibilities and accuracy of costing analyses, and the low quality of some data can also be a factor in limiting the usefulness of results. Research on the costs of crime in particular would benefit from better data collection or data quality in the following areas, some of which are also listed in Zhang et al. (2012):

- police, court, and prosecution resources (time and expenditures) devoted to each offence type;
- costs of probation, conditional sentence, parole, and monitoring offenders in the community more generally;
- costs associated with Review Boards and treatment in cases where the accused is found Unfit to Stand Trial or Not Criminally Responsible;
- compatibility and links between court sentencing data and corrections data (e.g., offender file goes through both systems);
- tangible impacts of experiencing physical or mental effects of crime victimization (e.g., medication for mental health effects and physical therapy costs for injured victims);
- costs of interpretation for police, courts where victims speak neither English nor French or have communicative disabilities;
- in cases of death of victim, legal costs attendant to death – probate of will, establishment of legal guardian for children;
- complete list of (and differentiation between) services used by victims as stated in surveys;
- primary reasons for undertaking certain actions as stated in surveys (e.g., installed burglar alarm or changed residences)
- services to victims not captured through the Victim Services Survey (which includes only those services that receive funding through a Justice or Public Safety Ministry or Department);
- comprehensive catalogue of all government costs;
- impacts (including fear and limiting opportunities) on family, friends, and wider society.

This list is not exhaustive and is only given as an indication of the challenges that are currently limiting costing work. Research on the criminal justice system in particular would benefit greatly from linking data from police reports and charging through the entire system to sentencing and corrections. Discussion on the viability of addressing these data gaps is the next step, and time and effort in the proper areas can lead to better data in Canada.

It is hoped that this research will prove valuable to any parties interested in criminal issues, and especially to those committed to combating crime in Canada. This study is another step toward the goal of accurately quantifying the economic impacts of crime victimization, and together with future research on the cost effectiveness of crime prevention and justice programs Canadians can better understand the potential economic effects of reducing crime.

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