



An Estimation of the Economic Impact of Spousal Violence in Canada, 2009



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2012

rr12-07-e

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Acknowledgements

This report is the result of the efforts of many people who all deserve credit and our sincere thanks. First of all, we would like to thank those at Statistics Canada, in particular at the General Social Survey and at the Canadian Centre for Justice Statistics, for their patience with our questions and special data requests.

From the Department of Justice, we would like to thank the Director of the Research and Statistics Division, Stephen Mihorean, for supporting this work; Ab Currie for his assistance with the legal aid portion; Melissa Northcott and Valérie Bourdeau for additional assistance with references; Alyson MacLean, Ab Currie, Kelly Morton-Bourgon and Albert Brews for reviewing the draft; Ting Li, Cherami Wichmann and Cathy Thomson for assistance with data on the civil justice system; and Gillian Blackell, Marilyn Bongard and Claire Farid for their policy support. The support of Status of Women Canada and in particular, Erin Leigh and Salena Brickey, has contributed greatly to moving the costing of gendered violence forward amongst Canadian researchers and policy makers.

In addition, we must thank all the provincial officials who responded to our requests and provided data on civil justice costs.

And finally, we must acknowledge the invaluable comments we received from our external reviewers, all of which have ultimately strengthened this work and furthered our understanding of the many issues inherent to a study of this scope and complexity. They are listed below in alphabetical order:

Dr. Rick Brown, Australian Institute of Criminology

Professor Michael Burns, Memorial University

Dr. Brent Davis, Australian Institute of Criminology

Professor Matthew Gray, Australian National University

Professor Holly Johnson, University of Ottawa

Professor Maryse Rinfret-Raynor, Université de Montréal

Dr. Adam Tomison, Australian Institute of Criminology

Professor Sylvia Walby, University of Lancaster

Highlights

- This is the first study which provides a comprehensive estimate of the economic impact (costs) of spousal violence in Canada. All incidents of spousal violence that were reported in 2009 are taken into account, and all costs that could be reasonably attributed to these incidents are included, whether the costs were realized in 2009 or at some later date.
- The Uniform Crime Reporting Survey 2 (UCR2) reports that 46,918 spousal violence incidents were brought to the attention of police in 2009, 81% involving female victims and 19% involving male victims. According to the 2009 General Social Survey, Cycle 23, Victimization (GSS), 335,697 Canadians were victims of 942,000 spousal violence incidents in 2009; 54% of the victims were female, and 46% of the victims were male. More victims were victimized by current spouses (69%) than by ex-spouses (31%).
- Including the impact borne by the justice system, the impact borne by primary victims, and the impact borne by third parties and others, the total economic impact of spousal violence in Canada in 2009 is estimated at **\$7.4 billion**, amounting to \$220 per Canadian.
- The justice system bore 7.3% (\$545.2 million) of the total economic impact, with \$320.1 million borne by the criminal justice system (police, court, prosecution, legal aid, and correctional services) and \$225.1 million borne by the civil justice system (civil protection orders, divorce and separation, and the child protection system).
- Victim costs (\$6.0 billion) accounted for the largest proportion (80.7%) of the total economic impact for cost items such as medical attention, lost wages, lost education, the value of stolen/damaged property, and pain and suffering.
- Third-party costs (\$889.9 million) represented 12.0% of the total costs. Substantial costs included social service operation costs (\$410.6 million), losses to employers (\$77.9 million), the negative impact on children exposed to spousal violence (\$235.2 million), and other government expenditures (\$116.3 million).
- The majority (\$5.5 billion) of the economic impact of spousal violence in 2009 were in the form of intangible costs borne by victims (pain and suffering and loss of life) and their family members (loss of affection and enjoyment).
- For the \$1.7 billion of tangible costs (excluding lost future income of children), the state paid 63.8%, individuals (mainly victims) paid 29.4%, and the private sector paid 6.9%.
- Due to data unavailability and the limitations of existing data in many areas of research, the estimate of \$7.4 billion is a conservative estimate.

Executive Summary

This report provides an estimate of the economic impact of spousal violence that occurred in Canada in 2009. Spousal violence is a widespread and unfortunate social reality that has an effect on all Canadians. Victims of spousal violence are susceptible to sustaining costly and long-lasting physical, emotional, and financial consequences. Children who are exposed to spousal violence suffer in many ways and are at increased risk of developing negative social behaviours or disorders as a result (Dauvergne and Johnson 2001). The victims' family, friends, and employers are also affected to varying degrees. Every member of society eventually feels the impact of spousal violence through the additional financial strain imposed on publicly funded systems and services.

The more Canadians understand about the costly and serious impact of spousal violence, the better prepared we are to continue efforts to prevent it and where it does occur, to protect and assist victims, to hold perpetrators accountable, and to take measures to break the cycle of violence. Estimating the economic impact of a social phenomenon such as spousal violence, a process known as costing, is a way to measure both the tangible and intangible impacts of that phenomenon. By placing a dollar value on the impact, a common unit of measurement is provided. The dollar value for the economic impact of spousal violence can then be compared to the corresponding estimates of other social phenomena. Proponents of costing contend that the understanding of economic impacts and the comparison of different social issues in the same units are important to policymakers, activists, social workers, and the public by assisting in the proper allocation of resources, and in evaluating the effectiveness of programs.

Two complementary data sources reflect the incidents of spousal violence in Canada: the police-based Uniform Crime Reporting Survey 2 (UCR2) and the self-reported 2009 General Social Survey (GSS, cycle 23, Victimization). While the UCR2 captures detailed information on all *Criminal Code* violations reported to police services, the GSS interviews Canadians aged 15 and older regarding their experience of physical or sexual victimization regardless of whether or not the incident was reported to police. The UCR2 Survey reports that 46,918 spousal violence incidents were brought to the attention of police in 2009, 81% involving female victims and 19% involving male victims. More victims were victimized by current spouses (71%) than by former spouses (29%). According to the 2009 GSS, 335,697 Canadians were victims of 942,000 spousal violence incidents in 2009; 54% of the victims were female, and 46% of the victims were male. More victims were victimized by current spouses (69%) than by ex-spouses (31%).

It is important to note that police-based surveys (such as the UCR2) and self-reported surveys (such as the GSS) normally report different proportions of female and male victims of spousal violence. Specifically, police-based survey data show a significantly higher proportion of female victims of spousal violence while GSS data depict gender parity in experiences of spousal violence. Many studies offer some reasons for this discrepancy. For instance, Allen (2011) states that this inconsistency can be explained by the fact the two types of surveys may actually capture different types of spousal violence; police-based surveys capture the more serious intimate terrorism (IT), which involves the use of severe violence to gain domination and control over a spouse, whereas self-reported surveys capture the generally more minor common couple violence (CCV), which involves poor resolution of typical conflict issues without the appearance of one party trying to completely dominate or control the other. Kevan and Archer (2003) find that perpetration rates for CCV are fairly even between genders (45% perpetrated by men), but that the large majority of IT is perpetrated by men (87% perpetrated by men). These findings may help to explain the disparity in the results of the GSS and the UCR2.

Methodology

In this study, the term “spousal” refers to relationships of married, common-law, separated, or divorced partners of at least 15 years of age. Both current and former marriage and common-law relationships are captured in these definitions, and both heterosexual and same-sex relationships are considered. Following this, “spousal violence” refers only to violence perpetrated by a spouse against his/her current or former spouse in any one of those types of relationships.

The purpose of this report is to measure the economic impact of all spousal violence that occurred in 2009, regardless of when those costs were incurred or will be incurred. Therefore, all incidents of spousal violence that were reported in 2009 are taken into account, and all costs that could be reasonably attributed to these incidents are included, whether the costs were realized in 2009 or at some later date. All types of economic costs (tangible, intangible, opportunity, short-term, long-term, etc.) are represented. In addition to offences defined by the *Criminal Code* such as homicide, sexual assault, assault, robbery, and criminal harassment, other equivalent violent acts listed in the GSS such as being threatened, pushed, grabbed, beaten, choked, threatened with a gun or knife, or forced into sexual activity, are also included. The results are disaggregated by gender.

Different data sources are used for different cost categories to reflect the prevalence of spousal violence in Canada. The UCR2 is the main data source used in the Criminal Justice System section, whereas the 2009 GSS is the main data source used in the Victim Costs and Third-Party Costs sections. Other data sources include academic literature, reports and publications from government and research organizations, and other surveys. While this study attempts to encompass all ten provinces and all three territories, the lack of available data for the territories (in the GSS) has necessitated the exclusion of the territories from certain calculations in the Civil Justice System section, Victim Costs section, and Third-Party Costs section. However, given the national coverage of the UCR2, the Criminal Justice System section covers all thirteen jurisdictions in Canada.

Cost analysis of a widespread, complex social issue involves limitations related to data availability, data reliability, and scope and method. Although efforts are made to include all reasonable impacts of spousal violence, the lack of data has rendered this impossible. Some cost items are underestimated as a precaution while others are omitted completely. Underestimation occurs where it is necessary to make an assumption because of insufficient data and where more than one assumption is possible; in these cases, the assumption resulting in a more conservative estimate is used.

Data availability affects the Civil Justice System estimate in particular, as there is a lack of useable data on important issues such as separation and divorce, civil court costs, and civil protection orders. The issue of data reliability also pertains to the major data sources used. The GSS in particular lacks complete and comprehensive coverage that may result in some demographic groups being misrepresented, even after weighting techniques are applied. Issues arise from the structure of the GSS as well, one example being the lack of sufficient information to determine whether outcomes of violence were a result of one single incident or a series of repeated incidents.

The economic impact of spousal violence is categorized into three categories:

- Impact borne by the justice system (or justice system costs);
- Impact borne by primary victims (or victim costs);
- Impact borne by third parties and others (or third-party costs).

Each category contains sub-categories and individual cost items. See Summary Table 1 for details. Cost items fall under the category of the party that bears the actual impact, not the category of the party that bears the financial burden of the cost item. For example, medical costs resulting from an injury to the victim are counted under the “victim costs” category because the victim bears the impact of the injury, even though a third party (the publicly-funded health system) bears much of the financial cost of the medical treatment. Each cost item listed in Summary Table 1 is estimated using different data sources, assumptions, and methods according to the specific nature of each impact and the available data sources. Findings from academic literature must be applied to cost items that present challenges in estimating several intangible costs, such as the value of life and the value of pain and suffering.

Results

Summary Table 1 presents the detailed estimates of the economic impact of spousal violence in Canada. The total economic impact of spousal violence in 2009 was **\$7.4 billion**, amounting to **\$220** per Canadian.

The justice system bore 7.3% (\$545.2 million) of the total economic impact, where \$320.1 million was borne by the criminal justice system and \$225.1 million was borne by the civil justice system. A breakdown of the total criminal justice system costs by specific cost items reveals that policing services accounted for the majority of expenditures (45.5%), followed by corrections (31.7%), courts (9.5%), prosecutions (7.9%), and legal aid (5.5%). For civil justice system costs, 80.8% was attributed to child protection systems, 18.2% to separations and divorces, and 1.0% to civil protection orders.

The most direct economic impact is borne by primary victims. Of the total estimated costs, \$6.0 billion was incurred by victims as a direct result of spousal violence for items such as medical attention, hospitalizations, lost wages, missed school days, and stolen/damaged property. The intangible costs of pain and suffering and loss of life accounted for 91.2% of the total victim costs. Of the remaining tangible costs (\$525.0 million), other personal costs, including legal costs for divorce and separation, and moving expenses, represented 51.7%, followed by costs associated with mental health issues (34.2%), productivity losses (10.2%), and health care costs (4.0%).

The impact of spousal violence ultimately extends to every member of society. Any party with a relationship to the victim, from the children to employers, may consciously be aware of how the violence affects them. Persons and entities with no direct relationship to the victim are also affected, at the very least through the allocation of public funds. The total economic impact borne by third parties and others was about \$889.9 million, including funeral expenses (\$1.4 million), loss of affection to family members (\$37.2 million), costs to other people who were hurt or threatened in the incidents (\$11.2 million), social service operating costs (\$410.6 million), losses to employers (\$77.9 million), the negative impact on children exposed to spousal violence (\$235.2 million), and other government expenditures (\$116.3 million) not already

included elsewhere in the report (for example, provincial and federal government expenditures for shelters and victim services are included already under the categories of social services and victim services).

The majority (\$5.5 billion) of the economic impact of spousal violence in 2009 was in the form of intangible costs to both victims (pain and suffering and loss of life) and family members (loss of affection and enjoyment). For tangible costs with an actual financial transaction, it is useful to know which party or system actually pays for the costs. This additional breakdown is provided in Summary Figure 1, where the costs are attributed to the state, individuals and private sector. Of the \$1.7 billion of tangible costs (excluding lost future income of children), it is estimated that 63.8% (\$1.1 billion) was paid by the state for cost items like the criminal justice system, the civil justice system, the health care system, and the operation of social services. Approximately 29.4% (\$0.5 billion) was borne by victims through cost items including lost wages, lost education, and moving expenses. The remaining 6.9% (\$0.1 billion) was borne by the private sector through lost output, lost productivity due to tardiness and distraction, and associated administration costs.

Conclusion

Spousal violence is very costly and it affects – directly or indirectly – all Canadians. An estimated **\$7.4 billion** was or will be lost to society because of spousal violence incidents that occurred in 2009. The most significant portion of these costs is tied to victims’ pain and suffering and loss of life. A large portion was also spent on preventing and responding to spousal violence. Due to data unavailability and the limitations of existing data in many areas of research, it is reasonable to suggest that the estimate of \$7.4 billion is a conservative estimate. However, the available data provides a clear indication that spousal violence has a significant impact on all of Canadian society. It is therefore crucial to continue efforts to prevent spousal violence, and where it does occur, to protect and assist victims, to hold perpetrators accountable, and to take necessary measures to help ensure that the cycle does not persist for future generations.

SUMMARY TABLE 1: ESTIMATED COSTS OF SPOUSAL VIOLENCE IN CANADA, 2009

	Violence against females (\$)	Violence against males (\$)	Total (\$)
Justice System Costs			
Criminal Justice System	\$271,964,457	\$48,102,455	\$320,066,911
Police	\$121,599,167	\$23,975,267	\$145,574,434
Court	\$25,763,472	\$4,588,151	\$30,351,623
Prosecution	\$21,346,584	\$3,801,558	\$25,148,142
Legal Aid	\$14,847,274	\$2,644,113	\$17,491,387
Corrections	\$88,407,960	\$13,093,366	\$101,501,325
Civil Justice System	\$182,257,357	\$42,860,469	\$225,117,826
Civil Protection Orders	\$1,752,400	\$519,800	\$2,272,200
Divorce and Separation	\$33,162,930	\$7,778,959	\$40,941,889
Child Protection Systems	\$147,342,027	\$34,561,710	\$181,903,737
Total Justice System Costs	\$454,221,814	\$90,962,924	\$545,184,737

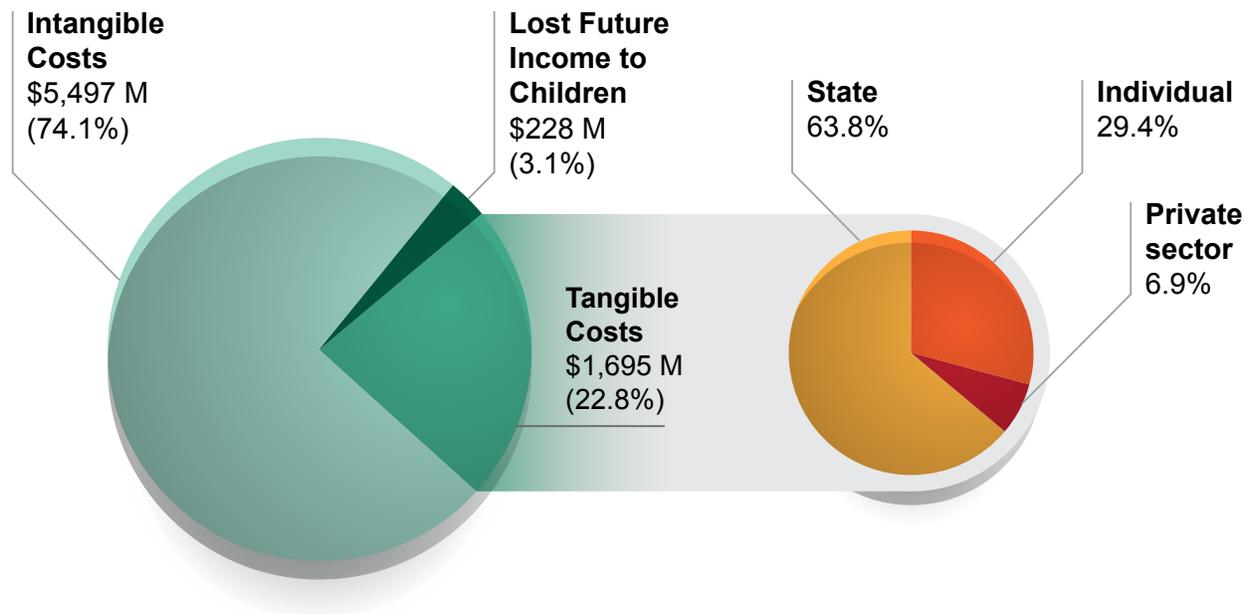
SUMMARY TABLE 1: ESTIMATED COSTS OF SPOUSAL VIOLENCE IN CANADA, 2009 (CONT'D)

	Violence against females (\$)	Violence against males (\$)	Total (\$)
Victim Costs			
Health Care	\$8,159,984	\$12,765,853	\$20,925,837
Physician visits	\$149,571	\$39,640	\$189,211
Emergency department visits	\$4,490,409	\$1,459,282	\$5,949,691
Acute hospitalization	\$3,520,004	\$11,266,931	\$14,786,935
Mental Health Issues	\$146,868,486	\$32,613,453	\$179,481,939
Medical services	\$38,013,972	\$10,030,455	\$48,044,427
Work loss	\$98,178,631	\$21,434,414	\$119,613,045
Suicide attempts (medical cost)	\$10,675,883	\$1,148,584	\$11,824,467
Productivity Losses	\$37,125,687	\$16,239,509	\$53,365,196
Lost wages	\$20,943,599	\$12,728,087	\$33,671,686
Lost household services	\$15,450,178	\$3,451,422	\$18,901,600
Lost education	\$259,081	\$0	\$259,081
Lost childcare services	\$472,829	\$60,000	\$532,829
Other Personal Costs	\$211,865,378	\$59,396,907	\$271,262,285
Damaged or destroyed property	\$62,915,576	\$26,306,202	\$89,221,778
Divorce and separation (legal costs)	\$134,914,290	\$31,646,562	\$166,560,852
Special phone features	\$1,791,358	\$254,044	\$2,045,402
Moving expenses	\$12,244,154	\$1,190,099	\$13,434,253
Intangible Costs	\$3,290,719,565	\$2,169,480,155	\$5,460,199,720
Pain and suffering	\$2,251,037,864	\$1,736,911,856	\$3,987,949,720
Loss of life	\$1,039,681,701	\$432,568,299	\$1,472,250,000
Total Victim Costs	\$3,694,739,100	\$2,290,495,877	\$5,985,234,977
Third-Party Costs			
Funeral Expenses	\$1,023,432	\$425,808	\$1,449,240
Loss of Affection and Enjoyment to Family Members	\$26,267,706	\$10,902,294	\$37,170,000
Costs to Other Persons Harmed/Threatened	\$9,047,144	\$2,198,976	\$11,246,120
Health care	\$1,413,201	\$109,013	\$1,522,214
Productivity losses	\$7,633,943	\$2,089,963	\$9,723,906
Social Services Operating Costs	\$353,039,335	\$57,556,464	\$410,595,799
Shelters and transition homes	\$285,420,000	\$0	\$285,420,000

SUMMARY TABLE 1: ESTIMATED COSTS OF SPOUSAL VIOLENCE IN CANADA, 2009 (CONT'D)

	Violence against females (\$)	Violence against males (\$)	Total (\$)
Crisis lines	\$601,854	\$9,163	\$611,017
Support centres	\$62,855,527	\$57,427,718	\$120,283,245
Victim services	\$4,161,954	\$119,583	\$4,281,537
Losses to Employers	\$52,123,343	\$25,795,217	\$77,918,560
Lost output	\$6,194,356	\$1,776,450	\$7,970,806
Tardiness and distraction	\$44,858,528	\$23,682,887	\$68,541,415
Administration costs	\$1,070,459	\$335,880	\$1,406,339
Negative Impact on Children Exposed to Spousal Violence	\$153,241,598	\$82,000,292	\$235,241,890
Medical costs	\$741,415	\$396,906	\$1,138,321
Missed school days	\$901,057	\$482,343	\$1,383,400
Lost future income	\$148,447,357	\$79,433,843	\$227,881,200
Delinquent acts against property	\$3,151,769	\$1,687,200	\$4,838,969
Other Government Expenditures	\$96,270,249	\$19,989,751	\$116,260,000
Other federal expenditures	\$7,620,897	\$1,409,790	\$9,030,687
Other provincial/ territorial expenditures	\$88,649,352	\$18,579,961	\$107,229,313
Total Third-Party Costs	\$691,012,807	\$198,868,802	\$889,881,609
Total Costs	\$4,839,973,721	\$2,580,327,603	\$7,420,301,324

SUMMARY FIGURE 1: TANGIBLE COSTS BY WHO PAYS, 2009 (\$ MILLION)



1. Introduction

The purpose of this report is to estimate the economic impact of spousal violence that occurred in Canada in 2009. This section begins with a brief discussion of the nature and extent of spousal violence in Canada, followed by the issue of gender in spousal violence, and the purpose of estimating the costs of crime. The subsequent sections describe the methodology used and provide estimates for three categories of economic impact: the impact borne by the justice system (criminal and civil), the impact borne by primary victims, and the impact borne by third parties.

1.1 Spousal Violence in Canada

Spousal violence (SV) is a widespread social issue that has garnered significant attention over the last three decades in social science and legal arenas, as well as in the media. Violence between spouses is unique in that the parties share a complex relationship involving physical, emotional, and economic bonds, with many violent spousal relationships also complicated by the presence of children. A victim of spousal violence is susceptible to sustaining long-lasting physical, emotional, and financial consequences. These effects are not confined only to the victim; they also stretch far beyond to the victim's family, friends, and employers. All members of society are also affected, whether through the additional financial strain imposed on the health care system or the lost future productivity of children exposed to spousal violence. Governments and other organizations are active in combating spousal violence, and a considerable amount of Canadian resources are redirected from other potential uses to address this issue. Despite decades of public awareness and prevention campaigns in Canada, spousal violence remains a devastating reality for many Canadian families of all social, economic, and cultural groups. National statistics show that, with the exception of spousal homicides, the incidence of spousal violence in Canada has not decreased over time (see Perreault and Brennan 2010).

Spousal violence is not a specific offence in and of itself in the *Criminal Code*, but many acts that constitute spousal violence are crimes in Canada. Offences often associated with spousal violence include common assault, assault with a weapon, sexual assault, homicide, forcible confinement, uttering threats, criminal harassment, and failure to provide the necessities of life. While psychological abuse and financial abuse are also forms of spousal violence (Mechanic et al. 2008; Adams et al. 2008), they are not necessarily considered crimes in Canada (Johnson and Dawson 2011). However, there is provincial and territorial legislation (for example, Prince Edward Island's *Victims of Family Violence Act* R.S.P.E.I. 1988, c. V-3.2; Manitoba's *The Domestic Violence and Stalking Act*, C.C.S.M. c. D93) that does address these forms of abuse. This legislation provides for responses in the civil context and complements the provisions outlined in the *Criminal Code*.

One way of describing the magnitude of spousal violence is through police-reported data. In 2009, 46,918 incidents of spousal violence were reported to police, representing 11% of all police-reported violent crime in Canada.¹ Incidents involving female victims accounted for 81% of all incidents, highlighting the gendered nature of spousal violence.² Among these police-reported incidents, the majority (71%) involved current partners, while 29% involved former partners. Most violent incidents between spouses involved offences that had low severity ratings as defined by Statistics Canada, with common assault representing the largest proportion of

¹ Statistics Canada, Canadian Centre for Justice Statistics (CCJS), Uniform Crime Reporting Survey 2 (UCR2). Micro data extracted November 2010. National coverage of the UCR2 micro data in 2009 was 99%.

² See footnote 1. Micro data extracted November 2010.

reported offences (63%). Assault with a weapon or causing bodily harm accounted for 13% of spousal violence while uttering threats and criminal harassment made up smaller proportions at 10% and 7% respectively. At its most severe, spousal violence can end fatally. In 2009, there were 65 spousal homicides in Canada, 11% of all homicides in that year. As in past years, women continued to be more likely than men to be victims of spousal homicide; in 2009, almost three times as many women as men were killed by a former or current spouse. In addition, another 8 deaths were caused by other violations such as criminal negligence causing death.

Self-reported data, another source for examining spousal violence, reveal that the majority of spousal violence incidents do not come to the attention of police. The 2009 General Social Survey (GSS) finds that 1,186,000 Canadians aged 15 and older in the provinces reported being physically or sexually victimized by a spouse in the preceding five years. In 2009 alone, 335,697 Canadians were victims of 942,000 spousal violence incidents. Less than one quarter (22%) of victims stated that the incident in the previous five years had come to the attention of police, a rate that has declined from 28% in 2004 (Brennan et al. 2011). The GSS data also show that of those victims who do alert the police, many do so only after experiencing multiple episodes of spousal violence. For instance, 28% of victims reported that they had been victimized more than ten times before they contacted the police. More than three quarters of spousal violence victims reported being emotionally affected in addition to sustaining physical injuries. The GSS findings show that spousal violence is more likely to occur between ex-spouses than current spouses, as 17.8% of people with a previous relationship experienced violence either before or after the separation while 3.8% of people in a current relationship experienced violence. Findings from the GSS also indicate that females continued to report more serious forms of spousal violence than males, despite equal victimization rates when all incidents were included.

This report presents a great many numbers: national statistics, numbers from other studies, calculations and financial estimates. It is important to remember that behind these numbers are actual people – women and men – who have experienced spousal violence. The following Text Box displays a summary of the demographic profile of the victims, so that readers may have a better understanding of who they are. All data are from the 2009 GSS and include victims of both current and ex-spousal violence.

TEXT BOX 1.1: WHO WERE THE VICTIMS?

Just over half of the victims of spousal violence were female (54%). The majority of these females were aged 25 to 44 (67%). Almost three quarters (70%) had post-secondary education (24% a university degree, 31% a college or technical diploma, and 15% some university of college). Just over one-tenth (12%) had elementary schooling or did not complete high school and the remainder (18%) had a high school diploma.

In terms of annual personal income (i.e. not their household income), 5% of females had no income and 5% had an income over \$100,000. More than half (62%) had an income less than \$39,999. Household income was under \$19,999 for 12% of women.

The majority of females (80%) lived in urban areas and most were Canadian-born (86%).³ Almost three-quarters (70%) of females spoke English as their main language, with a quarter (25%) speaking French and 5% speaking neither English nor French as their main language. Less than one-tenth (7%) cared for children and/or performed housework as their primary occupation while more than half (57%) were employed or seeking employment. More than a quarter (28%) volunteered or cared for children other than their own.

Less than half (46%) of the victims were male. The majority of these males were aged 25 to 44 (58%), while a further 23% were aged 45 to 54. Almost four-fifths (79%) had post-secondary education, 16% had a high school diploma, and 5% had elementary level education or had not completed high school. In terms of annual personal income, one-fifth (20%) earned more than \$100,000, more than half (61%) earned from \$20,000-\$69,000, 7% earned less than or equal to \$19,999, and no males reported no income.

Eighty-seven percent of males lived in urban areas and 85% were Canadian born. In terms of main language spoken, 71% of males spoke English, 24% spoke French, 1% spoke both and 4% spoke neither English nor French as their main language. In terms of their main occupation, 71% of males were employed or seeking employment, 3% were in school, 2% reported caring for children or doing housework, and 18% volunteered or cared for other children.

The GSS collects quantitative data and with these data paints a picture of sorts of the prevalence and nature of spousal violence in Canada. In reading the numbers in the pages that follow, do remember the victims.

³ Urban includes Census Metropolitan Areas (CMAs) and Census Agglomerations (CAs). See Statistics Canada, 2007, Illustrated Glossary, Catalogue no. 92-195-XWE for definitions. In 2010, Statistics Canada introduced new terminology. See <http://www.statcan.gc.ca/subjects-sujets/standard-norme/sgc-cgt/urban-urbain-eng.htm> (last accessed March 2, 2012).

1.2 Measuring Spousal Violence

Johnson and Dawson (2011, p. 65) note that “the frequency, severity, consequences, and context of intimate partner violence are gender-specific with distinct victimization experiences for men and women.” However, ascertaining the true differences in victimization rates and experiences between genders is difficult, and there is no consensus among academic researchers on the true composition of spousal violence. Some research has shown that both frequency and severity of spousal violence victimization are greater for female victims than for male victims (AuCoin 2005; Tjaden and Thoennes 2000). Other research indicates that the frequency of female victimization is greater and that females sustain more injuries but that severity of injuries is greater for male victims than female victims (Felson and Cares 2005). Research also suggests that the frequency is equal, but that women experience more severe victimization (Archer 2000).

Kimmel (2002), Felson and Cares (2005), Johnson (2008), and Allen (2011) offer some reasons for the contradicting results found in different studies. The major differences can be explained by the different types of surveys used in these empirical studies; the rates and severities of violence revealed crucially depend on the survey questions (definitions), assumptions, and samples. There are two main types of spousal violence surveys: police-reported crime surveys and self-reported victimization surveys based on the Conflict Tactics Scale (CTS).

Police-reported crime surveys **only** include incidents that are reported to police (the UCR2 in Canada) and are perceived as a crime, implying that only incidents that conform to *Criminal Code* offences are included. Studies using police-reported crime survey invariably find higher rates of violence against women (Kimmel 2002). Self-reported victimization surveys based on the CTS (the GSS in Canada) take samples from the general population and often report equivalent rates of violent victimization for men and women. This latter type of survey is more general and includes minor violent acts together with more severe incidents. A third type of survey is shelter-based (the Transition Home Survey (THS) in Canada). Surveys of this type show prevalence and severity results similar to police-reported crime surveys with women being the overwhelming victims. It is important to note that many shelters are only open to women and as such, results are not representative of the population (Statistics Canada 2009).

Some researchers claim that the violence captured in CTS surveys is taken out of context and hence, gender symmetry in intimate partner violence (IPV) is misleading. Allen (2011) explains that the main survey types paint different pictures of IPV because they actually capture different types of IPV. When IPV is subdivided into intimate terrorism (IT) and common couple violence (CCV), the ostensibly contradictory results from the different survey types can be reconciled. IT is characterized by one spouse using severe violence to gain power, control, and domination over the other spouse, while CCV is characterized by mostly minor violence triggered by conflict issues common to many relationships. Graham-Kevan and Archer (2003) find empirical evidence that distinguishing between IT and CCV does indeed reconcile the findings based on different types of surveys. Using a CTS survey, they find that 87% of IT is perpetrated by men and that 55% of CCV is perpetrated by women.

To investigate the gender differences of spousal violence victimization, the present report disaggregates the costs by gender of victim. Data from the Canadian police-reported crime survey and the self-reported victimization survey are used, each where appropriate.

1.3 Costs of Crime

Examining the economic impact of social phenomena is an established approach in social science research, and cost estimation methods have been extensively developed in the field over the past decades (Cohen 2005). The topic of crime, in particular, has garnered the attention of policy-makers and of researchers who have subsequently conducted studies on crime's economic impact. While a minority would disagree with the notion that enumerating the costs of crime is an effective and worthwhile exercise (Zimring and Hawkins 1995), proponents of crime costing contend that an understanding of the economic impact of crime can be important to policymakers and may assist in the proper allocation of resources both within the criminal justice system and between different social issues.

Economic exercises are often criticized for attempting to place a monetary value on intangibles. An individual's life and the pain and suffering of a victim are concepts that do not have a price determined by natural economic forces, as in a marketplace of goods where supply and demand determine prices. It is therefore difficult to attach a monetary figure, and some people may even claim that it is insensitive to do so. However, it can be argued that the benefits of performing costing exercises outweigh the potential negatives, and that estimating the costs of crime provides practically useful information.

As Cohen (2005) states, "the cost of crime" is equivalent to the "benefit of reducing crime", which in turn is tantamount to "the monetary amount that society would be willing to spend to prevent a criminal incident from occurring". It is important to remember that, regardless of the relative wealth of a society, economic resources are scarce. Estimates of the economic impacts of different social phenomena are therefore crucial in determining (through marginal condition) the efficient allocation of resources to programs competing for public funds (e.g., a larger police force, increased health care capacity, new transportation infrastructure, or more public parks).

Policy development implies the allocation of scarce public resources. Guiding questions for policy-making governments include:

1. How do we distribute public funds efficiently?
2. How do we distribute public funds fairly?

The efficient distribution of money entails getting the maximum impact given the limited funds with no regard to equality of spending. If spending all of the public money on one issue will generate greater overall benefits than allocating even a small portion of funds to another issue, efficiency would dictate the former option. However, doing so may be considered unfair and a decision to provide at least some funds to address each of the issues might be desirable. These guiding questions are often in tension and a balance must be found between efficiency and fairness.

Cost estimates assist in and facilitate the answering of these questions. Money can be viewed as a universal, objective language, and projecting objective monetary units onto subjective intangibles, such as mental health effects or pain and suffering, is a way of standardizing the competing social issues and allowing for a direct comparison. Costing exercises are fraught with challenges and those pertaining to this report specifically are described in the following Methodology section.

Several victimization costing exercises have been conducted in Canada, but few have focused specifically on spousal violence. The present research will attempt to fill this knowledge gap and will serve as a resource for all stakeholders working together to end spousal violence and to assist the victims, their children, and the many others affected.

Table 1.1 lists previous work on costing of domestic violence, intimate partner violence, and violence against women in Canada specifically. Walby (2004) and Varcoe et al. (2011) provide thorough reviews of the international literature of the costs of domestic violence up to 2010.

TABLE 1.1: COSTING STUDIES ON DOMESTIC VIOLENCE AND INTIMATE PARTNER VIOLENCE IN CANADA

Authors	Description	Results	Results (2009 \$)[†]
Day (1995)	Estimates health-related economic costs of violence against women in Canada (includes medical costs, work loss, transition homes, etc.).	\$1.54 billion (1993)	\$2.05 billion
Greaves et al. (1995)	Estimates economic costs of sexual assault, intimate partner abuse, and child sexual assault against women in Canada in health, criminal justice, social services/education, and labour/employment.	\$4.23 billion (1994)	\$5.55 billion
Kerr and McLean (1996)	Estimates economic costs of violence against women in BC in areas such as policing, corrections, income assistance, lost work time, transition homes, etc.	\$385 million (1994/1995)	\$502 million
Varcoe et al. (2011)	Estimates the costs associated with intimate partner violence for women leaving abusive partners.	\$6.9 billion (2011)	\$6.62 billion

[†] Results adjusted for inflation to 2009 dollars.

2. Methodology

This section introduces the definitions of important terms, presents the framework, describes the data sources, explains the limitations and provides a discussion of the important methodological issues.

2.1 Definitions

Spousal and Spousal Violence: In this study, the term “spousal” refers to relationships of married, common-law, separated, or divorced partners of at least 15 years of age. Both current and former marriage and common-law relationships are captured in these definitions, and both heterosexual and same-sex relationships are considered. Following this, “spousal violence” refers only to violence perpetrated by a spouse against another spouse in any one of those types of relationships.

Much of the recent literature in this area uses the term intimate partner violence (IPV); IPV includes a broad range of relationships, and includes dating couples. The terms domestic violence (DV) and family violence (FV) also potentially include violence against household members other than spouses, such as children.⁴ Therefore, the scopes of IPV, DV and FV are too broad for the purposes of this study, and the corresponding violence is not examined in this report.

Victims: The consequences of spousal violence are not limited to the direct victim (partner) who experiences abuse, and research on victimization shows that there can be primary, secondary, and tertiary victims (Hill 2009). However, in this study, the term “victim” refers only to the primary victim, that is, the spouse who has experienced violence at the hands of his or her partner. Children exposed to spousal violence, as well as family members who might be secondary and tertiary victims, are all classified as third parties in this report.

Offenders: Technically, the term “offender” would only be used upon conviction in the criminal justice system as, until that time, the allegations of violence have not been proven in court. Terms such as “alleged perpetrator” or “accused” (once charges are laid) may be used. For ease of reading, this report uses the word “offender” in most instances, but the distinctions noted above must be acknowledged.

Some situations of spousal violence may involve reciprocal violence, where the victim uses violence in a defensive manner. In such situations, spouses may be classified as both victims and offenders.

Stalking/Criminal Harassment: Criminal harassment is the term used in Canada to describe a specific *Criminal Code* offence that includes stalking, which is the term more widely used. Both terms are used in this report interchangeably to refer to 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”. Importantly, criminal harassment may be a precursor to subsequent violent acts (Department of Justice 2004).

⁴ See for example, the Government of Canada’s Family Violence Initiative of which the Department of Justice is a partner <http://www.justice.gc.ca/eng/pi/fv-vf/index.html> (accessed February 24, 2012).

Economic Impact and Costs: The term “economic impact” is synonymous with the term “cost” in this study. Anything resulting from an incident of spousal violence that otherwise would not have resulted is considered an economic impact, or cost, of spousal violence. This definition includes tangible expenditures, such as police costs, and intangible costs, such as the value of pain and suffering. While many of the impacts do not actually involve a financial transaction, an estimate of financial magnitude is calculated regardless. Quantifying all impacts in monetary terms allows for a direct comparison between the different impacts of spousal violence and between spousal violence and other social issues.

Terminology of References: Note that when referencing academic research, government reports, and surveys, the language used in the referenced work is used in this report for accuracy. For example, when Allen (2011) is referenced in the Introduction, the term “intimate partner violence” (IPV) is used in place of “spousal violence” because the referenced work uses IPV; when Weinbaum et al. (2001) is referenced in Section 4, the term “battered” is used to describe victimization because this is the term used in the referenced work.

2.2 Framework

A comprehensive framework is designed to capture as much of the economic impact of spousal violence as possible. This framework binds together the many cost-estimation models unique to each cost item. The framework essentially defines the scope of the project: the sources of impact; what regions, time periods, data types, and crimes are included; the breakdown of costs by gender; and the categorization of costs.

2.2.1 Sources of economic impact

Spousal violence incidents (victims) represent the key source of economic impact in this report. The costs associated with the impact of spousal violence on victims and on others, such as the justice system, family members, and employers, are included. However, the costs to the offender, such as lost freedom, are not included in this model for the reasons discussed below.

Some researchers, such as Cook (1983, 374), make the case that offenders should be perceived as normal members of society, with the implication that their utilities should be included in the social welfare function. Others, such as Trumbull (1990), argue that offenders are not entitled to be considered as full members of society as a consequence of contravening the law. Though useful, this debate in economic theory is not sufficient to convince the authors to include or exclude offender costs. An analysis of the cost items that might be considered if offenders were included in the social welfare function might provide further persuasion.

First, society may lose the productive capacity of individuals who are incarcerated. Unfortunately, data of the prior earning histories of incarcerated offenders are insufficient; the Correctional Service of Canada’s Intake Assessment Process collects information on the employment status immediately prior to the incarceration of offenders who have been admitted to federal facilities, but no data are collected on income levels or industry of employment.

Second, there is debate over whether the value of lost freedom to offenders sentenced to custody should be included in such cost analyses. Becker (1968, 179-80) supports inclusion, but others question why lost freedom should be considered, since incarceration is the punishment decided

by the courts, and its very purpose is to curtail the freedom of the offender. This same debate occurs for other civil rights, such as voting and employment. Data for these intangible costs is also very limited.

Other potential costs to offenders include the disruption of the lives of the offender's family and possible injury or death of the offender during incarceration. Data are very limited in these areas as well, making an estimate with confidence virtually impossible.

Therefore, due to a combination of data limitations and the inconclusive debate on the subject by economic theorists, this report does not include the costs to offenders.

2.2.2 Geography

This study attempts to encompass all ten of Canada's provinces and all three territories; however, the lack of available and useable data for the territories (from the GSS) has necessitated the exclusion of the territories from calculating certain impacts on the civil justice system, victims, and third parties. As prevalence rates and service delivery costs are significantly higher in the territories than in the provinces (see Perreault and Mahony 2012; Perreault and Brennan 2010; de Léséleuc and Brzozowski 2006),⁵ any cost estimates which are based on the GSS data may be underestimated.

Note that the data for calculating the impact on the criminal justice system come predominantly from data sources other than the GSS, including police reported data, court reported data, and correctional service data. Given the national coverage of these data sources, the Criminal Justice System section includes complete calculations for both the provinces and the territories.

2.2.3 Time period

The purpose of this report is to measure the impact (or costs) of all spousal violence that occurred in a given time period, regardless of when those costs were incurred or will be incurred. Therefore, all incidents of spousal violence that were reported (either self-reported to a survey or reported to police) in 2009 are taken into account, and all costs associated with these incidents are included, whether the costs were realized in 2009 or at some later date.⁶ For example, if an offender committed a spousal violence crime in 2009 and received a custodial sentence of 5 years, the entire cost of keeping that offender in custody for 5 years is counted.

While incidents in 2009 may result in costs that extend for multiple years, many of the impacts of spousal violence are the result not of just one violent episode, but of a culmination of several violent episodes spanning over several years (e.g., 2007 to 2009). In these cases, only part of the impact and associated costs should be attributed to incidents that occurred in 2009, as

⁵ The costs of goods and services in general are higher in the territories than in the provinces.

Source: Aboriginal Affairs and Northern Development Canada. Regional Results of Price Surveys.

Available at: <http://www.aadnc-aandc.gc.ca/eng/1100100035986>.

Source: Statistics Canada. CANSIM, Table 203-0001 – Survey of household spending (SHS), household spending, summary-level categories, by province, territory and selected metropolitan areas.

⁶ Calculating future costs is difficult because accurate information about future conditions is impossible to obtain. Thus, it is necessary to calculate future costs based on current information. For example, it is necessary to assume that the cost of a divorce in the future because of spousal violence in 2009 is the same as the cost of a divorce in 2009 (after removing the inflation effect) as no real future information is available. This method actually assumes that there is a steady state for some measures, implying that the measures are constant over time, despite the fact that such a steady state likely does not exist.

violence in previous years may also have contributed. Examples of this are separation and divorce and the negative impacts on children exposed to spousal violence. The decision to end a spousal relationship in 2009 may be the result of multiple years of violence, such that only part of the costs associated with these divorces should be attributed to incidents in 2009. Similarly, conditions such as physical aggression or mental health issues in children might also result from the accumulated impact of long-term exposure to spousal violence. As such, claiming all costs for 2009 will overestimate the true impact of the 2009 incidents. However, depending on estimation methods, these two situations are treated differently in the report, as explained below.

Divorce costs in this report are estimated based on the number of divorce cases initiated in 2009 that were primarily caused by spousal violence. As stated earlier, this report is concerned with the impact of spousal violence incidents in 2009, not with the costs incurred in 2009 that were the result of spousal violence occurring in previous years. However, if certain assumptions are maintained, it is argued that these two measures will generate equivalent measures, which would justify the calculation method used. For example, suppose a victim stays in an abusive relationship for 2 years (2008 and 2009) before making the decision to divorce (in 2009). If spousal violence in each year contributes equally to the decision, then half of the consequences and associated costs in 2009 are the result of the 2009 spousal violence incidents and half are due to the 2008 incidents. If there is another victim in a similar situation, but with violence occurring in 2009 and 2010, then half of the divorce costs incurred in 2010 should be attributed to 2009 incidents. Adding all of the costs attributable to spousal violence incidents in 2009 (one half plus one half) gives a total of one divorce, which is equivalent to the divorce costs incurred in 2009 if divorce costs are assumed to be the same in both 2009 and 2010.⁷ The same conclusion holds for longer time periods (greater than 2 years) and also applies to child protection systems, but to a lesser extent.

The economic impact on children exposed to spousal violence is estimated based on the number of children exposed to spousal violence in 2009 who have likely developed or will likely develop negative conditions due to the exposure. For example, if the GSS reported that 100 children were exposed to spousal violence in 2009, and it is known that 10% of children exposed to spousal violence develop a negative condition, then 10 ($=100*10\%$) children have developed or will develop a negative condition at some point in time. However, attributing all costs associated with the 10 children observed in 2009 will overestimate the true impact of the 2009 incidents.

To illustrate this, suppose that 50 of the 100 children were newly exposed to spousal violence in 2009 (i.e., without prior exposure) and 50 have had one previous year of exposure. Also, suppose that all 100 children are exposed to spousal violence for 2 years in total and that 10% will develop a negative condition at the end of the second year of exposure. Therefore, 5 ($=50*10\%$) children who were first exposed to violence in 2009 should develop some negative condition in 2010, after the second year of exposure, but only half of that impact should be attributed to 2009 incidents (assuming that exposure in both years contributes equally to the development of the condition). Another 5 ($=50*10\%$) children who had been exposed to violence in 2008 and 2009 will develop some negative condition in 2009, after the second year of exposure. Again, only

⁷ This scenario is plausible, but it works under very specific conditions and assumptions. For example, it must be assumed that spousal violence in each year contributes equally to the decision to divorce, that the number of divorces caused by spousal violence is the same in each year, and that divorce costs are the same in each year. If these conditions hold, then calculating the costs of divorces initiated in 2009 that were caused by spousal violence yields the same results as calculating the appropriate proportion of the costs of divorces in any year that were partially caused by spousal violence incidents in 2009.

half the impact on these 5 children should be attributed to 2009 incidents. Adding the impact attributable to exposure in 2009 only (five halves plus five halves) results in an impact equivalent to the impact on five children in total, not the 10 children initially estimated in 2009. This is because a portion of these children develop a negative condition partially as result of exposure to violence in 2008 and another portion develop a negative condition partially as a result of exposure to violence in 2010.

As this report only accounts for the impacts resulting from spousal violence incidents in 2009, an adjustment must be made if the number of children exposed is used as the estimation base. Ideally, this adjustment would be the division of the total costs based on children who are exposed to spousal violence in 2009 by the number of years of exposure that contributed to the development of any negative conditions. However, as no such data exists, the average number of years that children are exposed to spousal violence is used as a proxy measure.

2.2.4 Offences

Offence categories examined in the Justice System section are captured by the UCR2, including 1st degree murder, 2nd degree murder, manslaughter, sexual assault, assault, using a firearm in the commission of an offence, robbery, forcible confinement, criminal harassment, uttering threats, and other violent violations. Note that traffic violations are excluded from the analysis.

The GSS captures both physical and sexual violence as defined by the *Criminal Code* and includes violent acts such as being threatened, pushed, grabbed, beaten, choked, threatened with a gun or knife, or forced into sexual activity. All of these violent acts, as well as stalking, are examined in this report. Respondents to the GSS are also asked about emotional and financial abuse that they might have experienced at the hands of a current or ex-spouse. However, this study does not estimate the costs of emotional and financial abuse as separate incidents for several reasons. First, the main question on the survey asks respondents about lifetime emotional or financial abuse, making it impossible to estimate incidents of abuse in any particular year.⁸ Second, all spousal violence situations can involve some degree of emotional abuse (e.g., the emotional and psychological impact of any abuse or violence by someone you love, trust, have committed to, etc.); hence, costing emotional abuse as an individual incident will lead to double counting, as emotional costs (pain and suffering) are already estimated in various sections. And third, the decision to exclude self-reported acts of financial and emotional victimization at the hands of a spouse is consistent with the practices of other government agencies that report on spousal violence (Brennan et al. 2011).

2.2.5 Gender

To reflect the well-documented differences between male and female victims of spousal violence, the estimates presented here have been disaggregated according to the victim's gender. Since there is disagreement over the frequency and severity of spousal violence victimization in the gender groups, we have not relied on one prevalence rate per gender for the entire report, but instead use the appropriate data to calculate different rates for each cost item. For example, the breakdown of criminal justice system costs by gender is derived from police-reported information, and the breakdown of hospitalization costs by gender is calculated directly from GSS respondents who stated specifically that they were hospitalized for an injury.

⁸ There are also no police-reported data (UCR2) to estimate the associated costs for these two types of abuse. For example, while theft or fraud might be considered spousal financial abuse, these violations are not recorded as violent crime by the UCR2, and the UCR2 only records a victim for violent crimes.

2.2.6 Cost categories

The cost items are grouped into three main categories: the impact borne by the justice system (criminal and civil), the impact borne by the victim, and the impact borne by third parties. Within each of these categories, several sub-categories have been delineated, some of which are individual cost items themselves (e.g. police costs) and some of which are further divided into individual cost items (e.g. corrections is divided into incarceration costs and conditional sentence costs, among others).

Cost items fall under the category of the party that bears the actual impact, not the category of the party that bears the actual financial burden of the cost item. For example, medical costs resulting from injury to the victim fall under the “victim costs” category because the victim bears the impact of the injury, even though a third party (health system) bears much of the financial cost of the medical treatment. Section 6 provides an additional breakdown of the economic impact by the party who actually bears the financial cost. In that section, the costs are attributed to the state, private sector and individuals. The three main impact categories are described in more detail as follows.

2.2.6.1 Impact borne by the justice system – criminal and civil justice system costs

The Canadian criminal justice system is comprised of three main institutional bodies (the police, the courts, and corrections), each with a specific role in protecting victims and the public, applying the rule of law and ensuring offenders pay their debt to society and are assisted in rehabilitation. In the context of spousal violence, police are tasked mainly with protecting victims and detecting and investigating criminal acts. Criminal courts provide a forum where the accused can be tried and, if convicted, sentenced. The corrections system places serious offenders in confinement and limits the actions of other offenders. As a whole, the justice system has the responsibility of preventing crime by acting as a deterrent, of ensuring respect for the rule of law and the maintenance of a peaceful society, and of denouncing criminal activity by placing restrictions on offenders. The three interconnected institutions all involve widely disparate processes, equipment, infrastructure, and personnel. Previous studies have attempted to estimate the costs of violence across the entire criminal justice system at an aggregate level only (Walby 2004; Brand and Price 2000). Following Cohen et al. (1994), this study estimates the costs of spousal violence at each stage of the criminal justice system.

TABLE 2.1: CATEGORIES OF JUSTICE SYSTEM COSTS

Criminal Justice System	Civil Justice System
Police	Civil Protection Orders
Court	Divorce and Separation
Prosecution	Child Protection Systems
Legal Aid	
Corrections	
<i>Incarceration</i>	
<i>Conditional sentences</i>	
<i>Probation</i>	
<i>Fines</i>	

Table 2.1 lists the sub-categories that are included in the criminal justice system analysis. The three institutional bodies are all represented: police; courts, including prosecution, and legal aid sub-categories; and corrections, further separated into incarceration, conditional sentence, probation, and fines. As fines are considered a cost to offenders, and as costs to offenders are not considered in this report, fines will not be counted in the main analysis. Fines will, however, be considered in the analysis by who pays in the conclusion of the report, counted as a revenue to the state and a cost to individuals.⁹ Other criminal justice activities such as non-legal aid defence costs and expenditures related to Part XX.1 of the *Criminal Code* (mental disorder and review boards) have not been considered due to data limitations.

The criminal justice system is the most relevant legal system for most violent crimes, but in the case of spousal violence, the civil justice system is also an important part of the legal response. The civil justice system is concerned primarily with matters that arise between private parties, such as an action in damages or a family law matter. Although civil redress may take many forms, including torts and civil damages, the two main types of civil legal actions that are covered in this report are civil protection orders and divorce and separation, as listed in Table 2.1.

Civil protection orders are available either through the common law, as general injunctive relief, or under specific legislation. The superior courts have inherent jurisdiction to grant injunctive relief, including restraining orders (Christopher 2009). Restraining or no-contact orders are also available under provincial or territorial family law if the victim is undergoing a separation or divorce. Moreover, emergency protection orders or emergency intervention orders are available in most provinces and territories under specific civil family violence or domestic violence legislation.¹⁰ They can grant the victim temporary exclusive occupation of the home, remove the abuser from the home, set limits on contact and communication with the victim, as well as other remedies.

A divorce or legal separation can be sought if the victim decides to permanently leave the intimate relationship. Ongoing violence against a spouse may create a dangerous or harmful atmosphere for a child, and authorities may be forced to remove the child from the home to ensure personal safety. Exposing a child to domestic violence is grounds for child protection involvement in most provinces and territories.¹¹ Children are often themselves victims of violence perpetrated by a parent figure, but the scope of this report permits only cases involving spousal violence, whether violence against children is present or not.

⁹ Note that fines to the offender may actually be a cost to the victim to some degree. If the offender and victim are still in a spousal relationship, a fine to the offender will decrease the victim's family income. If the victim has left the relationship, a fine to the offender may still decrease the victim's income in cases where the offender's capacity to pay child or spousal support are diminished.

¹⁰ Alberta: *Protection Against Family Violence Act*, R.S.A. 2000, c. P-27; Saskatchewan: *Victims of Domestic Violence Act*, S.S. 1994, c. V-6.02; Manitoba: *Domestic Violence and Stalking Act*, C.C.S.M. 1998 c. D93; Nova Scotia: *Domestic Violence Intervention Act*, S.N.S. 2001, c. 29; Newfoundland and Labrador: *Family Violence Prevention Act*, S.N.L. 2005, c. F-3.1; Prince Edward Island (PEI): *Victims of Family Violence Act*, R.S.P.E.I. 1998, c. V-3.2; Nunavut: *Family Abuse Intervention Act*, S.Nu. 2006, c. 18; Northwest Territories (NWT): *Protection Against Family Violence Act*, S.N.W.T. 2003, c.24; Yukon: *Family Violence Prevention Act*, R.S.Y. 2002, c. 84.

¹¹ Alberta: *Child, Youth and Family Enhancement Act*, R.S.A. 2000, c. C-12, s.1 (3); New Brunswick: *Family Services Act*, S.N.B. 1980, c. F-2.2, s31(1); NWT: *Child and Family Services Act*, S.N.W.T. 1997, c. 13, s.7 (3); Nova Scotia: *Children and Family Services Act*, S.N.S. 1990, c. 5, s. 22 (2); PEI: *Child Protection Act*, R.S.P.E.I. 1988, c. C-5.1, s.9.; Saskatchewan: *Child and Family Services Act*, S.S. 1989-90, c. C-7.2, s.11.

2.2.6.2 Impact borne by primary victims – victim costs

While unreported crimes incur no immediate or measurable costs to the criminal justice system, the impact of unreported incidents on the victim may be just as significant as the impact of reported incidents. For this reason, victim costs are calculated separately based on self-reported data such as the GSS in order to capture the prevalence and costs of spousal violence more accurately.

Victims bear the direct impact of spousal violence and they may sustain both physical and emotional injuries. Physical injuries may be immediate and short-term in nature, but chronic violence can result in long-term physical health effects such as headaches, ulcers, and reproductive problems (Johnson and Dawson 2011). Psychological and emotional effects caused by spousal violence include fear and anxiety, depression, and addiction issues (Johnson and Dawson 2011; Bradley et al. 2002), and spousal violence can diminish one’s sense of safety, self-esteem, and confidence as well. Table 2.2 below lists the specific items in this section.

TABLE 2.2: CATEGORIES OF VICTIM COSTS

Health Care	Lost education
Physician visits	Lost childcare services
Emergency department visits	Other Personal Costs
Acute hospitalization	Damaged or destroyed property
Mental Health Issues	Divorce and separation (legal costs)
Medical services	Special phone features
Work loss	Moving expenses
Suicide attempts (medical costs)	Intangible Victim Costs
Productivity Losses	Pain and suffering
Lost wages	Loss of life
Lost household services	

Victims sustaining physical injuries may seek medical attention. The costs of visits to physicians and emergency departments are included, as are the costs of overnight hospitalizations. Mental health issues caused by spousal violence may also necessitate the use of medical services, including counselling, or have a detrimental effect on productivity. The victim may not be able to perform normal daily activities, which may result in lost wages, lost household productivity, lost education, or lost child care. If the parties decide to end the relationship through separation or divorce, the victim might need to pay the necessary legal fees. The offender may attempt to intimidate or get revenge on the victim by destroying or damaging the victim’s personal property. The victim may be forced to activate special phone features in order to avoid the offender, and the victim may even relocate if the safety of the victim or his or her children is threatened.

While all of the effects mentioned thus far incur a direct cost, other effects are abstract. For example, pain and suffering are hidden, but are no less real than tangible impacts. Emotional trauma caused by the situation may lead to a deterioration of mental health and subsequent use of mental health care services. The most severe cases of spousal violence result in the loss of a life, either at the hands of the offender or by the victim’s own volition. All of these impacts present financial costs, physical costs, and emotional costs to the victim.

2.2.6.3 Impact borne by third parties and others – third-party costs

The impact of spousal violence ultimately extends to every member of society. Any party with a relationship to the victim, from the children to employers, may consciously be aware of how the violence affects them. Persons and entities with no direct relationship to the victim are also affected, at the very least through the allocation of public funds, but may be unaware in what way or to what extent. Table 2.3 below lists the costs to all third parties.

TABLE 2.3: CATEGORIES OF THIRD-PARTY COSTS

Funeral Expenses	Losses to Employers
Loss of Affection and Enjoyment to Family Members	Lost output
Costs to Other Persons Harmed/threatened	Tardiness and distraction
Health care	Administration costs
Productivity losses	Negative Impact on Children Exposed to SV
Social Service Operating Costs	Medical costs
Shelters and transition homes	Missed school days
Crisis lines	Lost future income
Support centres	Delinquent acts against property
Victim services	Other Government Expenditures
	Other federal expenditures
	Other provincial and territorial expenditures

In the event of the victim’s death, the most immediately affected is the victim’s family, who is not only burdened by administrative matters and costs such as funeral expenses, but is also deprived of affection and enjoyment. Children who are exposed to the violence can be considered secondary victims. It has been documented that children exposed to violence by one parent against another often suffer from emotional, social, cognitive, and behavioural maladjustment problems, and that they are at greater risk of developing these problems than children who are not exposed to spousal violence (Fortin 2009; Wolfe et al. 2003; Jaffe et al. 1990; Margolin 1998; Peled and Davis 1995; Holden et al. 1998). These negative impacts on children exposed to spousal violence can continue into adulthood (Dube et al. 2002; Zametkin et al. 1990; Harrington et al. 1990; Loeber and Hay 1997) and the costs associated with a child developing these problems may accrue over the remainder of the child’s life. Furthermore, Fantuzzo and Mohr (1999) suggest that individuals exposed to domestic violence in childhood are also at risk for repeating the pattern of violence – as victims or perpetrators – in their own adult intimate relationships, but the costs of second-generation spousal violence are beyond the scope of this study.

Some violent incidents involve a third party sustaining physical injuries that require health care services or that force suspension of daily activities. Government and non-profit organizations are active in providing support for spousal violence victims in many ways: establishing social services such as shelters, crisis lines, and support centers, and providing a variety of victim services in collaboration with police, courts, and the community. Federal, provincial, and territorial governments also provide funding for a variety of prevention and awareness programs. As stated in the description of victim costs, the victim may miss work because of either physical or emotional distress, but actual work performance may also suffer. The victim may be consistently late or may not be able to concentrate on work tasks, and this kind of lost productivity will reflect in the employer’s output.

2.2.7 Cost item-specific models

The framework sets out the scope of the analysis and provides guidance for developing the many item-specific cost estimation models. One major difficulty is the disparity in the nature of each type of cost, which precludes a standard, uniform estimation method for all cost items. For example, the elements that comprise the police costs (e.g. salaries for police investigating crime, spending on tools used in investigations) are fundamentally different than elements that comprise the medical costs (e.g. ambulance use, medical staff salaries, overnight hospitalization costs). It follows that the sources and methods for calculating police costs are different from that for calculating medical costs. The effect that data limitations have on developing rigorous estimation methods is another challenge. In many cases, the best estimation method is not feasible because the appropriate data are not available.

Together, these two difficulties force each specific cost item to be examined individually. Each cost estimation model is explained in detail in the appropriate section of the report: 3. Justice System Costs, 4. Victim Costs, and 5. Third-Party Costs. In addition, complete and detailed calculations for each cost item are presented in the appropriate appendix: Appendix A: Justice System Costs, Appendix B: Victim Costs, and Appendix C: Third-party Costs.

2.3 Data Sources

The UCR2 is the main data source for the costs to the criminal justice system, while the 2009 GSS, Cycle 23 is the main data source for the victim and third-party costs. Police-reported data and self-reported data complement each other, and are both used to attain as comprehensive an account of spousal violence as possible. Other reliable sources have also been utilized including Statistics Canada publications, government-commissioned surveys and academic research.

2.3.1 Uniform Crime Reporting Survey 2 (UCR2)

The UCR2 survey is an administrative survey that captures detailed information on all *Criminal Code* violations reported to and substantiated by police services across Canada. The individual-level micro data indicates the relationship of the accused to the victim, which allows identification of spousal and common-law relationships, as well as whether the parties were divorced or separated at the time of the incident. The UCR2 survey records incidence, accusation, and charge statistics for each *Criminal Code* violation, and specifies the genders and ages of the offender and victim. The survey is comprehensive in both details and in geographic scope, as national coverage of the UCR2 survey was 99% in 2009. This study uses UCR2 data to find the number of incidents requiring police resources, which is then used to estimate the number of criminal court cases.

2.3.2 General Social Survey (GSS), Victimization, Cycle 23

The General Social Survey (GSS) is a regular annual survey conducted by Statistics Canada; each year or cycle focuses on a particular social subject. These surveys provide insight into social phenomena of current or emerging interest. The victimization cycle was first conducted in 1988 and now occurs every five years. It is the only national survey of self-reported victimization.

The target demographic is Canadians aged 15 and over who can conduct an interview in one of the official languages and who can be reached by landline telephone. Data collection for the territories in 2009 was carried out differently from the territories in that a portion of interviews

were conducted in person in an attempt to improve response rate and representativeness. Microdata for the territories were not accessible for 2004 or for 2009 and as such, references to the GSS are for provincial data only.

GSS respondents are asked about their personal experiences of criminal victimization, regardless of whether or not the incident was reported to police. Other questions inquire of the respondents' perceptions of crime, safety, and the justice system.

As not all crimes are brought to the attention of the police, the GSS provides 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 as recorded in the GSS gives a more comprehensive and accurate reflection of the prevalence and impact of spousal violence in Canada. The GSS victimization cycle contains two questionnaires and corresponding data files; the main file includes all questions relating to victimization of violence perpetrated by a current or former spouse, while the incident file includes questions relating to non-spousal victimization. Demographic information relevant to the cost items, such as gender, age, work status, annual income, education and family size, is recorded. The main file, which is used in this report, has a count of 19,422 respondents, and each respondent represents an average of approximately 1,400 non-institutionalized Canadians.

2.3.3 Other major data sources

- Police Administration Survey (PAS)
- Adult Criminal Court Survey (ACCS)
- Youth Court Survey (YCS)
- Court Personnel and Expenditure Survey (CPES)
- Prosecutions Personnel and Expenditure Survey (PPES)
- Legal Aid Survey (LAS)
- Adult Correctional Services Survey (ACS) and the Integrated Correctional Services Survey (ICS)
- Civil Court Survey (CCS)
- Central Registry of Divorce Proceedings (CRDP)
- 2006 General Social Survey (GSS, Cycle 20, Family Transition)
- Discharge Abstract Database (NAD)
- National Ambulatory Care Reporting System (NACRS)
- National Physician Database (NPD)
- Transition Home Survey (THS)
- Victim Services Survey (VSS)
- National Longitudinal Survey of Children and Youth (NLSCY)
- Academic research as cited
- Government and institution reports

2.4 Limitations

Cost analysis of a widespread, complex social issue such as spousal violence involves limitations related to data availability, data reliability, and scope and method. Although efforts are made to include all reasonable impacts of spousal violence, the paucity of data has rendered this impossible. Some cost items are underestimated as a precaution while others are omitted completely. Underestimation occurs where it is necessary to make an assumption because of insufficient data and where more than one assumption is possible; in these cases, the assumption resulting in a more conservative estimate is used in order to ensure a lower bound.

2.4.1 Data availability

The main limitation of this study is the lack of available data. Information gaps lead to omission or underestimation of some cost items, and assumptions adopted prohibit a fully accurate overall estimate of costs. For example, calls to crisis lines are anonymous and so it is impossible to determine how many calls a single caller makes; as such, an average number must be assumed based on qualitative data obtained from frontline workers. The lack of data may alternatively force the use of next best available data. For example, the number of children who have developed or will develop hyperactivity solely as a result of exposure to spousal violence in 2009 is unknown, but prevalence rates for child witnesses and non-witnesses can be calculated from a Statistics Canada publication (Dauvergne and Johnson 2001) that uses regression analysis to compare hyperactivity in the two groups. The hyperactivity prevalence rates of the two groups can then be used in the calculation of the number of children exposed to violence in 2009 who develop hyperactivity. Making necessary assumptions and using the next best available data are both common problems. A high-quality analysis of the economic impact of spousal violence would require very specific data that would be difficult to collect even through targeted studies or surveys.

2.4.2 Data reliability

The reliability of available data sources is also a major issue. The UCR2 survey collects data from police jurisdictions across Canada. Having individual police services report their own data may result in an aggregation of dissimilar data in the UCR2 survey. In addition, each jurisdiction has its own procedures and policies. For example, while all jurisdictions have some form of pro-charging or pro-prosecution policy for domestic violence, the individual responsible for the decision to lay a charge differs by jurisdiction. In British Columbia and Québec, the Crown makes the decision to lay a charge, while in New Brunswick it is the police that lay the charge based upon advice from the Crown (Department of Justice 2003, 11).

As noted previously, the UCR2 survey only records incidents that are reported to police. Based on self-reported statistics, the UCR2 therefore does not include the majority of spousal violence incidents. Victims and suspecting third parties may not report the incidents to police because of the individual's "circumstances, feelings, beliefs and level of knowledge about family violence" (Department of Justice Canada, "Family Violence: Department of Justice Canada Overview Paper" 2009, 6). However, the police-based nature of the survey does make it suitable to examine the criminal justice system costs as the actual criminal justice system spending is based on the incidents that are brought to the attention of police.

The main limitation of the GSS is its lack of complete and comprehensive coverage. The GSS coverage may exclude certain demographic and socio-economic groups, which may lead to a misrepresentation of these groups after weighting techniques are applied.

One particular source of underrepresentation is that the survey is conducted solely by landline telephone. Recent social and technological developments make it costlier and more difficult to conduct representative telephone surveys (Tourangeau 2004). These developments include the increased use of landline telephone features such as caller identification, call blocking, and answering machines. In addition, many individuals and households cease using landline telephones altogether in favour of cellular phones. For instance, the percentage of households relying solely on cellular phones increased from 6.4% to 13.0% from 2007 to 2010.¹² In the 2009 GSS, persons with only cellular telephone service were excluded from sampling. While major disparities between the sample and the population in terms of gender, age, income, education, and marital status are partially addressed by the use of weighting techniques and quota sampling, the bias resulting from non-representative coverage cannot be completely mitigated by these techniques. Specifically, young people are more likely to have cellular phones only (Arcturus Solutions 2008) and therefore younger demographic groups are more likely to be underrepresented by the 2009 GSS.

The failure of the GSS to capture persons who are institutionalized at the time of the survey is a second reason for the possible misrepresentation of demographic groups. Individuals staying in shelters, retirement homes, hospitals, correctional facilities and other non-traditional accommodations will not be accessible through the methods used in the GSS. People in these institutions may have different victimization rates than people in the non-institutionalized population, and as a result, the GSS may not accurately estimate the prevalence of spousal violence.

Another related problem of misrepresentation may result from the criterion that respondents must complete the survey in English or French. This excludes a significant number of people from consideration to be a GSS respondent, as 1.6% of Canadians could not speak either official language in 2006 (Canadian Heritage 2010). Language minorities, such as immigrants or refugee claimants who are not proficient in either official language or Aboriginal persons in remote communities who speak only their native language, are the most obvious groups affected by this requirement.

The issues discussed above are contributors to imperfect coverage by the GSS. In addition, note that the non-response rate for the 2009 GSS was 38%. Little or nothing is known about these non-responding cases, and so the results may be biased to the extent that the non-responding cases differ from those that provided responses.

Another limitation of the GSS is its reliance on respondents to accurately recall events that may have been emotionally traumatizing. Over time, events may become altered in memory and victims may not remember details of victimization experiences (see Perreault and Brennan 2010). Some respondents may not be candid intentionally. The interpretation of questions, a fundamental element of surveys, can vary between individuals despite extensive focus group and pre-testing.

¹² Statistics Canada, "Residential Telephone Service Survey", *The Daily*, 15 June 2009 and 5 April 2011.

The GSS uses a structured, closed-ended questionnaire. Respondents have no opportunity to describe the incidents, and instead must respond to questions posed by the telephone interviewer. Spousal violence is highly contextual. For example, a man could describe an incident where he was assaulted by his spouse, when in reality, his spouse may have been acting out of self-defence. It is important to bear this in mind when interpreting GSS results.

Issues also arise from the structure of GSS questions. Specifically, there is insufficient information to determine whether outcomes of violence were a result of one single incident or a series of repeated incidents. For example, one victim may be hospitalized once as a result of a single violent incident while another victim may be hospitalized multiple times as a result of multiple violent incidents. However, both of these cases are recorded as a one-time hospitalization, as the response to that survey question is only yes or no. The lack of clarity makes it impossible to identify the link between hospitalizations and incidents that caused those hospitalizations. As this problem extends to all of the questions regarding outcomes of violence, many cost estimates in this report are based on the number of victims, not the number of incidents. Given that almost one half of victims stated that they had been victimized on more than one occasion, and that injuries and psychological trauma can be worsened with repeat victimizations (as is often the case in spousal violence), this approach might result in cost underestimation.

One reliability issue shared by both the UCR2 survey and the GSS is the possibility that they present a distorted picture of the spousal violence landscape. There may be circumstances common to relationships in which spousal violence is present that consistently prevents one group of victims from being able to report their victimizations. For example, in situations involving complete control and dominance of one spouse over another, the victim may not have the ability (being physically prevented by injuries or lack of resources, or emotionally prevented by fear of reprisal or harm to children) to contact police to report the crimes committed by the offending spouse, or the offending spouse may not allow the victim to answer the phone, thus preventing the victim from taking part in the GSS. Should either of these situations typically involve one specific demographic of victims (women, for example), then both the UCR2 and the GSS would report lower numbers of victimizations for this group as compared to other groups (men).

2.4.3 Scope and method

Estimating the costs of crime is complicated by two initial necessary choices: 1) the choice of what actually is a cost (the scope), and 2) the choice of what method will result in the most accurate estimate.

The first choice is challenged by the nature of society. Every component of society is interconnected with every other component, so that any action may have an effect on the rest of society regardless of how unconnected that action may seem. In addition, the action may produce future actions, and this cycle may continue indefinitely. In this way, providing a cost estimate of one specific action (e.g. spousal violence) necessitates a decision to include only a certain range of the theoretically limitless effects, both present and future. The difficulty is in determining what actually should be considered a direct consequence of the action. Some costs are obvious, such as any medical treatment to address injuries sustained by a victim, or police and court costs associated with the investigation and trial of an assault. Other costs are less obvious or may not be limited to one cause, such as the increased mental health risk associated with victims of sexual assault or the lost work productivity caused by distraction of the victim of repeated assaults.

Once the cost items have been decided, a method of calculating each one must be devised. The difficulty here arises due to the heterogeneity of the different cost items. For example, the method for calculating the direct medical costs of an assault victim cannot be used as the method for calculating lost work productivity caused by distraction. Even within each cost item, decisions must be made: is it feasible to interview every victim about his or her injuries and the associated medical costs, or do average medical costs across the population have to be applied instead? Methods that are more accurate may not be used in several cases based on the constraints of time and resources.

2.5 Methodology Discussions

Economic impacts, or costs (which is the term more widely used), can be categorized in many ways. A brief overview of commonly used cost classifications (definitions) is presented in this section.

2.5.1 Classifications of costs

Four common classifications of costs are: real vs. transfer; tangible vs. intangible; out of pocket vs. opportunity; and short-run vs. long-run. Access Economics (2004) and Laing and Bobic (2002) provide useful discussions of some of these classifications.

Real vs. transfer: Real costs diminish or prevent the growth of the overall production or consumption capacities of the economy. For example, a real cost is incurred if a victim of spousal violence is no longer able to work and exits the labour force, thus removing production capacity from the economy. Transfer costs are simply financial transfers from one economic agent to another that do not actually constrain economic growth. An example of a transfer cost would be the legal fees for a divorce caused by spousal violence that are paid from the victim to the lawyer, but neither has reduced their production capabilities because of the transfer.

Tangible vs. intangible: Tangible costs are actual expenditures that would not have occurred in the absence of spousal violence. For example, court costs for cases of spousal violence are tangible costs. Intangible costs are abstract and do not have a market price. Though they cannot be detected or precisely measured, they are negative realities that are caused by the spousal violence. The primary intangible costs are the pain and suffering of victims and the loss of life.

Out of pocket vs. opportunity: There are many parallels between tangible vs. intangible costs and out of pocket vs. opportunity costs. Out-of-pocket costs are direct, immediate expenditures that are easily measured because they have a price. In the case of spousal violence, out of pocket costs include everything from police costs (an out-of-pocket cost to the state) to medical costs for the victim (a combination of state and personal out-of-pocket costs) to funeral services (an out-of-pocket cost to the family of the victim). Opportunity costs are the costs of any good, service, or activity measured in terms of the value of the next best alternative forgone. For example, if a victim spends several hours with police on an investigation, that victim suffers from a lost opportunity to earn money or to enjoy leisure activities during these hours. In this particular case, even this off-work time is covered by the employer (such as leave with pay) – no actual wages were lost, the lost opportunity, valued at forgone hourly wages, would still be one measure of the opportunity costs of spending with justice system.

Short-run vs. long-run: Making the distinction between short-run and long-run costs is difficult because every individual situation is unique. Short-run costs are those immediate impacts that will likely eventually disappear, while long-run costs may only be incurred after the violence and are continually incurred over a long period of time. The difficulty is that costs considered as short-run, such as medical costs for a physical injury, may never stop incurring, while those impacts considered as long-run, such as mental health issues, may end relatively soon.

Every type of cost mentioned above is represented in this report, and there is great overlap among these classifications. However, this report does not explicitly categorize costs in any of these four ways, but instead separates costs in an original and unique way: justice system costs, victim costs, and third-party costs. This categorization allows for an examination of the effects that spousal violence has on different parties. As noted earlier, there is also a brief presentation of the costs categorized by who actually pays (the state, private sector, or individuals) at the end of this report.

3. Justice System Costs

A summary of both criminal justice system costs and civil justice system costs for spousal violence incidents in 2009 is presented in Table 3.1. Appendix A provides detailed calculations of each cost item.

TABLE 3.1: JUSTICE SYSTEM COSTS

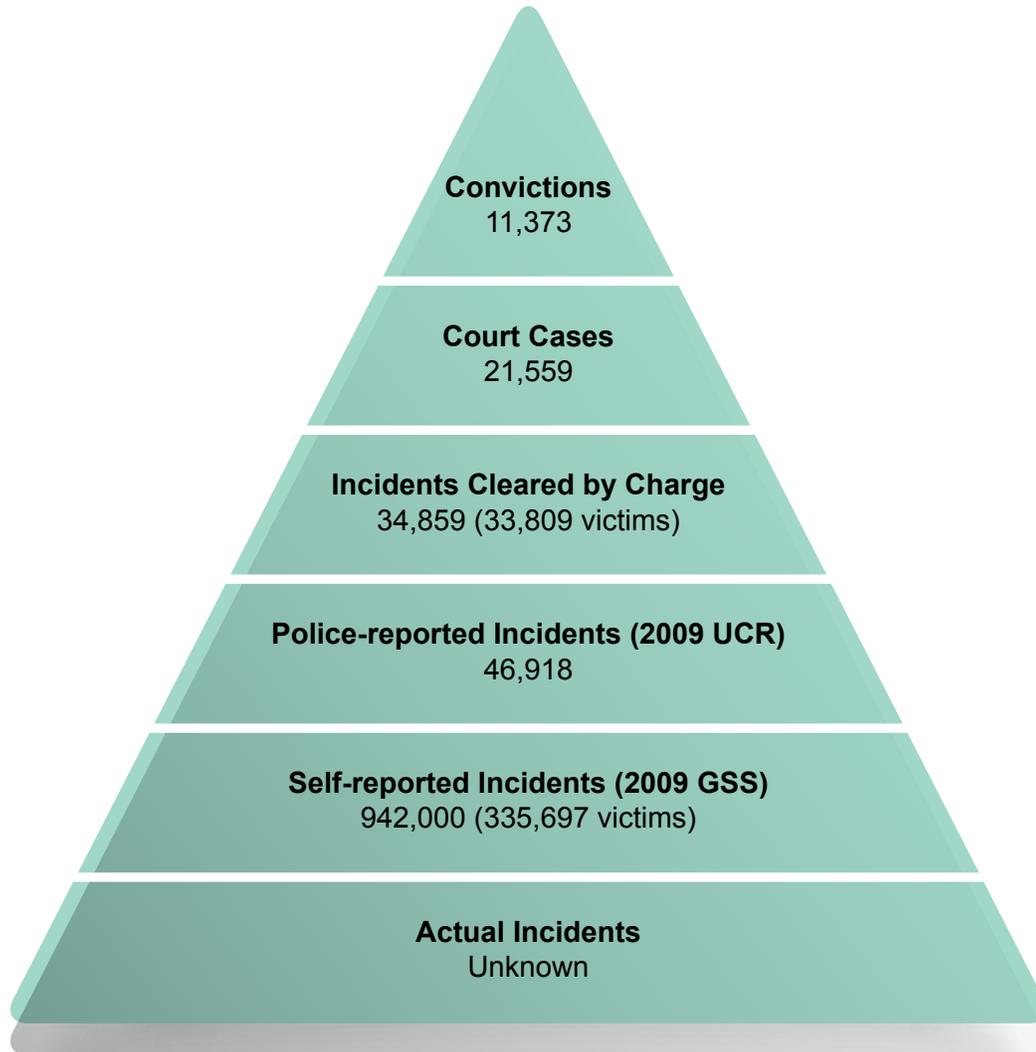
	Violence against females	Violence against males	Total
Criminal Justice System	\$271,964,457	\$48,102,455	\$320,066,911
Police	\$121,599,167	\$23,975,267	\$145,574,434
Court	\$25,763,472	\$4,588,151	\$30,351,623
Prosecution	\$21,346,584	\$3,801,558	\$25,148,142
Legal aid	\$14,847,274	\$2,644,113	\$17,491,387
Corrections	\$88,407,960	\$13,093,366	\$101,501,325
<i>Incarceration</i>	\$35,352,714	\$4,724,234	\$40,076,948
<i>Conditional sentences</i>	\$2,862,126	\$491,211	\$3,353,337
<i>Probation</i>	\$50,193,120	\$7,877,920	\$58,071,040
<i>Fines</i>	(\$135,276)	(\$22,689)	(\$157,965)
Civil Justice System	\$182,257,357	\$42,860,469	\$225,117,826
Civil protection orders	\$1,752,400	\$519,800	\$2,272,200
Divorce and Separation	\$33,162,930	\$7,778,959	\$40,941,889
Child protection systems	\$147,342,027	\$34,561,710	\$181,903,737
Total Justice Systems	\$454,221,814	\$90,962,924	\$545,184,737

Note: May not add to stated totals due to rounding

3.1 Criminal Justice System

The majority of spousal violence incidents are never reported to police. Of those that are reported, only a portion result in charges laid, fewer proceed to court, and even fewer result in a conviction. Figure 3.1 illustrates the attrition which occurs as incidents and cases move through the criminal justice system. Despite this attrition, spousal violence results in immense costs to the criminal justice system. The estimates of police, court, prosecution, legal aid, and corrections costs are presented in this section. Appendix A provides detailed calculations and sources for each cost estimate.

FIGURE 3.1: SPOUSAL VIOLENCE ATTRITION PYRAMID



Note: All figures for 2009.

3.1.1 Police

To calculate the economic impact of spousal violence on police services, a per-incident cost for each *Criminal Code* offence is estimated using the Canadian Centre for Justice Statistic's (CCJS) Crime Severity Index and these incident costs are then applied to the number of corresponding spousal violence incidents of each offence.

Total Canadian police expenditures in 2009 were \$12.3 billion; this figure includes salaries, wages, employment benefits, and operating expenses such as accommodation, fuel, and maintenance (Beattie 2009).¹³ However, only the costs associated with activities directly related to criminal incidents are required to calculate the economic impact of spousal violence and

¹³ Capital expenditures, funding from external sources, revenues, and recoveries are not included.

therefore only the proportion of the overall police budget that is allocated strictly toward police protection and investigation activities is considered. Walby (2004) infers that police services in the UK spend approximately 61% of resources directly addressing crime. After consultations with a police service in Canada, the proportion of police time allocated strictly to crime-related activities is estimated to be 65% in Canada.¹⁴

The Crime Severity Index assigns a weight to each offence according to the severity of the offence, where the severity is determined by sentence lengths. For example, the severity weight for homicide (including first degree murder) is 7,042, whereas the severity weight for common assault (level 1) is 23. The first step in estimating the police costs per incident is determining the “total severity” of each offence, which is done by multiplying the severity weight of each offence by the number of incidents of each offence. The second step is determining each offence’s “weighted proportion of severity” by dividing each offence’s “total severity” calculated in the first step by the summation of all of the “total severities”; for example, the “weighted proportion” of first degree murder is 1.2% and the “weighted proportion” of common assault (level 1) is higher (2.5%) because of the greater number of incidents of common assault (181,570 common assaults vs. 280 first degree murders). The third step is determining the “overall police expenditure” on each offence by multiplying each offence’s “weighted proportion” of severity by the total police budget (adjusted for the 65% proportion of police time allocated to criminal activities). The final step is determining the “per-incident police costs” for each offence by dividing the “overall police expenditure” on each offence by the number of incidents of each offence. Table 3.2 presents detailed information of police costs for **selected** offences; a complete table of all spousal violence violations is presented in Appendix A.

In 2009, 46,918 spousal violence incidents were reported to the police, and more than four fifths (81.2%) of these incidents were committed against women.¹⁵ By multiplying the per-incident costs of each offence by the number of corresponding spousal violence incidents of each offence and then summing over all offences, the total economic impact of spousal violence in 2009 on police services is estimated at **\$145,574,434**.

Police costs – SV against females	\$121,599,167
Police costs – SV against males	\$23,975,267
Total Criminal Justice System Costs, Police	\$145,574,434

¹⁴ Police in the UK have a greater variety of responsibilities than police in Canada. Initially, the proportion of police time spent directly on criminal activities was estimated at 75% for Canada, but after several consultations with the Ottawa Police Service this was revised to 65%. Other police duties (those not directly related to criminal activities) can include: traffic regulations (non-criminal), providing youth education seminars, coordinating community efforts, patrolling a regular route or responding to phone calls ranging from noise complaints to non-criminal emergency calls.

¹⁵ See footnote 1.

TABLE 3.2: POLICE COSTS FOR SELECTED SPOUSAL VIOLENCE OFFENCES[†]

Offences	Severity weights	Cost per incident	Spousal violence incidents against		Police costs for spousal violence against	
			F	M	F	M
Murder – 1st degree	7,042	\$344,444	25	4	\$8,698,086	\$1,391,694
Attempted murder	1,411	\$69,019	44	14	\$3,067,515	\$976,027
Aggravated sexual assault – level 3	1,047	\$51,225	9	0	\$465,678	\$0
Sexual assault – level 1	211	\$10,320	726	15	\$7,494,997	\$156,363
Assault with weapon causing bodily harm – level 2	77	\$3,785	4,124	1,812	\$15,611,108	\$6,859,252
Common assault – level 1	23	\$1,146	23,899	5,444	\$27,391,520	\$6,240,080
Robbery	583	\$28,517	102	24	\$2,909,331	\$691,326
Forcible confinement or kidnapping	477	\$23,332	1,068	29	\$24,911,308	\$683,470
Extortion	229	\$11,201	29	7	\$328,123	\$79,202
Criminal harassment	45	\$2,201	2,754	349	\$6,060,962	\$769,293
Threatening or harassing phone calls	17	\$832	843	289	\$701,356	\$240,225

Note: May not add to stated totals due to rounding.

[†] See Appendix A: Justice System Costs – A.1. Criminal Justice System – Police Costs for the full list of offences.

3.1.2 Court

Calculation of the economic impact of spousal violence on the courts requires the number of spousal violence court cases and the cost per court case.

The Adult Criminal Court Survey (ACCS) and the Youth Court Survey (YCS) collect data on criminal court cases, but these surveys do not capture the relationship between the victim and the accused. Therefore, the number of spousal violence court cases must be estimated using data from the UCR2, the ACCS, and the YCS. The UCR2 records the clearance status of each incident reported to police, and it is possible to determine how many spousal violence incidents had the clearance status “cleared by charge”, which indicates that a charge was laid. Police cases in which there is a charge may proceed from police jurisdiction to the next phase of the criminal justice system, the courts, but not all charges result in court cases. A charge may be dropped, withdrawn after the Crown’s post-charge screening (where relevant), diverted to alternative measures, or combined into one case with other charges incurred by an accused person during an incident. The number of court cases will therefore not be equal to the number of police charges. The rate of “charges resulting in court cases” is estimated by dividing the number of court cases by the number of charges for all violent violations with no distinction made between different relationship types, as the court data does not capture relationship types. According to the UCR2, the total number of offenders who were charged with a violent crime in 2009 was 157,245, while the court surveys record a total of 100,302 court cases involving violent offences, and dividing the latter by the former results in a rate of 63.8%. This rate is then applied to the number of spousal violence offences in which a charge was laid (33,798), resulting in

21,559 spousal violence court cases. This total estimate is divided into 18,300 cases for violence against females and 3,259 cases for violence against males, which are obtained using the ratio of spousal violence offenders who committed offences against females to spousal violence offenders who committed offences against males. These estimates of court caseloads are used as the base numbers to calculate not only court costs, but also prosecution costs, legal aid costs, and corrections costs.

The cost of each court case must be estimated from the most recent court expenditures data available: the 2002/03 Courts Personnel and Expenditures Survey (CPES), summarized in Statistics Canada's Overview of the Courts Personnel and Expenditures Survey (2004a). The CPES includes expenditure data for criminal courts and civil courts as a combined total, but many costs are excluded, such as building occupancy costs, maintenance costs and lease costs. Since the court expenditures data is only available as a total of criminal and civil costs, both the number of criminal and civil court cases must be known to calculate the average cost of a court case. The number of civil court cases in 2002/2003 is estimated by calculating the civil case initiation rate in the population for the years preceding 2009 from Statistics Canada (2011a; 2010a). This rate, 2.07%, is multiplied by the population of the relevant jurisdictions in 2002/2003 to obtain the number of civil court cases in 2002/2003. The estimate of civil court cases in 2002/2003 is 648,277 and when added to the 496,880 criminal court cases, the total number of court cases in 2002/2003 is 1,145,157. Total court expenditures in 2002/2003 were \$1.151 billion and the average cost per court case was therefore \$1,007.

The ACCS presents another important consideration: the average number of appearances per criminal case and the average duration of criminal cases increased by approximately 23% from 2002/03 to 2008/2009. There has been a general trend towards lengthier, more complex court cases and this should be reflected in the court cost estimate. Therefore, in addition to the adjustment for inflation, the average court cost is adjusted by a multiplier of 1.23 to account for the increased complexity and the average criminal court cost per case is estimated at \$1,408 in 2009.

Multiplying the cost per court case by the estimated number of spousal violence court cases, the total economic impact of spousal violence in 2009 on criminal courts is estimated at **\$30,351,623**.

Court costs – SV against females	\$25,763,472
Court costs – SV against males	\$4,588,151
Total Criminal Justice System Costs, Court	\$30,351,623

3.1.3 Prosecution

Estimating the prosecution costs due to spousal violence requires the number of spousal violence court cases and the prosecution cost per court case. As estimated above, the total number of spousal violence criminal court cases was 21,559. The number of court cases for violence against females was 18,300 and the number of criminal court cases for violence against males was 3,259.

The prosecution cost per court case is derived from the 2002/03 Prosecutions Personnel and Expenditures Survey (PPES), as summarized in Statistics Canada's Overview of the Prosecutions Personnel and Expenditures Survey (2004b). According to the PPES, the total expenditure on criminal prosecution in 2002/2003 was \$352 million and the total criminal caseload was

422,096.¹⁶ Dividing the expenditure by the caseload gives an average prosecution cost per criminal case in 2002/2003 of \$834.¹⁷ Adjusting for both inflation and the increasing complexity of court cases (a factor of 1.23), the prosecution cost per criminal case is estimated at \$1,166 for 2009.

Applying the prosecution cost per criminal case to the number of spousal violence court cases, the total economic impact of spousal violence on prosecution in 2009 is estimated at **\$25,148,142**.

Prosecution costs – SV against females	\$21,346,584
Prosecution costs – SV against males	\$3,801,558
Total Criminal Justice System Costs, Prosecution	\$25,148,142

3.1.4 Legal aid

The economic impact of spousal violence on legal aid is estimated using the number of criminal court cases and the legal aid cost per court case. The total number of spousal violence criminal court cases was 21,559, as calculated above. The number of criminal court cases for violence against females was 18,300 and the number of criminal court cases for violence against males was 3,259.

The legal aid cost per court case must be estimated using data from Statistics Canada (2010b and 2011c). These reports show that “direct” legal aid service expenditures for criminal matters in 2009 were \$313,490,065, where “direct” legal aid service expenditures include salaries for duty counsel and staff lawyers. However, “other” legal aid expenditures, which include indirect services such as external project expenditures and research activities, are not separated into criminal and civil categories, so in order to include “other” legal aid expenditures in the overall legal aid estimate, the civil court contributions to “other” legal aid expenditures must be excluded. To do so, the proportion of “direct” legal aid expenditures attributable to criminal matters is calculated, and the resulting percent is applied to the “other” legal aid expenditures, which leaves an estimate of the “other” legal aid expenditures on criminal matters. Summing the “direct” and “other” legal aid expenditures on criminal matters results in \$391,176,171 of total legal aid spending on criminal matters. As the ACCS and YCS record 482,144 criminal cases in 2009, the average legal aid expenditure per criminal court case in 2009 was \$811.¹⁸

Multiplying the legal aid cost per case by the number of spousal violence court cases, the total economic impact of spousal violence in 2009 on criminal legal aid is estimated at **\$17,491,387**.

Legal aid costs – SV against females	\$14,847,274
Legal aid costs – SV against males	\$2,644,113
Total Criminal Justice System Costs, Legal Aid	\$17,491,387

¹⁶ Since expenditures from British Columbia are excluded as they did not report to the PPES in 2002/2003, the caseload number in British Columbia is also not included.

¹⁷ In order to be consistent with expenditures, the criminal caseload from British Columbia was excluded. See footnote 16.

¹⁸ In the report, the calculated legal aid expenditure per case is only an average, obtained by dividing the total legal aid expenditures by the total number of cases. Therefore, this figure does not reflect the actual per-case legal aid spending for those cases that received legal aid.

3.1.5 Correctional services

Four sentence outcomes will be analysed: custody, conditional sentences, probation, and fines. The ACCS and YCS record the number of convicted offenders, but they do not indicate offenders of spousal violence specifically. The number of convicted spousal violence offenders must therefore be calculated from the estimates of the number of spousal violence court cases and ACCS data on conviction rates. The estimated number of spousal violence court cases is 21,559, of which 18,300 are for violence against females and 3,259 are for violence against males.

According to the ACCS, conviction rates for spousal violence-related offences in 2009 ranged from 16.7% (females accused of attempted murder) to 70.8% (males accused of other sexual offences), with the exact rate depending on the type of offence and the gender of the accused. Higher conviction rates were observed for male perpetrators than for female perpetrators for all violations. The number of spousal violence court cases for each offence type is obtained by applying the rate of “charges resulting in court cases” to the number of spousal violence incidents with a clearance status of “cleared by charge”; both are explained above in the section on Court Costs. These case numbers are then multiplied by the conviction rates for each offence, separately for male and female accused, to obtain the number of convicted persons of each offence type by gender.

Convicted offenders who receive a custody sentence, a conditional sentence, probation, or a fine are examined. In cases where offenders received multiple sentences, only the most serious sentence is considered. Among offenders convicted of spousal violence, 60.2% received probation as their most serious sentence, followed by custody (23.8%), conditional sentences (4.5%) and fines (3.2%). The remaining 8.3% of convicted offenders received other types of sentences, including restitution, absolute and conditional discharge, payment of legal costs, and suspension of driver’s license. Table 3.3 presents the distribution of most serious sentences for spousal violence-related convictions by sentence type and gender.

TABLE 3.3: NUMBER AND DISTRIBUTION PROPORTION OF MOST SERIOUS SENTENCE BY SENTENCE TYPE AND GENDER OF ACCUSED, 2009

Custody		Conditional sentences		Probation		Fines		Other		Total	
M	F	M	F	M	F	M	F	M	F	M	F
2,515	188	442	70	5,972	877	319	50	787	154	10,035	1,339
25.1%	14.0%	4.4%	5.2%	59.5%	65.5%	3.2%	3.7%	7.8%	11.5%	100%	100%

3.1.5.1 Custody

Convicted offenders who receive a custody sentence of 24 months or more serve their sentences in federal custody, while custody sentences of less than 24 months are served in provincial institutions. The cost of holding offenders differs between federal and provincial institutions, so these two custody types are examined separately. Offenders in all correctional institutions may be released prior to the completion of the full sentence length, either on parole or by the standard statutory release that is usually granted after serving two thirds of a sentence,¹⁹ and sentence time served in a corrections institution is calculated separately from sentence time served in the community. The sentence types, sentence lengths, parole grant rates, and incarceration costs vary

¹⁹ Due to data limitations, only full parole is considered; partial parole is not considered.

between male and female offenders, particularly for federal custody, and estimates are calculated separately by both gender of the offender and gender of the victim. The costs of remand are not included in custody estimates due to data limitations.

Federal custody. It is estimated that 25 male offenders and 6 female offenders were admitted to federal custody for committing spousal violence-related crimes in 2009.²⁰ Calculations based on ACCS data show that the average federal custody sentence length for crimes committed in 2009 (for both male and female inmates) was 1,245 days. According to *The Corrections and Conditional Release Statistical Overview Annual Report 2010* (Public Safety Canada 2010), the full parole grant rate in 2009 was 70.8% for federal female inmates and 39.3% for federal male inmates. Compared to male offenders, female inmates also served a shorter proportion of their sentences before being released on parole (36.1% vs. 38.5%). In addition, the successful completion rate for parole was 81.2%, which results in estimates of 8 male and 3 female inmates successfully completing their parole.

Incarcerated offenders who are not granted parole are normally eligible for statutory release after serving approximately two thirds of a sentence, except in cases of 1st degree murder, 2nd degree murder, and some other rare offences in which offenders are considered a high risk to recidivate. It is therefore assumed that 95% of federal inmates not released on parole were released on statutory release and that the remaining 5% of non-paroled inmates served the entire sentence time in prison. Public Safety Canada (2010) reports that the successful completion rate of statutory releases for federal offenders was 61.7% in 2009. Offenders who did not successfully complete their sentences in the community (either parole or statutory release) are assumed to have breached the release conditions at the midpoint of the parole or statutory release, and the offender is then assumed to be immediately returned to a correctional facility where the remainder of the sentence is served. Due to lack of data, those cases where a new charge was laid are not considered.

Male offenders and female offenders spent an estimated 19,462 and 4,063 days respectively in federal incarceration for spousal violence-related convictions, and the average daily cost of federal incarceration was \$292 and \$556 for male and female inmates respectively (Public Service Canada 2010). It follows that the federal incarceration costs total \$5,682,904 for offenders convicted of spousal violence against females, and \$2,259,028 for offenders convicted of spousal violence against males.

The total number of days served in the community (either parole or statutory release) is estimated at 11,664 for male offenders and 3,407 for female offenders. According to Public Safety Canada (2010), the annual cost of supervising a federal offender in the community was \$29,476 in 2008/09, equivalent to \$81 per day in 2009. Therefore, the total community supervision costs were \$944,784 for offenders of spousal violence against females and \$275,967 for offenders of spousal violence against males.

²⁰ These data include only offenders convicted of spousal violence incidents. A higher number of spousal violence offenders is found when participation in the Correctional Service of Canada's (CSC) National Family Violence Prevention Programs (<http://www.csc-scc.gc.ca/text/prgrm/fv-eng.shtml>) is considered. However, these programs are for offenders who have been abusive to intimate partners but who have not necessarily been convicted of the incidents of intimate partner violence; they may be in custody for an unrelated offence.

In addition, Correctional Service Canada (CSC) offers a variety of family violence prevention programs to reduce violence and abuse toward intimate partners and family members. These include the high intensity Family violence Prevention Program, the high intensity Aboriginal Family Violence Prevention Program and the Family Violence Prevention Maintenance program. In 2009, the total expense related to the delivery of these national programs was about \$3,560,616. As family violence also includes violence against parents, children, siblings and other extended family, spousal violence only accounts for a proportion of all family violence. According to *Family Violence in Canada: A Statistical Profile 2009* (Burns et al. 2009), there were a total of 75,779 victims of family violence in 2007 where 40,165 were victims of spousal violence. It follows that spousal violence cases represent approximately 53% of all family violence cases. It is assumed that the same percentage of the total expenditures also pertained to offenders who committed spousal violence. Therefore, it is estimated that \$1,887,126 was spent on a variety of family violence prevention programs for offenders of spousal violence specifically, with about \$1,648,306 was for male offenders and \$238,820 was for female offenders.

In sum, the total economic impact of spousal violence in 2009 on federal custody correctional services is estimated at \$11,049,809.

Provincial custody. It is estimated that there were 2,489 male offenders and 182 female offenders admitted to provincial custody in 2009 for spousal violence-related crimes. Using ACCS sentencing data, the average provincial custody sentence lengths in 2009 for relevant offences are estimated at 113 days for male offenders and 86 days for female offenders. Offenders sentenced to provincial custody are generally granted full parole after serving one third of the total sentence. According to the National Parole Board (2010), the provincial full parole rate was 38.5% in 2009, and 82.7% of paroles were successfully completed. All offenders in provincial custody not granted parole are released into community supervision, by law, after serving two thirds of the total sentence. For those offenders who were granted but did not successfully complete parole, it is assumed that the breach of release conditions and subsequent re-incarceration occurred at the midpoint of the parole period, and that the remainder of the sentence was served in a correctional facility. Costs related to new offences and charges are not considered due to lack of data.

According to the ACCS data in *Adult Correctional Services in Canada, 2008/2009* (Calverley 2010), the average daily cost of holding a provincial offender in incarceration was \$161 in 2009. No official provincial parole cost data is available, so based on available information sources it is assumed that provincial parole incurs a daily cost of only 20% of the cost of provincial incarceration,²¹ which amounts to \$32 per day.

The total economic impact of spousal violence in 2009 on provincial custody correctional services is estimated at \$29,027,139.

²¹ The John Howard Society of Ontario. "Fact Sheet #9: Reconsidering Community Corrections in Ontario." 1997. <<http://www.johnhoward.on.ca/pdfs/fctsh-9.pdf>>.

3.1.5.2 Conditional sentences

An estimated 442 male offenders and 70 female offenders received conditional sentences for spousal violence-related offences in 2009. According to Department of Justice Canada (2000), the average length of a conditional sentence for family violence-related offences in 1996/1997 was 9 months (270 days). This average is applied to those convicted of spousal violence crimes in 2009. The daily cost of supervising an offender with a conditional sentence is estimated at \$24.²²

The number of offenders with a conditional sentence is multiplied by both the average length of a conditional sentence and the daily cost of supervision. The total economic impact of spousal violence in 2009 on correctional services through conditional sentencing is estimated at \$3,353,337.

3.1.5.3 Probation

An estimated 5,972 male offenders and 876 female offenders were sentenced to probation after being convicted of committing a spousal violence-related offence in 2009. According to *Family Violence in Canada: A Statistical Profile 2004* (Brzozowski 2004), the average length of probation for spousal violence-related offences was 424 days in 2002; this length is applied to spousal violence offenders convicted of crimes in 2009. The daily cost of supervision associated with probation is assumed to be \$20, which is less than the daily cost of the more rigorous conditional sentence.²³

Probation costs are estimated by multiplying the number of offenders on probation by both the average length and cost of probation. The total economic impact of spousal violence in 2009 on correctional services through probation is estimated at \$58,071,040.

3.1.5.4 Fines

In contrast to all other cost items in the report, fines are considered revenue to the criminal justice system. The overall framework does not recognize offenders as being included in the social welfare function and any financial contribution by offenders into the system is therefore classified as a benefit. It follows then that fines are also unique in this report in that they are a source of revenue to the criminal justice system. While fines are not considered an economic impact on the criminal justice system, in the analysis of the financial burden by who actually pays (found in the final section of this report), fines are counted as revenue to the criminal justice system, but as a cost to individuals.

In 2009, a fine was the most serious sentence for a total of 369 convicted spousal violence offenders. Brzozowski (2004) records the average fine amount in spousal violence cases to be the equivalent of \$428 in 2009. Applying the number of fines to the average fine amount gives an estimated net benefit of \$157,965 to the correctional system.

²² Source: Victims of Violence. "Research – Conditional Sentences." 2011. <http://www.victimsofviolence.on.ca/rev2/index.php?option=com_content&task=view&id=332&Itemid=22>. This source notes that it costs almost \$50,000 less per year to supervise an offender with a conditional sentence than to hold an offender in provincial custody. The daily cost of provincial custody, as seen in 3. Justice System Costs – 3.1 Criminal Justice System – Correctional services – Provincial custody, is \$161. Calculating the yearly cost of provincial custody, subtracting \$50,000, and converting to daily value gives a cost of \$24 per day for supervising an offender with a conditional sentence.

²³ No information on the cost of supervising an offender with a probation sentence is available. The \$20 daily cost is an estimate based on the \$24 daily cost of conditional sentence supervision estimated in 3. Justice System Costs – 3.1 Criminal Justice System – Correction services – Conditional sentences, taking into account the more rigorous nature of a conditional sentence.

3.1.5.5 Total economic impact on correctional services

In sum, the total economic impact of spousal violence in 2009 on the Canadian correctional system is estimated at **\$101,501,325**.

Correctional services costs – SV against females	\$88,407,960
Correctional services costs – SV against males	\$13,093,366
Total Criminal Justice System Costs, Correctional Services	\$101,501,325

3.2 Civil Justice System

Although the civil justice system may be relevant to spousal violence matters in several respects, such as torts and damages, this report covers the estimated costs for civil protection orders; court and legal aid costs related to divorce; and child protection costs.

3.2.1 Civil protection orders

To date, six provinces and three territories have proclaimed legislation that provides for court ordered civil remedies to protect persons subjected to family violence. The legislation allows for court applications for civil protection orders to provide for immediate or longer-term safety measures to protect victims from further violence. Such orders can, for example, impose no contact/communication conditions or provide for temporary exclusive occupation of the home or seizure of weapons.

According to the GSS, there were 3,843 female victims and 1,140 male victims who obtained a restraining order or protection order from a civil court in 2009 due to spousal violence. The cost of issuing a civil protection order varies significantly among the provincial and territorial jurisdictions. Based on information provided by provinces, the average cost of issuing a civil protection order in Canada in 2009 is estimated at \$400. Note that due to lack of data, this figure does not include any legal fees that individuals may incur in obtaining or defending against these orders. This issuing cost only accounts for the wages of justice personnel who have some responsibility in issuing protection orders (justices of the peace, provincial court judges, superior court judges, clerks, and court recorders) and the time spent by each of the personnel on the issuing process.

Not every civil protection order application will be granted. Provincial data suggests that the number of application for civil protection order was about 1.28 times the number of order issued. Therefore, it is possible to estimate the number of orders applied for but not granted, for which resources were still used to review and to evaluate the applications. For the estimated 1,404 applications which were denied, it is assumed that the average cost of reviewing was lower at \$200.

The total costs of issuing of civil protection orders as a result of spousal violence in 2009 are therefore estimated at **\$2,272,200**.

Civil protection orders costs – SV against females	\$1,752,400
Civil protection orders costs – SV against males	\$519,800
Total Civil Justice System Costs, Civil Protection Orders	\$2,272,200

3.2.2 Divorce and separation

A divorce is the legal dissolution of a legal marriage. In Canada, divorce cases are governed by the legislation contained in the federal *Divorce Act*. Under the *Divorce Act*, marital breakdown is the only ground for divorce and it can be established in one of three ways: i) living separate and apart for at least one year (separation), ii) adultery, and iii) mental or physical cruelty. The vast majority (95%) of divorces in Canada are based on the grounds that the couple has been separated for at least one year.²⁴ While the federal *Divorce Act* generally applies when divorcing parents need to settle child custody, access, and support issues, provincial and territorial laws apply regarding child custody, access and support when unmarried parents separate or when married parents separate and do not pursue a divorce. Provincial and territorial laws also apply to some issues in divorce proceedings, for example property issues.

In order to obtain a divorce, one or both parties of the marriage must file an application for divorce. In Canada, all divorces must be granted by a superior court. In most cases, the parties can work out arrangements with respect to custody, access, support, and property either on their own or with the help of a lawyer or mediator. This agreement can be turned into a written separation agreement or incorporated into a court order. In these cases, the divorce will proceed through court as uncontested. If the divorcing couple cannot agree on one or more issues related to the divorce, then the divorce will proceed as contested.

This section attempts to estimate the costs of legal actions (in the civil justice system) that are associated with the breakdown of a relationship due to spousal violence, either by way of divorce or separation. Note that since legal aid is only provided in a small proportion of divorces, the costs of legal assistance via private lawyers are therefore a private burden, and will be presented in the Victim Costs section.

The first step of this estimation is to determine the proportion of separations and divorces caused primarily by spousal violence, but in Canada, little is known. Across other countries, there is no single agreed-upon value as countries boast various cultural, economic, and legal differences. Even ascertaining a single agreed-upon value within a country is itself difficult due to the lack of national data sources and the inherent differences in how separations and divorces are measured by different data sources.

As there is little Canadian evidence, data and studies from culturally and legally similar countries (such as the US and the UK) are consulted to estimate the proportion of divorces caused by spousal violence in Canada. Work on this topic has been ongoing since the 1960s. Levinger (1966), using a sample of 600 divorcing couples, finds that 37% of divorces were caused by spousal violence in the US. Other US findings range from 19% of divorces caused by spousal violence (Kurz 1996) to 57% of women citing violence as a major factor in divorce (Ellis and Stuckless 1996). A Canadian study from the mid-1990s shows that 19% of divorced or separated women had been abused while their relationship was intact (Johnson and Sacco 1995). The research cited thus far may be outdated as the social and cultural stigmas attached to divorce and to acknowledging violence within relationships may have changed over time. These studies are, however, instructive and thus, are taken into consideration for the cost estimate.

²⁴ Statistics Canada. 2011. Health Statistics Division, Canadian Vital Statistics, Divorce Database and Marriage Database.

Findings on the proportion of divorces caused by spousal violence crucially depend on the source of data or the type of survey. The proportion suggested by self-reported surveys is considerably higher than the proportion obtained from court case reviews or lawyer-reported surveys. For example, Walby (2004) uses questions related to interpersonal violence from the self-reported 2001 British Crime Survey to estimate that 29% of divorces in the UK were caused by spousal violence; and a 2008 telephone survey of more than 1,500 people in the US suggests that 36% of respondents divorced because of physical or verbal abuse.²⁵ Reviewing court divorce files from 1996 in Virginia, Brinig and Allen (2000) find that cruelty is cited as a cause in only 6% of divorce filings. UK organization Grant Thornton has conducted an annual matrimonial survey since 2003 in which family lawyers are canvassed, and from 2006 to 2009, the lawyer-reported survey found that, on average, emotional or physical abuse was the top reason for divorce in 10.3% of cases.²⁶ The results of self-reported surveys, court data, and lawyer-reported surveys are all considered here. Averaging Walby's (2004) finding of 29% and the finding of Grant Thornton's recent annual survey (10.3%), it is calculated that 19.7% of divorces are caused primarily by spousal violence.

Divorces initiated each year are recorded in the Central Registry of Divorce Proceedings (CRDP), which was established within the Department of Justice by the *Divorce Act of 1968*. It is estimated that in 2009 approximately 81,284 divorce applications were received by the CRDP.²⁷ Note that this number does not reflect the number of granted divorces in 2009, but rather the number of cases where proceedings were initiated. Using the proportion estimated above (19.7%), it is estimated that 16,013 of these initiated divorces were primarily caused by spousal violence in 2009.

Legal fees vary considerably between the two broad types of divorces – contested and uncontested. According to Kelly (2010), the majority of divorce cases (81%) handled through civil courts (in seven jurisdictions) in 2009/10 were uncontested, where both parties agreed to the divorce and any related issues, such as support and child custody and access arrangements. It follows then that 19% were contested. Applying these proportions, it is estimated that 3,042 divorce cases caused by spousal violence were contested and 12,971 were uncontested.²⁸ As the 2009 CRDP data suggests that for contested divorces, 94.7% of divorce applicants and 78.6% of respondents had legal representation, and for uncontested divorces, 63.6% of divorce applicants and 26.8% of respondents had legal representation²⁹, it is estimated that there

²⁵ Kimball, Michele. "Women Cite Abuse, Men Cite Sex as Top Reasons for Divorce." 2008. <<http://www.divorce360.com/divorce-articles/causes-of-divorce/information/why-americans-divorce.aspx?artid=169>>. The telephone survey was conducted by GFK Roper.

²⁶ Results obtained from a special data request to Grant Thornton.

²⁷ This number is an estimate, and it does not account for duplicate or invalid applications. As divorces (divorce decision/applications) that were caused by spousal violence in 2009 might not occur until a later year, it is assumed that the numbers of divorce applications in those following years are the same as the number in 2009. Therefore, the 2009 statistics are used. In addition, it has been noted that violence in multiple years might all contribute to the divorce decision, but as explained in the methodology section, using the number of divorce initiations in one year can be justified under certain assumptions.

²⁸ As it is unknown that how many of spousal violence caused divorce cases are contested (versus uncontested), the percentages of general divorce cases are applied here.

²⁹ Both "uncontested" and "on-consent" divorces in the CRDP are classified as "uncontested" divorces in this report. The main difference between "uncontested" and "on-consent" divorces in the CRDP is that the former usually involves only one spouse filing an application, while the latter involves both spouses signing a consent agreement. They are similar in that neither requires an actual hearing in court before a judge, and therefore, it is reasonable to classify both as "uncontested".

were 5,274 legal representatives involved in the 3,042 contested divorces and 11,726 legal representatives involved in the 12,971 uncontested divorces where spousal violence was the primary cause.

According to the *Canadian Lawyer's 2009 Legal Fees Survey* (Harris 2009), the average legal fees in 2009 for contested divorces and uncontested divorces were \$12,562 and \$1,342, respectively. Multiplying the number of legal representatives by the average legal fees of each divorce type results in an estimated total of \$81,987,747 in legal fees. Note that these legal costs were incurred by both legal aid and private lawyers.³⁰ Due to the limited data regarding the percentage of parties who received legal aid for divorce, the estimation for the legal aid costs must be based on certain assumptions, outlined below.

In 2009, total legal aid expenditures on family law issues were \$182,994,500.³¹ It is assumed that each type of family court case used the legal aid expenditures by its corresponding proportion of case volume. According to Kelly (2011), divorce cases accounted for about 35.4% of family court case volume in 2009/10, while 34.9% of family court case volume that year involved other forms of family breakdown which are dealt with under provincial or territorial legislation. Other family breakdown refers to cases that addressed issues of custody, access, support or division of property outside of a divorce proceeding such as cases of separation or those deciding arrangements for a child born outside a union. As it is not possible to break down into these two types, it is assumed that separation cases accounted for slightly less than 35% of the total family justice cases, at 30%. Therefore, by multiplying the total legal aid expenditures on family court cases by the respective percentages of 35.4% and 30%, we obtain that \$64,780,053 legal aid expenditures for divorce and \$60,388,185 legal aid expenditures for separation.

In order to determine the portion of the above divorce and non-divorce legal costs that are the result of spousal violence, the figures are multiplied by 19.7%, which, as noted above, is the proportion assigned to the number of divorces caused primarily by spousal violence (this proportion will also be applied to non-divorce cases). As a result, legal aid costs associated with divorce due to spousal violence are estimated at \$12,761,670 and legal aid costs associated with other family breakdowns due to spousal violence are estimated at \$10,814,975.

Assuming the costs for private legal services for divorce are equal to the costs of legal aid services for divorce, the difference between the total legal fees for divorce (\$81,987,747), as derived above, and the estimated legal aid costs for divorce (\$12,761,670) can be attributed to private legal assistance, and should be presented in the section on Victim Costs. Legal assistance provided by private lawyers for separation issues will be partially examined in the section of Victim Costs.

Civil court expenditures are another cost component associated with divorce. While the parties to an uncontested divorce do not have to appear in court before a judge in most provinces and territories, a court cost will still be incurred as court officials, including the judge, will have to review the documents submitted in order to grant the divorce order. However, the number of hours required by a judge and court clerks to review documents is unknown. Therefore, civil court costs are only estimated for contested divorces, thus resulting in a conservative estimate.

³⁰ Note that financial eligibility for legal aid and family law matters (e.g., custody, support and divorce) covered by legal aid differ by jurisdiction.

³¹ Source: Statistics Canada, CCJS, Legal Aid Survey, 2009/10.

For this portion of the estimate, cases with trials are not differentiated from those without trials, as in Canada divorce cases rarely reach the trial stage. For example, in 2010/11, only 1% of divorce cases in six jurisdictions (Nova Scotia, Alberta, British Columbia, Yukon, Northwest Territories and Nunavut) went to trial (Kelly 2012). The data and procedure used to estimate the average cost of a criminal court case in Section 3 is applied here for civil court cases, with the exception that the increased complexity of court cases (a multiplier of 1.23) is not accounted for. With the average civil case cost estimated at \$1,149 in 2009, the total civil court costs for the 3,042 contested divorce cases are therefore estimated at \$3,495,798.

The provinces and territories offer a number of family justice services as part of the family justice system. Public money is spent on these programs and services that are accessible by families experiencing spousal violence. These services are provided by different branches and levels of government. For example, under the Supporting Families Initiative, the federal government provides \$16 million per year to support the provision of programs and services for families undergoing separation and divorce. Specific programs and services supported by the federal government include: Mandatory Information Programs/Parent Education Sessions, Family Law Information Centres, Supervised Access Centres, the Family Court Support Worker Program (Ontario) and Mediation. The provinces and territories provide in-kind funding in addition to spending a significant amount on the provision of these services. A current estimate of the provincial contribution would be approximately \$54.5 million for 2009. However, this figure would underestimate provincial and territorial spending as there are programs and services fully funded by the provinces and territories without federal contributions, for which data are not available.

Therefore, the total estimated government (provincial/territorial and federal) contribution to family justice services is \$70,403,282 for 2009. All of these funds are related to divorce and separation and, after multiplying the total by 19.7% (the proportion of divorces and separations primarily caused by spousal violence), the estimated cost of spousal violence-related family justice services in 2009 is estimated at \$13,869,446.

It should also be noted that there are programs and services available in areas other than the civil justice system. These expenditures are covered elsewhere in the report, for example in the Shelters and Transition Homes section and in the Other Government Expenditures section.

Given that there is no indication of the gender of the applicants in divorces caused by spousal violence, the gender breakdown of divorce applicants will be imputed using the gender proportions of police-reported spousal violence as found by the UCR2 – 81% female and 19% male. Summing all of the costs, the total financial impact (borne by the civil justice system) for divorces and separations that were primarily caused by spousal violence is estimated at **\$40,941,889**.

Divorce and separation costs – SV against females	\$33,162,930
Divorce and separation costs – SV against males	\$7,778,959
Total Civil Justice System Costs, Divorce and Separation	\$40,941,889

3.2.3 Child protection systems

Child protection systems are based on provincial and territorial child protection laws. These laws provide for state intervention where parents or legal guardians are unable or unwilling to meet the child's physical, emotional and psychological needs. The child protection services (sometimes called child welfare or children's aid) in each jurisdiction are responsible for investigating allegations of child abuse and neglect, coordinating foster care services, and arranging for adoptions. Most provincial and territorial child protection Acts expressly refer to emotional harm as grounds for protection, and some jurisdictions (Ontario and Manitoba) include the risk of emotional harm in their definition. Most Acts also include exposure to family violence (witnessing, hearing or seeing the aftermath of violence in the home) as a ground for protection.³² Children exposed to violence may be removed from their homes and placed in foster care, extended family care, or a group home. Children who are not removed from home can receive continuous visits, supervision and assessment from child protection officials. In this section, the types of out-of-home care are grouped into two main categories depending on the funding requirements from the systems: 1. Foster care and formal kinship care (placement with alternate or person of sufficient interest placement), and 2. Informal arrangements with extended family members.

Data on child protection systems in Canada are limited. For example, the number of children involved in the system and each child's length of stay are not collected nationally. Many provinces that provide snapshots of their child protection systems are unable to continually track children and determine which children who become involved with the system actually end up in care and their length of stay. In addition, differences in legislation and investigation practices across provinces and territories, as well as changes over time, have also posed challenges in estimating the national annual incidence of reported maltreatment in Canada. In the many cases involving multi-faceted family issues, only the primary reason for involvement of the child protection system is recorded. For example, a parent's addiction may be noted as the reason for a child's involvement in a child protection system, but other issues, including exposure to spousal violence, may also be present in the situation. As a result, spousal violence may be much more prevalent as a reason for child protection involvement than is recorded.

The report, *The Canadian Incidence Study of Reported Child Abuse and Neglect-2008* (CIS-2008), which is published by the Public Health Agency of Canada (2010), is the third nation-wide study to examine the incidence of reported child maltreatment and the characteristics of the children and families investigated by child protection agencies. This study covers all provinces and territories in Canada. While the study reports on short-term outcomes of child protection investigations, including substantiation status, initial placements in out-of-home care, and court applications, the study does not track longer-term service events that occurred beyond the initial investigation.

According to this study, there were an estimated of 235,842 child maltreatment-related investigations conducted in Canada in 2008.³³ Among the 85,440 (36.2%) cases which were substantiated, about 34% (29,259) identified exposure to intimate partner violence as the primary category of maltreatment. However, there were no placements in a large proportion of substantiated cases. For example, in

³² Alberta: *Child, Youth and Family Enhancement Act*, R.S.A. 2000, c. C-12, s.1 (3); New Brunswick: *Family Services Act*, S.N.B. 1980, c. F-2.2, s31(1); N.W.T.: *Child and Family Services Act*, S.N.W.T. 1997, c. 13, s.7 (3); Nova Scotia: *Children and Family Services Act*, S.N.S. 1990, c. 5, s. 22 (2); P.E.I.: *Child Protection Act*, R.S.P.E.I. 1988, c. C-5.1, s.9.; Saskatchewan: *Child and Family Services Act*, S.S. 1989-90, c. C-7.2, s.11.

³³ As this is the most recent available data, we use the 2008 data to estimate the associated child protection system costs in this section. For limitations of the survey used in this study, please see the report for details.

2008, approximately 22.9% of all substantiated investigations resulted in a change of residence for the child, where half of these children moved to foster care or kinship care and half moved to an informal arrangement with a relative. The CIS-2008 report does not provide the breakdown of placement rates by the primary maltreatment type (physical abuse, sexual abuse, neglect, emotional maltreatment, and exposure to intimate partner violence). As the placement rates vary considerably among the different primary categories of maltreatment, using the overall rate of 22.9% might overestimate the out-of-home placements due to exposure to spousal violence. Fortunately, the 2003 version of the CIS report does show the placement rates specific to each type of maltreatment, and the rate for exposure to intimate partner violence can be adjusted and applied to the data in the 2008 report.

According to *The Canadian Incidence Study of Reported Child Abuse and Neglect-2003* (CIS-2003) (Trocmé et al. 2005), approximately 16.9% of substantiated investigations in Canada resulted in a change of residence.³⁴ As the primary category of maltreatment, neglect had the highest rate (28.0%) resulting in change of residence, followed by emotional maltreatment (18.9%), physical abuse (16.2%), sexual abuse (9.9%), and exposure to intimate partner violence (5.9%). As the 2003 aggregate out-of-home rate (16.9%) is much lower than the 2008 rate (22.9%), we need to adjust the 2003 specific rates to obtain the corresponding rates for different primary categories of maltreatment in 2008. In this way, it is estimated that about 6.6% (1,932) of substantiated investigations of exposure to intimate partner violence resulted in a change of residence in Canada. The CIS-2003 report also indicates that among those out-of-home placements resulting from exposure to spousal violence, 41.1% went to informal kinship care whereas 49.2% went to foster care or formal kinship care. About 9.8% went to group homes, but due to a lack of data on the daily cost of maintaining a child in a group home, it is decided to redistribute the number of children placed in group homes into among the other two placement types, based on their respective proportions. Following this, we estimate that in Canada, 1,053 children were placed in foster care or formal kinship care, and 879 children were moved to an informal arrangement with a relative.

While many countries such as the US and Australia have comprehensive information regarding the length of stay for children in care, the Canadian data are very limited in this area. The only information found is from Newfoundland and Labrador, which indicates that the provincial average length of stay was roughly 2 years in 2008 (Fowler 2008). Specifically, 18% of children spent between 1 and 6 months, 29% spent between 2 and 5 years, and 18% spent between 5 and 10 years. As a comparison, the National Foster Care Coalition in the US reported in 2008 that children remained in the foster care system for 27.2 months on average,³⁵ while the Child Welfare Information Gateway (2011) reported that the median length of stay in foster care for children exiting the system in 2009 was 13.7 months, or 420 days. The Australian statistics show that children in extended family-kinship care are generally in care for a longer period than children in foster care. For example, the Boston Consulting Group (2009) prepared a report for the Government of New South Wales showing that children spent 4.2 years in kinship care whereas children stayed in foster care for 1.9 years. As the Canadian data from Newfoundland and Labrador does not break down the length of stay by types of care, we will apply the average of 2 years (730 days) to both foster care and informal arrangements with an extended family member.

³⁴ This figure includes both investigations where an out-of-home placement decision has already been made or an out-of-home placement is still being considered at the time of the survey.

³⁵ National Foster Care Coalition. "Foster Care Facts." <<http://www.nationalfostercare.org/facts/fostercare.php>>

The daily cost of caring for a child in an out-of-home placement can range from \$10 to \$100 and differs dramatically across jurisdictions and by type of care. For example, data from provincial sources show that kinship care costs less than foster care. While data are available from a few Canadian provinces, they are not sufficient to calculate a national average cost for foster care or formal kinship care. As such, a middle range value of \$60 per day is used for this estimation. At the length of stay of 730 days, it follows that the total costs of providing foster care and formal kinship care to children exposed to spousal violence is estimated at \$46,121,400.

For children who were not removed from home or for those who were moved to an informal arrangement with a relative, child protection workers will normally continue to conduct regular visits to ensure the safety of the children, to assess the family's engagement in the services provided, and to help the family establish appropriate child care routines. Due to lack of data, it is assumed that each worker meets with the family once every two weeks and spends 3 hours per visit up to 2 years. The 3 hours cover conversation time, preparation time, travel time, and paper work time. Therefore, 52 visits in 2 years amount to 156 hours of work per child. Based on data from several provinces, it is estimated that the average annual salary for child protection worker in 2009 was \$51,608, equivalent to \$26.37 per hour.³⁶ Following this, the total costs associated with regular family visits and assessments for children with no placement or children with an informal agreement with a relative are estimated at \$116,032,512.

In addition to out-of-home placements, there are also investigation costs. An evaluation study conducted in Saskatchewan suggests that the average cost per child handled was about \$539.43 in 1998 (Prairie Research Associates 1998).³⁷ While this figure might be outdated, no recent or national information can be found regarding child maltreatment investigation costs. Adjusting this figure for inflation, we obtain \$675 as the investigation cost per case in 2009. By applying the cost per investigation to the number of substantiated investigations of exposure to spousal violence (29,259), the total costs of investigation for cases of child exposure to spousal violence in 2009 are estimated at \$19,749,825,

In sum, the total economic impact of spousal violence in 2009 on child protection services is estimated at **\$181,903,737**. See Appendix A for detailed calculations and sources. Given that there is no indication of the gender of the victim of spousal violence in child protection cases, the gender breakdown will be imputed using the gender proportions of police-reported spousal violence as found by the UCR2 – 81% female and 19% male.

Child protection systems costs – SV against females	\$147,342,027
Child protection systems costs – SV against males	\$34,561,710
Total Civil Justice System Costs, Child Protection Systems	\$181,903,737

³⁶ Family and Children's Services of the Waterloo Region, Career Opportunities, accessed on April 17, 2012. <<http://www.facswaterloo.org/html/CareerOpportunities.html>>. For example, the annual salary range for a foster care worker and children's service worker is from \$45,000.44 to \$59,217.50 in 2009 dollars. PEI Health Sector Council, Child Protection Social Workers, accessed on April 17, 2012. <<http://peihsc.ca/careers/career-portal/social-worker/>>. The annual salary range is from \$40,258.77 to \$65,941.08 in 2009 dollars.

³⁷ The agencies that were the subject of the evaluation were the Regina Children's Justice Centre, the Saskatoon Child Centre, and the multidisciplinary committee in North Battleford, Saskatchewan. These agencies use multidisciplinary teams to investigate reported cases of maltreatment in that police officers work as a team with child protection workers.

4. Victim Costs

The majority of spousal violence incidents are not brought to the attention of the criminal justice system, but all victimizations, whether reported to authorities or not, impact the victim. The GSS records that 336,000 victims experienced at least one incident of spousal violence in 2009, and that 54% of these victims were female. Given the limitations of the GSS outlined in the Methodology section, the victim cost estimates are significantly limited as they are largely based on the number of victims only, not the number of incidents. Both tangible and intangible impacts on victims are considered in this section. Table 4.1 summarizes the economic impact of spousal violence on victims.

TABLE 4.1: VICTIM COSTS

	Violence against females (\$thousand)	Violence against males	Total
Health Care	\$8,159,984	\$12,765,853	\$20,925,837
Physician visits	\$149,571	\$39,640	\$189,211
Emergency department visits	\$4,490,409	\$1,459,282	\$5,949,691
Acute hospitalization	\$3,520,004	\$11,266,931	\$14,786,935
Mental Health Issues	\$146,868,486	\$32,613,453	\$179,481,939
Medical services	\$38,013,972	\$10,030,455	\$48,044,427
Work loss	\$98,178,631	\$21,434,414	\$119,613,045
Suicide attempts* (medical cost)	\$10,675,883	\$1,148,584	\$11,824,467
Productivity Losses	\$37,125,687	\$16,239,509	\$53,365,196
Lost wages	\$20,943,599	\$12,728,087	\$33,671,686
Lost household services	\$15,450,178	\$3,451,422	\$18,901,600
Lost education	\$259,081	\$0	\$259,081
Lost child care	\$472,829	\$60,000	\$532,829
Other Personal Costs	\$211,865,378	\$59,396,907	\$271,262,285
Damaged or destroyed property	\$62,915,576	\$26,306,202	\$89,221,778
Divorce and Separation (legal costs)	\$134,914,290	\$31,646,562	\$166,560,852
Special phone features	\$1,791,358	\$254,044	\$2,045,402
Moving	\$12,244,154	\$1,190,099	\$13,434,253
Intangible Costs	\$3,290,719,565	\$2,169,480,155	\$5,460,199,720
Pain and suffering	\$2,251,037,864	\$1,736,911,856	\$3,987,949,720
Loss of life	\$1,039,681,701	\$432,568,299	\$1,472,250,000
Total Victim Costs	\$3,694,739,100	\$2,290,495,877	\$5,985,234,977

* Loss of life due to completed suicide is included under the intangible costs.

Note: May not add to stated totals due to rounding

4.1 Health Care

The GSS asks spousal violence victims about the medical attention they received as a result of the incidents. The GSS finds that 3 in 10 victims sustained physical injuries during spousal violence incidents in 2009, with 42% of female victims reporting injuries and 18% of male victims reporting injuries. Information from the GSS, the Canadian Institute for Health Information (CIHI) and other sources pertaining to the costs of administering medical services in Canada allow estimates of health care costs for physical injuries resulting from spousal violence in three areas: medical attention from a physician or nurse, hospital emergency department visits, and acute hospitalization. All victim counts are from the GSS and most cost per service data is from the CIHI (with the exception of ambulatory service costs).

As explained in the Limitations section, the structure of the GSS leads to an underestimation of health care costs, because only the number of victims who required medical attention is counted, not the number of times that each victim required medical attention. For example, if one victim was hospitalized five times as a result of multiple spousal violence incidents, the GSS would only show that the victim was hospitalized (once) at some point during the year, not the number of hospitalizations. This limitation also partially explains the result that acute hospitalization costs are higher for male victims than for female victims, which is seemingly contradictory to research in the area. Tjaden and Thoennes (2000) use the National Violence against Women Survey conducted in the US to show that females are more likely than males to sustain injuries, receive medical care, and require hospitalization due to recent episodes of spousal violence. Since the GSS does not record the medical service requirements following each incident, the actual number of times that each victim required medical treatment is suppressed to just one time. That is to say, victims who were hospitalized five times and victims who were hospitalized one time were all recorded in the survey as simply being hospitalized, so it can only be assumed that each of these victims was hospitalized once. Therefore, the estimated health care costs are likely to be underestimated, especially for females, as female victims have a greater tendency than male victims to require medical treatment after incidents of spousal violence (Tjaden and Thoennes 2000). In addition, because the sample size of the victims who sought medical attention (particularly for acute hospitalization) is very small, the weighted population might be a misrepresentation of the actual health care requirements resulting from spousal violence in Canada.

4.1.1 Physician visits

The GSS finds that there were 2,719 female victims and 721 male victims who received medical attention from a doctor or nurse as a result of spousal violence in 2009. Based on data from CIHI (2007), it is estimated that a single visit to a family doctor in 2009 cost approximately \$55. Multiplying the number of victims visiting a physician by the cost per visit, the total economic impact of spousal violence in 2009 through physician visits is estimated at **\$189,212**. See Appendix B: Victim Costs – B.1 Health Care for detailed calculations and sources.

Physician visits costs – SV against females	\$149,571
Physician visits costs – SV against males	\$39,640
Total Health Care Costs, Physician Visits	\$189,212

4.1.2 Emergency department visits

Emergency department visit costs include both medical services and ambulatory services.

The GSS finds that 7,245 females and 2,602 males visited emergency departments to receive medical attention for injuries sustained during incidents of spousal violence in 2009. The average cost of a single visit to a hospital emergency department in 2009, as derived from CIHI (2010), was \$266. The total cost of hospital emergency department visits is calculated by multiplying the number of victims requiring emergency department services by the average cost of a visit, and the resulting estimate is \$1,926,564 for female victims and \$691,935 for male victims.

The National Ambulatory Care Reporting System (NACRS) data provided by the CIHI³⁸ show that 78% of female victims and 69% of male victims of firearm offences with firearm-caused injuries who visited emergency departments in 2008 were transported to the hospital by ambulance. These figures are used as guides for the case of spousal violence as no statistics are available for victims of spousal violence specifically. Considering the seriousness of firearm-caused injuries and the wider range of injuries incurred by spousal violence, it is assumed that a lower proportion of spousal violence victims required ambulance transportation for emergency department visits: 60% (4,347) of female victims and 50% (1,301) of male victims who went to an emergency department are assumed to have required ambulance transportation. The average cost of providing ground ambulance transport in 2009 is estimated at \$590 per trip.³⁹ The total costs of ambulance services, obtained by multiplying the number of victims using ambulatory services by the cost per trip, are estimated at \$2,563,845 for female victims and \$767,347 for male victims.

Adding the hospital costs to the ambulance costs, the total costs of spousal violence in 2009 through emergency department visits are estimated at **\$5,949,691**.

Emergency department visits costs – SV against females	\$4,490,409
Emergency department visits costs – SV against males	\$1,459,282
Total Health Care Costs, Emergency Department Visits	\$5,949,691

4.1.3 Acute hospitalization

Acute hospitalization is defined as overnight admission to hospital for a minimum of one night (i.e., overnight hospitalization). The two components of acute hospitalization costs are hospital services and ambulatory services.

The GSS finds that 1,444 female victims and 800 male victims required acute hospitalization due to injuries sustained during incidents of spousal violence in 2009. While the cost of each acute hospitalization depends on the medical condition, the specific services received, the length of stay, the sex and age of the patient, and the location of the hospital, an average daily cost can be estimated from two reports from CIHI. The first report (2008) provides information on the cost

³⁸ Special data request from the Canadian Institute for Health Information.

³⁹ Source: Ministry of Health, *BC Ambulance Service, 2007, Ambulance Fee Changes*, <http://www2.news.gov.bc.ca/news_releases_2005-2009/2007HEALTH0101-001106-Attachment1.htm>. In 2006/2007, the average cost of providing ambulance transportation to a hospital in British Columbia was \$565. Information from other provinces was also examined, and the information from BC was used as it was considered typical and representative.

of acute hospitalization stays and the second report (2009) provides information on the average length of acute hospitalization stays. The estimated daily cost of acute hospitalization in 2009 is \$1,044.

According to the GSS, the length of acute hospitalization stays differed between male and female victims. Males injured by a current spouse were hospitalized overnight for an average of 17 days, while female victims were hospitalized overnight for an average of 2.4 days. A possible explanation for this disparity is the higher prevalence of weapons used in spousal violence incidents against males; 15% of male victims had a weapon used against them, while 5% of female victims had a weapon used against them. It follows from the number of victims hospitalized and the average lengths of stay that female victims were hospitalized overnight for a total of 2,882 days and male victims were hospitalized overnight for a total of 10,521 days. Acute hospitalization costs are calculated by multiplying the number of acute hospitalization days by the average daily cost; the total costs of the hospital component are \$3,009,211 for female victims and \$10,983,850 for male victims.

The method used to calculate ambulatory service costs for Emergency department visits (above) is also used in this section, though with one adjustment: both female and male victims hospitalized overnight are assumed to have required ambulance services at a rate of 60% because of the implied severity of injuries requiring acute hospitalization. Applying the \$590 average cost per ambulance trip, total ambulance costs are estimated at \$793,873.

Total acute hospitalization costs are acquired by adding the hospital and ambulance costs. The total economic impact of spousal violence in 2009 through acute hospitalization is estimated at **\$14,786,935**.

Acute hospitalization costs – SV against females	\$3,520,004
Acute hospitalization costs – SV against males	\$11,266,931
Total Health Care Costs, Acute Hospitalization	\$14,786,935

4.2 Mental Health Issues

The adverse health consequences of spousal violence are manifested both mentally and physically, and the link between spousal violence against women and mental health issues is well documented. Weinbaum et al. (2001) finds that 48% of women who had been battered stated that they had “wanted help with mental health in the past 12 months.” Many studies show that women who have been abused by intimate partners are at greater risk for developing certain mental health issues, including depression, post-traumatic stress disorder (PTSD), substance abuse, and suicidal behaviour. American and Canadian studies find that women receiving services for domestic violence experience depression at a rate ranging from 17% to 72% and PTSD at a rate ranging from 33% to 88% (Arias and Pape 1999; Astin et al. 1993; Astin et al. 1995; Campbell et al. 1995; Cascardi and O’Leary 1992; Humphreys 2003; Humphreys et al. 2001; Kubany et al. 1996; Sackett and Saunders 1999; Street and Arias 2001; Torres and Han 2000). A meta-analysis of studies of battered women by Golding (1999) suggests a weighted mean prevalence among female victims of 48% for depression, a weighted mean prevalence among female victims of 64% for PTSD, and a weighted mean prevalence among female victims of 18% for suicide.

There is less evidence pertaining to the mental health effects of spousal violence on men. Hines and Douglas (2010) conducted a study of 302 men who were victims of intimate partner violence (IPV) perpetrated by women, and they find that 9.6% of the men had been diagnosed with a mental health issue since being in the abusive relationship. The most common mental disorder was depression (64.8% of all sample men with a mental illness), followed by anxiety (47.9% of all sample men with a mental illness) and PTSD (12.7% of all sample men with a mental illness).

Estimation of the number of victims who have developed a mental health issue as a result of spousal violence is complicated by the wide range of possible mental health issues, the criteria used to determine morbidity, and the possibility of one victim developing multiple health issues. In light of these complications and the data limitations, depression and anxiety are used as proxies for all mental health issues associated with spousal violence. Depression is one of the most widespread mental health issues in Canada,⁴⁰ and the GSS contains useable data on depression. Therefore, only three individual cost items associated with mental health issues are examined in this section, and only the incremental costs, those costs that are incurred by people with mental health issues that are not incurred by people with no mental health issues, are included in each cost item. The three cost items are: medical services, productivity losses, and hospital costs due to suicide attempts. Following Lim et al. (2008b), both diagnosed and undiagnosed mental health issues are analyzed.

4.2.1 Medical services

Mental health medical services are offered by a diverse range of service providers in Canada. Services specific to the treatment of mental health issues include specialist services, hospital programs focusing on mental health (including outpatient and inpatient care), and community mental health centres that offer counselling and home-based or community-based mental health treatment. Individuals with mental health issues are also more likely to use mainstream health services more frequently than people with no mental health issues; Mai et al. (2010) find that users of mental health services visit general practitioners (GPs) more often than those without mental health problems. At the primary level of health care, GPs are the most frequently consulted health professionals for mental health matters and are responsible for much of the treatment of mental illness (Health Canada 2002).

Lim et al. (2008b) utilize data from the 2003 Canadian Community Health Survey to examine the incremental use of health care services by people with mental illness. They classify respondents as having a diagnosed mental illness, an undiagnosed mental illness, or no mental illness; respondents are classified as having an undiagnosed mental illness if the respondents reported their own mental health as poor, contacted a mental health professional at least twice, scored at a certain level in a depression screening module, or reported serious ideations of suicide.

Lim et al. (2008b) find that the average number of GP visits per year is 6.7 for people with a diagnosed mental illness, 4.8 for people with an undiagnosed mental illness, and 2.9 for people with no mental illness. Similar trends are seen in the use of other health care services such as specialist visits and hospital days (see Table 4.2). The completeness of data in Lim et al. (2008b) is limited by: the diagnosis method, which requires predefined symptoms to be observed for a diagnosis, thereby potentially omitting some people who experience non-traditional symptoms

⁴⁰ Source: Ministry of Health and Long-term Care, Government of Ontario, <<http://www.health.gov.on.ca/english/public/pub/mental/depression.html>>. An estimated one in four Canadians has a degree of depression serious enough to need treatment at some point in their lives.

for a mental health issue, and the potential choice of a person with a mental health issue to not seek medical attention, which results in no diagnosis and no use of medical services even though the person is affected by the disorder.

TABLE 4.2: MEDICAL SERVICE UTILIZATION BY MENTAL HEALTH STATUS IN CANADA

Medical Services	No Mental Illness	Diagnosed Mental Illness	Undiagnosed Mental Illness
GP visits	2.9	6.7	4.8
Specialist Visits	0.7	2.5	1.7
Hospital Days	0.5	2.2	1.2

The estimate for this section includes the incremental medical costs for people with a mental health issue, but due to data limitations, community mental health services and drug expenditures are not included. The GSS is used to determine the number of Canadians who developed a mental health issue as a result of spousal violence victimization. Specifically, the GSS finds that 38,332 females and 10,320 males reported suffering from depression or anxiety within a year of being a victim of spousal violence, representing 21.3% of all female victims and 6.6% of all male victims of spousal violence that year. The GSS rate for females falls within the 17% to 72% range of results in the Canadian and US studies cited earlier, suggesting that the GSS rate is a reasonable finding.

Among spousal violence victims who suffered from depression or anxiety, the GSS shows that 30.9% of females and 19.5% of males used medication for treatment (either prescribed or over-the-counter). This group of victims (including both females and males: 13,848) is categorized as having diagnosed mental health issues. The remaining victims, who reported depression or anxiety but did not report the use of medication to address the issues, are classified as having an undiagnosed mental health issue (including both females and males: 34,804).

Lim et al. (2008b) provide the incremental health care costs for people with diagnosed or undiagnosed mental health issues as compared to people with no mental health issue. Each classification of people (diagnosed, undiagnosed, or none) is further divided into five age groups, and the GSS allows for the same grouping of ages. For example, Lim et al. (2008b) find that for the 20 to 34 age group, the incremental medical costs for people with a diagnosed mental health issue were \$1,246 and the incremental medical costs for people with an undiagnosed mental health issue were \$382. Each incremental cost estimate for each age group from Lim et al. (2008b) is multiplied by the number of victims with a mental health issue in that age group from the GSS. The total economic impact of spousal violence in 2009 through mental health medical services is estimated at **\$48,044,427**.

Medical costs for mental health issues – SV against females	\$38,013,972
Medical costs for mental health issues – SV against males	\$10,030,455
Total Costs of Mental Health Issues, Medical Services	\$48,044,427

4.2.2 Work loss

This section addresses work loss associated with absenteeism due to mental health issues; productivity losses associated with absenteeism due to physical injuries are estimated in this section under Productivity Losses. Lim et al. (2008b) find that the average number of missed work days per year due to short-term disability is 33 days for people with diagnosed mental health issues, 27 days for people with undiagnosed mental health issues, and 10 days for people with no mental health issues (see above in Medical services for a description of diagnosed and undiagnosed classifications). This implies that the incremental work loss of people with diagnosed mental health issues is 23 days and the incremental work loss of people with undiagnosed mental health issues is 17 days. Long-term work loss (unemployment) due to mental health issues is not examined due to data limitations.

The number of work days missed because of mental health issues is used by Lim et al (2008b) to calculate the incremental costs of work loss, where the diagnosed and undiagnosed categories of people are further subdivided into age groups. For example, the incremental costs of work loss for people with a diagnosed mental health issue and aged 20 to 34 was \$3,454 in 2009, while the incremental work loss of people with an undiagnosed mental health issue in the same age group was \$2,023 in 2009.

It is estimated that 13,848 victims were diagnosed with a mental health issue and 34,804 victims suffered from an undiagnosed mental health issue as a result of spousal violence. These groups of victims are further subdivided into age groups corresponding to those of the work loss cost estimates above. The work loss of spousal violence victims is then calculated by multiplying the number of relevant victims for each age group by the corresponding work loss cost estimates. The total economic impact of spousal violence in 2009 through mental health-related work loss is estimated at **\$119,613,045**.

Short-term work loss – SV against females	\$98,178,631
Short-term work loss – SV against males	\$21,434,414
Total Costs of Mental Health Issues, Short-term Work Loss	\$119,613,045

4.2.3 Suicide attempts (medical costs)

This section draws on many sources to estimate the number of suicide attempts (including all cases of self-injury) brought about by spousal violence that resulted in hospital treatment, and the costs associated with that treatment. The two elements of healthcare involved in the treatment of self-injury are acute (overnight) hospitalizations and emergency department visits. While medical costs related to all suicide are included in this section (both those that resulted in a fatality and those that did not), the value of lost lives as a result of completed suicides will be examined in the later section on Loss of Life.

Research has shown that there are higher rates of suicide and suicide attempts among victims of spousal violence than among non-victims. Studies from many countries (including the US, the UK, Fiji, Papua New Guinea, Peru, India, Bangladesh, and Sri Lanka) show a positive correlation between domestic violence and suicide. A United Nations study (United Nations 1989) concludes that suicide is twelve times more likely to have been attempted by a woman who had been abused by a spouse than by a woman who had not been abused. Golding (1999) conducts a meta-analysis of 13 studies that find suicide prevalence rates among battered women

ranging from 4.6% to 77% and Golding (1999) estimates the weighted mean rate of suicidality at 17.9%. Singleton et al. (2002) examines a sample of women in the UK who had attempted suicide at some point in their lives and finds that 34% of the women had been victims of spousal violence. Stark and Flitcraft (1996) suggest that spousal abuse may be the single most important and common cause of female suicidality.

The Stark and Flitcraft (1996) study contains results that can be used in our estimates. They find that among the 176 American women in the study sample who went to an emergency department following an attempted suicide, 29.5% had been battered. Using this result, it is assumed that 29.5% of both attempted and completed suicides by females in 2009 were committed by victims who had experienced spousal violence, but this does not necessarily mean that spousal violence was the primary reason behind the suicide attempt. Therefore, another result from Stark and Flitcraft (1996) is used to ensure that only suicide attempts with spousal violence as the impetus are included in the estimate. The study finds that 36.5% of the battered women who had attempted suicide had visited the hospital due to an injury caused by spousal abuse on the same day as, but prior to, their suicide attempt. It is assumed that for these 36.5% of victims who harmed themselves, spousal violence was the primary cause of their attempted suicide. Together, these two assumptions lead to the conclusion that 10.8% ($=29.5\% \times 36.5\%$) of all attempted and completed suicides committed by women are primarily caused by spousal violence.

The extensive research on the link between spousal violence against women and suicide is in contrast to the dearth of similar studies on men. The research that does exist (Ansara and Hindin 2011; Ansara and Hindin 2010) suggests that the physical and emotional consequences of spousal violence are more severe for women than for men. These findings are supported by the GSS, which finds that female victims experienced more incidents on average than male victims (4.3 incidents compared to 2.7 incidents), a higher proportion of female victims visited a hospital than male victims (5.5% compared to 1.9%), and a higher proportion of female victims were mentally or emotionally affected by the incidents (87% compared to 65%).

It is clear that the proportion found for spousal violence attempts by females caused by spousal violence cannot be directly applied to the male case. However, there is no corresponding data relating to male suicide attempts and spousal violence, so the results of the female analysis are used as the basis for estimating the number of male suicide attempts resulting from spousal violence victimization. To properly account for the greater impact of violence on females, the results of Graham-Kevan and Archer (2003) regarding the proportion of Intimate Terrorism (IT) perpetrated by males and females is used. It is assumed that IT, being the most severe form of spousal violence, is the form of spousal violence that is responsible for nearly all suicide attempts caused by spousal violence. It is also assumed that females and males who are victims of IT have the same likelihood of attempting suicide, which implies that the proportion of suicide attempts by females to suicide attempts by males will be equivalent to the proportion of IT sustained by females to IT sustained by males. As Graham-Kevan and Archer (2003) finds that 87% of IT involved female victims and 13% involved male victims, the proportion of IT sustained by females as compared to males is 6.69 ($=87\%/13\%$). Therefore, this ratio is applied to the percentage of suicide attempts by females caused by spousal violence (10.8%) to give an estimate of the percentage of suicide attempts by males primarily caused by spousal violence at 1.6% ($=10.8\%/6.69$).

While the acute hospitalization estimate in this section accounts for victims between the ages of 15 and 69 only, minimal costs are omitted with this method as hospitalizations resulting from suicide attempts decrease markedly among people aged 50 and older (CIHI 2011). One aspect of the hospitalization estimate that enhances its accuracy is that it is based on the number of hospitalizations, not the number of victims, as is the case in most other sections of this report. The estimate will therefore capture all hospitalizations for cases in which patients might be hospitalized multiple times. For example, CIHI (2011) states that 6% of patients admitted for suicide attempts in 2009-2010 had two hospitalizations and 1% of such patients had three or more hospitalizations. CIHI (2011) records 16,930 hospitalizations for suicide attempts or self-inflicted injury in 2009 in the 15 to 69 age range, 9,843 of which were hospitalizations of female patients. Using the rates of suicide attempts caused primarily by spousal violence as calculated above (10.8% for female suicide attempts and 1.6% for male suicide attempts), it is estimated that there were 1,060 hospitalizations of females and 114 hospitalizations of males for suicide attempts motivated by spousal violence. The average length of acute hospitalization for incidents of self-harm was 7.74 days in 2009-2010 (CIHI 2011), and thus the total number of days in hospital for spousal violence victims who attempted suicide is estimated at 9,086. The average daily hospitalization cost in Canada is calculated at \$1,044, leading to total hospitalization costs of \$9,485,530 for suicide attempts.

Emergency departments are also major centres of care for people sustaining self-inflicted injuries. Data from Ontario, Alberta, and Yukon show that patients who require overnight hospitalization for self-inflicted injuries visit an emergency department two to three times. It is therefore assumed that each acute hospitalization is accompanied by 2.5 emergency department visits and using the data from the acute hospitalization calculations above (1,060 hospitalizations for female victims and 114 hospitalizations for male victims), it is estimated that the total number of emergency department visits due to suicide attempts caused by spousal violence was 2,935 across Canada in 2009. It is assumed that persons who attempt suicide and are hospitalized for related injuries likely require ambulance transportation to the emergency department since they are unlikely to request medical attention of their own volition, despite the need for it. Therefore, it is assumed that ground ambulance transportation was required in 90% of relevant emergency department visits. As one emergency department visit cost \$266 and one ground ambulance trip cost \$590 in 2009, the total costs associated with emergency department visits for suicide attempts caused by spousal violence were \$2,338,937.

Combining acute hospitalization and emergency department visit costs, the total economic impact of spousal violence through hospital treatment for suicide attempts in 2009 is estimated at **\$11,824,467**. Again, please see Appendix B: Victim Costs – 4.2 Mental Health Issues – B.2.3 Suicide attempts – for detailed calculations and sources.

Medical costs for suicide attempts – SV against females	\$10,675,883
Medical costs for suicide attempts – SV against males	\$1,148,584
Total Costs of Mental Health Issues, Suicide Attempts	\$11,824,467

In terms of completed suicides motivated by spousal violence, we multiply the total number of completed suicides by the proportions which represent the percentage caused by spousal violence. As suicide statistics for 2009 were not available, we use the average number of the completed suicides of the most three recent years where such information is available. Between 2005 and 2007, the average number of completed suicides among people aged 15 to 69 in

Canada was 3,254, of which 2,488 were committed by men. As estimated above, the proportions of female and male suicides caused by spousal violence were 10.8% and 1.6% respectively. Multiplying these rates by the total number of suicides yields the estimates of completed suicides caused by spousal violence: 82 for female victims and 40 for male victims. The value of lost human life will be examined and presented in Section 4.5 – Intangible Costs.

4.3 Productivity Losses

Victims of spousal violence may be prevented from carrying out regular activities because of debilitating physical injuries or time spent on justice system obligations. When the victim is unable to work, attend school, or perform household duties, there is a loss of wages, education, or necessary household work. The GSS asks respondents about the duration of hospitalization resulting from spousal violence, the number of days the victim stayed in bed recovering outside of the hospital, and any additional days the victim was unable to perform daily activities. The questions regarding emergency department visits will also be used in the estimate of lost productivity; it is assumed that one full day of normal activities was missed for victims who visited the emergency department but were not hospitalized overnight, while victims who required both types of hospital service are assumed to have missed time equal to the number of days hospitalized overnight only.

4.3.1 Lost wages

GSS respondents who reported that their main activity during the last 12 months was either “working at a paid job or business” or “maternity/paternity leave” are included in this section. The quantity of lost wages is derived from the amount of time the victims were unable to work and the average incomes of various victim demographic groups. The amount of time that victims were unable to work includes hospitalization time, time spent recovering in bed outside of the hospital, days in the emergency department, and other time off. It is estimated that female victims were absent from work a total of 145,147 days and that male victims were absent from work a total of 45,543 days.

Income ranges are self-reported by respondents of the GSS, and this information is used to estimate victims’ daily wages. There are two notable characteristics of victims’ incomes that are accounted for in the estimates. Male victims had higher incomes than female victims, and victims of current spouses had different incomes than victims of ex-spouses. Based on 52.18 weeks per year and five working days per week, the estimates for daily wages are: \$136 for female victims of ex-spouses, \$183 for female victims of current spouses, \$294 for male victims of ex-spouses, and \$249 for male victims of current spouses. The total economic impact of spousal violence in 2009 through lost wages is estimated at **\$33,671,686**.

Lost wages – SV against females	\$20,943,599
Lost wages – SV against males	\$12,728,087
Total Productivity Losses, Lost Wages	\$33,671,686

4.3.2 Lost household services

All GSS respondents who were victims of spousal violence and who were unable to perform daily activities are included in this section, regardless of each respondent’s main activity. Household services, such as cleaning and cooking, have a value even if no monetary transaction

takes place, and therefore, there is a loss of value when these services cannot be performed. If a victim is incapacitated by spousal violence, he or she may be forced to either solicit a family member or friend to temporarily complete the household tasks (incurring an opportunity cost), or temporarily hire a household worker (incurring tangible a cost).

Accounting for the time that victims were hospitalized, bedridden, and otherwise unable to perform daily activities, it is estimated that female victims lost 247,598 days of normal productivity, while male victims lost 88,498 days of normal productivity due to spousal violence in 2009. According to the 2010 GSS (Statistics Canada 2011b), women spend, on average, 4 hours per day on household work and related activities (e.g., cooking, housekeeping, shopping for goods and services, child care), and men spend 2.5 hours per day on such activities. According to Statistics Canada's Labour Force Survey, the average wage of a household worker for services such as meal preparation, household cleaning, laundry, and sewing was \$15.60 per hour in 2009, and this is used as a proxy for the hourly value of household services. Using the number of days of household services lost, the average hours committed to household services, and the average wage of household services, the total economic impact of spousal violence in 2009 through lost household services is estimated at **\$18,901,600**.

Value of lost household services – SV against females	\$15,450,178
Value of lost household services – SV against males	\$3,451,422
Total Productivity Losses, Lost Household Services	\$18,901,600

4.3.3 Lost education

GSS respondents who reported that their main activity during the last 12 months was “going to school” are included in this section. Students who are unable to attend class face costs while attempting to make up for the missed class time. For instance, they may either incur tangible costs by hiring a tutor, or they may incur opportunity costs by studying and refraining from other activities. Severe circumstances may force a student to lose an entire semester or to drop out of school altogether, thus reducing future earning potential. For spousal violence cases, data limitations preclude an analysis of the latter scenario, so only missed class time will be taken into account.

The majority of spousal violence victims are 18 or older, so the cost of missed school days is based on university and college fees. The time that victims were hospitalized, bedridden, and otherwise unable to perform daily activities is counted towards lost education. The GSS finds that female victims missed a total of 6,574 days of school because of spousal violence, while no male victims reported lost education. According to Statistics Canada, the average tuition fee across Canada for undergraduate studies in 2009 was equivalent to \$4,926,⁴¹ which, assuming 125 school days per year, was \$39.41 per school day. The total economic impact of spousal violence in 2009 on lost education is estimated at **\$259,081**.

Value of lost education – SV against females	\$259,081
Value of lost education – SV against males	\$0
Total Productivity Losses, Lost Education	\$259,081

⁴¹ Statistics Canada. “University tuition fees.” *The Daily*, Thursday, September 16, 2010. Catalogue no. 11-001-XIE.

4.3.4 Lost childcare services

GSS respondents who reported that their main activity during the last 12 months was “caring for children” are included in this section. Victims of spousal violence who are unable to perform normal childcare duties must be temporarily replaced as caregiver by a family member or friend (incurring an opportunity cost) or a hired childcare worker (incurring a tangible cost).

According to the GSS, female victims of spousal violence in 2009 lost a total of 15,761 days of childcare, and male victims lost a total of 2,000 days of childcare, where lost childcare is measured by the time that victims were hospitalized, bedridden, and otherwise unable to perform daily activities. The national average daily cost of childcare services in 2009 is estimated at \$30, based on data from *Today's Parent*.⁴² Following this, the total economic impact of spousal violence in 2009 on lost childcare services is estimated at **\$532,829**.

Value of lost childcare services – SV against females	\$472,829
Value of lost childcare services – SV against males	\$60,000
Total Productivity Losses, Lost Childcare Services	\$532,829

4.4 Other Personal Costs

This section includes personal costs not captured in the other sections of Victim Costs. Victims of spousal violence are often subject to personal costs including property damage, fees associated with divorce, and measures taken to avoid criminal harassment.

A victim who is stalked or criminally harassed⁴³ by a current or former spouse may be forced to activate special phone features, or in severe situations, to move from one address to another. Criminal harassment is a specific form of psychological and emotional abuse, which is a crime in Canada. Often referred to as stalking or repeatedly following someone from place to place, criminal harassment involves unwanted attention that causes a person to fear for their safety or the safety of someone known to them. The 2009 GSS did not include questions on the impacts of criminal harassment. These data are available from the 2004 GSS and thus, all detailed information on the impacts and consequences of criminal harassment are obtained from the 2004 GSS and are applied to the victim numbers from the 2009 GSS.

4.4.1 Damaged or destroyed property

In 2009, there were 52,501 instances of perpetrators of spousal violence damaging or destroying the property of female victims, and 21,951 similar instances for male victims. Henderson (2000) estimates the cost of property losses per domestic violence victim in Australia at \$1,092 AUD in 2000. The Australian survey in Henderson (2000) used criteria that captured more severe domestic violence than the 2009 GSS, and therefore the estimate of average property loss is discounted by 50% for use in this study. After adjusting for the discount, the exchange rate, and inflation, the estimated property loss per victim in 2009 is \$1,198 CAD. The final estimate of

⁴² The *Today's Parent* website compiled a list of childcare service costs across Canada. The link is no longer operational and the relevant page no longer exists.

⁴³ Criminal harassment is the term used in Canada for the offence which is found in s. 264 of the *Criminal Code*.

damaged or destroyed property is obtained by multiplying the number of instances by the cost per victim. The total economic impact of spousal violence-related property damage or theft in 2009 is estimated at **\$89,221,778**. See Appendix B for detailed calculations and sources.

Value of damaged or destroyed property – SV against females	\$62,915,576
Value of damaged or destroyed property – SV against males	\$26,306,202
Total Other Personal Costs, Damaged or Destroyed Property	\$89,221,778

4.4.2 Divorce and Separation (legal costs)

In cases where couples are not eligible for legal aid for divorce and separation, the parties bear the full impact of the legal fees. As shown in the second section of the Civil Justice System, the total legal expenditures for the 16,013 initiated divorces that were caused by spousal violence were \$81,987,747, where \$12,761,670 was paid through legal aid. The remaining \$69,226,077 was borne by victims through private legal fees.

As for separation, while legal aid costs can be estimated from the volume of separation cases processed in civil court (as shown in the Divorce and Separation section of the Civil Justice System), legal fees paid by victims for private lawyers are very difficult to estimate. This is because no statistics on the number of separations (married or common-law couples) are available as people do not need to report when they separate.

A 2008 internal study of the Department of Justice Canada finds that 85.8% of people (187 out of 218) seeking legal assistance for a relationship breakdown sought assistance from a private lawyer while only 14.2% (31 out of 218) received legal aid services.⁴⁴ Since the total number of respondents reporting a relationship breakdown problem in this survey was 269, it follows that 11.5% (31/269) of relationship breakdown cases were associated with legal aid services. While this data is from a recent year, the figure is derived from a small sample size. One national statistic is available, but from an earlier year. According to Statistics Canada, there were 71,528 divorces in Canada in 1996, and only 5,800 were funded by legal aid.⁴⁵ A ratio of these two numbers indicates that about 8.1% of people in divorce cases received legal aid in that year. Given the limitations of both data sources, it is decided to adjust the 2008 proportion of legal aid funded divorces (out of total divorces with legal assistance) accordingly to reflect a possible lower national rate of all divorces that were funded by legal aid. The adjusted rate is about 10%⁴⁶, representing the percentage of people who received legal aid out of all those seeking legal assistance for a relationship breakdown. Therefore, it is assumed that this 10% figure also applies to separations that were primarily caused by spousal violence.

⁴⁴ Department of Justice Canada. “National Justiciable Problems Survey.” 2008. Unpublished data.

⁴⁵ Statistics Canada, The Daily, Marriages and divorces, 1996. Available at <http://www.statcan.gc.ca/daily-quotidien/980129/dq980129-eng.htm>.

⁴⁶ This figure is also consistent with other source found. For example, an analysis of court data collected between 1998 and 2002 in Nova Scotia reveals that, among the litigants who were represented in divorce cases, 10 % were represented by legal aid and 90% were represented by privately retained counsel. Source: The Department of Canada, Family, Children and Youth Section. Permanent Working Group on Legal Aid Research, Secretariat Legal Aid Research – Key Results, Data on Unrepresented Litigants in Family Courts. Data were collected from twenty courts hearing divorce matters from across the country with the exception of Nunavut and Quebec. The data base contains approximately 33,000 cases collected between October 1998 and January 2002.

As estimated in the Divorce and Separation section under Civil Justice System Costs, the legal aid expenditures spent on spousal violence-caused separations were about \$10,814,975. Assuming equal costs of legal aid and private legal services, and using the 10% figure to represent the legal aid portion of all separation-related legal costs, it is estimated that the total legal assistance cost for separation was \$108,149,750 where 90% (\$97,334,775) was attributed to private legal assistance.

In sum, a total of **\$166,560,852** in legal assistance was borne by victims for divorce and separation, where \$134,914,290 was borne by female victims and \$31,646,562 was borne by male victims.

Legal costs for divorce and separation – SV against females	\$134,914,290
Legal costs for divorce and separation – SV against males	\$31,646,562
Total Other Personal Costs, Divorce and Separation	\$166,560,852

4.4.3 Special phone features

The 2009 GSS finds that 25,718 females and 3,751 males had been stalked or criminally harassed by either a current spouse or an ex-spouse in the 12 months prior to the survey. Victims may purchase special phone features such as call display, call screening, or caller identification as a reaction to criminal harassment and in an attempt to avoid the stalker.

The 2004 GSS asks victims who said they had been stalked if they activated special phone features because of the stalking. The proportion of all victims who answered yes to this question is applied to the number of spousal violence-related stalking victims from the 2009 GSS. This method results in estimates of 14,928 female victims and 2,117 male victims who activated special phone features in response to being stalked by a current or former spouse in 2009.

The 2004 GSS does not ask which specific special phone features the victim activated, so a general fee is determined from the costs of the most common phone features. Based on fees charged by Rogers Communications for call screening (\$5 per month), call display (\$8 per month), caller identification (\$10 per month), and phone number change (\$25 if not waived for repeated unwanted calls), an average fee of \$10 for special phone features is used to ensure a conservative estimate. In the absence of data, it is assumed that victims paid for 12 months of special phone features. By multiplying the \$10 fee for special phone features by the number of victims who activated features and the length of time the features were activated, the total economic impact of spousal violence in 2009 through special phone features is estimated at **\$2,045,402**.

Costs of special phone features – SV against females	\$1,791,358
Costs of special phone features – SV against males	\$254,044
Total Other Personal Costs, Special Phone Features	\$2,045,402

4.4.4 Moving expenses

Spousal violence victims may respond to stalking, assault, or sexual assault by physically relocating from one home to another. The 2004 GSS asks respondents if they have moved in response to stalking, but neither the 2004 GSS nor the 2009 GSS asks if victims have moved in response

to other violent incidents such as assault or sexual assault. Therefore, only victims who moved because of stalking are considered in this section, and only the moving expenses will be considered in the cost estimate.⁴⁷ Women’s shelters and other emergency accommodations that assist women who are fleeing violence and harassment are analysed in Section 5 under Third-Party Costs. Though not figuring into the costing exercise, it is noted that provincial governments have recognized the importance of providing legislative support for victims of spousal violence attempting to leave violent situations.⁴⁸

Applying the proportion of stalking victims who moved in the 2004 GSS to the number of spousal violence-related stalking victims in the 2009 GSS, it is estimated that there were 12,244 females and 1,190 males who moved in response to criminal harassment by a current spouse or an ex-spouse in 2009. Moving expenses depend on the time of year, the distance between locations, the size of the current home, and whether packing assistance is required. For a conservative estimate, it is assumed that all relocations are intra-city, all current dwellings are two-bedroom homes, and packing service is not required. According to the nationally active AMJ Campbell, a move with the preceding characteristics costs between \$800 and \$1,200 and an Ottawa-based moving company prices the same move at \$1,125. Using these figures as a base, it is assumed that moving expenses were \$1,000 per move in 2009. The moving expenses per move are multiplied by the estimated number of spousal violence victims forced to move. The total economic impact of spousal violence in 2009 on victims forced to move because of spousal violence is estimated at **\$13,434,253**.

Moving expenses – SV against females	\$12,244,154
Moving expenses – SV against males	\$1,190,099
Total Other Personal Costs, Moving	\$13,434,253

4.5 Intangible Victim Costs

Intangible impacts that do not involve a monetary transaction and for which no market prices exist, are the most difficult impact to estimate. Pain and suffering affects a victim’s physical and mental wellbeing. An early loss of life deprives the victim of years of productivity and joy. These two elements are subject to considerable uncertainty and controversy, but they are the largest victim impact brought about by spousal violence.

4.5.1 Pain and suffering

Previous studies, such as Turner, Finkelhor, and Ormrod (2006), show that exposure to violence can lead to depression, anger, and aggression, all of which serve to reduce a victim’s enjoyment of life and can be categorized as pain and suffering. Pain and suffering are intangible impacts that have no market value. One method of quantifying pain and suffering, used in Access Economics (2004), is through Disability Adjusted Life Years (DALYs) and Quality Adjusted Life

⁴⁷ Note that moving expenses are not the only type of housing costs generated by spousal violence. Women may be forced to flee the home of the violent partner, either for a short period of time or permanently. In the former case, a victim needs a short-term residence, such as a shelter or a friend’s residence, and this will involve a financial impact, though not necessarily a monetary transaction. In the case of a victim permanently leaving the home of the violent spouse, there are costs associated with moving and setting up a new home. Due to data limitations, only costs directly related to moving expenses are examined.

⁴⁸ In 2006, the Quebec government introduced a section to the *Civil Code* (section 1974.1) to specifically allow tenants to terminate a residential lease if the safety of the tenant or any children living with the tenant was threatened as a result of domestic violence on the part of a spouse or former spouse.

Years (QALYs). The World Health Organization (WHO), in cooperation with the World Bank and Harvard University, introduced the concept of DALYs for the Global Burden of Disease (GBD) study that began in 1996. DALYs, as explained by the World Health Organization (2008), are essentially summations of the years of life lost due to premature death caused by a disease or injury and the years of healthy life lost due to a disease or injury. DALYs are measured on a scale of 0 to 1 and an increase on the scale correlates to an increase in the loss of health. For example, a broken ankle corresponding to a DALY of 0.20 implies that 20% of one year of healthy life is lost, while a broken leg corresponding to a DALY of 0.31 implies that 31% of one year of healthy life is lost.

There are two problems with DALYs that prevent their use in this report. First, they are not presented in monetary units, so the monetary values of each injury would have to be estimated by multiplying the DALY weight of each injury by the VSL per year. Second, any method involving DALYs requires detailed data on the numbers and types of injuries suffered by spousal violence victims and such information is not available for Canada.

Another method for estimating pain and suffering costs is to use the value court award. In Canada, civil courts award damages for both tangible costs and pain and suffering, the latter referred to as non-pecuniary damages, to plaintiffs in litigation cases involving claims of physical or emotional victimization; however, there is currently no comprehensive study of these cases to determine the average value of pain and suffering for each type of injury. Pain and suffering damages are awarded through a similar process in the US justice system, and Cohen (1988) does provide an analysis of US jury-awarded damages to determine average pain and suffering costs of certain violent crimes. In determining compensation for pain and suffering, the court evaluates how the injury has affected the victim's ability to function in daily life and how the injury has affected the victim's enjoyment of life. Cohen (1988) finds that, according to the courts, rape causes pain and suffering equivalent to \$43,561 (1988 USD) and assault causes pain and suffering equivalent to \$4,921 (1988 USD). These figures are adjusted for the exchange and inflation rates to 2009 CAD and the resulting figures of \$86,800 and \$9,800 are used as the values of pain and suffering for each sexual assault and assault case, respectively.

Civil lawsuits seeking damages for pain and suffering for spousal abuse in Canada are contentious and costly, and hence, relatively rare. In a recent case wherein criminal charges had not been proven beyond a reasonable doubt, the civil standard was met and the judge awarded the applicant \$65,000 in pain and suffering damages.⁴⁹ In Canada, there are few cases, a huge range of amounts awarded, and no comprehensive study from which to draw an average cost of pain and suffering; as such, the US amounts are applied.

While victims who reported being forced into unwanted sexual activities are considered as experiencing pain and suffering equivalent to that of sexual assault victims, all other victims of spousal violence who did not report being forced into unwanted sexual activities are considered as experiencing pain and suffering equivalent to that of assault victims. Therefore, all spousal violence victims are considered as experiencing pain and suffering at least as great as that of physical assault victims.

⁴⁹ Cristin Shmitz. February 17, 2012. Ex-wife awarded \$65,000. *The Lawyers Weekly* 31:38, 1,23. The author completed a QuickLaw search for damages in spousal violence cases and found the highest award for these damages was \$275,000 (jury awarded) and at the other end of the continuum, a judicial award of \$5,000.

According to the GSS, 179,893 females and 155,804 males reported spousal violence victimization, among which 6,376 female victims and 2,760 male victims had been forced into unwanted sexual activities. The value of pain and suffering from sexual assault is multiplied by the number of victims forced into unwanted sexual activity, and the value of pain and suffering from assault is multiplied by all victims who were not forced into unwanted sexual activity. Adding the two amounts, the total economic impact of spousal violence in 2009 on victims through pain and suffering is estimated at **\$3,987,949,720**.

Pain and suffering – SV against females	\$2,251,037,864
Pain and suffering – SV against males	\$1,736,911,856
Total Intangible Victim Costs, Pain and Suffering	\$3,987,949,720

4.5.2 Loss of life

The value of a lost life is primarily comprised of intangible costs (loss of enjoyment, lost quality of life) and opportunity costs (loss of future income). Because of the intangible elements, the value of a lost life has no market price and therefore, the value of a statistical life (VSL) must be estimated. A common method used to estimate the VSL in economic literature is an analysis of the “willingness to pay” or “willingness to accept” approach. This approach is explored by Ludwig and Cook (2001) and Cohen et al. (2004). Willingness to pay captures the monetary amount that a person would be willing to pay for a reduced probability of death, while willingness to accept is simply the converse scenario of a person accepting monetary compensation for an increased probability of death. For example, 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. Data from the US labour market indicates that workers would be willing to accept an annual wage premium of \$700 to face a 0.01% risk of death, which implies a VSL of $\$700/0.01\% = \7 million (Viscusi 2008). This latter example is an illustration of the theory of compensating differentials which proposes that workers should receive additional pay to face additional risk when all other aspects of a job are held constant. This analysis of wage-risk tradeoffs is the dominant approach in the economic literature.⁵⁰

A major complication of VSL analysis is that the value of life is not constant across the population or across time. One person’s valuation of life may differ from another’s, and an individual’s valuation of life may change as his or her economic situation and age change. This heterogeneity of the VSL has become a prominent issue in the literature, and to address it, researchers have examined the relationship between the VSL and variables such as age, income, citizenship status, and the nature of the relevant risk exposure. Table 4.3 below presents a selection of estimates of the VSL from the literature.

The results of the following studies may remove confidence in the method of using one standard VSL: Aldy and Viscusi (2008) and Kniesner et al. (2006) find an inverted-U-shaped relationship between the VSL and age; the VSL increases with personal income due to the positive income elasticity of life and health; Viscusi (2009) illustrates the effect that the nature of the risk has on the VSL by estimating that deaths resulting from natural disasters are valued at just over one half the value of deaths caused by terrorist incidents. However, Kniesner et al. (2006) find that proper

⁵⁰ Although the present study is not a cost-benefit analysis, the VSL concept is still appropriate. Suppose an intervention program has been proposed that will reduce the risk of death during spousal violence incidents; the program represents a benefit to victims equal to the VSL. If the program is not implemented then the victims would essentially be experiencing a loss (because they have not experienced the benefits of the program) equal to the value of the VSL.

application of the U-shaped trajectory of the VSL over the life cycle would yield results not significantly different from estimates obtained without any age adjustment. This finding, along with the difficulty of accounting for heterogeneity, has encouraged the US and other countries to adopt the use of uniform VSL estimates to monetize the benefits of risk regulations and other policies as standard practice (Viscusi 2010).

There is no standard method used to calculate the VSL and each study may include different variables, account for different factors, and focus on different populations, which together partly explains the wide disparity in estimates. The Canadian government has stipulated the guidelines for the use of VSLs in research.⁵¹ Being aware of the limitations of this approach, a VSL figure from a recent US study (Viscusi 2008) is used instead. Viscusi (2008) finds a VSL figure of \$7 million 2008 USD, which is equivalent to \$7.55 million 2009 CAD and is higher than the \$6.1 million 2009 CAD obtained by the Treasury Board method.

TABLE 4.3: SELECTED STUDIES ON VALUE OF STATISTICAL LIFE (VSL)

Author(s)	Year	Country	VSL \$million (2008 USD)
Miller	1990	USA	4.0
Kniesner and Leeth	1991	Australia	5.3
Viscusi	1993	USA	4.9-11.5
Miller, Cohen, and Wiersema	1996	USA	4.0
Siebert and Wei	1998	Hong Kong	2.1
Meng and Smith	1999	Canada	2.9
Arabsheibani and Marin	2000	UK	38.4
Shanmugam	2001	India	1.3-1.8
Smith	2000	USA	2.9-6.1
Viscusi	2000	USA	4.0-11.9
Gunderson and Hyatt	2001	Canada	5.1-23.1
Leeth and Ruser	2003	USA	3.4
Viscusi	2004	USA	6.4
Aldy and Viscusi	2008	USA	4.3-9.5
Viscusi	2008	USA	5.0-12.5

The number of suicides motivated by spousal violence is estimated in the Mental Health Issues section on Suicide Attempts. The number of suicides is added to the number of homicides involving spousal relationships ascertained from Statistics Canada's Homicide Survey. The resulting total number of deaths caused by spousal violence is then multiplied by the VSL.

⁵¹ The *Canadian Costs Benefit Analysis Guide: Regulatory Proposals* released by the Treasury Board of Canada suggests that all researchers use a value of \$5.2 million (1996 CAD) adjusted for inflation to the appropriate year. However, adjusting the VSL for inflation is an insufficient method to obtain a reasonable estimate of the VSL in any given year.

As previously estimated in the Mental Health Issues section on Suicide Attempts, there were 82 and 40 suicides committed by female and male victims, respectively. According to Statistics Canada's Homicide Survey, 49 women, 15 men, and one victim of unknown gender were killed by a current or former spouse in 2009.⁵² In addition to homicide, 6 females and 2 males died due to other *Criminal Code* violations causing death such as criminal negligence causing death. Adding all of the deaths attributable to spousal violence gives a total of 137 females, 57 males, and 1 victim of unknown gender who lost their lives as a result of spousal violence.

Multiplying the number of lives lost due to spousal violence by the VSL, the total economic impact of spousal violence in 2009 through the loss of life is estimated at **\$1,472,250,000**. See Appendix B: Victim Costs – B.5 Intangible Costs – B.5.2 Loss of life for detailed calculations and sources.

Value of lost lives – SV against females	\$1,039,681,701
Value of lost lives – SV against males	\$432,568,299
Total Intangible Victim Costs, Loss of Life	\$1,472,250,000

⁵² There was one same-sex spousal homicide victim in 2009. As the gender of this victim is unknown, the value of lost life for this victim is split between female and male victims according to the proportion of each group.

5. Third-Party Costs

Crime affects the victim most seriously, but children and other family members, neighbours and friends, employers, government, and the general public are also affected to varying degrees. In particular, children exposed to spousal violence have an increased risk of committing acts of property damage, developing mental health issues, and not reaching their full earning potential (Dauvergne and Johnson 2001). While children may also be further victimized through physical or emotional abuse perpetrated directly against themselves by a parent, such incidents are not considered in this report. The economic impact of spousal violence on third parties is summarized below in Table 5.1.

TABLE 5.1: THIRD-PARTY COSTS

	Violence against females	Violence against males	Total
Funeral Expenses	\$1,023,432	\$425,808	\$1,449,240
Loss of Affection and Enjoyment to Family Members	\$26,267,706	\$10,902,294	\$37,170,000
Costs to Other Persons Harmed/Threatened	\$9,047,144	\$2,198,976	\$11,246,120
Health care	\$1,413,201	\$109,013	\$1,522,214
Productivity losses	\$7,633,943	\$2,089,963	\$9,723,906
Social Service Operating Costs	\$353,039,335	\$57,556,464	\$410,595,799
Shelters and transition homes	\$285,420,000	\$0	\$285,420,000
Crisis lines	\$601,854	\$9,163	\$611,017
Support centers	\$62,855,527	\$57,427,718	\$120,283,245
Victim services	\$4,161,954	\$119,583	\$4,281,537
Losses to Employers	\$52,123,343	\$25,795,217	\$77,918,560
Lost output	\$6,194,356	\$1,776,450	\$7,970,806
Tardiness and distraction	\$44,858,528	\$23,682,887	\$68,541,415
Administration costs	\$1,070,459	\$335,880	\$1,406,339
Negative Impact on Children Exposed to SV	\$153,241,598	\$82,000,292	\$235,241,890
Medical costs	\$741,415	\$396,906	\$1,138,321
Missed school days	\$901,057	\$482,343	\$1,383,400
Lost future income	\$148,447,357	\$79,433,843	\$227,881,200
Delinquent acts against property	\$3,151,769	\$1,687,200	\$4,838,969
Other Government Expenditures	\$96,270,249	\$19,989,751	\$116,260,000
Other federal expenditures	\$7,620,897	\$1,409,790	\$9,030,687
Other provincial/territorial expenditures	\$88,649,352	\$18,579,961	\$107,229,313
Third-Party Costs	\$691,012,807	\$198,868,802	\$889,881,609

Note: May not add to stated totals due to rounding.

5.1 Funeral Expenses

In the section on Loss of Life, it is estimated that 137 women, 57 men, and one person of unknown gender died as a result of spousal violence in 2009.⁵³ According to the Ontario Board of Funeral Services, the average funeral cost in 2009 was \$7,432.⁵⁴ Multiplying the number of lives lost due to spousal violence by the average funeral cost, the total economic impact of spousal violence in 2009 through funeral expenses is estimated at **\$1,449,240**.

Funeral expenses – SV against females	\$1,023,432
Funeral expenses – SV against males	\$425,808
Total Funeral Expenses	\$1,449,240

5.2 Loss of Affection and Enjoyment to Family Members

The death of a family member or loved one can have a significant emotional impact on a person, and when the death is surrounded by traumatic events, as with spousal violence, the emotional impact may be magnified. A grieving person may develop depression, anxiety, sleeping problems, and a range of other mental health issues due to the loss (Lichtenthal et al. 2004; Biondi and Picardi 1996).⁵⁵ Although it is impossible to truly estimate a value for the suffering of grieving family members of victims of fatal spousal violence, analyzing court awards can provide useable information for subsequent estimates.

Relevant court awards information is available from several jurisdictions, though the legislation is not specific to spousal violence. Alberta's *Fatal Accidents Act* requires courts to award damages for grief and the loss of care, guidance, and companionship in the amount of \$75,000 to the spouse or adult partner of the deceased person, \$75,000 to the parents of the deceased person, and \$45,000 to each minor or unmarried/un-partnered child of the deceased person.⁵⁶ Saskatchewan's *Fatal Accidents Act* also allows for recovery of bereavement damages; the damages for loss of companionship or grief are capped at \$60,000 for a spouse and \$30,000 for each child of the deceased.

Unlike Alberta and Saskatchewan, Ontario has no legislation to govern recovery for grief. Awards for the loss of companionship, care, and guidance in Ontario are at the discretion of the Ontario court and are subject to a reasonableness requirement. One particular case in the Ontario courts, analysed in Garrow and Ayre (2009), involved the jury awarding general damages of \$45,000 to the son of the deceased, \$100,000 to the daughter of the deceased and \$373,000 to the wife of the deceased, but the Ontario Court of Appeal ruled that these awards could not stand as "it is well established that losses of that character are not compensable as a matter of law." In the end, the court substituted the following awards for general damages: \$20,000 to the deceased's son, \$35,000 to the deceased's daughter, and \$75,000 to the deceased's wife.

⁵³ There was one same-sex spousal homicide victim in 2009. As the gender of this victim is unknown, the value of lost life for this victim is split between female and male victims according to the proportion of each group.

⁵⁴ Ontario Board of Funeral Services. "Ontario Funeral Sector – Quick Facts 2009." 2009.

⁵⁵ There is a large body of literature on complicated grief. See for example, Janice Harris Lord. 2006. *No Time for Goodbyes: Coping with Sorrow, Anger and Injustice after a Tragic Death*, 6th ed. Compassion Press. For a list of resources see Bereaved Families of Ontario- Toronto at www.bfotoronto.ca.

⁵⁶ For detailed definitions and conditions, see Alberta's *Fatal Accidents Act*, R.S.A. 2000, C. F-8, S. 8.

A collective assessment of the court awards information leads to the use of Alberta's legislation as the basis for value of lost enjoyment and affection due to loss of family members in this report. Therefore, for the purpose of this report, the value of lost enjoyment and affection to parents of victims who died as a result of spousal violence is \$75,000 and the value to children of the victims is \$45,000.

As previously estimated, there were 137 women, 57 men, and one person of unknown gender who died as a result of spousal violence in 2009.⁵⁷ The impact on the parents and children of the victims who died are considered, but the impact on the perpetrating spouses is not included. It is assumed that every victim has two living parents, and the number of children per victim is estimated from Statistics Canada data. According to Statistics Canada, there were 8,459,058 couples (both those with children and those without children) and 7,638,710 children of couples in 2009, which implies that there were 0.9 children per couple (both those with children and those without children) in 2009.⁵⁸

The number of victims who died as a result of spousal violence is multiplied by both the appropriate value of the lost affection and enjoyment and the number of family members of the appropriate type. The total economic impact of spousal violence in 2009 on the family members of victims who lost their lives is estimated at **\$37,170,000**.

Loss of affection/enjoyment to family members – SV against females	\$26,267,706
Loss of affection/enjoyment to family members – SV against males	\$10,902,294
Total Loss of Affection and Enjoyment to Family Members	\$37,170,000

5.3 Costs to Other Persons Harmed During the Incidents

Witnesses of violent crime may attempt to intervene on behalf of the victim and may suffer physical or emotional impacts as a result. The GSS provides data on people who were harmed in spousal violence incidents other than the victim and the perpetrator.

5.3.1 Health care

The GSS finds that 48,871 persons who were neither victims nor perpetrators were harmed or threatened during spousal violence incidents in 2009. As the GSS respondents were not asked questions regarding the health care required by witnesses who were harmed or threatened, it is assumed that witnesses had the same probability of seeking medical attention from a physician or at an emergency department following the incident as victims. Due to data limitations, acute hospitalization is not examined, yielding a more conservative estimate.

After calculating the probabilities of victims requiring the two types of health care from the GSS, it is then estimated that 851 individuals received medical attention from a physician and 2,398 individuals visited an emergency department for injuries incurred while witnessing spousal violence. The total health care costs can be calculated by applying \$55 for the average cost of a physician visit (as calculated in the section on Victim Costs, Physician Visits), \$266 for the average

⁵⁷ There was one same-sex spousal homicide victim in 2009. As the gender of this victim is unknown, the value of lost life for this victim is split between female and male victims according to the proportion of each group.

⁵⁸ Source: Statistics Canada, CANSIM, Table 1110022 – Family characteristics, families with children, by age of children, annually. Source: Milan et al. (2007).

cost of an emergency department visit, and \$590 for the average cost of ambulance transportation, along with the 60% and 50% rates of ambulance use for females and males respectively. The total economic impact of spousal violence in 2009 through health care costs for other people harmed is estimated at **\$1,522,214**.

Health care costs of other persons harmed – SV against females	\$1,413,201
Health care costs of other persons harmed – SV against males	\$109,013
Total Costs to Other Persons Harmed, Health Care	\$1,522,214

5.3.2 Productivity losses

As with victims, other people harmed during incidents of spousal violence may be unable to work or attend school, resulting in productivity losses. Data relating to the productivity losses of people harmed during spousal violence incidents other than the victim or offender is not available. As such, certain assumptions are made: first, we use the value of household work as the base wage for missed work, acknowledging that this will likely yield a conservative estimate; second, we assume that these individuals were unable to perform daily activities for a length of three days.

Among the 48,871 other individuals harmed or threatened during incidents of spousal violence, as found in the GSS, 27,704 were aged 15 or over. The hourly wage of household workers in 2009 was \$15.60 (see Lost Household Services section). The total economic impact of spousal violence in 2009 through productivity losses to other people harmed is estimated at **\$9,723,906**.

Productivity losses to other persons harmed – SV against females	\$7,633,943
Productivity losses to other persons harmed – SV against males	\$2,089,963
Total Costs to Other Persons Harmed, Productivity Losses	\$9,723,906

5.4 Social Services Operating Costs

A variety of resources are available to victims of spousal violence in Canada. Shelters and transition homes provide safe accommodations to victims fleeing violence, victim counselling provides emotional support, and community centres offer temporary assistance to victims and their families. Programs and services are funded by both government and non-government contributions.

5.4.1 Shelters and transition homes

Statistics Canada's Transition Home Survey (THS) collects information on shelters and transition homes in Canada biennially. The type of shelter, number of beds, number of admissions, and reasons for stay are recorded every cycle, while operating cost data are collected every second cycle. The 2009/2010 cycle estimates the total operating costs of the 593 shelters across Canada in 2009 to be \$402 million. All expenditures are assumed to be used for assisting female clients only, though there are services available for men who require emergency shelter. Men fleeing violent situations may be placed in a hotel or may be able to stay in a homeless shelter, some of which are accessible only to men. The costs of these services are not available as the proportion

of these men seeking shelter due to spousal violence is unknown, as are the total expenditures of these services; because of these limitations, no estimate will be conducted for male victims in this section.

In addition to expenditure information, the 2009/2010 THS also took a snapshot of the transition home clients on April 15, 2010. The snapshot shows that 71% (3,298) of the 4,645 female residents reported abuse as the main reason for seeking refuge. The GSS reveals that the desire to protect their children from suffering abuse or exposure to abuse was another leading motivation for females seeking shelter and the THS snapshot corroborates this with the finding that 74% of female clients with parental responsibilities also brought their children into the shelter.

Following the results from the 2009/2010 THS snapshot, it is assumed that 71% of women admitted to shelters or transition homes in 2009 were fleeing situations involving spousal violence and therefore that 71% of expenditures were allocated to spousal violence victims. Multiplying the proportion of expenditures allocated to spousal violence victims by the total operating costs of transition homes, the total economic impact of spousal violence in 2009 on shelters and transition homes is estimated at **\$285,420,000**.

Operating costs of shelters – SV against females	\$285,420,000
Operating costs of shelters – SV against males	\$0
Total Social Services Operating Costs, Shelters	\$285,420,000

5.4.2 Crisis lines

The GSS finds that 15,046 female victims of spousal violence and 229 male victims contacted crisis lines in 2009. The average length of call is estimated at 24 minutes.⁵⁹ Since all calls made to crisis lines are anonymous, the number of follow-up calls per client is unknown. However, qualitative evidence from crisis line workers suggests that victims make, on average, five calls to a crisis line. The total length of calls by each victim utilizing crisis line services is therefore estimated at two hours. Various job postings for crisis line positions suggest that the average operating cost of a crisis line in 2009 was \$20 per hour, where salaries were the main cost component.⁶⁰ Although many crisis line workers are volunteers, the \$20 per hour rate is used as a proxy for the opportunity costs of the volunteers who may otherwise be working for pay and for the supervision of the volunteers or paid workers. Multiplying the number of victims contacting crisis lines by the total length of calls per victim and the crisis line operating costs per hour, the total economic impact of spousal violence in 2009 on crisis lines is estimated at **\$611,017**.

Operating costs of crisis lines – SV against females	\$601,854
Operating costs of crisis lines – SV against males	\$9,163
Total Social Services Operating Costs, Crisis Lines	\$611,017

⁵⁹ Source: Crisis Call Centre (Reno, Nevada, US). “Profile Report 2004-2005.” <<http://www.crisiscenter.org/documents/04-05ProfileReport.pdf>>.

⁶⁰ Source: Charity Village. <<http://www.charityvillage.com/>>. The annual salary for crisis line coordinators ranges from \$37,011 to \$46,274 (2011), equivalent to an hourly wage rate of \$19 to \$24. Other job websites suggest that the hourly wage rate ranges from \$13 to \$19.

5.4.3 Support centres

According to the GSS, 139,679 female victims and 127,617 male victims sought help from a support centre (a broad category of social services that includes women's centres, men's centres, community centres, and family centres) in 2009 as a result of spousal violence. The average length of use of the centres and the associated operating costs are unknown; therefore, assumptions of these measures are necessary. It is assumed that each client visited a centre multiple times, with total use lasting on average 15 hours per client, and that the operating cost per hour was \$30. The final estimate is obtained by multiplying the number of victims who used support centres by the average length of visit and the support centre operating costs per hour. The total economic impact of spousal violence in 2009 on support centres is estimated at **\$120,283,245**.

Operating costs of support centres – SV against females	\$62,855,527
Operating costs of support centres – SV against males	\$57,427,718
Total Social Services Operating Costs, Support Centres	\$120,283,245

5.4.4 Victim services

Victim services provide information, counselling, and other assistance to victims of crime and abuse. Funding for victim services comes from a variety of sources, including the federal government's Victims Fund, provincial and territorial general revenues, provincial, territorial, and federal surcharges, and other sources such as private fundraising.

The GSS records that victim services were used by 9,184 female victims of spousal violence and 264 male victims in 2009. Based on information from the Victim Services Survey (Sauvé 2008), the cost of victim services per client in 2009 is estimated at \$453. Multiplying the number of persons who used victim services by the service operating costs per victim, the total economic impact of spousal violence in 2009 on victim services is estimated at **\$4,281,537**.

Victim compensation programs typically exist at victim services locations, but the costs of victim compensation programs are not included in this section's estimate as compensation programs normally cover damaged and stolen property, lost wages, and pain and suffering, all of which are captured elsewhere in this report. Compensation programs are important as they do attempt to shift the impact from the victim to the state, and this aspect is examined further in Section 6 where the burden by who actually pays is analysed.

Operating costs of victim services – SV against females	\$4,161,954
Operating costs of victim services – SV against males	\$119,583
Total Social Services Operating Costs, Victim Services	\$4,281,537

5.5 Losses to Employers

Employees who are in abusive relationships may display the adverse effects of the abuse in the workplace, with tardiness, distraction, and absence all contributing to decreased productivity. Employers therefore face economic losses when their employees experience spousal violence. Swanberg et al. (2005) find that 71% of female victims of spousal violence who were employed reported having difficulty concentrating in the workplace because of the spousal violence, while 63% did not work at their optimal level in the year following the spousal violence. Decreased

productivity at work is one possible outcome for victims, but when victims cannot attend work at all, managers and administrators must complete the necessary administration for rearranging workloads among remaining staff or the organization will face even greater output losses (Health and Safety Executive 1999).

In the event of the victim resigning or being dismissed, employers face recruitment and retraining costs, but such data for spousal violence cases do not exist and so these costs are not included in the estimate. Therefore, only three types of costs comprise the losses to employers: lost output from victims' absences, lost productivity due to tardiness and distraction, and administration costs for victims' absences.

5.5.1 Lost output

As labour, an employee is one of the inputs used in the production of a firm's output. The wages paid to an employee can be considered the cost of, or investment in, this input. It is assumed in this study that every employer, whether public or private, makes an efficient investment decision, and that every investment is expected to generate a positive return. Following Boardman et al. (2008), the marginal return rate on investment in employee labour is assumed to be 5.2%; this means that if an employer invests \$100 in an employee (through wages), the employer will gain \$105.20 in output, for a net gain of \$5.20. Conversely, a disinvestment of \$100, brought about by an employee's absence from work, will bring an employer a net loss of \$5.20.

Lost victim wages due to both physical injuries and mental health issues are calculated in Section 4, Victim Costs, Work Loss (due to mental health issue) and Lost Wages (due to physical injuries). Adding the lost wages from both sources, the total lost wages are estimated at \$119,122,230 for female victims and \$21,434,414 for male victims. This disinvestment will cause a net output loss of 5.2% to employers. Multiplying the amount of lost wages by the 5.2% rate of return results in a lost net output of \$6,194,356 for female victims and \$1,776,450 for male victims. The total economic impact of spousal violence in 2009 on the output of employers is estimated at **\$7,970,806**.

Lost output – SV against females	\$6,194,356
Lost output – SV against males	\$1,776,450
Total Losses to Employers, Lost Output	\$7,970,806

5.5.2 Tardiness and distraction

Reeves and O'Leary-Kelly (2007) examine the tardiness and distraction of both employed intimate partner violence (IPV) victims and employed non-victims in a southern American city. By comparing the tardiness and distraction costs between the two groups the cost of tardiness and distraction attributable to spousal violence can be determined.

Given the average lost productivity and annual income in Reeves and O'Leary-Kelly (2007), the percentage of income counted as lost productivity was 12.3% for female victims, 10.2% for male victims, 8.4% for female non-victims, and 8.4% for male non-victims. This implies that the percentage of income counted as lost productivity due to spousal violence was 3.9% for female

victims and 2.2% for male victims. Applying this to the average incomes of Canadian victims, the monthly loss to employers due to tardiness and distraction caused by spousal violence is \$137.64 and \$125.69 for females and males respectively.

The GSS is used to determine the number of victims that exhibited tardiness and distraction because of spousal violence. GSS respondents are screened for employment status and how they were affected by the incidents. Respondents who were employed and considered to have been significantly affected are separated into three groups in this study: victims suffering one incident in the last 12 months are assumed to exhibit one month of tardiness and distraction; victims suffering two incidents are assumed to exhibit two months of tardiness and distraction; and victims suffering three or more incidents are assumed to exhibit six months of tardiness and distraction.

According to the GSS, 95,268 female victims and 65,898 male victims were employed and emotionally affected in some way by the incidents. Among these victims, 62,701 had suffered one incident in the previous 12 months, 35,239 victims had suffered two incidents, and 63,526 victims had suffered three or more incidents. To obtain the total lost productivity from tardiness and distraction, the monthly cost to employers is multiplied by the number of months each group of victims exhibited tardiness and distraction and the number of victims in each group. The total economic impact of spousal violence in 2009 on employers due to tardiness and distraction is estimated at **\$68,541,415**.

Tardiness and distraction – SV against females	\$44,858,528
Tardiness and distraction – SV against males	\$23,682,887
Total Losses to Employers, Tardiness and Distraction	\$68,541,415

5.5.3 Administration costs

Managers and administrators must re-arrange workloads and complete other administrative tasks when employees are absent from work. The Health and Safety Executive (1999), a UK organization, assumes that administrators lose 0.5 hours of productivity because of employee absenteeism. For the purposes of this report only 0.25 hours of lost productivity, split evenly between managers and administrators, is assumed in order to ensure a conservative estimate. The hourly wage of managers and administrators is multiplied by the time that each spends on administrative tasks for employee absenteeism. Following this, the resulting administration cost per victim for 2009 is estimated at \$7.40 for each absence. It is calculated in Section 4, Lost Wages, that female victims missed 145,147 days of work and male victims missed 45,543 days of work as a direct result of spousal violence. The number of days missed is multiplied by the cost per absence to obtain the final estimate. The total economic impact of spousal violence in 2009 on employers through administration costs is estimated at **\$1,406,339**.

Administration costs for work absences – SV against females	\$1,070,459
Administration costs for work absences – SV against males	\$335,880
Total Losses to Employers, Administration Costs	\$1,406,339

5.6 Negative Impact on Children Exposed to Spousal Violence

The GSS shows that children were exposed (heard, witnessed or saw the after-effects) to violence between parents in 94,631 households in 2009, accounting for 28% of all households in which spousal violence was reported. It is documented that children exposed to spousal violence are more likely than other children to develop social disorders (e.g. hyperactivity and aggressiveness), emotional disorders (mental health issues), and delinquency issues (Dauvergne and Johnson 2001). The Adverse Childhood Experiences (ACE) Study in the U.S. has been following over 17,000 patients participating in routine health screening since the mid 1990s and has revealed evidence of adverse health, social, and economic impacts that result from childhood trauma, including childhood exposure to spousal violence (Felitti et al. 1998; Dube et al. 2001; Chapman et al. 2004; Dube et al. 2003a; Dube et al. 2003b; Whitfield et al. 2003; Dube et al. 2002; Dube et al. 2009; Anda et al. 2007; Brown et al. 2009; Anda et al. 2004)

Bowlus and Seitz (2006) present evidence that being raised in a household where violence is present increases the probability of exhibiting physically aggressive behaviour. All of these negative effects present significant costs to children, their parents, and to society in general. Moreover, these problems often persist into the child's adulthood (for hyperactivity see Zametkin et al. 1990; for mental health issues see Harrington et al. 1990; for physical aggression see Loeber and Hay 1997) and future generations of a family can become trapped in a cycle of violence. Bowlus and Seitz (2006) find that female children who have been exposed to the abuse of their mothers by their fathers are more likely to be abused by their partners later in life, and males exposed to this behaviour often reproduce this behaviour with their future spouses.

Data limitations make it difficult to accurately estimate the number of children exposed to spousal violence. The GSS asks, "Did any of your children see or hear this incident or any of these incidents?" Tallying the "yes" answers shows that there were 94,631 households in which children were exposed to spousal violence, but there is no follow-up question asking respondents to specify the number of children in the household exposed to the violence. To estimate this, the average number of children per couple family with children (1.83), derived from Statistics Canada data,⁶¹ is applied to the number of respondents who answered "yes" to the above question. With this method, it is estimated that 173,591 children were exposed to spousal violence in 2009.

One factor leading to possible underestimation is the potential inaccuracy of responses to the GSS question. Victims may not have been aware that their children had been exposed to the violence and inaccurately responded "no" to the question (Jaffe et al. 1990; Dauvergne and Johnson 2001). A parent's personal motives in answering the question may have led to a distortion of the truth; parents may wish to claim that their children had not been exposed to the violence even if this was not true in order to avoid negative real or perceived consequences (O'Brien et al. 1994; Dauvergne and Johnson 2001). One factor leading to possible overestimation of the estimate is the attribution of all negative impacts on children exposed to spousal violence to incidents in 2009; a child's development of a social or emotional disorder might be caused by long-term exposure to spousal violence that occurred not only in 2009.

⁶¹ Statistics Canada, CANSIM, Table 1110022 – Family characteristics, families with children, by age of children, annually. V29765770: Children in couple families; and V29765737: Couple families with children.

Three of the four major types of economic impacts in this section are: medical costs, missed school days, and lost future income. Each of these impacts are estimated by analysing three specific conditions that children may develop: hyperactivity (ADD or ADHD), mental health issues (emotional disorders), and physical aggression. The fourth type of impact is delinquent acts against property and the estimation method for this type of impact is simpler than for the other three. It is important to note that some of the economic impacts will only present themselves later in the child's life, and, therefore, are subject to future changes in the economic, social, and judicial environments.

While the GSS data are used to estimate the total number of children who were exposed to spousal violence in 2009, findings from Dauvergne and Johnson (2001) are used to estimate the proportion of children who developed hyperactivity, emotional disorders, and physical aggression. Dauvergne and Johnson (2001) use data from the 1999 National Longitudinal Survey of Children and Youth (NLSCY), Cycle 3 to determine how significant the contribution of witnessing spousal violence is to a child's development of a condition (hyperactivity, emotional disorder, or physical aggression) while accounting for other potentially influential factors, such as family structure, family income level, and parenting style.

The NLSCY is a recurring nationwide survey that tracks many aspects of child development, and Cycle 3 is the most recent version of the NLSCY for which the dataset is fully available. The NLSCY question pertinent to this study asks children about their exposure to violence in the house and Dauvergne and Johnson (2001) use the results from this question and other NLSCY data regarding the previously mentioned variables to determine the contribution of witnessing violence to the development of a condition. The results of the regressions these authors perform are then converted into a useable form that indicates what percentage of children exposed to spousal violence develop each condition primarily because of the exposure to violence. For example, an estimated 3.06% of children exposed to spousal violence develop hyperactivity primarily because of the exposure; the corresponding percentages for mental health issues and physical aggression are 1.86% and 22.24%, respectively.

The proportions of children developing each condition primarily because of exposure to spousal violence are then multiplied by the total number of children exposed to spousal violence (173,591 as calculated above) to determine the number of children with each condition. Table 5.2 below presents the estimated number of children exposed to spousal violence by the condition developed and the gender of the primary victim.

TABLE 5.2: NUMBER OF CHILDREN EXPOSED TO SPOUSAL VIOLENCE BY TYPE OF CONDITION AND GENDER OF PRIMARY VICTIM

Gender of Primary Victim	Hyperactivity	Mental Health Issue	Physical Aggression	Delinquent Acts against Property
F	3,460	2,103	25,145	13,579
M	1,852	1,126	13,461	7,269

As explained in the Framework section, it is possible that these conditions are only manifested after multiple years of exposure to spousal violence. In such cases, the effect of the conditions on the lives of the children exposed to violence cannot be attributed solely to spousal violence

incidents in 2009, because incidents in other years have also contributed to the development of the conditions. It follows that only a certain proportion of costs associated with these conditions can be reasonably attributed to spousal violence incidents in 2009. To ensure that only costs resulting from incidents in 2009 are included in this report, all costs in this section are divided by the average number of years that children are exposed to spousal violence. It is assumed that each year of exposure contributes equally to the development of these negative conditions.

Scant research exists attempting to estimate the average years of exposure, so an indirect method is used. Using a sample of 176 children, Rossman (2001) studies the effects of exposure to spousal violence on children. For each child in the sample, Rossman (2001) records the percentage of life that he or she had been exposed to parental violence, along with his or her age. By multiplying the two measures, the approximate number of years that each child had been exposed to parental violence is ascertained, and averaging across all children gives an estimate of the average length of time that children are exposed to spousal violence, which is 7 years. All estimates in this section are therefore divided by 7 in order to obtain the impact that can be reasonably attributed to spousal violence incidents solely in 2009.

5.6.1 Medical costs

Only children with hyperactivity or mental health issues are included in this section. Data of the number of children on medication, the duration of medication treatment, and the cost of medication are all required to estimate the economic impact. Any medical costs associated with the physical pain of mental health issues are not included.

As shown in Table 5.2, 5,312 children developed hyperactivity due to exposure to spousal violence in 2009. LeFever et al. (2002) find that 74% of American children with hyperactivity use medication to control symptoms. Applying this proportion to the Canadian numbers in 2009, it is estimated that 3,931 children with hyperactivity used medication as a result of exposure to spousal violence. The average medication treatment length is determined from Barbaresi et al. (2006) and the Centers for Disease Control and Prevention. Barbaresi et al. (2006) study the effects of stimulant medication on children born between 1976 and 1982 who were diagnosed with ADHD. The median treatment length in their sample of 379 children was 33.8 months, but a 1996 study reports that treatment length for children diagnosed with ADHD before puberty commonly increased to ten years (120 months) following the increase in ADHD rates.⁶² Considering these sources, medication treatment length for children exposed to spousal violence in 2009 is assumed to be five years (60 months). At a monthly medication cost of \$30 per child,⁶³ the total medication costs for children with hyperactivity are estimated at \$7,075,441.

Table 5.2 shows that 3,229 children developed a mental health issue or emotional disorder due to exposure to spousal violence in 2009. Dauvergne and Johnson (2001) find that 8.1% of parents whose children had witnessed spousal violence contacted a mental health professional about their children's physical or emotional health problems. Multiplying the number of children with a mental health issue by the proportion receiving mental health treatment, the number of children exposed to spousal violence who received mental health treatment is estimated at 261. Based on

⁶² Source: Centers for Disease Control and Prevention. Participants: Pelham, William, and Laurence Greenhill. "Public Health Issues in the Treatment of ADHD." 1999. <<http://www.cdc.gov/ncbddd/adhd/workshops/treatment.html>>.

⁶³ Source: eHow Health. "Screening Tests for ADHD." <http://www.ehow.com/facts_5028739_screening-tests-adhd.html>. The lowest monthly treatment cost is \$30.

Croghan et al. (1999) and the Association of Psychologists of Nova Scotia,⁶⁴ it is assumed that the average length of mental health treatment for children was 1.25 years. Children’s Mental Health Ontario suggests that the mental health treatment cost per child in 2009 was \$2,731.⁶⁵ Therefore, the total costs of mental health treatment for children exposed to spousal violence were \$892,806.

Adding the medical costs associated with hyperactivity and mental health issues, and dividing by 7 years of exposure, the total economic impact of spousal violence in 2009 through the medical costs for children exposed to spousal violence is estimated at **\$1,138,321**. See Appendix C for detailed calculations and sources.

Medical costs for children – SV against females	\$741,415
Medical costs for children – SV against males	\$396,906
Total Negative Impact on Children, Medical Costs	\$1,138,321

5.6.2 Missed school days

Only children with hyperactivity and physical aggression are included in this section. The estimate will factor in the number of children who miss medication doses, the number of children suspended or expelled, and the length of suspensions and expulsions. Children who miss school days because of mental health issues are not considered due to data limitations, while lost education from dropping out is examined in the section on Lost Future Income.

Table 5.2 shows that 5,312 children developed hyperactivity as a result of exposure to spousal violence, and it is calculated above that 3,931 children used medication to control hyperactivity. Dick and Balch (2004)⁶⁶ find that, on average, children who take medication for hyperactivity miss one dose every two weeks, with 26% of missed doses occurring in the morning, 26% in the afternoon, and 22% at lunchtime. For simplicity, it is assumed that all missed doses occur on weekdays and that children who miss a morning dose also miss an afternoon dose. Children who miss doses may experience a lack of focus in class and, therefore, children who miss a lunch dose are assumed to miss 0.5 days of school, while those who miss both morning and afternoon doses are assumed to miss one entire day of school.

Children who exhibit hyperactive behaviour, but are not diagnosed with hyperactivity are assumed to miss the equivalent of 0.5 days of school every two weeks since the severity of their symptoms may not be as acute. Following this, 26% of children on medication (1,022 children) missed two days of school per month, 22% of children on medication (865 children) missed one day of school per month, and the remaining 1,382 children not on medication also missed one day of school per month. With an average treatment length of five years, as discussed above, a total of 193,045 school days are assumed to be missed because of missed medication doses.

⁶⁴ Source: Association of Psychologists of Nova Scotia. “Psychology works for Social Anxiety Disorder (Social Phobia). <http://www.apns.ca/prob_socialphobia.html>. The average treatment length for social anxiety is 2 years.

⁶⁵ Source: Children’s Mental Health Ontario (CMHO). “Our Children’s Mental Health: Worth an Extra 4¢ a Week? 2005-2006.” Presentation. The average cost of the Ontario children’s mental health system in 2005 was \$2,500 per child, equivalent to \$2,731 in the 2009 dollars.

⁶⁶ Source: Dick, Erin, and Denise Balch. 2004. ADD/ADHD and Caregiver Productivity. *Benefits and Pensions Monitor Online* October 2004.

Table 5.2 shows that 38,606 children developed physically aggressive behaviour as a result of exposure to spousal violence in 2009. Physical aggression can be cause for suspension and expulsion from school. Rates of suspension and expulsion vary widely across school boards. In 2007/2008, the most recent school year for which data is available, the province-wide suspension rate in Ontario was 4.54% and the expulsion rate was 0.07%. Statistics from New Zealand imply that 61.5% of all suspensions and expulsions in 2009 were mainly due to issues associated with physical aggression, including physical assault on students and staff, sexual harassment and misconduct, arson, vandalism, continual disobedience, other harmful or dangerous behaviour, verbal assault, and weapons.⁶⁷ Faris and Felmlee (2011) note that about 25% of children exhibit physically aggressive behaviour.

Together these data allow us to estimate the suspension rate and expulsion rate for physically aggressive children in 2009. The suspension rate is estimated to be 11.17% ($=4.54\%*61.5\%/25\%$) and the expulsion rate is estimated to be 0.17% ($=0.07\%*61.5\%/25\%$). By applying these rates to the total number of children with physical aggression, it is estimated that 5,258 children were suspended and 81 children were expelled due to physical aggression that developed after exposure to spousal violence. The average suspension length in 2009 was ten days and the average expulsion length was 90 days, so the total estimated number of lost school days due to suspension and expulsion is 49,050.

Adding the number of missed school days due to hyperactivity and physical aggression results in an estimate of 242,095 lost school days due to exposure to spousal violence. Using information from six provincial ministries of education, the daily education cost per child in 2009 is estimated at \$40. After dividing by 7 years of exposure, the total economic impact of spousal violence in 2009 through lost school days of children exposed to spousal violence is estimated at **\$1,383,400**.

Costs of missed school days for children – SV against females	\$901,057
Costs of missed school days for children – SV against males	\$482,343
Total Negative Impact on Children, Missed School Days	\$1,383,400

5.6.3 Lost future income

The research used in this section’s estimates show that childhood social and emotional disorders can continue into adulthood and negatively affect future income levels. Children with any of the three main conditions – hyperactivity, mental health issues, or physical aggression – may not reach their full earning potential. Children may develop more than one of these conditions, but there is a limit to how much income can be lost and so the lost income of children with more than one condition may be double-counted if inadequate methods are used. Therefore, children who have multiple conditions due to exposure to spousal violence are, for the purposes of this section, counted once for having the condition that results in the greatest expected loss of income. This method eliminates the problem of double counting.

Biederman and Faraone (2006) find that hyperactivity (ADHD) in adulthood is associated with reduced earning potential equivalent to \$12,214 CAD per person in 2009 dollars. The Mental Health Division of the UK Department of Health (2010) estimates the loss in annual earnings due to serious mental health issues to be equivalent to \$13,564 CAD in 2009, representing 35.3% of

⁶⁷ Source: New Zealand government. “Education Counts, Indicators”. 2009.
 <<http://www.educationcounts.govt.nz/indicators/data/student-engagement-participation/3728>>.

expected earnings when no mental health issue is present. Hankivsky (2008) estimates the annual income loss of dropping out of school (high school non-completion), which is assumed to be one possible result of physically aggressive behaviour, at the equivalent of \$6,558 CAD in 2009.

Children with mental health issues are counted as having mental health issues only, even though some of them also exhibit hyperactivity or physical aggression. The remaining children who have hyperactivity are counted as having hyperactivity only, regardless of whether they also exhibit physical aggression. Other children who have physical aggression only are counted as such. This method avoids the problem of double counting and at the same time ensures that children with multiple conditions will be counted as losing at least as much future income as their most serious condition entails.

Table 5.2 shows that 3,229 children developed a mental health issue after exposure to spousal violence in 2009, 8.1% (261) of whom received services from a mental health specialist. The Mental Health Division of the UK Department of Health (2010) states that 25% to 50% of adult mental health problems could have been avoided with treatment during childhood. It is therefore assumed that hyperactivity persists into adulthood for 10% of children who received treatment in childhood and for 25% of children who received no treatment, which means that 768 children will carry the mental health issues into adulthood. Kessler et al. (2008) find that serious mental disorders represent 13.2% of all mental health disorders, and it follows that 101 ($=768*13.2\%$) children exposed to spousal violence in 2009 will have serious mental disorders that will reduce their earning potential as adults.

In addition, table 5.2 shows that 5,312 children developed hyperactivity after exposure to spousal violence in 2009. Zametkin et al. (1990) note that 40% to 60% of childhood ADHD persists into adulthood, and following this it is assumed that 50% of childhood hyperactivity persists into adulthood; therefore, 2,656 ($=5,312*50\%$) children will experience adult ADHD due to exposure to spousal violence as children. Data from the 1999 National Longitudinal Survey of Children and Youth (NLSCY) suggest that 50.2% of children with an emotional disorder also exhibit hyperactivity. As it was previously calculated that 101 children exposed to spousal violence in 2009 had a mental health issue, it is estimated that 51 ($=101*50.2\%$) also had hyperactivity due to exposure to violence. The number of children with hyperactivity who did not have an emotional disorder is then calculated to be 2,605 ($=2,656-51$).

Table 5.2 also shows that 38,606 children began exhibiting physically aggressive behaviour after exposure to spousal violence in 2009. Aggressive behaviour can lead to dropping out of school, as evidenced by Cairns, Cairns and Neckerman (1989), who determine that the dropout rate for American high school students with high aggression and poor academic performance (severe cases) ranges from 43% to 71%. These data support the assumption that 15% of all children with physical aggression drop out of school, which is higher than the Canadian dropout rate for all students, (9.8% in 2004/2005⁶⁸). Multiplying the dropout rate of physically aggressive students by the number of physically aggressive students results in 5,791 physically aggressive students who will drop out of school due to exposure to spousal violence.

Results from the NLSCY indicate that 41.5% of children with a mental health issue, hyperactivity, or both also exhibit physical aggression. To determine how many children exhibited physical aggression only, the number of children with a mental health issue (101) is added to the number of

⁶⁸ Statistics Canada. "Education Matters: Trends in dropout rates among the provinces." *The Daily Friday*, December 16, 2005. <<http://www.statcan.gc.ca/daily-quotidien/051216/dq051216c-eng.htm>>.

children who developed hyperactivity but not a mental health issue (2,605), and the result (2,706) is multiplied by the proportion of those children who also exhibited physical aggression (41.5%). The result (1,122) is subtracted from the number of physically aggressive students who will drop out of school (5,791). The final result of 4,669 is the estimated number of children who will drop out of school due to physical aggression but who did not develop hyperactivity or a mental health issue.

Table 5.3 below compares the original independent count of people with each condition and the revised count where the overlap has been removed.

TABLE 5.3: NUMBER OF CHILDREN AND LOST FUTURE INCOME BY TYPE OF NEGATIVE IMPACT

	Hyperactivity	Emotional Disorder	Physical Aggression
Independent count	2,656	101	5,791
Revised count	2,605	101	4,669
Annual income loss per person	\$12,214	\$13,564	\$6,558
Total annual income loss	\$31,817,470	\$1,369,964	\$30,619,302

Multiplying the number of estimated unique children with each condition by the corresponding estimate of lost annual income for each condition gives a lost future income of \$63,806,736 per year. Assuming 25 year careers and a discount rate equal to the inflation rate, and dividing by 7 years of exposure, the total lost future income of children exposed to spousal violence is estimated at **\$227,881,200**. Appendix C contains all sources and detailed calculations.

Lost future income of children – SV against females	\$148,447,357
Lost future income of children – SV against males	\$79,433,843
Total Negative Impact on Children, Lost Future Income	\$227,881,200

5.6.4 Delinquent acts against property

The number of children who committed delinquent acts against property can be found in the results of the National Longitudinal Survey of Children and Youth (NLSCY), as a question in the NLSCY asks children directly if they had committed property offences.

Using results of the NLSCY from Dauvergne and Johnson (2001), it is estimated that 12%, or 20,848, of the 173,591 children exposed to spousal violence committed delinquent acts against property as a result of the exposure to spousal violence. Due to a lack of data, it is impossible to identify how many delinquent acts each of these children committed, so it is assumed that each child committed only one act. The value of the property damage or theft associated with incidents of delinquent acts against property is obtained from the GSS: 93% of property crimes involved damaged property, with a value of \$860 per incident and 98% of property crimes involved stolen property or cash, with a value of \$840 per incident. It follows that 19,393 property offences committed by children exposed to violence involved damaged property and 20,470 property offences committed by children exposed to violence involved stolen property or cash. After dividing by 7 years of exposure, the total economic impact of spousal violence in 2009 on property damaged or stolen by children exposed to spousal violence is estimated at **\$4,838,969**.

Costs of delinquent acts against property – SV against females	\$3,151,769
Costs of delinquent acts against property – SV against males	\$1,687,200
Total Negative Impact on Children, Delinquent Acts against Property	\$4,838,969

5.7 Other Government Expenditures

Both the federal and provincial/territorial levels of government are active in spousal violence prevention and education, rehabilitation of spousal violence perpetrators, and assistance of spousal violence victims and children who are exposed to violence. The vast majority of both government funding for third-party service delivery and direct government expenditures on programs and policies related to spousal violence 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 shelters and transition homes, support centres, crisis lines, and victim services. This section therefore only includes expenditures that are not already accounted for elsewhere in the report.

TABLE 5.4: SELECT FEDERAL, PROVINCIAL, AND TERRITORIAL ACTION PLANS/PROGRAMS

Jurisdiction	Action Plan or Program
Canada	Family Violence Initiative (FVI)
Newfoundland & Labrador	Violence Prevention Initiative, 2006-2012
Nova Scotia	Domestic Violence Prevention Committee
New Brunswick	A Better World for Women: moving forward 2005-2010
Prince Edward Island	Family Violence Prevention Services
Quebec	Action Plan on Sexual Abuse, 2008-2013 Domestic Violence Action Plan, 2004-2009
Ontario	Domestic Violence Action Plan Victim/Witness Assistance Program (V/WAP) Partner Assault Response (PAR) Program
Manitoba	Domestic Violence Prevention Program
Saskatchewan	Interpersonal Violence and Abuse Program
Alberta	Family Violence Prevention
British Columbia	Stopping the Violence Relationship Violence Prevention Program
Northwest Territories	Family Violence Action Plan: Phase II, 2007-2012

Table 5.4 above lists select programs or action plans sponsored by federal, provincial and territorial governments. In addition, there are government expenditures related to spousal violence that may comprise one part of a program, policy, or initiative with a broader focus, such as violence against women, or crime prevention. In most cases where spousal violence is definitely encompassed in the mandate, appropriate conservative estimates have been made to capture only expenditures related to spousal violence, but programs and initiatives where too much speculation is involved in estimating the proportion of expenditures related to spousal violence are excluded. Thus, the estimates in this section are very conservative.

Though not specific to spousal violence, a general impression of the spousal violence funding environment can be obtained from the Canadian Network of Women's Shelters and Transition Houses' 2011 report, *Scan on Funding and Policy Initiatives to Respond to Violence against Women*.

5.7.1 Other federal expenditures

Most of the federal funding associated with spousal violence is already accounted for elsewhere in the report. As Text Box 5.1 illustrates, federal departments are deeply involved in issues related to spousal violence, often through funding of social services such as transition homes and shelters. This section only estimates additional expenditure information not included elsewhere in the report and much federal funding related to spousal violence is impossible to ascertain as it is tied to broader budgets.

It is difficult to estimate specific federal government expenditures associated with spousal violence. The federal Family Violence Initiative (FVI) is a longstanding horizontal collaboration of various federal departments, agencies and Crown corporations led by the Public Health Agency of Canada (PHAC).⁶⁹ The mandate is to enhance awareness of spousal violence and other forms of family violence, build a knowledge base, and strengthen the ability of the justice, housing and health systems, and communities to prevent and respond to the violence. A key component of the FVI is its horizontal management structure to ensure a shared federal perspective, foster collaboration and provide opportunities for joint action. Since 2007, the FVI has provided \$7 million per year in funding to eight departments and agencies. The initiative's guiding documents indicate that this \$7M annual allocation serves to implement core activities and that it is also intended to supplement and boost departments' regular budgets to foster collaboration and provide opportunities for joint action to enhance the scope of federal investments and activities in this area.

Given the FVI's horizontal approach, the \$7 million FVI investment was taken as a starting point to determine a more comprehensive estimate of federal government resources being used to address the issue of spousal violence. Additional information was requested and received from a number of other federal departments; the information received indicates that, in 2009, federal spousal violence expenditures included direct and cost shared amounts related to a wide variety of activities and programming directed to prevention and awareness, services, interventions, research, policy development, consultations, symposia, education and training. As previously mentioned, much of the funding could not be included in this section because it is accounted for elsewhere in the report. An example of expenditures from Aboriginal Affairs and Northern Development is provided in the Text Box below. In most instances, departments were not able to provide exact dollar amounts particularly where activities on spousal violence were part of more general activities (e.g. victims of crime, violence against women, crime prevention). Nor was it possible for departments to break down the amounts by gender of victim. Unless the data provided clearly indicate gender, the male/female ratio from police-reported cases in the UCR2 has been applied to break down the amounts by gender of victim.

As such, the total estimated for the federal expenditures in 2009 is **\$9,030,687**. This figure under represents the total additional federal expenditures as not all departments and agencies are included. It should thus be viewed as a very conservative estimate.

⁶⁹ For a list of the federal partners and their role, see <http://www.phac-aspc.gc.ca/ncfv-cnivf/initiative-eng.php#fvidepartments>

TEXT BOX 5.1: ABORIGINAL AFFAIRS AND NORTHERN DEVELOPMENT CANADA (AAND)

AAND does not receive funds through the Family Violence Initiative. In the fiscal year 2009/10, it invested approximately **\$29.8 million** in family violence prevention programs and services on-reserve. In that year, the Family Violence Prevention Program (FVPP) provided operational funding for a network of 36 shelters and supported approximately 350 community-based prevention projects on-reserve.⁷⁰ These specific funds have already been accounted for in this report through The Transition Home Survey, which calculates the operational costs for all the housing options for those fleeing violence. The majority of the \$29.8 million is grant and contribution funding transferred to First Nation communities, with \$800,000 in O&M. There are no salary dollars under the FVPP.

Federal expenditures – spousal violence against females	\$7,620,897
Federal expenditures – spousal violence against males	\$1,409,790
Total Other Government Expenditures, Federal	\$9,030,687

5.7.2 Other provincial and territorial expenditures

As with the federal government, provincial and territorial governments are committed to addressing spousal violence. Many have launched action plans which set out commitments and establish frameworks for co-ordination amongst the different government ministries that play a role. Quebec’s Governmental Action Plan 2004-2009 is highlighted as one example in Text Box 5.2.

TEXT 5.2: QUEBEC: GOVERNMENT ACTION PLAN 2004-2009 ON DOMESTIC VIOLENCE

To update its intervention policy on domestic violence,⁷¹ the Quebec government published the *Government Action Plan 2004-2009 on Domestic Violence*⁷² (*Action Plan*) in December 2004. The *Action Plan* includes 72 actions under the responsibility of departments and agencies directly concerned with this issue. Its main purpose is to ensure the safety of victims of domestic violence and the children exposed to it.

From 2004 to 2010, the Quebec government spent over \$90 million to implement the action plan, not including the budget allocated to the human resources required for its completion (police services, criminal and penal prosecutors and stakeholders in the areas of education, health and social services, detention, probation and other services). As far as major achievements go, other than in the area of prevention, of note is the increase in funding for services to victims. Furthermore, a comprehensive public awareness campaign was conducted and special focus was directed to the development of skills for professionals working in the early identification of spousal abuse.

⁷⁰ Today there are 41 shelters funded by AANDC serving First Nation communities across Canada.

⁷¹ Politique d’intervention en matière de violence conjugale : *Prévenir, dépister, contrer la violence conjugale* (1995). <<http://publications.msss.gouv.qc.ca/acrobat/f/documentation/2000/00-807/95-842.pdf>>

⁷² *Plan d’action gouvernemental 2004-2009 en matière de violence conjugale* (2004). <<http://www.scf.gouv.qc.ca/fileadmin/publications/Violence/plan-action-violence-2004-09.pdf>>
See also *Plan d’action gouvernemental 2004-2009 en matière de violence conjugale: volet autochtone* (2005). <http://www.scf.gouv.qc.ca/fileadmin/publications/cf_plan_violenceconjugale_autochtone_04-09.pdf>

The review of the implementation of the *Action Plan*, published in 2011,⁷³ is an excellent example of accountability with the establishment of embedded costs. The review presents achievements related to the 72 actions and provides a detailed breakdown of the government's annual expenditures for each of the achievements. Because the Quebec government understands that the fight against domestic violence requires a long-term commitment, it is currently working on the development of a new five-year action plan in this regard.

As part of their work on spousal violence, the provinces and territories have also implemented numerous programs focusing on awareness, prevention, intervention, assistance and support. These programs vary across the country in order to take into account different needs in different communities. An example from British Columbia of one such program is described in Text Box 5.3 below.

TEXT BOX 5. 3: BRITISH COLUMBIA : VICTIMLINK BC⁷⁴

VictimLink BC is a toll-free, confidential, multilingual telephone service available across British Columbia and Yukon 24 hours a day, 7 days a week at 1-800-563-0808. It provides information and referral services to all victims of crime and immediate crisis support to victims of family and sexual violence.

VictimLink BC provides service in more than 110 languages, including 17 North American Aboriginal languages. In 2009-2010, VictimLink BC responded to 10,218 enquiries and its budget for that year was \$515,248.⁷⁵ Victim service workers can provide information and referrals to all victims of crime and crisis support to victims. All calls are confidential.

VictimLink BC staff can connect people to a network of community, social, health, justice and government resources, including victim services, transition houses, and counselling resources. They also provide information on the justice system, relevant federal and provincial legislation and programs, crime prevention, safety planning, protection order registry, and other resources as needed. In addition, VictimLink BC also provides after-hours notification on offender status for high risk victims.

Through provincial and territorial contacts, information was obtained on expenditures for the 2009 year. Limited data are also obtained from the Canadian Network of Women's Shelters and Transition Houses (2011) report where there is no double-counting with existing inclusions. It is important to note that most provincial and territorial expenditures related to spousal violence (e.g. most shelter funding, victim services and family justice services) are already accounted for elsewhere in this report, and **only** additional expenditures not captured elsewhere are included in this section.

⁷³ *Bilan de la mise en œuvre du plan d'action gouvernemental 2004-2009 en matière de violence conjugale* (2011). <http://www.scf.gouv.qc.ca/fileadmin/publications/Violence/BilanViolenceConjugale_Final.pdf>

⁷⁴ Source: <<http://www.victimlinkbc.ca/>>. For more information on services in BC for victims of spousal violence, see <<http://www.pssg.gov.bc.ca/victimservices/service-provider/docs/activityreport-2009-2010.pdf>>

⁷⁵ Data do not indicate how many of these enquiries were about spousal violence and hence, how much of the budget would be attributable to responding to spousal violence.

As many programs address violence in general, family violence (broader than spousal violence), or sexual assault, it is, in some instances, difficult to determine the proportion of spending related to spousal violence specifically. Therefore, the proportion of violent crime involving a spousal relationship (as determined by the UCR2 survey) is used to determine the relevant costs of some programs, while some programs are excluded altogether due to the difficulty of determining the proportion of funds that should be attributed to spousal violence.

In sum, the total provincial and territorial government expenditures on spousal violence are estimated at **\$107,229,313**. As with the federal expenditures, this total should also be viewed as very conservative.

Provincial and territorial expenditures – SV against females	\$88,649,352
Provincial and territorial expenditures – SV against males	\$18,579,961
Total Other Government Expenditures, Provincial and Territorial	\$107,229,313

6. Conclusion

6.1 Summary of Results

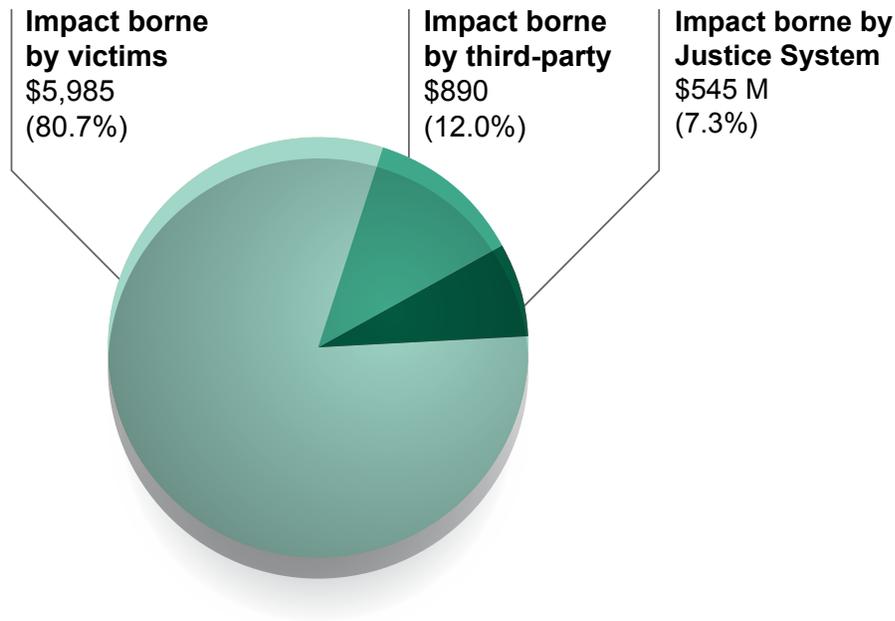
Table 6.1 below presents a summary of all economic impacts in the report. The total economic impact of spousal violence in 2009 in Canada is estimated at **\$7,420,301,324** (\$7.4 billion). Figure 6.1 presents the breakdown of costs by who bears the impact.

TABLE 6.1: COSTS OF SPOUSAL VIOLENCE, 2009 (\$'000)

	Violence against females	Violence against males	Total
Justice System Costs			
Criminal Justice System	\$271,965	\$48,102	\$320,067
Civil Justice System	\$182,257	\$42,860	\$225,118
Total	\$454,222	\$90,963	\$545,185
Victim Costs			
Health Care	\$8,160	\$12,766	\$20,926
Mental Health Issues	\$146,868	\$32,613	\$179,482
Productivity Losses	\$37,126	\$16,240	\$53,365
Other Personal Costs	\$211,865	\$59,397	\$271,262
Intangible Costs	\$3,290,720	\$2,169,480	\$5,460,200
Total	\$3,694,739	\$2,290,496	\$5,985,235
Third-Party Costs			
Funeral Expenses	\$1,023	\$426	\$1,449
Loss of Affection/Enjoyment to Family Members	\$26,268	\$10,902	\$37,170
Costs to Other Persons Harmed/threatened	\$9,047	\$2,199	\$11,246
Social Service Operating Costs	\$353,039	\$57,556	\$410,596
Losses to Employers	\$52,123	\$25,795	\$77,919
Negative Impact on Children Exposed to SV	\$153,242	\$82,000	\$235,242
Other Government Expenditures	\$96,270	\$19,990	\$116,260
Total	\$691,013	\$198,869	\$889,882
Total Costs	\$4,839,974	\$2,580,328	\$7,420,301

Note: May not add to stated totals due to rounding

FIGURE 6.1: WHO BEARS THE IMPACT, 2009 (\$ MILLION)



6.2 Costs by Who Pays

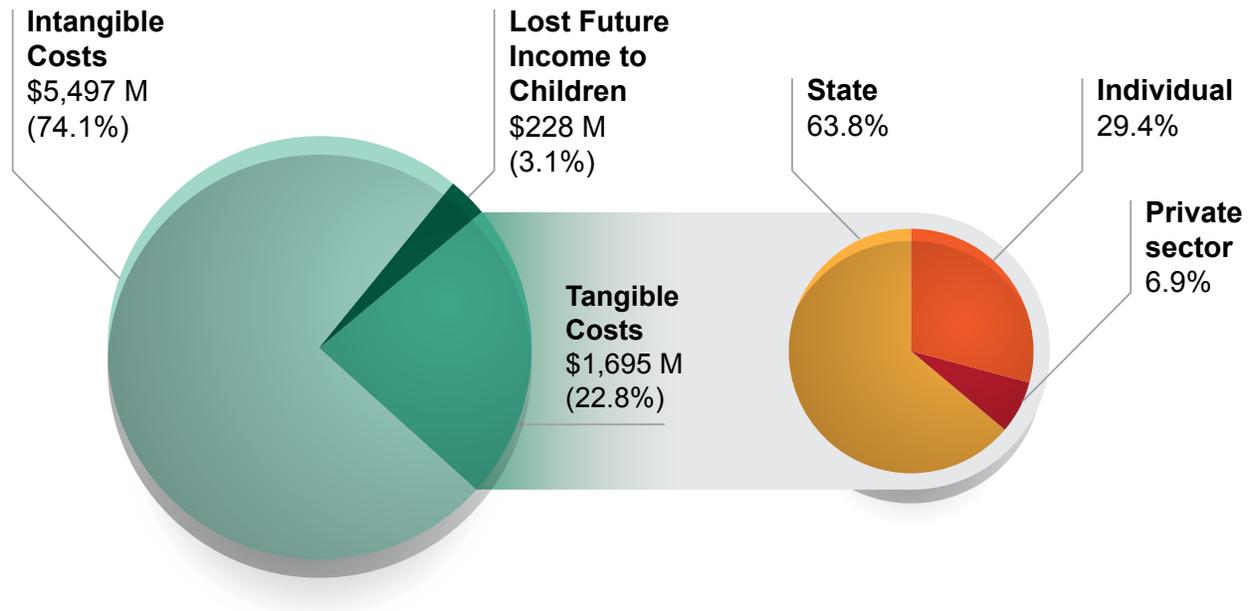
It is useful to know which party or system actually pays for the costs of spousal violence in addition to knowing which party or system bears the burden of the impact. These two classifications can lead to very different results as the party who bears an impact is often not the party who actually pays. For example, health care is required by victims of spousal violence who sustain injuries. Injuries are the most direct impact and are borne by the victim. However, health care costs are actually mostly paid by the state through the public health care system. Therefore, in the analysis of who bears the burden, the economic impacts of health care are attributed to the victim, but in the analysis of who actually pays, health care costs are attributed to the state.

This analysis of who actually pays considers three parties: government/state, individuals, and the private sector. This analysis only applies to tangible costs (excluding lost future income of children exposed to spousal violence) where an actual financial transaction is made. Tangible costs include losses of goods and services that have a price in the market or for which a proxy price is easily estimable through information and experience, whereas intangible costs include emotional costs to victims and the family. Intangible costs, which make up over 74.1% of the total economic impact of spousal violence (\$5.5 billion), are therefore removed from the analysis by who actually pays. One reason that the lost future income of children exposed to spousal violence is also excluded is because this item only presents itself later in the child's life, and thus is highly subject to future changes in economic, social and judicial environments. Therefore, only tangible costs (excluding lost future income of children) are included in the analysis of who actually pays.

Figure 6.2 summarizes the main findings. Of the \$1.7 billion of tangible costs, 63.8% (\$1.1 billion) was paid by the state/government for cost items like the criminal justice system, the civil justice system and the health care system. Approximately 29.4% (\$0.5 billion) was borne by victims through cost items including lost wages, lost education, damaged or stolen property, and

moving expenses. The remaining 6.9% of tangible costs (\$0.1 billion) was borne by the private sector through lost output, lost productivity due to tardiness and distraction, and associated administration costs.

FIGURE 6.2: WHO PAYS THE COSTS, 2009 (\$ MILLION)



6.3 Concluding Remarks

The field of costing and cost/benefit analysis in the realm of criminal justice has advanced significantly over the past three decades. As in other fields, new methods and frameworks have been developed to replace older ones and the work continues to be reviewed and debated. Canada has not seen the same energy devoted to this area as the United States (see Cohen 2005 for a summary of developments), Australia or the United Kingdom (see Laing and Bobic 2002; Access Economics 2004; Walby 2004; 2009). *The Cost of Crime in Canada, 2008* (Zhang 2011) is the first comprehensive work in Canada in the area of criminal justice. In the area of violence against women, the recently published work of Varcoe et al. (2011) on health impacts for separated spouses is the first research completed and published since the work from the mid-1990s (Greaves et al. 1995; Day 1995; Kerr and McLean 1996).

Estimating economic impacts, a process known as costing, is a way to measure the tangible and intangible impacts of, in the case of this report, spousal violence. By placing a dollar value on the impact, a common unit of measurement is provided. The dollar is a unit of measurement that all Canadians understand whether they are policy-makers, entrepreneurs, or the general public.

In the Methodology section, and throughout the report, the limitations of the data have been carefully articulated to ensure that the reader has a thorough understanding of exactly what is being measured and how to understand the results. The primary limitation is lack of data. Research could be undertaken through case studies if more feasible. In particular, this study would benefit from more comprehensive data in the following areas:

Justice System Costs

- Policing resources expended in spousal violence cases;
- Better data on restraining orders including number of applications in a given year in cases of spousal violence, as well as justice system costs for restraining orders in general;
- Policing and court resources expended in cases of breaches of restraining/emergency protection orders;
- Court costs for Domestic Violence Courts;
- Costs associated with Review Boards and treatment in cases where the accused is found Unfit to Stand Trial or Not Criminally Responsible;
- Legal representation costs of child protection in cases of spousal violence;
- Costs of interpretation for police, courts where victims speak neither English nor French or have communicative disabilities;
- Restitution orders (net benefit) and costs of enforcement;
- Costs of legal separations;
- Costs of mandatory family breakdown education sessions for spouses; and
- In cases of death of victim, legal costs attendant to death – probate of will, establishment of legal guardian for children.

Victim Costs

- Suicides caused by spousal violence;
- Better understanding and data on the impact of spousal violence for victims who speak neither English nor French, who are newcomers to Canada (i.e. impact on immigration status), who have a physical or mental disability, who are Aboriginal or of a different religion or race;
- Where there is more than one incident of violence in the given year (GSS 2009 or 2014 as examples) better data on impact of each violent incident such as trips to the emergency department, nights in hospital, etc.

Third-Party Costs

- Additional detail on compensation;
- Services related to Domestic Violence Courts such as programs for the perpetrator;
- 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);
- Social housing costs to municipal governments;
- Comprehensive catalogue of all government costs.

These lists are by no means comprehensive, but provide an indication of some of the key data gaps. For those working in the area of criminal justice, there are numerous challenges to costing analysis in Canada that would be resolved with the linking of data from police reports and charging through to sentencing and corrections.

It is hoped that discussions on these and other important topics that have started through this study will continue with both stakeholders and others in the future. These discussions have worked to raise awareness amongst policy-makers in the federal, provincial and territorial governments and to researchers of several key data limitations in the Canadian justice realm. Additionally, awareness has been raised of the far reaching impact of a phenomenon that was once considered a private matter.

After all is said and done, the economic impact of spousal violence in Canada in 2009 is estimated to be \$7,420,301,324. With this sum, it is evident that spousal violence has a significant impact on all of Canadian society. Today, as ever before, it is critical to continue efforts to prevent spousal violence, and where it does occur, to intervene, assist, and support to the extent possible so that the cycle does not persist for generations more.

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Appendix A: Justice System Costs ⁷⁶

A.1 Criminal Justice System

A.1.1 Police

Total police expenditures, 2009	\$12,316,896,000 ^a
Proportion of police expenditures spent on crime-related activities	65% ^b
Police expenditures on crime-related activities (\$12,316,896,000*0.65)	\$8,005,982,400
Table A.1 presents the allocation of police expenditures between all spousal violence-related offences according to their severity weights	
Police costs – spousal violence against females	\$121,599,167
Police costs – spousal violence against males	\$23,975,267
Total Criminal Justice System Costs, Police	\$145,574,434

TABLE A.1: POLICE EXPENDITURES ALLOCATED BETWEEN SPOUSAL VIOLENCE OFFENCES

Offences	Severity weights ^c	Police costs per incident	# of incidents against ^d		Police costs for incidents against	
			F	M	F	M
Murder – 1st degree & 2nd degree	7,042	\$344,444	48	10	\$16,700,326	\$3,479,235
Manslaughter	1,822	\$89,101	1	5	\$90,001	\$450,003
Criminal negligence causing death	688	\$33,611	3	1	\$102,002	\$34,001
Other violations causing death	62	\$3,029	3	1	\$9,179	\$3,060
Attempted murder	1,411	\$69,019	44	14	\$3,067,515	\$976,027
Conspire to commit murder	611	\$29,887	3	1	\$90,566	\$30,189
Aggravated sexual assault – level 3	1,047	\$51,225	9	0	\$465,678	0
Sexual assault with a weapon – level 2	678	\$33,181	37	1	\$1,240,098	\$33,516
Sexual assault – level 1	211	\$10,320	726	15	\$7,494,997	\$156,363
Sexual interference/Invitation to sexual touching/Sexual exploitation/Anal intercourse	211	\$10,320	6	0	\$62,551	0
Voyeurism	86	\$4,207	2	0	\$8,498	0
Aggravated assault – level 3	405	19,804	189	70	\$3,740,820	\$1,380,303
Assault with weapon/causing bodily harm – level 2	77	\$3,785	4,124	1,812	\$15,611,108	\$6,859,252
Assault – level 1	23	\$1,146	23,899	5,444	\$27,391,520	\$6,240,080
Unlawfully causing bodily harm	143	\$6,995	46	9	\$325,010	\$63,589

⁷⁶ All figures in Appendix A are presented in round numbers. Numbers may not add to totals due to rounding.

TABLE A.1: POLICE EXPENDITURES ALLOCATED BETWEEN SPOUSAL VIOLENCE OFFENCES (CONT'D)

Offences	Severity weights ^c	Police costs per incident	# of incidents against ^d		Police costs for incidents against	
			F	M	F	M
Discharge firearm with intent	988	\$48,328	3	0	\$146,447	0
Using firearm in commission of offence	267	\$13,060	9	3	\$118,729	\$39,576
Pointing a Firearm	194	\$9,489	9	3	\$86,268	\$28,756
Assault police officer – level 1	42	\$2,054	0	4	\$0	\$8,301
Criminal negligence causing bodily harm	399	\$19,517	7	0	\$137,998	0
Other assaults	58	\$2,837	75	16	\$212,062	\$45,851
Forcible confinement/Kidnapping	477	\$23,332	1068	29	\$24,911,308	\$683,470
Hostage taking/trafficking in persons	1278	\$62,513	5	0	\$315,721	0
Robbery	583	\$28,517	102	24	\$2,909,331	\$691,326
Intimidation of a justice system/ a non-justice participant	67	\$3,277	68	10	\$221,796	\$33,104
Extortion	229	\$11,201	29	7	\$328,123	\$79,202
Criminal harassment	45	\$2,201	2754	349	\$6,060,962	\$769,293
Threatening or harassing phone calls	17	\$832	843	289	\$701,356	\$240,225
Uttering threats	46	\$2,250	3949	713	\$8,886,643	\$1,604,596
Arson, disregard for human life	322	\$15,750	4	2	\$63,638	\$31,819
Other violent violations	143	\$6,995	14	2	\$98,916	\$14,131
Total			38,082	8,836	\$121,599,167	\$23,975,267

^a Source: Beattie (2009).

Total police expenditures include salaries and wages, benefits, and operating expenses such as accommodation costs, fuel, maintenance, etc. Capital expenditures, funding from external sources, and revenues and recoveries are not included.

^b It is assumed, based on several communications with the Ottawa Police Service, that police in Canada spend 65% of their time on crime-related activities. Other duties can include: traffic regulations (non-criminal), offering youth education seminars, coordinating community efforts, patrolling a regular route or responding to phone calls ranging from noise complaints to non-crime emergency calls for help.

^c Statistics Canada assigns a severity weight to all criminal offences based on their seriousness. The level of seriousness is based on sentences from federal, provincial, and territorial courts. Higher weights are assigned to more serious crimes. It is assumed that more serious offences use a greater amount of police resources.

^d Source: Statistics Canada, CCJS, Uniform Crime Report Survey 2 (UCR2) 2009.

Data was extracted February 2011. The underrepresentation of the UCR2 aggregate data (99%) has been adjusted.

A.1.2 Court

Number of active civil cases per capita, 2002/03	0.0207 ^a
Population, 2002/03	31,353,656 ^b
Estimated number of civil cases, 2002/03 (31,353,656*0.0207)	648,277
Number of total criminal court cases (adult + youth), 2002/03	496,880 ^c
Total cases processed in court, 2002/03 (648,277+496,880)	1,145,157
Total court expenditures, 2002/03	\$1,151,885,000 ^d
Average court cost per case, 2002/03 (\$1,151,885,000/1,145,157)	\$1,007
Average court cost per case (length adjustment) (\$1,007*1.23)	\$1,238 ^e
Average court cost per case, 2009 (inflation adjustment)	\$1,408
Number of criminal court cases, 2009 – spousal violence against females	18,300 ^f
Number of criminal court cases, 2009 – spousal violence against males	3,259 ^f
Criminal court costs – spousal violence against females (18,300*\$1,408)	\$25,763,472
Criminal court costs – spousal violence against females (3,259*\$1,408)	\$4,588,151
Total Criminal Justice System Costs, Criminal Court	\$30,351,623

^a Sources: Statistics Canada (2010a); Statistics Canada (2011a).

This figure is calculated as the average of the initiated civil cases per capita over the period between 2005/06 and 2008/09 in corresponding jurisdictions. The civil court statistics are only available starting from 2005/06.

^b Source: Statistics Canada, CCJS – Population by Age and Sex, Canada, Provinces and Territories, 2002.

^c Sources: Statistics Canada, CCJS, ACCS – Number of Cases and Charges by Type of Decision, 2002/03; Statistics Canada, CCJS, YCS – Number of Cases and Charges by Type of Decision, 2002/03.

The underrepresentation of the ACCS has been adjusted (Information from Quebec's municipal courts, which account for approximately 25% of *Criminal Code* charges in that province, was not yet collected at the time of analysis).

^d Source: Statistics Canada (2004a).

^e As both the average number of appearances per criminal case and the average elapsed time per criminal case have increased by approximately 23% from 2002/03 to 2008/09, it is assumed that there has been a general trend towards lengthier and more complex cases. These changes should be reflected in the associated court costs. Therefore, 1.23 is used as a multiplier to reflect the increased use of court resources per case.

^f Sources: Statistics Canada, CCJS, ACCS – Cases by Decision, 2008/09 and 2009/10; Statistics Canada, CCJS, YCS – Cases by Decision, 2008/09 and 2009/10.

The underrepresentation of the ACCS has been adjusted.

A.1.3 Prosecution

Total criminal prosecution expenditures (excluding BC), 2002/03	\$352,138,000 ^a
Number of criminal cases (adult + youth) (excluding BC), 2002/03	422,096 ^b
Average prosecution cost per case, 2002/03 (\$352,138,000/422,096)	\$834
Average prosecution cost per case (length adjustment) (\$834*1.23)	\$1,026 ^c
Average prosecution cost per case, 2009 (inflation adjustment)	\$1,166
Number of criminal court cases, 2009 – spousal violence against females	18,300 ^d
Number of criminal court cases, 2009 – spousal violence against males	3,259 ^d
Prosecution costs – spousal violence against females (18,300*\$1,166)	\$21,346,584
Prosecution costs – spousal violence against males (3,259*\$1,166)	\$3,801,558
Total Criminal Justice System Costs, Prosecution	\$25,148,142

^a Source: Statistics Canada (2004b).

^b Sources: Statistics Canada, CCJS, ACCS – Number of Cases and Charges by Type of Decision, 2002/03; Statistics Canada, CCJS, YCS – Number of Cases and Charges by Type of Decision, 2002/03. The underrepresentation of the data from Quebec is adjusted in order to be consistent with the scope of Statistics Canada (2004b).

^c See A.1.2, note e.

^d See A.1.2, note f.

A.1.4 Legal Aid

Direct legal service expenditures (criminal matters), 2008/09	\$313,049,000 ^a
Other expenditures (criminal matters), 2008/09	\$75,342,000 ^a
Total legal aid expenditures (criminal matters), 2008/09 (\$313,049,000 + \$75,342,000)	\$388,391,000
Direct legal service expenditures (criminal matters), 2009/10	\$314,812,000 ^a
Other expenditures (criminal matters), 2009/10	\$84,719,000 ^b
Total legal aid expenditures (criminal matters), 2009/10 (\$314,812,000 + \$84,719,000)	\$399,530,000
Total legal service expenditures, 2009 (\$388,391,000 *25% + \$399,530,000*75%)	\$391,176,171
Number of total criminal cases in Canada (adult+ youth), 2009	482,144 ^c
Legal aid costs per case, 2009 (\$391,176,171/482,144)	\$811
Number of criminal court cases, 2009 – spousal violence against females	18,300 ^d
Number of criminal court cases, 2009 – spousal violence against males	3,259 ^d
Legal aid costs – spousal violence against females (18,300*\$811)	\$14,847,274
Legal aid costs – spousal violence against females (3,259*\$811)	\$2,644,113
Total Criminal Justice System Costs, Legal Aid	\$17,491,387

^a Sources: Statistics Canada (2011c); Statistics Canada (2010b).

While direct legal service expenditures are disaggregated between criminal matters and civil matters, other expenditures were not. Therefore, the percentage that criminal “direct legal service expenditures” represent out

of the total “direct legal service expenditures” is applied to “other expenditures” to obtain the proportion of “other expenditures” that were spent on criminal matters. Other expenditures include office functions, external project expenditures, research activities, etc.

^b Sources: Statistics Canada, CCJS, ACCS – Number of Cases and Charges by Type of Decision 2008/09 and 2009/10; Statistics Canada, CCJS, YCS – Number of Cases and Charges by Type of Decision 2008/09 and 2009/10.

The underrepresentation of the ACCS has been adjusted.

^c See A.1.2, note f.

A.1.5 Correctional Services

TABLE A.2: NUMBER OF SPOUSAL VIOLENCE CASES AND CONVICTION RATES BY GENDER OF ACCUSED, GENDER OF VICTIM, AND VIOLATION ^a

	Number of Cases Male Accused			Number of Cases Female Accused		
	Gender of Victim		Conviction rate	Gender of Victim		Conviction rate
	F	M		F	M	
Homicide	30	0	50.4%	0	14	46.6%
Attempted murder	25	1	20.5%	0	6	16.7%
Robbery	55	4	65.3%	1	1	55.2%
Sexual assault	316	1	43.8%	1	2	26.9%
Other sexual offences	3	0	70.8%	0	0	46.9%
Major assault	2,549	63	57.3%	31	842	48.7%
Common assault	11,605	167	54.5%	82	1,814	41.1%
Uttering threats	1,659	33	54.4%	11	171	43.3%
Criminal harassment	1,221	16	55.4%	10	107	31.9%
Other crimes against persons	690	8	45.5%	4	15	40.9%

^a Sources: Statistics Canada, CCJS, UCR2, 2009; Statistics Canada, CCJS, ACCS – Number of Cases and Charges by Type of Decision, 2008/09 and 2009/10.

The number of spousal violent offences processed in court is estimated by applying the proportion of the total number of charged persons over the total number of criminal court cases to the number of persons charged for spousal violent crimes. The underrepresentation of the UCR2 micro-data (99%) has been adjusted. The conviction rate is calculated from adult court data. Other crimes against persons include all other violent crimes which are not specified in the table.

TABLE A.3: DISTRIBUTION OF MOST SERIOUS SENTENCES BY GENDER OF ACCUSED AND VIOLATION ^a

	Custody		Conditional Sentence		Probation		Fine	
	M	F	M	F	M	F	M	F
Homicide	79.5%	85.5%	1.7%	1.8%	2.4%	7.3%	2.8%	0
Attempted murder	78.1%	50.0%	0	0	2.9%	37.5%	2.9%	0
Robbery	79.8%	67.0%	4.8%	9.1%	10.3%	16.2%	0.2%	0.7%
Sexual assault	56.2%	33.3%	12.5%	21.2%	21.4%	43.9%	0.4%	0
Other sexual offences	64.4%	56.3%	5.3%	2.7%	19.8%	18.8%	2.5%	7.1%
Major assault	47.3%	25.9%	8.6%	11.2%	35.2%	52.5%	3.1%	3.4%
Common assault	16.0%	6.3%	3.2%	2.0%	68.2%	73.1%	3.6%	4.3%
Uttering threats	32.9%	19.4%	3.7%	4.2%	54.1%	64.4%	3.4%	3.1%
Criminal harassment	28.1%	11.6%	5.0%	5.8%	61.6%	74.5%	0.8%	0.2%
Other crimes against persons	49.5%	23.0%	5.4%	9.9%	36.4%	52.9%	1.2%	1.7%

^a Source: Statistics Canada, CCJS, ACCS – Guilty Cases by Most Serious Sentence, 2008/09 and 2009/10. Using the distribution of most serious sentences may result in an underestimate of correctional service costs as, in cases of multiple convictions, more than one type of sentence will be given. Other sentences including restitution, absolute and conditional discharge, payment of legal costs, and suspension of drivers' license, are not examined.

TABLE A.3-1: NUMBER OF CONVICTED MALE OFFENDERS BY SENTENCE TYPE AND VIOLATION

	Spousal Violence against Females				Spousal Violence against Males			
	Custody	Conditional Sentence	Probation	Fine	Custody	Conditional Sentence	Probation	Fine
Homicide	12	0	0	0	0	0	0	0
Attempted murder	4	0	0	0	0	0	0	0
Robbery	29	2	4	0	2	0	0	0
Sexual assault	78	17	30	1	0	0	0	0
Other sexual offences	1	0	0	0	0	0	0	0
Major assault	691	126	514	45	17	3	13	1
Common assault	1,013	205	4,312	228	15	3	62	3
Uttering threats	297	33	489	31	6	1	10	1
Criminal harassment	190	34	416	5	3	0	6	0
Other crimes against persons	155	17	114	4	2	0	1	0
Total	2,471	434	5,880	314	44	8	92	5

TABLE A.3-2: NUMBER OF CONVICTED FEMALE OFFENDERS BY SENTENCE TYPE AND VIOLATION

	Spousal Violence against Females				Spousal Violence against Males			
	Custody	Conditional Sentence	Probation	Fine	Custody	Conditional Sentence	Probation	Fine
Homicide	0	0	0	0	6	0	0	0
Attempted murder	0	0	0	0	0	0	0	0
Robbery	0	0	0	0	0	0	0	0
Sexual assault	0	0	0	0	0	0	0	0
Other sexual offences	0	0	0	0	0	0	0	0
Major assault	4	2	8	1	106	46	216	14
Common assault	2	1	25	1	47	15	544	32
Uttering threats	1	0	3	0	14	3	48	2
Criminal harassment	0	0	2	0	4	2	25	0
Other crimes against persons	0	0	1	0	1	1	3	0
Total	8	3	39	2	180	67	837	48

A.1.5.1 Custody

TABLE A.4: DISTRIBUTION OF SENTENCE LENGTH FOR OFFENDERS CONVICTED OF SPOUSAL VIOLENCE CRIMES, BY GENDER OF ACCUSED^a

	M	F
Federal custody (>=24 month)	1.03%	3.28%
Provincial custody (<24 months)	98.97%	96.72%

^a Source: Brzozowski (2004), Sentencing in Cases of Spousal Violence, Table 5.7.

A.1.5.1.1 Federal Custody

Number of male offenders admitted to federal custody,	
spousal violence against females (2,471*1.03%)	25 ^a
spousal violence against males (44*1.03%)	0 ^a
Number of female offenders admitted to federal custody,	
spousal violence against females (8*3.28%)	0 ^a
spousal violence against males (180*3.28%)	6 ^a
Average length of federal custody in days	1,245 ^b
Federal full parole grant rate for males	39.3% ^c
Federal full parole grant rate for females	70.8% ^c
Number of male offenders granted federal full parole,	
spousal violence against females (25*39.3%)	10

Number of female offenders granted federal full parole, spousal violence against males (6*70.8%)	4
Proportion of sentence served before full parole, male offenders	38.5% ^d
Proportion of sentence served before full parole, female offenders	36.1% ^d
Federal full parole successful completion rate	81.2% ^e
Number of male offenders successfully completing full federal parole, spousal violence against females (10*81.2%)	8
Number of female offenders completing full federal parole, spousal violence against males (4*81.2%)	3
Number of incarceration days, male offenders with successful full parole, spousal violence against females (1,245*38.5%*8)	3,835
Number of incarceration days, female offenders with successful full parole, spousal violence against males (1,245*36.1%*3)	1,348
Number of male offenders not completing full parole, spousal violence against females (10-8)	2
Number of female offenders not completing full parole, spousal violence against males (4-3)	1
Number of incarceration days, male offenders not completing full parole, spousal violence against females [2*(1,245*38.5%+1,245*(1-38.5%)*0.5)]	1,724 ^f
Number of incarceration days, female offenders not completing full parole, spousal violence against to males [1*(1,245*36.1%+1,245*(1-36.1%)*0.5)]	847
Percentage of offenders released on statutory release (not granted full parole)	95% ^g
Number of male offenders released on statutory release, spousal violence against females [25*(1-39.3%)*95%]	14
Number of female offenders released on statutory release, spousal violence against males [6*(1-70.8%)*95%]	2
Federal statutory release successful completion rate	61.7% ^h
Number of male offenders successfully completing statutory release, spousal violence against females (14*61.7%)	9
Number of female offenders successfully completing statutory release, spousal violence against males (2*61.7%)	1
Proportion of sentence served before statutory release granted	66.7% ^g
Number of incarceration days, male offenders completing statutory release, spousal violence against females (9*1,245*66.7%)	7,470
Number of incarceration days, female offenders completing statutory release, spousal violence against males (1*1,245*66.7%)	830

Number of male offenders not completing statutory release, spousal violence against females (14-9)	5
Number of female offenders not completing statutory release, spousal violence against males (2-1)	1
Number of incarceration days, male offenders not completing statutory release, spousal violence against female [$5*(1,245*66.7%+1,245*33.3%*0.5)$]	5,188
Number of incarceration days, female offenders not completing statutory release, spousal violence against male [$1*(1,245*66.7%+1,245*33.3%*0.5)$]	1,038
Number of male offenders without early release, spousal violence against female (25-10-14)	1
Number of female offenders without early release, spousal violence against male (6-4-2)	0
Number of incarceration days, male offenders without early release, spousal violence against females ($1*1,245$)	1,245
Total number of incarceration days for male offenders spousal violence against females ($3,835+1,724+7,470+5,188+1,245$)	19,462
Total number of incarceration days for female offenders spousal violence against males ($1,348+847+830+1,038$)	4,063
Average daily cost of federal incarceration, male offenders	\$292 ⁱ
Average daily cost of federal incarceration, female offenders	\$556 ⁱ
Incarceration costs – spousal violence against females ($19,462*\$292$)	\$5,682,904
Incarceration costs – spousal violence against males ($4,063*\$556$)	\$2,259,028
Number of days on parole for male offenders spousal violence against females ($1,245*[(1-38.5%)*8+(1-38.5%)*0.5*2]$)	6,891
Number of days on parole for female offenders spousal violence against males ($1,245*[(1-36.1%)*3+(1-36.1%)*0.5*1]$)	2,784
Number of days on statutory release for male offenders spousal violence against females [$1,245*(33.3%*9+33.3%*0.5*5)$]	4,773
Number of days on statutory release for female offenders spousal violence against males [$1,245*(33.3%*1+33.3%*0.5*1)$]	623
Total number of days serving the sentence in community for male offenders spousal violence against females ($6,891+4,773$)	11,664
Total number of days serving the sentence in community for female offenders spousal violence against males ($2,784+623$)	3,407
Average daily cost of supervising a federal offender in the community	\$81 ⁱ

Costs of supervising federal offenders in community – spousal violence against females (11,664*\$81)	\$944,784
Costs of supervising federal offenders in community – spousal violence against males (3,407*\$81)	\$275,967
<hr style="border-top: 1px dashed black;"/>	
Total expenditures of national family violence correctional programs (CSC)	
For male offenders	\$3,110,012 ^j
For female offenders	\$450,604 ^j
Percentage of spousal violence victims out of all victims of family violence	53% ^k
Expenditures of family violence correctional programs related to spousal violence	
For male offenders (\$3,110,012*53%)	\$1,648,306
For female offenders (\$450,604*53%)	\$238,820
<hr style="border-top: 1px dashed black;"/>	
Federal custody costs – spousal violence against females (\$5,682,904+\$944,784+\$1,648,306)	\$8,275,994
Federal custody costs – spousal violence against males (\$2,259,028+\$275,967+\$238,820)	\$2,773,815
Total Custody Costs, Federal Custody	\$11,049,809

^a See Table A.3-1, Table A.3-2 and Table A.4.

^b Source: Calverley (2010), Reference Tables, Table 29.
The average sentence length (mean) for federal offenders is 41 months, or 1,245 days.

^c Source: Public Safety Canada (2010), Table D1.
Due to data limitations, day parole is not examined.

^d Source: Public Safety Canada (2010), Table D6.

^e Source: Public Safety Canada (2010), Table D8.

^f It is assumed that revocation occurs exactly at the midpoint of the parole or statutory release, and that offenders are returned to incarceration on breach of release conditions to serve the rest of their sentences. Additional sentences due to new charges laid during the parole or statutory release are not considered due to data limitations.

^g Offenders who are not granted parole are normally subject to statutory release after serving approximately 2/3 of their sentence. This is the law and is not a discretionary release by the National Parole Board. The offender is supervised in the community and will be returned to prison if he or she is believed to present an undue risk to the public. This report assumes that 95% of federal offenders who were not released on parole are released on statutory release. Statutory release does not apply to those convicted of 1st or 2nd degree murder (and a few other rare offences). The 5% can be considered a factor to capture dangerous or repeat offenders.

^h Source: Public Safety Canada (2010), Table D9.

ⁱ Source: Public Safety Canada (2010), Figure B3.
The annual cost of supervising a federal offender on parole (in community) in 2008/09 was equivalent to about \$81 per day in the 2009 dollars.

^j Financial information regarding Family Violence Correctional Programs were received from Correctional Service Canada, 2012.

^k Source: Burns, Mike, Andrea Taylor-Butts, Racha Nemr, Roxan Vaillancourt, and Lucie Ogrodnik. 2009. *Family Violence in Canada: A Statistical Profile*. Table 2.1. Ottawa: Statistics Canada, 2009. Catalogue no. 85-224-X.

A.1.5.1.2 Provincial Custody

Number of male offenders admitted to provincial custody,	
spousal violence against females (2,471-25)	2,445 ^a
spousal violence against males (44-0)	44 ^a
Number of female offenders admitted to provincial custody,	
spousal violence against females (8-0)	8 ^a
spousal violence against males (180-6)	174 ^a
Average length of provincial custody in days for male offenders	113 ^b
Average length of provincial custody in days for female offenders	86 ^b
Provincial full parole grant rate	38.5% ^c
Number of male offenders granted full parole,	
spousal violence against females (2,445*38.5%)	941
spousal violence against males (44*38.5%)	17
Number of female offenders granted full parole,	
spousal violence against females (8*38.5%)	3
spousal violence against males (174*38.5%)	67
Provincial full parole successful completion rate	82.7% ^c
Number of male offenders successfully completing parole,	
spousal violence against females (941*82.7%)	778
spousal violence against males (17*82.7%)	14
Number of female offenders successfully completing parole,	
spousal violence against females (3*82.7%)	2
spousal violence against males (67*82.7%)	55
Proportion of sentence served before full parole granted	33.33% ^d
Number of incarceration days, male offenders with successful parole,	
spousal violence against females (778*33.33%*113)	29,302
spousal violence against males (14*33.33%*113)	527
Number of incarceration days, female offenders with successful parole,	
spousal violence against females (2*33.33%*86)	57
spousal violence against males (55*33.33%*86)	1,577
Number of male offenders not completing full parole,	
spousal violence against females (941-778)	163
spousal violence against males (17-14)	3
Number of female offenders not completing full parole,	
spousal violence against females (3-2)	1
spousal violence against males (67-55)	12

Number of incarceration days, male offenders not completing full parole,	
spousal violence against females [$163 \times 113 \times (33.33\% + 66.67\% \times 0.5)$]	12,276 ^e
spousal violence against males [$3 \times 113 \times (33.33\% + 66.67\% \times 0.5)$]	226 ^e
Number of incarceration days, female offenders not completing full parole,	
spousal violence against females [$1 \times 86 \times (33.33\% + 66.67\% \times 0.5)$]	57 ^e
spousal violence against males [$12 \times 86 \times (33.33\% + 66.67\% \times 0.5)$]	688 ^e

Number of male offenders released on statutory release,	
spousal violence against females (2,445-941)	1,504
spousal violence against males (44-17)	27
Number of female offenders released on statutory release,	
spousal violence against females (8-3)	5
spousal violence against males (174-67)	107

Proportion of sentence served before statutory release	66.67% ^f
Number of incarceration days, male offenders receiving statutory release,	
spousal violence against females ($1,504 \times 66.67\% \times 113$)	113,301
spousal violence against males ($27 \times 66.67\% \times 113$)	2,034
Number of incarceration days, female offenders receiving statutory release,	
spousal violence against females ($5 \times 66.67\% \times 86$)	287
spousal violence against males ($107 \times 66.67\% \times 86$)	6,135

Total number of incarceration days for male offenders,	
spousal violence against females ($29,302 + 12,276 + 113,301$)	154,879
spousal violence against males ($527 + 226 + 2,034$)	2,787
Total number of incarceration days for female offenders,	
spousal violence against females ($57 + 57 + 287$)	401
spousal violence against males ($1,577 + 688 + 6,135$)	8,400

Average daily cost of provincial incarceration	\$161 ^g
Incarceration costs – spousal violence against females [$(154,879 + 401) \times \$161$]	\$25,000,080
Incarceration costs – spousal violence against males [$(2,787 + 8,400) \times \$161$]	\$1,801,107

Number of days serving the sentence in community for male offenders,	
spousal violence against females [$113 \times (778 \times 66.67\% + 66.67\% \times 0.5 \times 163)$]	64,752
spousal violence against males [$113 \times (14 \times 66.67\% + 66.67\% \times 0.5 \times 3)$]	1,168
Number of days serving the sentence in community for female offenders,	
spousal violence against females $86(2 \times 66.67\% + 66.67\% \times 0.5 \times 1)$	143
spousal violence against males $86 \times (55 \times 66.67\% + 66.67\% \times 0.5 \times 12)$	3,498

Average daily cost of provincial parole	\$32 ^h

Cost of supervising provincial offenders in community – spousal violence against females [(64,752+143)*\$32]	\$2,076,640
Cost of supervising provincial offenders in community – spousal violence against males [(1,168+3,498)*\$32]	\$149,312
Provincial custody costs – spousal violence against females (\$25,000,080+\$2,076,640)	\$27,076,720
Provincial custody costs – spousal violence against males (\$1,801,107+\$149,312)	\$1,950,419
Total Custody Costs, Provincial Custody	\$29,027,139

^a See Table A.3-1, Table A.3-2 and Table A.4.

^b Source: Statistics Canada, CCJS, ACCS – Guilty Cases by Length of Custody, 2008/09 and 2009/10.

^c Source: Parole Board of Canada (2010).

^d Offenders sentenced to provincial custody are generally paroled after serving 1/3 of their sentence.

^e See A.1.5.1.1 note f.

^f If parole is denied, the provincial offender must be released, by law, after serving 2/3 of the sentence.

^g Source: Calverley (2010), Reference Tables, Table 4.

^h It is reported that a person is supervised in the community for about 20% of the cost of supervising a person in provincial custody (from The John Howard Society of Ontario, “Fact Sheet: Reconsidering Community Corrections in Ontario,” January 1997). Although the level of supervision for both provincial parole and probation are similar (depending on risk level), provincial parole has more infrastructure that leads to additional costs. Parole boards are one example of additional infrastructure, and these require that an inmate have a parole hearing, a decision be made by members of the parole board, and that the board have revocation procedures and hearings. This and other extra personnel and procedures is the main reason for a higher daily cost of provincial parole compared to probation.

Total Custody Costs

	Spousal Violence against Females	Spousal Violence against Males	Total
Federal Custody	\$8,275,994	\$2,773,815	\$11,049,809
Provincial Custody	\$27,076,720	\$1,950,419	\$29,027,139
Total Correctional Services Costs, Custody	\$35,352,714	\$4,724,234	\$40,076,948

A.1.5.2 Conditional Sentence

Number of male offenders receiving conditional sentence,	
spousal violence against females	434 ^a
spousal violence against males	8 ^a
Number of female offenders receiving conditional sentence,	
spousal violence against females	3 ^a
spousal violence against males	67 ^a

Average length of conditional sentence in days	270 ^b
Average daily cost for supervising one offender with conditional sentence	\$24 ^c

Conditional sentence costs – spousal violence against females ((434+3)*270*\$24)	\$2,862,126
Conditional sentence costs – spousal violence against males ((8+67)*270*\$24)	\$491,212

Total Correctional Services Costs, Conditional Sentence	\$3,353,337

^a See Table A.3-1 and Table A.3-2.

^b Source: Roberts and LaPraire (2000), Table 3.5.

The average length of conditional sentence for selected jurisdictions was 9 months (270 days) for family violence during the period of 1996-1999.

^c According to Victims of Violence, a federally registered charitable organization, it costs almost \$50,000 per year less to supervise someone with a conditional sentence than to hold someone in provincial incarceration (from Victims of Violence, “Research Report: Conditional Sentence”, http://www.victimsofviolence.on.ca/rev2/index.php?option=com_content&task=view&id=332&Itemid=22). In 2009, the annual cost of keeping one provincial inmate was \$58,860 (calculated from data used in A.1.5.1.2). A simple calculation shows the annual cost of holding one offender on conditional sentence to be \$8,860, equivalent to approximately \$24 per day.

A.1.5.3 Probation

Number of male offenders receiving probation,	
spousal violence against females	5,880 ^a
spousal violence against males	92 ^a
Number of female offenders receiving probation,	
spousal violence against females	39 ^a
spousal violence against males	837 ^a

Average length in days of probation	424 ^b
Average daily cost for supervising one offender on probation	\$20 ^c

Probation costs for offenders convicted of spousal violence against females ((5,880+39)*424*\$20)	\$50,193,120
Probation costs for offenders convicted of spousal violence against males ((92+837)*424*\$20)	\$7,877,920

Total Correctional Services Costs, Probation	\$58,071,040

^a See Table A3-1 and Table A3-2.

^b Source: Brzozowski (2004), Sentencing in Cases of Spousal Violence, Table 5.5.

The average probation length for spousal violence cases was 424 days.

^c Considering that the seriousness of probation is lower than the seriousness of conditional sentence (\$24 daily cost), it is assumed that the daily probation cost is \$20.

A.1.5.4 Fine

Number of male offenders receiving a fine,		
spousal violence against females		314 ^a
spousal violence against males		5 ^a
Number of female offenders receiving a fine,		
spousal violence against females		2 ^a
spousal violence against males		48 ^a
Average fine amount for offenders convicted of spousal violence		\$428 ^b
Fine costs – spousal violence against females ((314+2)*\$428)		\$135,276
Fine costs – spousal violence against males ((5+48)*\$428)		\$22,689
Total Correctional Services Costs, Fine		\$157,965

^a See Table A.3-1 and Table A.3-2.

^b Source: Brzozowski (2004), Sentencing in Cases of Spousal Violence, Table 5.5.
The average fine amount for spousal violence cases was \$368 during the period of 1996/97 to 2001/02.
After inflation adjustment, this value is \$428 in 2009 dollars.

Total Correctional Services Costs

	Spousal Violence against Females	Spousal Violence against Males victims	Total
Custody	\$35,352,714	\$4,724,234	\$40,076,948
Conditional Sentence	\$2,862,126	\$491,211	\$3,353,337
Probation	\$50,193,120	\$7,877,920	\$58,071,040
Fine	(\$135,276)	(\$22,689)	(\$157,965)
Total Criminal Justice System Costs, Correctional Services	\$88,407,960	\$13,093,366	\$101,501,325

Total Criminal Justice System Costs

	Spousal Violence against Females	Spousal Violence against Males	Total
Police	\$121,599,167	\$23,975,267	\$145,574,434
Court	\$25,763,472	\$4,588,151	\$30,351,623
Prosecution	\$21,346,584	\$3,801,558	\$25,148,142
Legal Aid	\$14,847,274	\$2,644,113	\$17,491,387
Correctional Services	\$88,407,960	\$13,093,366	\$101,501,325
Total Criminal Justice System Costs	\$271,964,457	\$48,102,455	\$320,066,911

A.2 Civil Justice System

A.2.1 Civil Protection Orders

Number of civil protection orders issued, female victims	3,843 ^a
Number of civil protection orders issued, male victims	1,140 ^a
Average cost of issuing one civil protection order	\$400 ^b
Number of civil protection orders applied for but not granted, female victims	1,076 ^c
Number of civil protection orders applied for but not granted, male victims	319 ^c
Average cost of processing one civil protection order application	\$200 ^c
Civil protection order costs – spousal violence against females (3,843*\$400+1,076*\$200)	\$1,752,400
Civil protection order costs – spousal violence against males (1,140*\$400+319*\$200)	\$519,800
Total Civil Justice System Costs, Civil Protection Orders	\$2,272,200

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER EXABUSE, EXVIOL, XRP_Q130, XRP_Q140, SPABUSE, CRVIOL, SRP_Q310, SRP_Q320.

^b This is an estimate based on information provided by several jurisdictions.

^c According to data from certain provinces, the total number of applications for civil protection orders was about 1.28 times the number of orders issued. Therefore, it is possible to estimate the number of orders applied for but not issued by the court. Though these protection orders were not issued, resources might be still used to review and evaluate the applications.

A.2.2 Divorce and Separation

Number of divorce initiations, 2009	81,284 ^a
Percentage of divorces caused by spousal violence	19.7% ^b
Number of divorces caused by spousal violence (81,284*19.7%)	16,013
Percentage of divorces that are contested	19% ^c
Number of contested divorces caused by spousal violence (16,013*19%)	3,042
Number of uncontested divorces caused by spousal violence (16,013-3,042)	12,971
Contested divorces,	
Percentage of applicants using legal assistance	94.74% ^d
Percentage of respondents using legal assistance	78.60% ^d
Uncontested divorces,	
Percentage of applicants using legal assistance	63.64% ^d
Percentage of respondents using legal assistance	26.76% ^d
Legal representatives used in contested divorces (3,042*(97.74%+78.6%))	5,274
Legal representatives used in uncontested divorces (12,971*(63.64%+26.76%))	11,726
Average legal fees for contested divorce, 2009	\$12,562 ^e
Average legal fees for uncontested divorce, 2009	\$1,342 ^e

Total legal fees for divorces [(5,274*\$12,562)+(11,726*\$1,342)]	\$81,987,747
Total legal aid expenditures on family law issues, 2009	\$182,994,500 ^f
Percentage of family court cases involving divorce, 2009/2010	35.4% ^g
Percentage of family court cases involving separation, 2009/2010	30.0% ^g
Legal aid expenditures on spousal violence-related divorce cases (\$182,994,500*35.4%*19.7%)	\$12,761,670
Legal aid expenditures on spousal violence-related separation cases (\$182,994,500*30%*19.7%)	\$10,814,975
Average civil court cost per contested divorce, 2009	\$1,149 ^h
Civil court costs for contested divorces (3,042*\$1,149)	\$3,495,798
Total family service expenditures for divorce and separation, 2009	\$70,403,282
Family service expenditures for spousal violence caused divorce and separation (\$70,403,282*19.7%)	\$13,869,446
Total civil justice system costs for divorce and separation caused by spousal violence (\$12,761,670+\$10,814,975+\$3,495,798+\$13,869,446)	\$40,941,889
Percentage of spousal violence-caused separations & divorces initiated by females	81% ⁱ
Percentage of spousal violence-caused separations & divorces initiated by males	19% ⁱ
Costs associated with divorce and separation – spousal violence against females (\$27,072,443*81%)	\$33,162,930
Costs associated with divorce and separation – spousal violence against males (\$27,072,443*19%)	\$7,778,959
Total Civil Justice System Costs, Divorce and Separation	\$40,941,889

^a Source: The Department of Justice Canada's Central Registry of Divorce Proceedings (CRDP). This number is an estimate, and it does not account for duplicate or invalid applications.

^b It is noted that the percentage of divorces caused by spousal violence suggested by self-reported surveys is much higher than the percentage obtained from court case reviews or lawyer-reported surveys. For example, the 2001 British Crime Survey on inter-personal violence suggests that 29% of divorces captured in the survey were caused by spousal violence. A telephone survey of more than 1,500 people by GFK Roper (as seen in Kimball, Michele, 2008, "Women Cite Abuse, Men Cite Sex as Top Reasons for Divorce," <http://www.divorce360.com/divorce-articles/causes-of-divorce/information/why-americans-divorce.aspx?artid=169>) shows that 36% of respondents said the reason for divorce was physical or verbal abuse. However, by reviewing court divorce files, Brinig and Allen (2000) find that cruelty amounted to only 6% of all divorce filings in Virginia in 1996. More recently, UK organization Grant Thornton has conducted a matrimonial survey annually since 2003 in which the opinions of over 100 leading family lawyers in the UK are gathered, with the opinions based on client work in the previous calendar year. The survey asks respondents about the top reason for divorce, and the average proportion of divorces due to emotional/physical abuse from 2006 to 2009 was about 10.3%. Given the significant discrepancy between the results of self-reported surveys and court/lawyer-reported surveys, it is decided to use a rate between the two results (19.7%).

^c Source: Kelly (2010).

^d Source: CRDP, The Department of Justice Canada. Micro data was extracted for the year 2008. The figures used for uncontested divorces include information for both uncontested divorces and divorces on consent.

^e Source: Harris (2009). The Canadian Lawyer's 2009 Legal Fees Survey, national fee ranges, sample size = 193.

^f Source: Statistics Canada, CCJS, Legal Aid Survey, 2009/10.

^g Source: Kelly (2011).

^h See A.1.2. The average court cost per case in 2002/03 is estimated at \$1,007, which is adjusted for inflation to \$1,149. Only contested cases are assumed to be processed in civil court.

ⁱ Source: Statistics Canada, CCJS, UCR2 2009.

It is assumed that the gender of initiators of divorce files caused by spousal violence is in the same proportion to victims of spousal violence reported to police – 81% female initiators vs. 19% male initiators. Micro data was extracted in November, 2010.

A.2.3 Child Protection Systems

Number of children involved in investigations of exposure to spousal violence	29,259 ^a
Average cost per investigation	\$675 ^b
Total investigation costs of exposure to spousal violence (29,259*\$675)	\$19,749,825
Percentage of substantiated investigation of exposure to spousal violence that resulted in a change of residence	6.6% ^c
Number of children placed in out-of-home care (29,259*6.6%)	1,932
Number of children without a change of residence (29,259-1,932)	27,327
Among those out-of-home placements because of exposure to spousal violence	
Percentage of children went to foster care or formal kinship care	54.5% ^d
Percentage of children went to informal kinship care	45.5% ^d
Number of children placed in foster care and formal kinship care (1,932*54.5%)	1,053
Number of children placed in informal kinship care (1,932*45.5%)	879
Length of stay in out-of home care in days	730 ^e
Number of visits conducted for children staying in home or informal kinship care	52 ^f
Number of hours per visit	3 ^f
Average daily cost of maintaining a child in foster care or formal kinship care	\$60 ^g
Average hourly salary rate for child protection worker (conducting visits)	\$26.37 ^h
Costs of providing foster care and formal kinship (1,053*730*\$60)	\$46,121,400
Costs of conducting regular visits (52*3*26.37)*(879+27,327)	\$116,032,512
Total child protection system costs due to exposure to spousal violence (\$19,749,825+\$46,121,400+\$116,032,512)	\$181,903,737
Percentage of spousal violence against females	81% ⁱ
Percentage of spousal violence against males	19% ⁱ
Child protection systems costs – spousal violence against females (\$181,903,737*81%)	\$147,342,027
Child protection systems costs – spousal violence against males (\$181,903,737*19%)	\$34,561,710
Total Civil Justice System Costs, Child Protection Systems	\$181,903,737

^a The Canadian Incidence Study of Reported Child Abuse and Neglect. 2008. Public Health Agency of Canada: Ottawa, Ontario. According to this study, there were an estimated of 235,842 child-maltreatment-related investigations conducted in Canada in 2008. Among the 85,440 (36.2%) cases which were substantiated, about 34% (29,259) identified exposure to intimate partner violence as the primary category of maltreatment.

^b Evaluation of Three Child Abuse Response Models. 1998. The agencies that were the subject of the evaluation were the Regina Children's Justice Centre, the Saskatoon Child Centre, and the multidisciplinary committee in North Battleford, Saskatchewan. These agencies use multidisciplinary teams to investigate reported cases of maltreatment in that police officers work as a team with child protection workers. The 1998 dollar value has been adjusted for inflation.

^c Source: The Canadian Incidence Study of Reported Child Abuse and Neglect-2003 (CIS-2003). According to this report, approximately 16.9% of substantiated investigations in Canada resulted in a change of residence. As the primary category of maltreatment, exposure to intimate partner violence (IPV) had a rate (5.9%) of changing of residence. As the 2003 aggregate out-of-home rate (16.9%) is much lower than the 2008 rate (22.9%), the 2003 specific rate for exposure to IPV is adjusted to obtain the corresponding rate in 2008. In this way, it is estimated that about 6.6% (1,932) of substantiated investigation of exposure to intimate partner violence resulted in a change of residence in Canada.

- ^d Source: The Canadian Incidence Study of Reported Child Abuse and Neglect-2003 (CIS-2003). Among those out-of-home placements because of exposure to spousal violence, 41.1% went to informal kinship care whereas 49.2% went to foster care or formal kinship care. About 9.8% went to group homes. Due to lack of data on the daily cost of maintaining a child in group homes, it is decided to redistribute the number of children who were placed in group home into the other two types, based on the respective proportions.
- ^e Ken Fowler (2008), Children in care in Newfoundland and Labrador, Department of Psychology, Memorial University of Newfoundland. This is the only information regarding length of stay that is found in Canada. The report indicates that the provincial average length of stay was roughly 2 years in 2008, approximately 730 days.
- ^f For those children who were not removed from home or were moved to an informal agreement with a relative, child protection workers normally will continue to conduct regular visits. It is assumed that each worker meets with the family once every two weeks and spends 3 hours per visit up to 2 years. The 3 hours cover conversation time, preparation time, travelling time and paper work time.
- ^g The daily cost of caring for a child in out-of-home placement can range from \$10 to \$100 and differs dramatically across jurisdictions and by type of care. As data received from a few provinces are not sufficient to calculate a national average cost for foster care and formal kinship, we use a figure of \$60 from the middle range in our estimation.
- ^h Based on data from several provinces, it is estimated that the average annual salary for child protection worker in 2009 was \$51,608, equivalent to \$26.37 per hour. Family and Children's Services of the Waterloo Region, Career Opportunities, accessed on April 17, 2012. < <http://www.facswaterloo.org/html/CareerOpportunities.html> >. PEI Health Sector Council, Child Protection Social Workers, accessed on April 17, 2012. < <http://peihs.careers/career-portal/social-worker/> >. BC Government and Service Employees' Union, Recruitment drive for new social workers could be hobbled by pay gap with Alberta, accessed on April 17, 2012. < http://www.bcgeu.ca/Recruitment_drive_for_new_social_workers_could_be_hobbled_by_pay_gap_with_Alberta >.
- ⁱ Source: Statistics Canada, CCJS, UCR2 2009.
It is assumed that child protection cases for which the main reason for intervention is spousal violence is in the same proportion (in terms of gender of victims) as victims of spousal violence reported to police – 81% of cases were due to violence against females and 19% of cases were due to spousal violence against males. Micro data was extracted in November 2010.

Total Civil Justice System Costs

	Spousal Violence against Females	Spousal Violence against Males	Total
Civil Protection Orders	\$1,752,400	\$519,800	\$2,272,200
Divorce and Separation	\$33,162,930	\$7,778,959	\$40,941,889
Child Protection systems	\$147,342,027	\$34,561,710	\$181,903,737
Total Civil Justice System Costs	\$182,257,357	\$42,860,469	\$225,117,826

Appendix B: Victim Costs ⁷⁷

B.1 Health Care

B.1.1 Physician Visits

Number of female victims visiting a physician	2,719 ^a
Number of male victims visiting a physician	721 ^a
<hr/>	
Average cost of one physician visit, 2004/05	\$50.36 ^b
Average cost of one physician visit, 2009 (inflation adjustment)	\$55
Physician visits costs – spousal violence against females (2,719*\$55)	\$149,571
Physician visits costs – spousal violence against males (721*\$55)	\$39,640
Total Health Care Costs, Physician Visits	\$189,212

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, EXABUSE, EXVIOL, XAI_Q140, SPABUSE, CRVIOL, SAI_Q140.

^b Source: Canadian Institute for Health Information (2007), Table 7-5, Major Assessments for Office.

B.1.2 Emergency Department Visits

Number of female victims visiting emergency departments	7,245 ^a
Number of male victims visiting emergency departments	2,602 ^a
<hr/>	
Average emergency department treatment cost, 2007/08	\$260 ^b
Average emergency department treatment cost, 2009 (inflation adjustment)	\$266
Total emergency department treatment costs for female victims (7,245*\$266)	\$1,926,564
Total emergency department treatment costs for male victims (2,602*\$266)	\$691,935
<hr/>	
Percentage of female victims transported to emergency department by ambulance	60% ^c
Percentage of male victims transported to emergency department by ambulance	50% ^c
Number of female victims transported to emergency department by ambulance (7,245*0.6)	4,347
Number of male victims transported to emergency department by ambulance (2,602*0.5)	1,301
<hr/>	
Average cost of ambulance service, 2006/07	\$565 ^d
Average cost of ambulance service, 2009 (inflation adjustment)	\$590
Total cost of providing ambulance transport for female victims (4,347*\$590)	\$2,563,845
Total cost of providing ambulance transport for male victims (1,301*\$590)	\$767,347
<hr/>	
Emergency department visits costs – spousal violence against females (\$1,926,564+\$2,563,845)	\$4,490,409
Emergency department visits costs – spousal violence against males (\$691,935+\$767,347)	\$1,459,282
Total Health Care Costs, Emergency Department Visits	\$5,949,691

⁷⁷ All figures in Appendix B are presented in round numbers. Numbers may not add to totals due to rounding.

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, EXABUSE, EXVIOL, XAI_Q130, SPABUSE, CRVIOL, SAI_Q130.

^b Source: Canadian Institute for Health Information (2010).

^c Source: National Ambulatory Care Reporting System (NACRS) data (special data request from the Canadian Institute for Health Information).

The data suggests that 78% of female victims and 69% of male victims of firearm offences (with firearm-caused injuries) who visited emergency departments were transported by ground ambulance. No other type of ambulance was used for transport to emergency departments. It is assumed that lower proportions apply to victims of spousal violence since injuries are not necessarily caused by firearms.

^d Source: Ministry of Health, *BC Ambulance Service, 2007, Ambulance Fee Changes*, http://www2.news.gov.bc.ca/news_releases_2005-2009/2007HEALTH0101-001106-Attachment1.htm.

There is little variation among provinces for the cost of providing ambulance transport. Data from British Columbia is used as it is the most representative.

B.1.3 Acute Hospitalization (Overnight Hospitalization)

Number of female victims admitted to acute hospitalization	1,444 ^a
Number of male victims admitted to acute hospitalization	800 ^a
Length of stay of hospitalization for female victims in days	2,882 ^b
Length of stay of hospitalization for male victims in days	10,521 ^b
Average daily acute hospitalization cost	\$1,044 ^c
Total acute hospitalization costs for female victims (2,882*\$1,044)	\$3,009,211
Total acute hospitalization costs for male victims (10,521*\$1,044)	\$10,983,850
Percentage of victims transported to hospital by ambulance	60% ^d
Number of female victims transported to hospital by ambulance (1,444*0.6)	866
Number of male victims transported to hospital by ambulance (800*0.6)	480
Average cost of ambulance service, 2009	\$590 ^e
Total cost of providing ambulance transport for female victims (866*\$590)	\$510,792
Total cost of providing ambulance transport for male victims (480*\$590)	\$283,081
Acute hospitalization costs – spousal violence against females (\$3,009,211+\$510,792)	\$3,520,004
Acute hospitalization costs – spousal violence against males (\$10,983,850+\$283,081)	\$11,266,931
Total Health Care Costs, Acute Hospitalization	\$14,786,935

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, EXABUSE, EXVIOL, XAI_Q132, SPABUSE, CRVIOL, SAI_Q132.

^b Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, EXABUSE, EXVIOL, XAI_Q135, SPABUSE, CRVIOL, SAI_Q135.

^c Sources: Canadian Institute for Health Information (2008); Canadian Institute for Health Information (2009), Table 4.

The average cost of acute hospitalization was \$6,983 in 2004/05, which is \$7,619 in 2009 dollars after inflation adjustment. In 2008/09, the average length of acute inpatient hospital stay was 7.3 days. Dividing the average cost per stay by the average length of stay yields the average daily cost for acute hospitalization.

^d The Discharge Abstract Database (DAD) from the Canadian Institute for Health Information suggests that 85% of victims of firearm offences (with firearm-caused injuries) who were hospitalized overnight were transported by ambulance. The majority (93%) of these transports were by ground ambulance (other types include air ambulance or a combination of air, ground, and water ambulance).

Considering that injuries resulting from spousal violence may be less severe than firearm-caused injuries, it is assumed that 60% of spousal violence victims who were admitted to overnight hospitalization were transported by ambulance. Due to data limitations, ground ambulance is the only type of service considered.

^e See B.1.2, note d.

Total Health Care Costs

	Spousal Violence against Females	Spousal Violence against Males	Total
Physician Visits	\$149,571	\$39,640	\$189,211
Emergency Department Visits	\$4,490,409	\$1,459,282	\$5,949,691
Acute Hospitalization	\$3,520,004	\$11,266,931	\$14,786,935
Total Health Care Costs	\$8,159,984	\$12,765,853	\$20,925,837

B.2 Mental Health Issues

Total number of female victims with depression/anxiety disorders (mental health issues)	38,332 ^a	
Total number of male victims with depression/anxiety disorders (mental health issues)	10,320 ^a	
	Female	Male
Victims aged 15-19	0	0
Victims aged 20-34	17,864	3,742
Victims aged 35-49	13,134	4,172
Victims aged 50-64	4,889	642
Victims aged 65+	2,444	1,765
Number of female victims with diagnosed mental health issues (i.e. on medication)	11,840 ^p	
Number of male victims with diagnosed mental health issues (i.e. on medication)	2,008 ^p	
	Female	Male
Victims aged 20-34	4,346	732
Victims aged 35-49	4,694	901
Victims aged 50-64	2,244	375
Victims aged 65+	556	0
Number of female victims with undiagnosed mental health issues (38,332-11,840)	26,491	
Number of male victims with undiagnosed mental health issues (10,320-2,008)	8,313	
	Female	Male
Victims aged 20-34	13,519	3,010
Victims aged 35-49	8,439	3,271
Victims aged 50-64	2,645	267
Victims aged 65+	1,889	1,765

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, EXABUSE, EXVIOL, XCS_Q220_C10, SPABUSE, CRVIOL, SCS_Q220_C10.

Respondents who reported that they had developed depression or anxiety disorder as a result of the violence are included.

^b Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, PRDEPRSS, MED_DEPRESS, EXABUSE, EXVIOL, SPABUSE, CRVIOL.

Respondents who answered yes to both variables PRDEPRSS and MED_DEPRESS are selected. This is a conservative estimate as the medication module of the GSS only covers the past month from the interview date, even though some victims may require medication continuously throughout the year. It is assumed that those victims on medication represent people with a diagnosed mental health issue, and the remaining victims represent people with an undiagnosed mental health issue.

B.2.1 Medical Services

Incremental costs due to mental health issues (compared to people with no mental health issue)		
	Incremental cost, 2003/04^a	Inflation adjustment, 2009
Victims with a <i>diagnosed</i> mental health issue		
Victims aged 20-34	\$1,135	\$1,246
Victims aged 35-49	\$1,502	\$1,650
Victims aged 50-64	\$2,025	\$2,225
Victims aged 65+	\$2,025	\$2,225
Victims with an <i>undiagnosed</i> mental health issue		
Victims aged 20-34	\$347	\$382
Victims aged 35-49	\$684	\$751
Victims aged 50-64	\$1,430	\$1,571
Victims aged 65+	\$1,430	\$1,571

Incremental medical costs for female victims with a diagnosed mental health issue (4,346*\$1,246+4,694*\$1,650+2,244*\$2,225+556*\$2,225)		\$19,392,426
Incremental medical costs for male victims with a diagnosed mental health issue (732*\$1,246+901*\$1,650+375*\$2,225)		\$3,232,566

Incremental medical costs for female victims with an undiagnosed mental health issue (13,519*\$382+8,439*\$751+2,645*\$1,571+1,889*\$1,571)		\$18,621,546
Incremental medical costs for male victims with an undiagnosed mental health issue (3,010*\$382+3,271*\$751+267*\$1,571+1,765*\$1,571)		\$6,797,889

Medical costs for mental health issues – spousal violence against females (\$19,392,426+\$18,621,546)		\$38,013,972
Medical costs for mental health issues – spousal violence against males (\$3,232,566+\$6,797,889)		\$10,030,455
Total Mental Health Costs, Medical Services		\$48,044,427

^a Source: Lim (2008b).

It is assumed that the medical costs for people aged 65 and up are the same as the medical costs for people aged 50 to 64.

B.2.2 Work Loss

Incremental work loss due to mental health issues (compared to people with no mental health issue), short-term		
Victims with a diagnosed mental health issue	Incremental cost, 2003/04 ^a	Inflation adjustment, 2009
Victims aged 20-34	\$3,141	\$3,454
Victims aged 35-49	\$3,193	\$3,509
Victims aged 50-64	\$3,885	\$4,269
Victims with an undiagnosed mental health issue	Incremental cost, 2003/04 ^a	Inflation adjustment, 2009
Victims aged 20-34	\$1,842	\$2,023
Victims aged 35-49	\$1,901	\$2,088
Victims aged 50-64	\$4,182	\$4,595
Incremental work loss for female victims with a diagnosed mental health issue (4,346*\$3,454+4,694*\$3,509+2,244*\$4,269)		\$41,047,831
Incremental work loss for male victims with an diagnosed mental health issue (732*\$3,454+901*\$3,509+375*\$4,269)		\$7,286,603
Incremental work loss for female victims with an undiagnosed mental health issue (13,519*\$2,023+8,439*\$2,088+2,645*\$4,595)		\$57,130,800
Incremental work loss for male victims with an undiagnosed mental health issue (3,010*\$2,023+3,271*\$2,088+267*\$4,595)		\$14,147,811
Short-term work loss – spousal violence against females (\$41,047,831+\$57,130,800)		\$98,178,631
Short term work loss – spousal violence against males (\$7,286,603+\$14,147,811)		\$21,434,414
Total Mental Health Costs, Short-term Work Loss		\$119,613,045

^a See B.2.1, note a.

It is assumed that there is no work loss for people aged 65 and up.

B.2.3 Suicide Attempts (Medical Costs)

Number of hospitalizations due to suicide attempts, people aged 15-70	16,930 ^a
Proportion of suicide attempts by women	58% ^a
Number of hospitalizations due to suicide attempts, females (16,930*58%)	9,843
Number of hospitalizations due to suicide attempts, males (16,930-9,578)	7,087
Percentage of suicide attempts by females motivated by spousal violence	10.8% ^b
Percentage of suicide attempts by males motivated by spousal violence	1.6% ^c
Number of hospitalizations for suicide attempts by female victims motivated by spousal violence (9,843*10.8%)	1,060
Number of hospitalization for suicide attempts by male victims motivated by spousal violence (7,087*1.6%)	114
Average length of stay in hospital for suicide attempts in days	7.74 ^d
Number of hospitalization days due to suicide attempts, female victims (1,060*7.74)	8,203
Number of hospitalization days due to suicide attempts, male victims (114*7.74)	883
Average daily hospitalization cost	\$1,044 ^e

Hospitalization costs due to suicide attempts, females (8,203*\$1,044)	\$8,564,141
Hospitalization costs due to suicide attempts, males (883*\$1,044)	\$921,389
Average number of emergency department visits associated with each hospitalization	2.5
Number of emergency department visits due to suicide attempts, female victims (1,060*2.5)	2,650
Number of emergency department visits due to suicide attempts, male victims (114*2.5)	285
Average emergency department treatment cost, 2009	\$266 ^f
Emergency department costs due to suicide attempts, females (2,650*\$266)	\$704,797
Emergency department costs due to suicide attempts (285*\$266)	\$75,827
Percentage of emergency department visits requiring ambulance services	90% ^g
Number of emergency department visits requiring ambulance transportation, female victims (2,650*90%)	2,385
Number of emergency department visits requiring ambulance transportation, male victims (285*90%)	257
Average cost of ambulance services, 2009	\$590 ^h
Total cost of providing ambulance services to female victims (2,385*\$590)	\$1,406,944
Total cost of providing ambulance services to male victims (257*\$590)	\$151,369
Medical costs for suicide attempts – spousal violence against females (\$8,564,141+\$704,797+\$1,406,944)	\$10,675,883
Medical costs for suicide attempts – spousal violence against males (\$921,389+\$75,827+\$151,369)	\$1,148,584
Total Mental Health Costs, Suicides and Suicide Attempts (Medical Costs Only)	\$11,824,467

^a Sources: Canadian Institute for Health Information (2011), Chapter 1: Self-Injury in Canada; Canadian Institute for Health Information (2004).

In 2009/10, there were 17,482 overnight hospitalizations as a result of self-inflicted injuries among Canadians aged 15 and up. As people aged 70 and up represent approximately 3.2% of the population, it is estimated that the total number hospitalizations for people aged 15 to 69 is 16,930.

^b According to Stark and Flitcraft (1996), females who attempted suicide had previously experienced spousal violence in 29.5% of all suicide attempts by females, and spousal violence was the main cause of the suicide attempt in at least 36.5% of the suicide attempts that followed hospitalization for domestic violence injuries on the same day. Therefore, an estimated 10.8% (=29.5%*36.5%) of all suicide attempts and suicides by females were primarily caused by spousal violence.

^c Source: Graham-Kevan and Archer (2003). The proportion of IT victims who are female to male (6.69=87%/13%), as found in the Source, is applied to the percentage of female suicide attempts that are mainly caused by spousal violence (10.8%) to get the percentage of male suicide attempts that are mainly caused by spousal violence (1.6%=10.8%/6.69).

^d Source: Canadian Institute for Health Information (2011).

^e See B.1.3, note c.

^f See B.1.2, note b.

^g It is assumed that persons who attempt suicide are more likely to require ambulance transportation to the hospital (compared to other victims of spousal violence) given that they are unlikely to request medical attention of their own volition and that they have injured themselves as part of the suicide attempt. It is assumed that 90% of these emergency department visits required ambulance transportation.

^h See B.1.2, note d.

B.2.3.1 Completed Suicides

Number of completed suicides, females, aged 15-70	765 ^a
Number of completed suicides, males, aged 15-70	2,488 ^a
Percentage of suicides primarily caused by spousal violence, females	10.8% ^b
Percentage of suicides primarily caused by spousal violence, males	1.6% ^b
Number of completed suicides primarily caused by spousal violence, female victims (765*10.8%)	82
Number of completed suicides primarily caused by spousal violence, male victims (2,488*1.6%)	40

^a Source: Statistics Canada, CANSIM, Table 102-0551, Suicides and Suicide Rate by Sex and Age Group. The most recent available data on suicide is 2007. Therefore, the average number of suicides from 2005-2007 is used as a proxy for the number of suicides in 2009.

^b See B.2.3, notes b and c.

Total Mental Health Costs

	Spousal Violence against Females	Spousal Violence against Males	Total
Medical Services	\$38,013,972	\$10,030,455	\$48,044,427
Short-term Work Loss	\$98,178,631	\$21,434,414	\$119,613,045
Suicide Attempts (Medical Costs)	\$10,675,883	\$1,148,584	\$11,824,467
Total Mental Health Costs	\$146,868,486	\$32,613,453	\$179,481,939

B.3 Productivity Losses

B.3.1 Lost Wages ^a

GSS 2009, Main File, Ex-Spousal Violence, Female Victims	
Number of days in hospital	3,268 ^b
Number of days bedridden (excluding hospital time)	61,052 ^c
Number of days off work (excluding hospital and bed time)	55,006 ^d
Total number of days absent from work (3,268+61,052+55,006)	119,326
Average daily wage of female victims	\$136 ^e
Lost wages for female victims of ex-spousal violence (\$136*119,326)	\$16,229,134
GSS 2009, Main File, Current Spousal Violence, Female Victims	
Number of days in hospital	922 ^b
Number of days bedridden (excluding hospital time)	5,533 ^c
Number of days off work (excluding hospital and bed time)	19,365 ^d
Total number of days absent from work (922+5,533+19,365)	25,820
Average daily wage of female victims	\$183 ^e
Lost wages for female victims of current spousal violence (\$183*25,820)	\$4,714,466

GSS 2009, Main File, Ex-Spousal Violence, Male Victims

Number of days in hospital	9,212 ^b
Number of days bedridden (excluding hospital time)	5,400 ^c
Number of days off work (excluding hospital and bed time)	16,317 ^d
Total number of days absent from work (9,212+5,400+16,317)	30,929
Average daily wage of male victims	\$294 ^e
Lost wages for male victims of ex-spousal violence (\$294*30,929)	\$9,094,552

GSS 2009, Main File, Current Spousal Violence, Male Victims

Number of days in hospital	2,088 ^b
Number of days bedridden (excluding hospital time)	1,789 ^c
Number of days off work (excluding hospital and bed time)	10,737 ^d
Total number of days absent from work (2,088+1,789+10,737)	14,614
Average daily wage of male victims	\$249 ^e
Lost wages for male victims of current spousal violence (\$249*14,614)	\$3,633,535
Lost wages – spousal violence against females (\$16,229,134+\$4,714,466)	\$20,943,599
Lost wages – spousal violence against males (\$9,094,552+\$3,633,535)	\$12,728,087

Total Productivity Losses, Lost Wages **\$33,671,686**

- ^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File.
Respondents who reported that their main activity during the last 12 months was either “working at a paid job or business” or “maternity/paternity leave” are included (ACMYR).
- ^b Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, ACMYR, WGHT_PER, EXABUSE, EXVIOL, XAI_Q130, XAI_Q132, XAI_Q135, SPABUSE, CRVIOL, SAI_Q130, SAI_Q132, SAI_Q135.
In addition to the length of hospitalization, it is assumed that victims who received medical attention at a hospital or health center, but did not stay at the hospital overnight, were absent from work for the day that they received treatment (1 day).
- ^c Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, ACMYR, WGHT_PER, EXABUSE, EXVIOL, XAI_Q150, XAI_Q155, SPABUSE, CRVIOL, SAI_Q150, SAI_Q155.
- ^d Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, ACMYR, WGHT_PER, EXABUSE, EXVIOL, XAI_Q160, SPABUSE, CRVIOL, SAI_Q160.
It is assumed that each victim took, on average, 3 days off from their main activity.
- ^e Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, ACMYR, WGHT_PER, INCM, EXVIOL, CRVIOL.
Daily wages are calculated from the annual income reported in the GSS, which is divided by 52.18 weeks per year and 5 days per week.

B.3.2 Lost Household Services ^a

GSS 2009, Main File, Ex-Spousal Violence, Female Victims	
Number of days in hospital	7,853 ^b
Number of days bedridden (excluding hospital time)	111,450 ^c
Number of days unable to perform daily activities (excluding hospital and bed time)	77,421 ^d
Total number of days off from daily activities (7,853+111,450+77,421)	196,724
GSS 2009, Main File, Current Spousal Violence, Female Victims	
Number of days in hospital	831 ^b
Number of days bedridden (excluding hospital time)	8,886 ^c
Number of days unable to perform daily activities (excluding hospital and bed time)	41,157 ^d
Total number of days off from daily activities (831+8,886+41,157)	50,874
GSS 2009, Main File, Ex-Spousal Violence, Male Victims	
Number of days in hospital	9,552 ^b
Number of days bedridden (excluding hospital time)	39,164 ^c
Number of days unable to perform daily activities (excluding hospital and bed time)	19,769 ^d
Total number of days off from daily activities (9,552+39,164+19,769)	68,485
GSS 2009, Main File, Current Spousal Violence, Male Victims	
Number of days in hospital	2,771 ^b
Number of days bedridden (excluding hospital time)	2,463 ^c
Number of days unable to perform daily activities (excluding hospital and bed time)	14,779 ^d
Total number of days off from daily activities (2,771+2,463+14,779)	20,013
Number of lost days for female victims (196,724+50,875)	247,599
Number of lost days for male victims (68,485+20,013)	88,498
Average hours per day spent on household services, females	4 ^e
Average hours per day spent on household services, males	2.5 ^e
Total lost hours of household services, female victims (247,599*4)	990,396
Total lost hours of household services, male victims (88,498*2.5)	221,245
Average hourly wage rate for household workers	\$15.60 ^f
Value of lost household services – spousal violence against females (990,396*\$15.60)	\$15,450,178
Value of lost household services – spousal violence against males (221,245*\$15.60)	\$3,451,422
Total Productivity Losses, Lost Household Services	\$18,901,600

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File.

All the victims of spousal violence are included, regardless of their occupation.

^b Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, ACMYR, WGHT_PER, EXABUSE, EXVIOL, XAI_Q130, XAI_Q132, XAI_Q135, SPABUSE, CRVIOL, SAI_Q130, SAI_Q132, SAI_Q135.

In addition to the length of hospitalization, it is assumed that victims who received medical attention at a hospital or health center, but did not stay at the hospital overnight, were unable to perform household services on the day that they received treatment (1 day).

^c Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, ACMYR, WGHT_PER, EXABUSE, EXVIOL, XAI_Q150, XAI_Q155, SPABUSE, CRVIOL, SAI_Q150, SAI_Q155.

^d Source: Statistics Canada, GSS 2009, Cycle 23, Victimization. Main File: SEX, WGHT_PER, EXABUSE, EXVIOL, XAI_Q160, SPABUSE, CRVIOL, SAI_Q160.

It is assumed that each victim was unable to perform household activities for, on average, 3 days.

^e Source: Statistics Canada (2011b).

^f Source: Statistics Canada, Labour Force Survey.

The average wage rate of household workers for activities such as meal preparation and cleanup, house cleaning, laundry and sewing was \$15.60 per hour in 2009.

B.3.3 Lost Education ^a

GSS 2009, Main File, Ex-Spousal Violence, Female Victims	
Number of days in hospital	267 ^b
Number of days bedridden (excluding hospital time)	3,351 ^c
Number of days absent from school (excluding hospital and bed time)	1,456 ^d
Total number of days absent from school (267+3,351+1,456)	5,074
GSS 2009, Main File, Current Spousal Violence, Female Victims	
Number of days absent from school (excluding hospital and bed time)	1,500 ^d
GSS 2009, Main File, Ex and Current Spousal Violence, Male Victims	
Total number of days absent from school	0
Total number of days absent from school for female victims (5,074+1,500)	6,574
Total number of days absent from school for male victims	0
Average tuition fees for undergraduate studies, 2009	\$4,926 ^e
Average university school days	125 ^f
Average cost per university school day (\$4,926/125)	\$39.41
Value of lost education – spousal violence against females (6,574*\$39.41)	\$259,081
Value of lost education – spousal violence against males (0*\$39.41)	\$0
Total Productivity Losses, Lost Education	\$259,081

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File.

Respondents who reported that their main activity during the last 12 months was “going to school” are included (ACMYR).

^b Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, ACMYR, WGHT_PER, EXABUSE, EXVIOL, XAI_Q130, XAI_Q132, XAI_Q135, SPABUSE, CRVIOL, SAI_Q130, SAI_Q132, SAI_Q135.

In addition to the length of hospitalization, it is assumed that victims who received medical attention at a hospital or health center, but did not stay at the hospital overnight, were absent from school on the day that they received treatment (1 day).

^c Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, ACMYR, WGHT_PER, EXABUSE, EXVIOL, XAI_Q150, XAI_Q155, SPABUSE, CRVIOL, SAI_Q150, SAI_Q155.

^d Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, EXABUSE, EXVIOL, XAI_Q160, SPABUSE, CRVIOL, SAI_Q160.

It is assumed that each victim was absent from school for, on average, 3 days.

^c Source: Statistics Canada, “University tuition fees,” *The Daily*, Thursday, September 16, 2010. Catalogue no. 11-001-XIE, <http://www.statcan.gc.ca/daily-quotidien/100916/dq100916-eng.pdf>. The national average undergraduate tuition fee for full-time Canadian students was \$4,942 in 2009/10, which is \$4,926 in 2009 dollars after inflation adjustment.

^f The number of school days in 2009 at three universities (McGill University, University of Toronto, University of British Columbia) are averaged (125 days).

B.3.4 Lost Childcare Services ^a

GSS 2009, Main File, Ex Spousal Violence, Female Victims	
Number of days in hospital	984 ^b
Number of days bedridden (excluding hospital time)	3,975 ^c
Number of days unable to perform normal daily activity (excluding hospital and bed time)	5,892 ^d
Total number of days off from daily activity (984+3,975+5,892)	10,852
<hr style="border-top: 1px dashed #000;"/>	
GSS 2009, Main File, Current Spousal Violence, Female Victims	
Number of days unable to perform normal daily activity (excluding hospital and bed time)	4,909 ^d
<hr style="border-top: 1px dashed #000;"/>	
GSS 2009, Main File, Current Spousal Violence, Male Victims	
Number of days bedridden (excluding hospital time)	500 ^e
Number of days unable to perform normal daily activity (excluding hospital and bed time)	1,500 ^d
<hr style="border-top: 1px dashed #000;"/>	
Total number of days of lost childcare services, female victims (10,852+4,909)	15,761
Total number of days of lost childcare services, male victims (500+1,500)	2,000
<hr style="border-top: 1px dashed #000;"/>	
Average cost of childcare per day, 2009	\$30 ^e
<hr style="border-top: 1px dashed #000;"/>	
Value of lost childcare services – spousal violence against females (15,761*\$30)	\$472,829
Value of lost childcare services – spousal violence against males (2000*\$30)	\$60,000
<hr style="border-top: 1px solid #000;"/>	
Total Productivity Losses, Lost Childcare Services	\$532,829

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File.

Respondents who reported that their main activity during the last 12 months was “caring for children” are included (ACMYR).

^b Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, ACMYR, WGHT_PER, EXABUSE, EXVIOL, XAI_Q130, XAI_Q132, XAI_Q135, SPABUSE, CRVIOL, SAI_Q130, SAI_Q132, SAI_Q135.

In addition to the length of hospitalization, it is assumed that victims who received medical attention at a hospital or health center, but did not stay at the hospital overnight, were unable to perform their normal daily activity on the day that they received treatment (1 day).

^c Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, ACMYR, WGHT_PER, EXABUSE, EXVIOL, XAI_Q150, XAI_Q155, SPABUSE, CRVIOL, SAI_Q150, SAI_Q155.

^d Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, EXABUSE, EXVIOL, XAI_Q160, SPABUSE, CRVIOL, SAI_Q160.

It is assumed that each victim was off from their normal activity for, on average, 3 days.

^e Source: Today’s Parent, http://www.todayparent.com/lifeasparent/childcare/article.jsp?content=20100302_173310_5996&page=1. This figure is an average cost of the four types of childcare services across all provinces.

Total Productivity Losses

	Spousal Violence against Females	Spousal Violence against Males	Total
Lost Wages	\$20,943,599	\$12,728,087	\$33,671,686
Lost Household Services	\$15,450,178	\$3,451,422	\$18,901,600
Lost Education	\$259,081	\$0	\$259,081
Lost Childcare Services	\$472,829	\$60,000	\$532,829
Total Productivity Losses	\$37,125,687	\$16,239,509	\$53,365,196

B.4 Other Personal Costs

B.4.1 Damaged or Destroyed Property

Number of female victims who reported damaged/destroyed property	52,501 ^a
Number of male victims who reported damaged/destroyed property	21,951 ^a
Average value of damaged or destroyed property	\$1,198 ^b
Value of damaged or destroyed property – spousal violence against females (52,501*\$1,198)	\$62,915,576
Value of damaged or destroyed property – spousal violence against males (21,951*\$1,198)	\$26,306,202
Total Other Personal Costs, Damaged or Destroyed Property	\$89,221,778

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, EXABUSE, EXVIOL, EFX_Q260, SPABUSE, CRVIOL, EFP_Q260.

Respondents who reported that their (ex or current) spouse had destroyed or damaged their possessions or property are included.

^b Source: Henderson (2000).

Henderson (2000) estimates that the value of property losses per victim of domestic violence in Australia was \$1,092 AUD (after a discount of 50% is applied to account for the likelihood of higher severity of victimization in the particular survey analyzed in the source). This is equivalent to \$1,198 in 2009 Canadian dollars.

B.4.2 Divorce and Separation (Legal Costs)

Total legal fees for spousal violence caused divorce	\$81,987,747 ^a
Legal aid expenditures on spousal violence caused divorce	\$12,761,670 ^a
Legal costs for divorce borne by victims (\$81,987,747-\$12,761,670)	\$69,226,077
Legal aid expenditures on spousal violence caused separation	\$10,814,975 ^a
Percentage of people who received legal aid out of all those seeking legal assistance for a relationship breakdown	10% ^b
Percentage of people who received private legal assistance out of all those seeking legal assistance for a relationship breakdown (1-10%)	90%
Total legal fees for spousal violence caused separation (\$10,814,975/10%)	108,149,750
Legal costs for separation borne by victims (\$108,149,750*90%)	\$97,334,775

Total private legal costs for divorce and separation caused by spousal violence (\$69,226,077+\$97,334,775)	\$166,560,852
Percentage of spousal violence caused divorce and separation initiated by females	81% ^c
Percentage of spousal violence caused divorce and separation initiated by males	19% ^c
Private legal costs for divorce and separation – spousal violence against females (\$166,560,851*81%)	\$134,914,290
Private legal costs for divorce and separation – spousal violence against males (\$166,560,851*19%)	\$31,646,562
Total Other Personal Costs, Legal Costs for Divorce and Separation	\$166,560,852

^a See A.2.2.

^b A 2008 internal study of the Department of Justice Canada finds that 85.8% of people (187 out of 218) seeking legal assistance for a relationship breakdown sought assistance from a private lawyer while only 14.2% (31 out of 218) received legal aid services. Since the total number of respondents reporting a relationship breakdown problem in this survey was 269, it follows that 11.5% (31/269) of relationship breakdown cases were associated with legal aid services. While this data is from a recent year, the figure is derived from a small sample size. One national statistic is available, but from an earlier year. According to Statistics Canada, there were 71,528 divorces in Canada in 1996, and only 5,800 were funded by legal aid. A ratio of these two numbers indicates that about 8.1% of people in divorce cases received legal aid in that year. Given the limitations of both data sources, it is decided to adjust the 2008 proportion of legal aid funded divorces (out of total divorces with legal assistance) accordingly to reflect a possible lower national rate of all divorces that funded by legal aid. The adjusted rate is about 10%.

^c See A.2.2, note i.

B.4.3 Special Phone Features

Number of female victims who purchased special phone features	14,928 ^a
Number of male victims who purchased special phone features	2,117 ^a
Average cost of purchasing one type of special phone feature per month	\$10 ^b
Costs of special phone features – spousal violence against females (14,928*\$10*12)	\$1,791,358
Costs of special phone features – spousal violence against males (2,117*\$10*12)	\$254,044
Total Other Personal Costs, Special Phone Features	\$2,045,402

^a Sources: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, OCE_Q180; Statistics Canada, GSS 2004, Cycle 18, Victimization – Main File: SEX, WGHT_PER, STK_Q340, STK_RELAT, STK_INLISTED.

^b According to the one of Canada's largest phone service providers (Rogers), call screening/blocking costs \$5 per month, call display costs \$8 per month, and name display costs \$10 per month. Requesting a landline phone/wireless phone number change costs \$25. However, under certain circumstances, this \$25 fee can be waived if the request is due to repeated unwanted/wired calls. To prevent overestimation, it is assumed that each victim only purchased one service, and a uniform fee of \$10 per service is used.

B.4.4 Moving Expenses

Number of female victims forced to move	12,244 ^a
Number of male victims forced to move	1,190 ^a
Average moving expenses	\$1,000 ^b
Moving expenses – spousal violence against females (12,244*\$1,000)	\$12,244,154
Moving expenses – spousal violence against males (1,190*\$1,000)	\$1,190,099
Total Other Personal Costs, Moving	\$13,434,253

^a Sources: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, OCE_Q180; Statistics Canada, GSS 2004, Cycle 18, Victimization – Main File: SEX, WGHT_PER, STK_Q340, STK_RELAT, STK_MOVING.

^b Moving costs depend on many factors: the time of year, the distance, the size of current home, whether packing is required, etc. For a conservative estimate, it is assumed that all moving is intra-city, the current home is a 2-bedroom house (home types range from 1-bedroom condo to 5-bedroom house), and packing service is not required. According to Canada's largest moving company's (AMJ Campbell, <http://www.amjcampbell.com/main.aspx>) online quote tool, this type of move in Ottawa would cost between \$800 and \$1,200. A local Ottawa moving company's (First Rate Movers, <http://www.firstratemovers.com/ottawamovingestimatelocal.htm>) online information also suggests that this type of move would cost about \$1,125. Based on these sources, it is assumed that each move costs \$1,000.

Total Other Personal Costs

	Spousal Violence against Females	Spousal Violence against Males	Total
Damaged or Destroyed Property	\$62,915,576	\$26,306,202	\$89,221,778
Divorce and Separation (Legal Costs)	\$134,914,290	\$31,646,562	\$166,560,852
Special Phone Features	\$1,791,358	\$254,044	\$2,045,402
Moving Expenses	\$12,244,154	\$1,190,099	\$13,434,253
Total Other Personal Costs	\$211,865,378	\$59,396,907	\$271,262,285

B.5 Intangible Costs

B.5.1 Pain and Suffering

Number of female victims of sexual assault	6,376 ^a
Number of male victims of sexual assault	2,760 ^a
Number of female victims of physical assault	173,517 ^b
Number of male victims of physical assault	153,044 ^b
Proposed value of pain and suffering for sexual assault	\$86,800 ^c
Proposed value of pain and suffering for physical assault	\$9,800 ^c
Value of Pain and Suffering, Female Victims	
Female victims of sexual assault (6,376*\$86,800)	\$553,347,536
Female victims of physical assault (173,517*\$9,800)	\$1,697,690,328
Value of Pain and Suffering, Male Victims	
Male victims of sexual assault (2,760*\$86,800)	\$239,529,360
Male victims of physical assault (153,044*\$9,800)	\$1,497,382,496
Pain and suffering – spousal violence against females (\$553,347,536+\$1,697,690,328)	\$2,251,037,864
Pain and suffering – spousal violence against males (\$239,529,360+\$1,497,382,496)	\$1,736,911,856
Total Intangible Victim Costs, Pain and Suffering	\$3,987,949,720

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization. Main File: SEX, WGHT_PER, EXVIOL, NO_EXSEXAB_C, CRVIOL, NO_PRSEXAB.

All victims who reported experiencing sexual violence (“unwanted sexual activity”) at least once are counted as victims of sexual assault, while all other victims of spousal violence are counted as experiencing physical assault. As many victims of spousal violence experience both physical and sexual assault, and many victims experience chronic violence, this estimate is conservative.

^b Source: Cohen (1988).

Cohen (1988) uses jury award information from the US to value pain and suffering for non-fatal injuries. The value of pain and suffering for rape is estimated at \$43,561 USD in 1988, and for assault the estimate is \$4,921. These figures are used to estimate the value of pain and suffering for two groups of victims in this report: victims of sexual assault and victims of physical assault. Considering inflation, the values of pain and suffering for sexual assault and physical assault are equivalent to \$86,800 CAD and \$9,800 CAD in 2009 dollars.

B.5.2 Loss of Life

Number of spousal homicides, female victims	49 ^a
Number of spousal homicides, male victims	15 ^a
Number of other deaths caused by spousal violence, female victims	6 ^b
Number of other deaths caused by spousal violence, male victims	2 ^b
Number of suicides primarily motivated by spousal violence, female victims	82 ^c
Number of suicides primarily motivated by spousal violence, male victims	40 ^c
Total number of female deaths due to spousal violence (49+6+82)	137
Total number of male deaths due to spousal violence (15+2+40)	57
Number of victims whose gender is unknown	1 ^a
Proposed value of a human life	\$7,550,000 ^d
Value of lost lives for female victims (137*\$7,550,000)	\$1,034,350,000
Value of lost lives for male victims (57*\$7,550,000)	\$430,350,000
Value of lost life for one victim of unknown gender (1*\$7,550,000)	\$7,550,000
Proportion attributed to female victims (\$7,550,000*[137/(137+57)])	\$5,331,701
Proportion attributed to male victims (\$7,550,000*[57/(137+57)])	\$2,218,299
Value of lost lives – spousal violence against females (\$1,034,350,000+\$5,331,701)	\$1,039,681,701
Value of lost lives – spousal violence against males (\$430,350,000+\$2,218,299)	\$432,568,299
Total Intangible Victim Cost, Loss of Life	\$1,472,250,000

^a Source: Statistics Canada, CCJS, Homicide Survey, 2009.

There was one same-sex spousal homicide victim in 2009. As the gender of this victim is unknown, the value of lost life for this victim is split between female and male victims according to the proportion of the genders of the other homicides.

^b Source: Statistics Canada, CCJS, UCR2 2009.

Data was extracted June 2011.

^c See B.2.3.

^d Source: Viscusi (2008).

The average estimate of the 2008/09 value of a statistical life (VSL) in the US, based on labour market analysis, is between \$7 to \$8 million USD. Therefore, \$7 million USD, equivalent to \$7.55 million CAD in 2009 dollars, is used in this report. The \$7.55 million figure is higher than the \$6.1 million value suggested by the Treasury Board of Canada (after inflation adjustment).

Total Intangible Victim Costs

	Spousal Violence against Females	Spousal Violence against Males	Total
Pain and Suffering	\$2,251,037,864	\$1,736,911,856	\$3,987,949,720
Loss of Life	\$1,039,681,701	\$432,568,299	\$1,472,250,000
Total Intangible Victim Costs	\$3,290,719,565	\$2,169,480,155	\$5,460,199,720

Appendix C: Third-Party Costs ⁷⁸

C.1 Funeral Expenses

C.1.1 Funeral expenses

Total number of female deaths due to spousal violence	137 ^a
Total number of male deaths due to spousal violence	57 ^a
Number of victims whose gender is unknown	1 ^a
Average cost of funeral services in Canada, 2009	\$7,432 ^b
Funeral expenses for female victims (137*\$7,432)	\$1,018,184
Funeral expenses for male victims (57*\$7,432)	\$423,624
Funeral expenses for one victim of unknown gender (1*\$7,432)	\$7,432
Proportion attributed to female victims ($\$7,432 \times 137 / (137 + 57)$)	\$5,248 ^c
Proportion attributed to male victims ($\$7,432 \times 86 / (134 + 86)$)	\$2,184 ^c
Funeral expenses – spousal violence against females (\$1,018,184+\$5,248)	\$1,023,432
Funeral expenses – spousal violence against males (\$423,624+\$2,184)	\$425,808
Total Funeral Expenses	\$1,449,240

^a See B.5.2.

^b Source: Ontario Board of Funeral Services, 2009, *Ontario Funeral Sector – Quick Facts 2009*.

^c See B.5.2, note a.

C.2 Loss of Affection and Enjoyment to Family Members

C.2.1 Loss of Affection and Enjoyment to Family Members

Number of female victims deceased due to spousal violence	137 ^a
Number of male victims deceased due to spousal violence	57 ^a
Number of victims deceased due to spousal violence whose gender is unknown	1 ^a
Number of parents of female victims (134*2)	274 ^b
Number of parents of male victims (86*2)	114 ^b
Number of parents of victims of unknown gender (1*2)	2 ^b
Number of children in couple families, 2009	7,638,710 ^c
Number of couple families, 2009	8,459,058 ^d
Number of children per couple family (with and without children)	0.903

⁷⁸ All figures in Appendix C are presented in round numbers. Numbers may not add to totals due to rounding.

Number of children of female victims (137*0.903)	124
Number of children of male victims (87*0.903)	51
Number of children of victims of unknown gender (1*0.903)	1
Average court award to parents of deceased for grief and loss of companionship	\$75,000 ^e
Average court award to children of deceased for grief and loss of companionship	\$45,000 ^e
Loss of affection to families of female victims (274*\$75,000+124*\$45,000)	\$26,130,000
Loss of affection to families of male victims (114*\$75,000+51*\$45,000)	\$10,845,000
Loss of affection to families of one victim of unknown gender (2*\$75,000+1*\$45,000)	\$195,000
Proportion attributed to female victims (\$195,000*137/(137+57))	\$137,706 ^f
Proportion attributed to male victims (\$195,000*57/(137+57))	\$57,294 ^f
Loss of affection and enjoyment to family members – spousal violence against females (\$26,130,000+\$137,706)	\$26,267,706
Loss of affection and enjoyment to family members – spousal violence against males (\$10,845,000+\$57,294)	\$10,902,294
Total Loss of Affection and Enjoyment to Family Members	\$37,170,000

^a See B.5.2.

^b It is assumed that both parents of the victim are alive at the time of the victim's death.

^c Source: Statistics Canada, CANSIM, Table 1110022 – Family Characteristics, Families with Children, by Age of Children, Annually, V29765770.

^d Sources: Statistics Canada, CANSIM, Table 1110022 – Family Characteristics, Families with Children, by Age of Children, Annually, V29765737; Milan et al. (2007).

There were a total of 4,164,150 couples with children in 2009. According to Milan et al. (2007), 41.4% of families are couples with children, and 42.7% of families are couples without children. After calculations, the total number of couples is estimated at 8,459,058.

^e Source: Alberta Fatal Accidents Act, R.S.A. 2000, C. F-8, S. 8.

After reviewing multiple provincial legislations, the legislation from Alberta is deemed to be the most representative. Alberta's Fatal Accidents Act requires courts to award damages for grief and the loss of care, guidance, and companionship in the amounts of: \$75,000 to the spouse or adult partner of the deceased person; \$75,000 to the parents of the deceased person; \$45,000 to each minor or unmarried/un-partnered child of the deceased person. The impact on the violent spouse/partner is not considered.

^f See B.5.2, note a.

C.3 Other Persons Harmed During the Incidents

C.3.1 Health Care

Number of other persons harmed during incidents of spousal violence – spousal violence against females	39,848 ^a
Number of other persons harmed during incidents of spousal violence – spousal violence against males	9,023 ^a
Percentage of other persons harmed requiring physician visit – spousal violence against females	2.04% ^b
Percentage of other persons harmed requiring physician visit – spousal violence against males	0.44% ^b
Average cost of one physician visit, 2009	\$55 ^c

Physician visit costs for other persons harmed – spousal violence against females (39,848*2.04%*\$55)	\$44,624
Physician visit costs for other persons harmed – spousal violence against males (9,023*0.44%*\$55)	\$2,184
Percentage of other persons harmed requiring emergency department visit – spousal violence against females	5.54% ^b
Percentage of other persons harmed requiring emergency department visit – spousal violence against males	2.11% ^b
Average cost of one emergency department visit, 2009	\$266 ^d
Emergency department visit costs for other persons harmed – spousal violence against females (39,848*5.54%*\$266)	\$587,164
Emergency department visit costs for other persons harmed – spousal violence against males (9,023*2.11%*\$266)	\$50,653
Percentage of other persons harmed transported by ambulance – spousal violence against females	60% ^d
Percentage of other persons harmed transported by ambulance – spousal violence against males	50% ^d
Average cost of ambulance service, 2009	\$590 ^d
Ambulance costs for other persons harmed – spousal violence against females (39,848*5.54%*60%*\$590)	\$781,413
Ambulance costs for other persons harmed – spousal violence against males (9,023*2.11%*50%*\$590)	\$56,176
Health care costs to other persons harmed – spousal violence against females (\$44,401+\$587,164+\$781,413)	\$1,413,201
Health care costs to other persons harmed – spousal violence against males (\$2,173+\$50,653+\$56,176)	\$109,013
Total Costs to Other Persons Harmed, Health Care	\$1,522,214^e

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main file: SEX, WGHT_PER, EXABUSE, EXVIOL, XAI_Q180, XAI_Q185, SPABUSE, CRVIOL, SAI_Q180, SAI_Q185.

^b Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, EXABUSE, EXVIOL, XAI_Q130, XAI_Q140, SPABUSE, CRVIOL, SAI_Q130, SAI_Q140.

It is assumed that other individuals who were harmed or threatened during the incidents of spousal violence had the same possibility as the victims of seeking medical attention from a doctor or at hospital. Therefore, the proportions of female and male victims who required each type of medical treatment are calculated, and the results are used in this analysis of other persons harmed.

^c See B.1.1.

^d See B.1.2.

^e Due to lack of data, acute hospitalization is not considered, and this result may therefore be a conservative estimate.

C.3.2 Productivity Losses

Number of other persons harmed during incidents of spousal violence – spousal violence against females	39,848 ^a
Number of other persons harmed during incidents of spousal violence – spousal violence against males	9,023 ^a
Number of other persons harmed aged 15 and under – spousal violence against females	18,099 ^b
Number of other persons harmed aged 15 and under – spousal violence against males	3,068 ^b
Number of other persons harmed aged 15 and up – spousal violence against females (39,848-18,099)	21,749
Number of other persons harmed aged 15 and up – spousal violence against males (9,023-3,068)	5,955
Average number of days off from normal daily activity	3 ^c
Total number of days off from normal daily activity for other persons harmed – spousal violence against females (21,749*3)	65,247
Total number of days off from normal daily activity for other persons harmed – spousal violence against males (5,955*3)	17,863

Average hourly wage rate for household workers	\$15.6 ^d
Productivity losses to other persons harmed – spousal violence against females (65,247*\$15.6)	\$7,633,943
Productivity losses to other persons harmed – spousal violence against males (17,863*\$15.6)	\$2,089,963
Total Costs to Other Persons Harmed, Productivity Losses	\$9,723,906

^a See C.3.1, note a.

^b Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, EXABUSE, EXVIOL, XAI_Q190, XAI_Q195, SPABUSE, CRVIOL, SAI_Q190, SAI_Q195.

^c It is assumed that other persons harmed are off from daily activities for, on average, 3 days.

^d See B.3.2.

The hourly wage rate for household workers is used for a conservative estimate due to lack data.

Total Costs to Other Persons Harmed During the Incidents

	Spousal Violence against Females	Spousal Violence against Males	Total
Health Care	\$1,413,201	\$109,013	\$1,522,214
Productivity Losses	\$7,633,943	\$2,089,963	\$9,723,906
Total Costs to Other Persons Harmed	\$9,047,144	\$2,198,975	\$11,246,120

C.4 Social Service Operating Costs

C.4.1 Shelters and Transition Homes

Total operating costs of all shelters in Canada, 2009/10	\$402,000,000 ^a
Proportion of women in shelters seeking refuge because of spousal abuse	71% ^b
Operating costs of shelters – spousal violence against females (\$402,000,000*0.71)	\$285,420,000
Operating costs of shelters – spousal violence against males	\$0 ^c
Total Social Services Operating Costs, Shelters	\$285,420,000

^a Source: Statistics Canada, Transition Home Survey 2009/10.

Total expenditures for the 593 shelters in operation in 2009/10 were \$402 million. Some facilities did not provide expenditure information, and their expenditure information was therefore imputed.

^b Source: Statistics Canada, Transition Home Survey 2009/10, Canada's Shelters for Abused Women, 2009/10.

On the snapshot day of April 15, 2010, 71% of respondents reported abuse as their reason for seeking refuge.

^c While some facilities may also provide accommodation for men, no information is available regarding the number of men seeking refuge and the reason of stay. In addition, the 2009 GSS reported that no male victims had sought help from shelters.

C.4.2 Crisis Lines

Number of female victims contacting crisis lines	15,046 ^a
Number of male victims contacting crisis lines	229 ^a
Average hourly operating cost of crisis lines	\$20 ^b
Average call length in hours	0.4 ^c
Average number of calls made by each victim	5 ^d
Operating costs of crisis lines – spousal violence against females (15046*\$20*0.4*5)	\$601,854
Operating costs of crisis lines – spousal violence against males (229*\$20*0.4*5)	\$9,163
Total Social Services Operating Costs, Crisis Lines	\$611,017

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main file: SEX, WGHT_PER, EXVIOL, XCS_Q115, CRVIOL, SCS_Q115.

^b Job postings on <http://www.charityvillage.com/> show that the annual salary of crisis line coordinators ranges from \$37,011 to \$46,274 (2011), equivalent to an hourly wage of \$19 to \$24. Other job-posting websites suggest the hourly wage ranges from \$13 to \$19. This report uses \$20 in the estimate. Although many staff are volunteers, the wage rate can be considered as the opportunity cost. The results may be underestimates as only one employee is assumed, and many fixed costs, such as office rental or equipment purchase, are not included.

^c Source: Crisis Call Centre, (Reno, Nevada, U.S.), Profile Report 2004-2005, <http://www.crisiscallcenter.org/documents/04-05ProfileReport.pdf>. The average length of each call is 24 minutes, which is 0.4 hours.

^d As all the phone calls made to crisis lines are anonymous, no official data is available regarding the number of times that each person called. However, according to anecdotal evidence from crisis line workers, people do make follow-up calls. It is assumed that, on average, each victim who contacted a crisis line made 5 calls in total.

C.4.3 Support Centres

Number of female victims visiting support centres	139,679 ^a
Number of male victims visiting support centres	127,617 ^a
Average hourly operating cost of support centres	\$30 ^b
Average number of visiting hours per victim	15 ^c
Operating costs of support centres – spousal violence against females (139,679*\$30*15)	\$62,855,527
Operating costs of support centres – spousal violence against males (127,671*\$30*15)	\$57,427,718
Total Social Services Operating Costs, Support Centres	\$120,283,245

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, EXVIOL, XCS_Q135, XCS_Q135, XCS_Q155, XCS_Q165, XCS_Q175, CRVIOL, SCS_Q135, SCS_Q155, SCS_Q165, SCS_Q175.

^b Taking C.4.2 into consideration, it is assumed that the average hourly operating cost of support centres is \$30.

^c It is assumed that, on average, each victim who visited a support centre spent 15 hours total at the support centre.

C.4.4 Victim Services

Number of female victims using victim services	9,184 ^a
Number of male victims using victim services	264 ^a
Operating cost per victim service agency, 2007/08	\$263,181 ^b
Operating cost per victim service agency, 2009 (inflation adjustment)	\$268,277
Total number of victim service agencies	879 ^c
Total annual operating costs for victim services, 2009 (\$268,277*879)	\$235,815,202
Average number of victims assisted per agency	592 ^d
Total number of victims assisted by victim service agencies (592*879)	520,368
Operating cost of victims service agencies per victim (\$235,815,202/520,368)	\$453
Operating costs of victim services – spousal violence against females (\$453*9,184)	\$4,161,954
Operating costs of victim services – spousal violence against males (\$453*264)	\$119,583
Total Social Services Operating Costs, Victim Services	\$4,281,537

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, EXABUSE, EXVIOL, XCS_Q185, SPABUSE, CRVIOL, SCS_Q185.

^b Source: Statistics Canada, CCJS, *Victim Services Survey, 2007/2008*.

No data is available for 2009. Data collected from 679 victim service agencies (excluding compensation programs) shows that the cost of providing formal services to victims of crime in Canada was \$178.7 million in 2007/08. This amount excludes costs to administer criminal injury compensation and other financial benefits programs, and other costs not specifically related to the formal delivery of services provided to victims. The average cost was therefore \$263,181 (= \$178,700,000/679).

^c Source: Statistics Canada, CCJS, *Victim Services Survey, 2007/2008*.

No data is available for 2009. There were a total of 884 victim service agencies in the fiscal year ending March 31, 2008. Five of these agencies offered only criminal injuries compensation programs or other financial benefits programs to victims. Therefore, there were 879 (=884-5) victim service providers.

^d Source: Statistics Canada, CCJS, *Victim Services Survey, 2007/2008*.

No data is available for 2009. According to the survey, 686 service providers indicated that they had assisted about 406,000 victims from April 1, 2007 to March 31, 2008. Therefore, the average number of victims served by each agency was about 592 (=406,000/686).

Total Social Service Operating Costs

	Spousal Violence against Females	Spousal Violence against Males	Total
Shelters and transition Homes	\$285,420,000	\$0	\$285,420,000
Crisis Lines	\$601,854	\$9,163	\$611,017
Support Centers	\$62,855,527	\$57,427,718	\$120,283,245
Victim Services	\$4,161,954	\$119,583	\$4,281,537
Total Social Service Operating Costs	\$353,039,335	\$57,556,464	\$410,595,799

C.5 Losses to Employers

C.5.1 Lost Output

Lost wages to female victims due to physical injuries	\$20,943,599 ^a
Lost wages to male victims due to physical injuries	\$12,728,087 ^a
Lost wages (absence) to female victims due to mental health issues	\$98,178,631 ^b
Lost wages (absence) to male victims due to mental health issues	\$21,434,414 ^b
Total lost wages to female victims (\$20,943,599+\$98,178,631)	\$119,122,230
Total lost wages to male victims (\$12,728,087+\$21,434,414)	\$21,434,414
Marginal rate of return	5.2% ^c
Lost output to employers – spousal violence against females (\$119,122,230*5.2%)	\$6,194,356
Lost output to employers – spousal violence against males (\$21,434,414*5.2%)	\$1,776,450
Total Losses to Employers, Lost Output	\$7,970,806

^a See B.3.1.

^b See B.2.2. Only short-term work loss associated with work absence is included in this section. It is assumed that for long-term work loss due to mental health issues, employers can fill the position by hiring new employees.

^c Following Boardman et al. (2008), a marginal return rate on investment of 5.2% is used. This means that if an employer invests (disinvests) an additional \$100, he or she expects to gain (lose) \$5.20 in net returns.

C.5.2 Tardiness and Distraction

Reeves and O'Leary-Kelly (2007)^a	
Victims	
Annual losses to employers (tardiness and distraction), female victims	\$4,112
Annual losses to employers (tardiness and distraction), male victims	\$4,989
Average annual income of female victim respondents	\$33,426
Average annual income of the male victim respondents	\$48,749
Percentage of income lost to tardiness and distraction, female victims (\$4,112/\$33,426)	12.3%
Percentage of income lost to tardiness and distraction, male victims (\$4,989/\$48,749)	10.2%
Non-victims	
Annual losses to employers (tardiness and distraction), females	\$3,412
Annual losses to employers (tardiness and distraction), males	\$5,300
Average annual income of female respondents	\$40,481
Average annual income of the male respondents	\$66,277
Percentage of income lost to tardiness and distraction, females (\$3,412/\$40,481)	8.4%
Percentage of income lost to tardiness and distraction, males (\$5,300/\$66,277)	8.0%
Difference	
Difference in percentage of lost productivity between victims and non victims, females (12.3%-8.4%)	3.9%
Difference in percentage of lost productivity between victims and non victims, males (10.2%-8.0%)	2.2%
Average annual income of female victims of spousal violence (GSS), 2009	\$42,645 ^b
Average annual income of male victims of spousal violence (GSS), 2009	\$67,416 ^b
Annual losses to employers due to spousal violence, female victims (\$42,645*3.9%)	\$1,652
Annual losses to employers due to spousal violence, male victims (\$67,416*2.2%)	\$1,508
Monthly losses to employers due to spousal violence, female victims (\$1,652/12)	\$137.64
Monthly losses to employers due to spousal violence, male victims (\$1,508/12)	\$125.69
Number of employed female victims affected by the violence (1 incident)	34,520 ^c
Number of employed female victims affected by the violence (2 incidents)	18,724 ^c
Number of employed female victims affected by the violence (3+ incidents)	42,324 ^c
Number of employed male victims affected by the violence (1 incident)	28,181 ^c
Number of employed male victims affected by the violence (2 incidents)	16,515 ^c
Number of employed male victims affected by the violence (3+ incidents)	21,202 ^c
Tardiness and distraction – spousal violence against females ($\$137.64 \times 34,520 + \$137.64 \times 18,724 \times 2 + \$137.64 \times 42,324 \times 6$)	\$44,858,528 ^d
Tardiness and distraction – spousal violence against males ($\$125.69 \times 28,181 + \$125.69 \times 16,515 \times 2 + \$125.69 \times 21,202 \times 6$)	\$23,682,887 ^d
Total Losses to Employers, Tardiness and Distraction	\$68,541,415

- ^a Reeves and O’Leary-Kelly (2007).
The data presented here only refers to the group of current victims of intimate partner violence.
- ^b Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, ACMRY, INCM, EXVIOL, CRVIOL. Respondents who reported that their main activity during the last 12 months was either “working at a paid job or business” or “maternity/paternity leave” are included (ACMYR).
- ^c Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, ACMYR, EXABUSE, EXVIOL, PSX_Q330, SPABUSE, CRVIOL, PSP_Q330, PRANGRY, PRUPSET, PRFEARFL, PRSHOCK, PRHRDIS, PRVICTIM, PRSLPROB, PRDEPRSS, PRASHGLT, PRAFRCHD, PRLESTEM, PRPRELAT.
- ^d Victims with 1 victimization in the previous 12 months are assumed to experience tardiness and distraction at work for 1 month; victims with 2 victimizations are assumed to experience tardiness and distraction for 2 months; victims with 3 or more victimizations are assumed to experience tardiness and distraction for 6 months.

C.5.3 Administration Costs

Number of days absent from work, female victims, ex-spousal violence	119,326 ^a
Number of days absent from work, female victims, current spousal violence	25,820 ^a
Number of days absent from work, male victims, ex-spousal violence	30,929 ^a
Number of days absent from work, male victims, current spousal violence	14,614 ^a
<hr/>	
Total number of days absent from work, female victims (119,326+25,820)	145,147
Total number of days absent from work, male victims (30,929+14,614)	45,543
<hr/>	
Average hourly wage rate of managers	\$37 ^b
Average hourly wage rate of administrators	\$22 ^b
Combined hours spent on administration and rearranging tasks	0.25 ^c
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Administration costs for work absences – spousal violence against females ($\$37 \times 0.25/2 + \$22 \times 0.25/2$) * 145,147	\$1,070,459
Administration costs for work absence – spousal violence against males ($\$37 \times 0.25/2 + \$22 \times 0.25/2$) * 45,543	\$335,880
Total Losses to Employers, Administration for Work Absences	\$1,406,339

- ^a See B.3.1.
- ^b Source: Statistics Canada, CANSIM, Table 202-0106, Earnings of Individuals, by Selected Characteristics and National Occupational Classification (NOC-S), 2009, Annually.
The average annual incomes (earnings) of managers and administrators in 2009 were \$72,300 and \$43,000, respectively. Hourly wage rate was calculated by dividing the annual income by 52.18 weeks per year, 5 days per week and 7.5 hours per day.
- ^c Source: Health and Safety Executive (1999).
The source assumes 0.5 hours of an “accounts and wages” clerk’s time are lost for each absence of an employee, but also mentions the possibility of lost manager time for rescheduling. To ensure a lower bound estimate, this study assumes 0.25 hours of productivity are lost, split evenly between managers and administrators.

Total Losses to Employers

	Spousal Violence against Females	Spousal Violence against Males	Total
Lost Output	\$6,194,356	\$1,776,450	\$7,970,806
Tardiness and Distraction	\$44,858,528	\$23,682,887	\$68,541,415
Administration Costs	\$1,070,459	\$335,880	\$1,406,339
Total Losses to Employers	\$52,123,343	\$25,795,217	\$77,918,560

C.6 Negative Impact on Children Exposed to Spousal Violence

Initial Analysis

Number of households with children exposed to spousal violence – spousal violence against females	61,636 ^a
Number of households with children exposed to spousal violence – spousal violence against males	32,996 ^a
Number of couple families with children	4,164,150 ^b
Number of children in couple families with children	7,638,710 ^b
Number of children per couple family with children (7,638,710/4,164,150)	1.83
Number of children exposed to spousal violence – spousal violence against females (61,636*1.83)	113,064
Number of children exposed to spousal violence – spousal violence against males (32,996*1.83)	60,527
Percentage of children exposed to spousal violence developing hyperactivity	3.06% ^c
Number of children exposed to spousal violence developing hyperactivity – spousal violence against females (113,064*3.06%)	3,460
Number of children exposed to spousal violence developing hyperactivity – spousal violence against males (60,527*3.06%)	1,852
Percentage of children exposed to spousal violence developing a mental health issue (emotional disorder)	1.86% ^c
Number of children exposed to spousal violence developing a mental health issue – spousal violence against females (113,064*1.86%)	2,103
Number of children exposed to spousal violence developing a mental health issue – spousal violence against males (60,527*1.86%)	1,126
Percentage of children exposed to spousal violence developing physical aggression	22.24% ^c
Number of children exposed to spousal violence developing physical aggression – spousal violence against females (113,064*22.24%)	25,145
Number of children exposed to spousal violence developing physical aggression – spousal violence against males (60,527*22.24%)	13,461
Percentage of children exposed to spousal violence committing delinquent acts against property	12.01% ^c
Number of children exposed to spousal violence committing delinquent acts against property – spousal violence against females (113,064*12.01%)	13,579
Number of children exposed to spousal violence committing delinquent acts against property – spousal violence against males (60,527*12.01%)	7,269
Average number of years of exposure to spousal violence	7 ^d

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX, WGHT_PER, EXABUSE, EXVIOL, XAI_Q210, SPABUSE, CRVIO, SAI_Q210.

^b Source: Statistics Canada, CANSIM, Table 1110022 – Family Characteristics, Families with Children, by Age of Children, Annually – V29765770: Children in Couple Families; V29765737: Couple Families with Children. There were a total of 4,164,150 couple families (with children) with 7,638,710 children in 2009. Therefore, the average number of children per couple family with children is about 1.83 ($=7,638,710/4,164,150$). It is assumed that this number also applies to the households in which respondents reported that their children heard or saw violent incidents.

^c Sources: Dauvergne and Johnson (2001).

^d Rossman, (2001). Note that as explained in the report, all the costs estimated below will be adjusted for 7 years of exposure to reflect the impact that can be appropriately attributed solely to spousal violence incidents in 2009.

TABLE C.1: NUMBER OF CHILDREN EXPOSED TO SPOUSAL VIOLENCE BY TYPE OF NEGATIVE IMPACT AND GENDER OF PRIMARY VICTIM

Gender of the primary victim	Hyperactivity	Mental Health Issue (Emotional Disorder)	Physical Aggression	Delinquent Acts against Property
F	3,460	2,103	25,145	13,579
M	1,852	1,126	13,461	7,269

C.6.1 Medical Costs

Hyperactivity

Percentage of hyperactive children receiving medication to control symptoms	74% ^a
Number of children who receive medication for hyperactivity due to exposure to spousal violence against females (3,460*74%)	2,560
Number of children who receive medication for hyperactivity due to exposure to spousal violence against males (1,852*74%)	1,371
Monthly cost of medication treatment for hyperactivity	\$30 ^b
Average number of months on medication	60 ^c
Medical costs for hyperactivity – spousal violence against females (2,560*\$30*60)	\$4,608,401
Medical costs for hyperactivity – spousal violence against males (1,371*\$30*60)	\$2,467,040

Mental Health Issues

Incremental percentage of children exposed to spousal violence visiting mental health specialists	8.1% ^d
Number of children receiving medical treatment for mental health issues due to exposure to spousal violence against females (2,103*8.1%)	170
Number of children receiving medical treatment for mental health issues due to exposure to spousal violence against males (1,126*8.1%)	91
Average mental health treatment cost per child per year, 2009	\$2,731 ^e
Average number of years of mental health treatment	1.25 ^f
Medical costs for mental health issues – spousal violence against females (170 *\$2,731*1.25)	\$581,506
Medical costs for mental health issues – spousal violence against males (91*\$2,731*1.25)	\$311,300
Medical costs for children – spousal violence against females [(\$4,608,401+\$581,506)/7]	\$741,415
Medical costs for children – spousal violence against males [(\$2,467,040+\$311,300)/7]	\$396,906

Total Negative Impacts on Children Exposed to Spousal Violence, Medical Costs **\$1,138,321**

^a Source: LeFever et al. (2002).

LeFever et al. (2002) find that 74% of their study sample of hyperactive children was taking ADHD medication at the time of their study.

^b Source: eHow Health, *Screening Tests for ADHD*, http://www.ehow.com/facts_5028739_screening-tests-adhd.html.

Numerous websites provide wide-ranging cost estimates for ADHD drug treatments. This amount (\$30) is chosen as a reasonably low estimate.

^c Source: Centers for Disease Control and Prevention. 1999. Public Health Issues in the Treatment of ADHD. Atlanta: Centers for Disease Control and Prevention. <http://www.cdc.gov/ncbddd/adhd/workshops/treatment.html>.

The source finds that the average medication treatment length for hyperactive children commonly increased to ten years after 1996. Following this, it is assumed that, on average, hyperactive children take medication for 5 years (60 months).

^d Source: Dauvergne and Johnson (2001).

According to the source, 11.5% of children who did not witness spousal violence (physical fights) and 19.6% of children who witnessed spousal violence (physical fights) visited mental health specialists at least once. Following this, it is calculated that 8.1% (=19.6%-11.5%) of child visits to mental health specialists were due to exposure to spousal violence.

^e Source: Children's Mental Health Ontario (CMHO), *Our Children's Mental Health: Worth an Extra 4¢ a week? 2005-2006*.

This CMHO presentation states that the average cost of the Ontario children's mental health system was \$2,500 per child per year, equivalent to \$2,731 in 2009 Canadian dollars.

^f Sources: Croghan et al. (1999); Association of Psychologists of Nova Scotia, http://www.apns.ca/prob_socialphobia.html.

Croghan et al. (1999) state that the average antidepressant treatment length is 4 to 9 months, while the Association of Psychologists of Nova Scotia states that the average treatment length for social anxiety is 2 years. Accordingly, a compromise of 1.25 years is used as the treatment length for mental health issues (emotional disorders).

C.6.2 Missed School Days

Hyperactivity	
Number of children receiving medication for hyperactivity due to exposure to spousal violence against females	2,560 ^a
Number of children receiving medication for hyperactivity due to exposure to spousal violence against males	1,371 ^a
Number of children with hyperactivity not receiving medication – spousal violence against females (3,460-2,560)	900 ^a
Number of children with hyperactivity not receiving medication – spousal violence against males (1,852-1,371)	482 ^a
Percentage of hyperactive children on medication who miss full day doses twice per month	26% ^b
Percentage of hyperactive children on medication who miss half day doses twice per month	22% ^b
Number of children missing full day doses twice per month – spousal violence against females (2,560*26%)	666
Number of children missing full day doses twice per month – spousal violence against males (1,371*26%)	356
Number of children missing half day doses twice per month – spousal violence against females (2,560*22%)	563
Number of children missing half day doses twice per month – spousal violence against males (1,371*22%)	302
Number of missed school days per month,	
Hyperactive children without medication	1 ^b
Hyperactive children with medication who miss full day doses	2 ^b
Hyperactive children with medication who miss half day doses	1 ^b
Number of missed school days for hyperactive children – spousal violence against females ((900*1*9*5)+(666*2*9*5)+(563*1*9*5))	125,735 ^c
Number of missed school days for hyperactive children – spousal violence against males ((482*1*9*5)+(356*2*9*5)+(302*1*9*5))	67,310 ^c
Physical Aggression – Suspension	
Suspension rate for children with physical aggression	11.17% ^d
Number of children exposed to spousal violence suspended for physical aggression – spousal violence against females (25,145*11.17%)	2,808
Number of children exposed to spousal violence suspended for physical aggression – spousal violence against males (13,461*11.17%)	1,503
Average suspension length in days	10 ^e
Number of missed school days for children due to suspension – spousal violence against females (2,808*10)	28,080
Number of missed school days for children due to suspension – spousal violence against males (1,503*10)	15,030

Physical Aggression – Expulsion

Expulsion rate for children with physical aggression	0.17% ^d
Number of children exposed to spousal violence expelled for physical aggression – spousal violence against females (25,145*0.17%)	43
Number of children exposed to spousal violence expelled for physical aggression – spousal violence against males (13,461*0.17%)	23
Average expulsion length in days	90 ^e
Number of missed school days for children due to expulsion – spousal violence against females (43*90)	3,870
Number of missed school days for children due to expulsion – spousal violence against males (23*90)	2,070
Total number of missed school days for children exposed to spousal violence against females (125,735+8,080+3,870)	157,685
Total number of missed school days for children exposed to spousal violence against males (67,310+15,030+2,070)	84,410
Cost of education per child per day	\$40 ^f
Costs of missed school days for children – spousal violence against females [(157,685*\$40)/7]	\$901,057
Costs of missed school days for children – spousal violence against males [(84,410*\$40)/7]	\$482,343
Total Negative Impact on Children Exposed to Spousal Violence, Missed School Days	\$1,383,400

^a See C.6-A and C.6.1.

^b Source: Dick, Erin, and Denise Balch. 2004. ADD/ADHD and Caregiver Productivity. *Benefits and Pensions Monitor Online* October 2004.

The source states that hyperactive children who receive medication for their condition miss, on average, one dose per half month, with 26% of missed doses occurring in the morning, 26% in the afternoon, and 22% at lunch. For simplicity of calculations, it is assumed that those children who miss a morning dose also miss an afternoon dose, with the morning and afternoon doses together constituting a full day's dose. Following this, it is assumed that students who miss a full day dose miss one full day of education and students who miss a half-day dose miss half of a school day. In addition, it is assumed that students who do not take medication have less severe hyperactivity and only miss half of a school day per half month. Therefore, children who miss a half-day dose and children who do not take medication only miss one school day per month while children who miss a full day dose miss two school days per month.

^c Elementary schools and high schools in Canada run from September to June. Taking into account holidays, there is approximately 9 months of education per year. In addition, following the assertion in section C.6.1 that, on average, hyperactive children take medication for 5 years, it is assumed that children would miss doses during the entire treatment period.

^d The rate of suspensions and expulsions varies widely. According to the Ontario Ministry of Education's *McGuinty Government Receives Report on Safe Schools Act Review* (2009), some school boards in Ontario reported a suspension rate of 0.5% in 2003/04, while other boards reported suspension rates above 36%. Some school boards reported no expulsions, while others reported expulsion rates of 2.3%. In 2007/08, the most recent year of available data, the suspension rate and the expulsion rate was 4.54% and 0.07%, respectively, for all students attending Ontario schools. Based on statistics from New Zealand (New Zealand Government, 2009, "Education Counts, Indicators", <http://www.educationcounts.govt.nz/indicators/data/student-engagement-participation/3728>) it is assumed that 61.5% of total suspensions and expulsions were in part due to physical aggression, where physical aggression is assumed to be present in suspensions and expulsions resulting from arson, continual disobedience, other harmful or dangerous behaviour, physical assault on students and staff, sexual harassment and misconduct, vandalism, verbal assault on students and staff, and weapons. In addition, Faris and Felmler (2011) state that about 25% of children exhibit physically aggressive behaviour. Following this, it is estimated that the suspension rate and the expulsion rate for physically aggressive children was 11.17% (=4.54%*61.5%/25%) and 0.17% (=0.07%*61.5%/25%), respectively.

^e According to the Ontario Ministry of Education's *Suspension and Expulsion: What Parents Need to Know* (2009), students may be suspended for a period of time ranging from one school day to 20 school days; a period of 10 days is used in this report. The expulsion length ranges from 20 school days to one year; a period of 90 days is used in this report.

^f The per-child, per-day cost of education is a weighted average calculated from the financial information of six ministries of education (NB, ON, MB, SK, AB, BC).

C.6.3 Lost Future Income

Hyperactivity	
Percentage of childhood hyperactivity persisting into adulthood	50% ^a
Number of children who will experience adult ADHD due to exposure to spousal violence against females as a child (3,460*50%)	1,730
Number of children who will experience adult ADHD due to exposure to spousal violence against males as a child (1,852*50%)	926
Mental Health Issues	
Percentage of childhood mental health issues continuing into adulthood when not treated	25% ^b
Percentage of childhood mental health issues continuing into adulthood when treated	10% ^c
Number of children whose mental health issues will persist into adulthood – spousal violence against females (170*10%+(2,103-170)*25%)	500
Number of children whose mental health issues will persist into adulthood – spousal violence against males (91*10%+(1,126-91)*25%)	268
Percentage of mental health issues that are defined as serious	13.2% ^d
Number of children who will have serious mental health issues in adulthood – spousal violence against females (500*13.2%)	66
Number of children who will have serious mental health issues in adulthood – spousal violence against males (268*13.2%)	35
Physical Aggression – School Dropout	
School dropout rate for physically aggressive children	15% ^e
Number of aggressive children exposed to spousal violence dropping out of school – spousal violence against females (25,145*15%)	3,772
Number of aggressive children exposed to spousal violence dropping out of school – spousal violence against males (13,461*15%)	2,019
Average annual reduced earnings due to hyperactivity, 2009	\$12,214 ^f
Average annual reduced earnings due to serious mental health issues, 2009	\$13,564 ^d
Average annual reduced earnings due to school dropout, 2009	\$6,558 ^g
<p>If all numbers of children counted under each problem are used in the estimate of lost income, there is the possibility of double or multiple counting as one child may develop more than one problem; though one child may have multiple problems and may lose lifetime income due to each problem, there is a limit to how much lifetime income one child can lose. Therefore, if one person has two problems (for example, both hyperactivity and a serious mental health issue), the person is assumed to only have the problem with the higher value of expected lost income (in this example, the serious mental health issue). As serious mental health issue is associated with the highest expected lost income, all people with a serious mental health issue are assumed as having this problem only. Therefore, as long as a person has a serious mental health issue, it is assumed that he or she will lose \$13,564 a year, regardless of other problems. The next greatest expected income loss is for hyperactivity (\$12,214), followed by school dropout due to physical aggression (\$6,558).</p>	
Number of children having a serious mental health issue in adulthood, regardless of other problems,	
Due to exposure to spousal violence against females	66
Due to exposure to spousal violence against males	35
Percentage of children with mental health issues also having hyperactivity (regardless of physical aggression) 50.16% ^h	
Number of children exposed to spousal violence having both a mental health issue and hyperactivity in adulthood – spousal violence against females (66*50.16%)	33
Number of children exposed to spousal violence having both a mental health issue and hyperactivity in adulthood – spousal violence against males (35*50.16%)	18

Number of children having hyperactivity but not a mental health issue in adulthood (regardless of school dropout),	
Due to exposure to spousal violence against females (1,730-33)	1,697
Due to exposure to spousal violence against males (926-18)	908
Percentage of children having a mental health issue, hyperactivity, or both, and also dropping out of school	41.45% ^b
Number of children having a mental health issue, hyperactivity, or both, and also dropping out of school – spousal violence against females ((66+1,697)*41.45%)	731
Number of children having a mental health issue, hyperactivity, or both, and also dropping out of school – spousal violence against males ((35+908)*41.45%)	391
Number of children, with neither a mental health issue nor hyperactivity, dropping out of school,	
Due to exposure to spousal violence against females (3,772-731)	3,041
Due to exposure to spousal violence against males (2,019-391)	1,628
Average number of years for employment	25 ^c
Lost future income for people having a serious mental health issue,	
Due to exposure to spousal violence against females (\$13,564*66*25)	\$22,380,600
Due to exposure to spousal violence against males (\$13,564*35*25)	\$11,868,500
Lost future income for people having hyperactivity (no mental health issue),	
Due to exposure to spousal violence against females (\$12,214*1,697*25)	\$518,178,950
Due to exposure to spousal violence against males (\$12,214*908*25)	\$277,257,800
Lost future income for people dropping out of school (no mental health issue or hyperactivity),	
Due to exposure to spousal violence against females (\$6,558*3,041*25)	\$498,571,950
Due to exposure to spousal violence against males (\$6,558*1,628*25)	\$266,910,600
Lost future income of children – spousal violence against females [((\$22,380,600+\$518,178,950+\$498,571,950)/7)]	\$148,447,357
Lost future income of children – spousal violence against males [((\$11,868,500+\$277,257,800+\$266,910,600)/7)]	\$79,433,843
Total Negative Impact on Children Exposed to Spousal Violence, Lost Future Income	\$227,881,200

^a Source: Zemetkin et al. (1990).

The source notes that 40%-60% of childhood ADHD continues into adulthood; the midpoint of 50% is used in this report.

^b Source: Department of Health (2010).

The source states that 25% to 50% of adult mental health problems could have been avoided by receiving treatment during childhood. Therefore, it is assumed that 25% of untreated childhood mental health issues persist into adulthood.

^c It is assumed that 10% of treated childhood mental health issues continue into adulthood.

^d Source: Kessler et al. (2008).

Kessler et al. (2008) examines the association between mental health issues and earnings. According to the source, people with a serious mental health issue represent 13.2% of all people with a mental health issue. For those study respondents with earnings, the estimated loss in earnings due to the serious mental health issue averaged \$14,393, or 35.3% of the expected earnings (\$40,799), where the expected earnings measure assumes that no mental health issue is present. Applying this percentage to the average Canadian earnings (\$38,447), the estimated earnings loss in 2009 is obtained at approximately \$13,564. Here, the average Canadian earning is based on people with at least some earnings (not necessarily from full-time employment). As there is likely a higher proportion of non-earners among people with serious mental health issues than the general population, this is an underestimate of the negative impact on the reduced earnings potential.

^e Source: Statistics Canada. “Education Matters: Trends in dropout rates among the provinces.” *The Daily Friday*, December 16, 2005. <http://www.statcan.gc.ca/daily-quotidien/051216/dq051216c-eng.htm>. According to the source, the national dropout rate was 9.8% in 2004/05. It is assumed that the dropout rate is slightly higher, at 15%, for children with physical aggression. This is a conservative assumption as Cairns, Cairns and Neckerman (1989) find that 43% to 71% of students with poor academic performance and high aggression dropped out of school.

^f Source: Biederman and Faraone (2006).

The average annual income loss due to ADHD is estimated at \$10,300 USD (using the Heckman-advanced model), equivalent to \$12,214 in 2009 Canadian dollars. The Heckman-advanced model, which assumes that observed differences in educational attainment and achievement are fully attributable to ADHD demonstrates a higher annual income loss (\$10,300 USD) compared with the Heckman- basic specification (\$8,900 USD), which assumes that observed differences in educational attainment and achievement are not attributable to ADHD.

^g Source: Hankivsky (2008).

Hankivsky estimates the employment loss of school dropout (high school non-completion) to be \$6,552 (equivalent to \$6,558 in the 2009 Canadian dollars).

^h Source: Statistics Canada, NCYLS, Cycle 3: CBEC06, CBEC08, CBEC09, CWTCW01C.

ⁱ It is assumed that, on average, each person has a 25 year employment. The discount rate is assumed to be the same as the inflation rate.

C.6.4 Delinquent Acts against Property

Proportion of property crimes involving damaged property	93% ^a
Proportion of property crimes involving stolen property/cash	98% ^b
Number of property crimes involving damaged property, committed by children exposed to spousal violence against females (13,579*93%)	12,631
Number of property crimes involving damaged property, committed by children exposed to spousal violence against males (7,269*93%)	6,762
Number of property crimes involving stolen property/cash, committed by children exposed to spousal violence against females (13,579*98%)	13,333
Number of property crimes involving stolen property/cash, committed by children exposed to spousal violence against males (7,269*98%)	7,137
Average value of damaged property per incident of property crime	\$860 ^a
Average value of property/cash stolen per incident of property crime	\$840 ^b
Value of delinquent acts against property by children – spousal violence against females [(12,631*\$860+13,333*\$840)/7]	\$3,151,769
Value of delinquent acts against property by children – spousal violence against males [(6,762*\$860+7,137*\$840)/7]	\$1,687,200
Total Negative Impact on Children Exposed to Spousal Violence, Delinquent Acts against Property	\$4,838,969

^a Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX; Incident File: WGHT_HSD, MSCRIME, VALDAMAGE_C.

Property crimes where MSCRIM >= 304 are selected, including beak and enter, motor vehicle theft, theft of personal property and vandalism.

^b Source: Statistics Canada, GSS 2009, Cycle 23, Victimization – Main File: SEX; Incident File: WGHT_HSD, MSCRIME, SPR_Q130_C.

Property crimes where MSCRIM >= 304 are selected including beak and enter, motor vehicle theft, theft of personal property and vandalism.

Total Negative Impact on Children Exposed to Spousal Violence

	Spousal Violence against Females	Spousal Violence against Males	Total
Medical Costs	\$741,415	\$396,906	\$1,138,321
Missed School Days	\$901,057	\$482,343	\$1,383,400
Lost Future Income	\$148,447,357	\$79,433,843	\$227,881,200
Delinquent Acts Against Property	\$3,151,769	\$1,687,200	\$4,838,969
Total Negative Impact on Children Exposed to Spousal Violence	\$153,241,598	\$82,000,292	\$235,241,890

C.7 Other Government Expenditures

C.7.1 Other Federal Expenditures

Federal expenditures – spousal violence against females	\$7,620,897 ^a
Federal expenditures – spousal violence against males	\$1,409,790 ^a
Total Other Government Expenditures, Federal	\$9,030,687

^a Sources: Jamieson and Gomes (2010); data requests to various federal government departments. Funds for the Family Violence Initiative (FVI) are included, as well as any other expenditures indicated by federal departments as being related to spousal violence. However, most federal government expenditures are already included in other sections in the report (such as in the social service operating costs section). Where data does not provide the breakdown by gender, the breakdown by gender as reported in the UCR2 Survey is used.

C.7.2 Other Provincial and Territorial Expenditures

Provincial and territorial expenditures – spousal violence against females	\$88,649,352 ^a
Provincial and territorial expenditures – spousal violence against males	\$18,579,961 ^a
Total Other Government Expenditures, Provincial and Territorial	\$107,229,313

^a Sources: Data requests to provincial jurisdictions; Canadian Network of Women's Shelters and Transition Houses (2011). Information was requested through the Federal-Provincial-Territorial Working Group on Family Violence. The data presented here is primarily based on information received from six jurisdictions: Prince Edward Island, New Brunswick, Quebec, Ontario, Saskatchewan, and British Columbia. Limited data from Canadian Network of Women's Shelters and Transition Houses (2011) is also used. However, most provincial/territorial government expenditures are already included in other sections in the report (such as in the social service operating costs section). Therefore, the result is an underestimate of the true expenditures spent on prevention, assistance, and awareness programs in Canada.

Total Other Government Expenditures

	Spousal Violence against Females	Spousal Violence against Males	Total
Other Federal Expenditures	\$7,620,897	\$1,409,790	\$9,030,687
Other Provincial and Territorial Expenditures	\$88,649,352	\$18,579,961	\$107,229,313
Total Other Government Expenditures	\$96,270,249	\$19,989,751	\$116,260,000