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**CRITICAL ISSUES**

*bulletin*

The Costs of Crime  
Who Pays and How Much?  
1998 Update

*by Paul Brantingham  
and Stephen T. Easton*

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## Preface

*Michael Walker, Executive Director, The Fraser Institute*

There is a wide difference of opinion about the functions that should be performed by the government sector. The Fraser Institute's research leads it to suggest that the economic and social well-being of countries is more likely to be enhanced if the functions performed in the non-competitive, politically controlled sector are limited. Others take the view that government must be active in many areas, and indeed that the scope of government activities must be enhanced.

A common ground between these two positions is the agreement that government must have the primary responsibility for the maintenance of a framework of law and in the control of crime. This agreement amongst those who have different perspectives about the role of government has generally meant that the activities of the government in the two areas of law and crime control have not been subject to the scrutiny that has been accorded other areas about which there has not been agreement. The Institute's "Law and Markets" program is designed to subject the law-and-order functions of government to closer inspection.

In this *Critical Issues Bulletin*, Professors Paul Brantingham and Stephen Easton provide an update and extension of their survey of crime and its attributes. In it, we discover the enormous costs that criminal activity impose on the population. We see who are the victims and perpetrators of crime, and what sorts of crime are most prevalent. And, we also find out how the incidence of crime in Canada compares to that in other countries.

One of the most interesting trends identified in the study is the emergence of private policing. An earlier study of The Fraser Institute had examined private security firms as an aspect of the growth of the service sector of the Canadian

economy. In this *Bulletin*, we discover that private security guards outnumber public police officers two to one, and we find out why there has been this explosion in private policing.

There are two extensions of the unique compilation of data provided in the original study. The first is the compilation of the expected cost of crime to the criminal. This calculation bears directly on the question of whether "crime pays" and to what extent the policing and justice apparatus provides deterrence to criminal activity. The probable cost of many crimes is relatively small and certainly raises questions about the sort of cost/benefit calculation to which they might lead.

The second extension to the original study is a compilation of the sentencing terms in the provinces for which there are data available. This collection of information is valuable for two reasons. First, it shows that there are wide variations in the sentences handed down for identical crimes depending on the province in which the offence was committed; this raises the issue of whether we have a uniform system of justice in Canada. Second, in the process of assembling the data it was discovered that Manitoba, New Brunswick, and British Columbia do not collect data on sentencing! A true national comparison is, therefore, impossible and these three provinces have no ability to know how their sentencing practices compare with those in other Canadian jurisdictions.

The Fraser Institute has been pleased to support this compilation of research on the attributes of crime in Canada. However, the authors have worked independently and the views they express may or may not represent the views of the members or trustees of the Institute.

## Introduction

*The Costs of Crime: Who Pays and How Much?* is a revision of *The Crime Bill: Who Pays and How Much?* (Brantingham and Easton 1996) that expands and brings up to date the statistics presented in the original publication. The purpose of this primer is to describe (1) what kinds of crime Canadians are exposed to, (2) who is at risk from these crimes, (3) who commits what crimes, (4) what costs the victims face, and (5) what expenditures we make to prevent crime. To understand what changes we may want to make in our criminal justice system, it is important to see the overall patterns of crime and punishment, how they have evolved, and what they have cost.

Canadians should be concerned about crime: *there were 2.7 million crimes known to the police in 1996*—in a population of 30 million; one in four Canadians reported that they were victimized by some kind of criminal act during 1996 although most crimes were not reported to the police. If those crimes known to the police were evenly spread across the population, you, the average Canadian, would have almost one chance in 10 of reporting a criminal act each year. In a three year period, you would have about a 50 percent chance of being victimized and, in a lifetime of 60 active years, you would have more than a 99 percent chance of reporting to the police a criminal act perpetrated against you or your property.

Fortunately, most criminal acts are relatively minor. But anyone who has had to report a “relatively minor” crime such as breaking and entering or who has been subjected to criminal vandalism would probably be offended by any attempt to treat such events as trivial. The costs of criminal activities and the fear they engender are often out of proportion to the monetary losses they inflict on victims. The threat of violence lurks in the background even of simple

property crime. If your home has been broken into or your house vandalized, even simple things are seen in a quite different light: returning to an empty house or letting your children be first in the door are no longer perceived as safe.

If you ask Canadians about crime, you will hear that there is too much, that people feel unsafe, that it is upsetting that criminals get off or get out of jail and re-offend. Some members of the police agree: the late Ray Canuel, former Vancouver Chief of Police, said not long ago that criminals “laugh at the system. . . I think the general public out there feels the parole system is not working, the corrections aspect is not working. . . maybe the court system is not working—it’s overloaded, overworked. It’s time we have a look at it. If we can fix it, lets do that” (*Vancouver Sun* 1996: B1). Yet, newspapers are full of reports that the crime rate is actually decreasing. And, this is true: for many crimes, the Canadian crime rate has been decreasing by about two percent per year for the past several years. Most crime rates peaked in 1991.

Millions of people are exposed to crime each year at a cost of between \$15 billion and \$30 billion. To understand how our system of criminal justice might be changed, we begin by reviewing where the system stands today and how it got there. Although many of the estimates we present are precise, estimates about the amount of crime in Canada, and its associated costs vary widely. We offer very conservative estimates of both incidence of crime and costs, along with more expansive estimates. Readers will have to decide, on the basis of their own experience, which set of estimates is more appropriate. We also offer a word of caution: Canadian crime statistics are patchy. Publicly accessible data provide only partial coverage of many important criminal justice issues and contain some surprising gaps and omissions.



## Crime in Canada

Crime is one of the dominant social concerns of Canadians. It causes extensive physical, emotional, and economic harm. Coverage of crime—from disputes about statistical patterns to headlines about the vicious activities of mass killers or serial rapists to reports of stock-market swindles—is a staple of the Canadian media. Canadian governments spend almost \$10 billion a year trying to control crime and private security firms are paid at least another \$6 billion to protect what people produce and sell.

Do Canadians receive fair value for all the tax money that they spend on crime control? How much crime do Canadians really have to endure? How much economic damage does crime do to them? Are things better or worse in Canada than in other countries? Is the situation better or worse in Canada now than it used to be? What additional strategies for crime control should Canadian governments be exploring?

### What is a crime?

“Crime” is a generic term that is used to refer to a wide variety of very different activities that violate some formal penal law enacted by the federal government, or by the various provincial and local governments. In popular understanding, crimes include, for example, murder; breaking into someone’s home in order to steal; forcing unwanted sexual contact on somebody; driving an automobile while intoxicated; selling shares in a company on the basis of falsified information; smuggling wine and groceries through customs without paying duty; practising medicine or law without a license; parking in a fire lane; polluting a salmon stream; using unlicensed game software on a home computer. According to the Law Reform Commission of Canada, various kinds of crimes and offences are defined in some 40,000 federal and provincial laws and regulations and an uncounted number of local government acts and by-laws.

Crimes do have a common element: they are all violations of laws that prohibit specific activities and provide for punishment of violators by the state. According to the definitions of the Canadian Constitution, only those offences

defined and punished under federal law are technically and legally called crimes in Canada. Offences against provincial or local law, which can result in jail terms, fines, and other typically criminal sanctions upon conviction, must technically be considered penal offences.<sup>1</sup>

The offences most widely and commonly understood as crimes, such as murder, robbery, sexual assault, burglary, and theft, are defined and prohibited by the federal Criminal Code. Other offences widely understood as crimes, such as drug trafficking, income-tax evasion, and smuggling, are defined in other specific Acts of Parliament. Such offences carry the possibility of serious punishments. The vast majority of Canadian penal offences defined by provincial and municipal enactments carry relatively minor penalties. For both practical and scientific reasons, however, a crime is defined in this paper as an offence against some penal law currently in force. All data relate to violations of such legal rules and the focus of this paper is on acts commonly understood to be serious crimes and defined in the Criminal Code and a few other well-known Acts of Parliament. Activities that are legal, however loathsome they may be in the view of some particular group, are not treated as crimes.<sup>2</sup>

### How do we know what the crime rate is?

Criminologists commonly utilize three measures of crime: (1) crimes known to the police; (2) data on convictions for various crimes; and (3) crime rates estimated from surveys of victims.<sup>3</sup> Crimes known to the police represent counts of offences discovered by, or reported to, the police. These have been recorded in a uniform format by Canadian police forces since 1962. Data on convictions count the outcomes of criminal prosecutions and require the government to collect data from the courts. Although Canada collected such data from shortly after Confederation until the late 1960s, these data have not been consistently available in Canada over the past quarter century. Recent efforts by the Canadian Centre for Justice Statistics provide data on convictions in some provinces and territories. Data from surveys of victims permit

- estimates of the total numbers of selected crimes occurring in Canada in a given year. These data suggest an incidence of crime higher than suggested by counts of crimes discovered by, or reported to, the police. Each set of data has its uses and we will discuss which data are appropriate in the context of specific issues, although counts of crimes known to the police and estimates from surveys of victims are most frequently used today.

Only a limited number of the crimes Canadians suffer are reported to the police. For example, only two-thirds of the breaking-and-entering offences and one-half of the vehicle thefts discovered in the victimization component of the 1993 General Social Survey (GSS) (Gartner and Doob 1994) were reported to the police. The rate of reporting for violent crimes is even lower: only about one-third of the assaults and one-tenth of the sexual assaults discovered in the 1993 GSS victimization survey were reported to the police. This is a common problem: similar low reporting levels are found in all 20 of the countries that have so far participated in the periodic standardized international victimization survey.

Most of the time, victims' decisions not to report a crime to police are grounded on a rational assessment of the costs and benefits of reporting. For instance, victims may decide that the incident, though technically criminal, was too unimportant to report or that they themselves could handle the situation more satisfactorily than the police. In about 10 percent of the cases, however, victims say they refrain from reporting the crime to police for fear of retribution by the offender; this is a matter for substantial concern.

Criminologists talk about the incidence of crime and about crime rates. By "incidence" they refer to a count of the number of crimes known to the police, a count of the number of crimes estimated on the basis of victimization surveys to have occurred, or a count of the number of persons convicted of crimes in court. Establishing incidence is important to understanding the number of police officers, courtrooms, judges, or prison cells required to respond to crime.<sup>4</sup>

When criminologists talk about crime "rates," they mean the incidence of crime in relation to the quantity of some important underlying variable such as population or volume of crime targets. Crime rates constitute estimates of the risk of crime per unit volume of the underlying variable. Crime rates permit comparisons across time and between places. Vancouver, for instance, with almost 50 times the population would be expected to have a higher incidence of crime than the small interior city of Williams Lake and it does. In 1996, Vancouver reported 105,991 criminal-code offences known to the police, more than 35 times the 3,015

crimes reported in Williams Lake. When crime rates per 1,000 population are calculated, however, it becomes apparent that residents of Williams Lake face a much greater risk of crime: their rate of 265 criminal-code offences per 1,000 population was more than one-third higher than Vancouver's 1996 rate of 197 offences per 1,000 residents. Vancouver's 1996 incidence of 8,587 violent crimes was almost 24 times the incidence of 364 violent crimes in Williams Lake, but Williams Lake's rate of 32 violent crimes per 1,000 population was double the Vancouver rate of 16 violent crimes per 1,000 population. Although many more crimes occurred in Vancouver, the risk of any given citizen becoming a victim of crime was higher in the small city of Williams Lake. Rates can also be used to make comparisons between neighbourhoods within cities, between provinces, and between nations. Crime rates are also used to make comparisons between different periods in the same place.

In the sections below, our estimates distinguish numbers and costs for violent crime and property crime based on both the incidence of crimes known to the police and estimates of incidence drawn from surveys of victims. The cost estimates using numbers of crimes known to the police underestimate the real cost to victims while cost estimates based on data from surveys of victims are likely to be close to the upper bounds. We also distinguish, as necessary, between incidence of crime and the rate of crime.

## International patterns of crime

Although it may be cold comfort to victims of crime, patterns of crime in Canada are consistent with those in the rest of the world. We have relatively low rates of violent crime and relatively high rates of property crime. Statistics collected over the past 40 years by the International Criminal Police Organization (Interpol), by various agencies of the United Nations and, more recently, through surveys of victims conducted by a consortium of national governments, suggest a few broad, world-wide, patterns. (See, e.g., Interpol 1995; Kangaspunta 1995; van Dijk, Mayhew and Killias 1990; Mayhew and van Dijk 1997.)

In general, *rates of crimes against property are directly related to a nation's level of economic development*: the higher a nation's per-capita gross domestic product (GDP), the more women there are in the workforce, the richer and more urbanized a nation's citizens, the higher that nation's rate of property crime. For 1992, this was true across the set of nations reporting to Interpol or the United Nations.



The patterns for violent crime rates are much weaker but persist across more than 40 years of data accumulated by Interpol. *Rates of violent crime are inversely related to a nation's level of economic development:* the lower a nation's per-capita GDP, the weaker a nation's economy, the poorer a nation's citizens, the higher its violent crime rate. Similarly, the less urbanized a nation, the higher its rate of violent crime.<sup>5</sup>

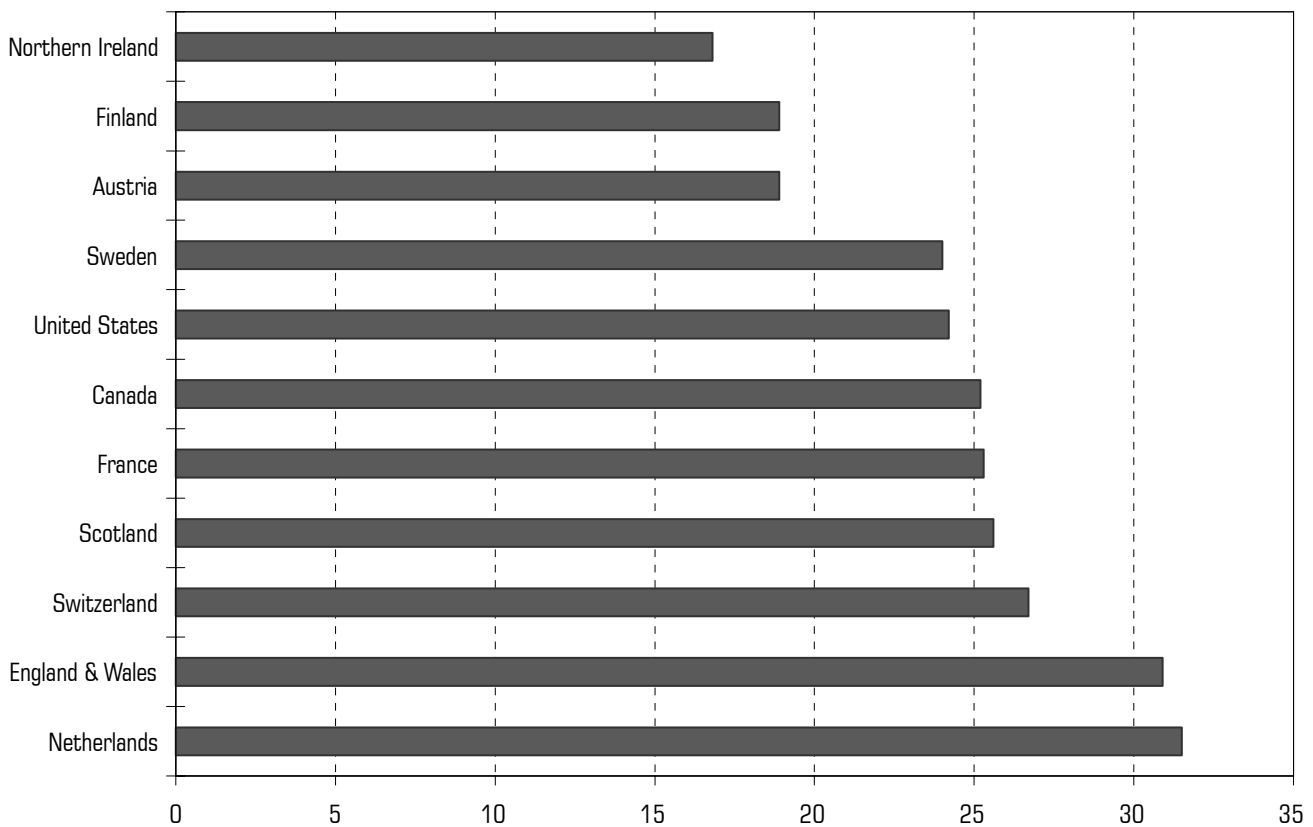
The pattern of crime in Canada is consistent with these generalizations. Compared to many other countries, Canada has lower rates of violent crime and higher rates of property crime. These patterns are illustrated in table 1, which shows national rankings for murder (a violent crime) and for theft (a property crime) in 50 selected countries in 1992. Crime rates are standardized as crimes known to the police in a particular country, and are expressed per 100,000 population in that country. The United States is anomalous: it has both high levels of property crime and high levels of violent crime. It is also worth tracking the relative positions of China, Egypt, England, India, Japan, Russia, Sweden, Uganda, and Venezuela.

Similar patterns could be shown for serious assault, on the one hand, and for burglary, motor-vehicle theft, and fraud, on the other. These data suggest that in keeping with international patterns, Canada has high property crime rates and low violent crime rates relative to world standards. This is hardly a reason to be complacent: high levels of property crime result in a large proportion of a nation's residents being directly affected by crime. Figure 1 shows the proportions of residents victimized by selected crimes in the 11 nations that participated in the International Victimization Survey of 1996. This confirms earlier victimization studies showing that, given current crime levels, about 25 percent of Canadians are likely to be victimized in any given year.

### Canadian patterns of crime

The international patterns that suggest Canada has relatively high levels of property crime and much lower levels of violent crime are confirmed by a breakdown into broad categories of

**Figure 1: Percent of population victimized in 11 selected nations, 1995**



Source: Mayhew and van Dijk 1997.

**Table 1: Interpol crime rates (crimes known to police per 100,000 population) for selected countries (1992)**

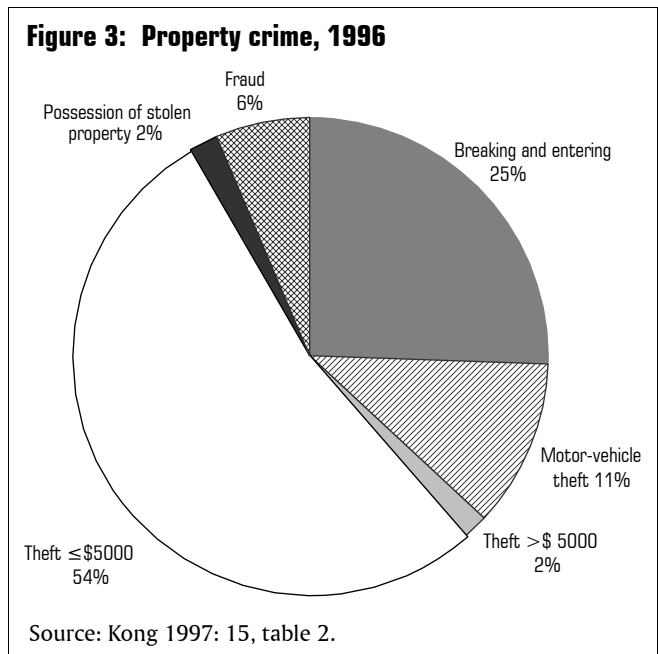
<b>Murder</b>			<b>Theft</b>		
<b>Rank</b>	<b>Country</b>	<b>Rate</b>	<b>Rank</b>	<b>Country</b>	<b>Rate</b>
1	Swaziland	53.73	1	Denmark	8,495
2	Botswana	29.15	2	Sweden	8,419
3	Jamaica	25.56	3	England & Wales	7,938
4	Lesotho	17.20	4	Netherlands	7,527
5	Rwanda	15.63	5	<b>Canada</b>	<b>5,453</b>
6	Venezuela	14.96	6	USA	5,166
7	Russia	14.09	7	Germany	4,977
8	USA	9.31	8	Bermuda	4,681
9	Peru	9.28	9	Switzerland	4,528
10	Uganda	9.00	10	France	4,487
11	Thailand	8.85	11	Norway	3,884
12	Angola	7.73	12	Austria	3,027
13	Azerbaijan	7.67	13	New Zealand	2,990
14	Iraq	7.07	14	Belgium	2,873
15	Kenya	6.40	15	Hungary	2,669
16	Ecuador	6.19	16	Swaziland	2,630
17	Bermuda	5.12	17	Italy	2,575
18	Chile	5.04	18	Israel	2,332
19	India (1991)	4.61	19	Botswana	2,183
20	Netherlands	3.98	20	Ireland	1,703
21	Turkey	3.17	21	Russia	1,273
22	Poland	3.01	22	Poland	1,261
23	Hungary	2.92	23	Spain	1,261
24	New Zealand	2.85	24	Japan	1,228
25	Belgium	2.70	25	Singapore	1,219
26	<b>Canada</b>	<b>2.57</b>	26	Venezuela	950
27	Italy	2.54	27	Hong Kong	928
28	England & Wales	2.52	28	Lesotho	800
29	France	2.33	29	Jamaica	790
30	China (1990)	2.04	30	Chile	667
31	Sweden	2.01	31	Greece	534
32	Hong Kong	1.86	32	Peru	350
33	Israel	1.77	33	Algeria	236
34	Singapore	1.53	34	Ecuador	222
35	Germany	1.45	35	Korea	185
36	Korea	1.42	36	Kenya	174
37	Switzerland	1.35	37	Jordan	159
38	Greece	1.33	38	Azerbaijan	130
39	Austria	1.25	39	Thailand	99
40	Denmark	1.20	40	Turkey	84
41	Spain	1.19	41	Rwanda	81
42	Norway	1.17	42	Uganda	64
43	Egypt (1991)	1.07	43	Argentina	63
44	Jordan	1.02	44	Iraq	63
45	Indonesia	.80	45	India (1991)	63
46	Algeria	.70	46	Egypt (1991)	60
47	Saudi Arabia	.67	47	Saudi Arabia	53
48	Ireland	.66	48	Indonesia	49
49	Japan	.51	49	China	42
50	Argentina	.05	50	Angola	7

Source: Interpol 1995; Kangaspunta 1995. Data are for 1992 unless indicated.

offences committed in 1996. Figure 2 (based on crimes known to the police) shows that property crime accounted for more than half (58 percent) of all federal crimes, and this pattern has been consistent over the years. The category labelled property crime includes breaking and entering, theft, fraud, motor-vehicle theft, and being in possession of stolen goods. Much of the category labelled “Other Criminal Code,” which made up about 29 percent of all offences in 1996, was composed of property damage offences such as mischief (commonly referred to as vandalism) and arson.

As figure 3 shows, the category property crime is dominated by two offences: theft under \$5,000—more than half (54 percent) all property crimes,<sup>6</sup> and breaking and entering—one-quarter of such crimes. Fraud accounted for 6 percent and motor-vehicle theft for 11 percent of all property crime known to police in 1996, while theft over \$5,000 and possession of stolen property each accounted for 2 percent.

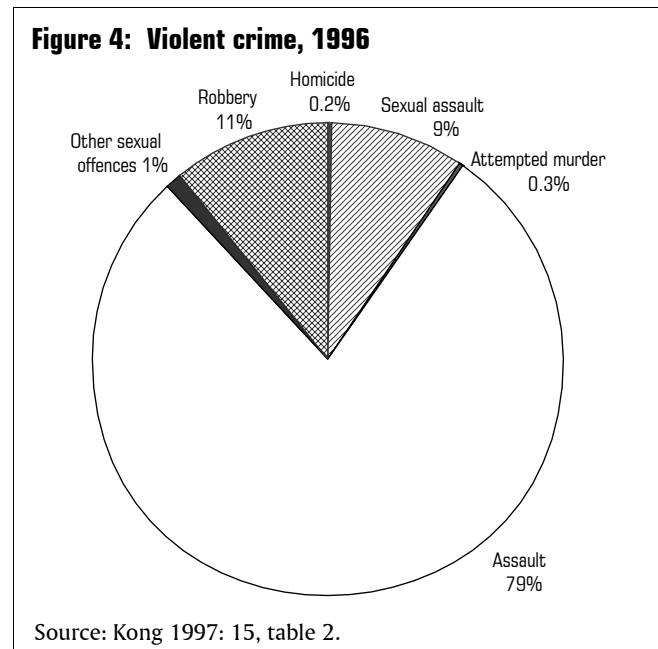
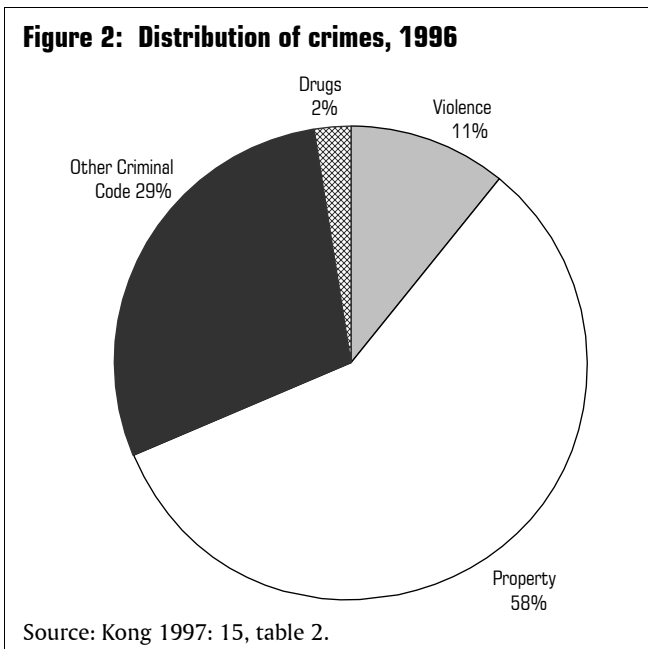
Violent offences made up 11 percent of all known federal crimes and provincial offences in 1996. The category violent crime was dominated by assaults, which accounted for 8 out of 10 violent offences. Most assaults—some 78 percent—were minor level-1 offences, which are primarily offences dealt with by summary conviction.<sup>7</sup> The most serious offences—homicide, attempted murder, and abduction—each contributed less than one-half of one percent of known violent offences. As figure 4 illustrates, sexual assault and robbery accounted respectively for about 9 and 11 percent of known violent offences. Nearly all known sexual assaults—some 96 percent—were minor level-1 offences.



In Canada, property crime occurs more frequently than violent crime in the proportion of five to one. Crimes of violence (known to the police) are relatively few although naturally their impact is comparatively more serious and more greatly feared.

**Historical trends**

Two series of data allow us to explore trends in Canadian crime. The first series counts judicial convictions for different categories of offences. This series started shortly after Con-



- federation and continued until the late 1960s, when several
- provinces withdrew from the judicial statistics program. It has
- only recently been restarted and, at present, covers only
- some of the provincial and territorial court systems. The second
- series counts crimes known to the police using a Uniform Crime
- Reporting system. It dates from 1962 and provides information
- about a wider and more detailed array of offences.

**Long-term trends**

The three sets of crimes tracked in figure 5 are grouped somewhat differently from the way they would be at present. Over the period from Confederation to the end of the 1960s, Canada, as part of the British Empire and Commonwealth, grouped crimes into categories developed in England. Violence against the person included criminal homicide, rape, and assault. Violence against property included robbery, burglary and other offences involving breaking and entering, and extortion. (In modern crime statistics, robbery is counted as a violent offence.) Property offences included theft and fraud.

Figure 5 looks at the long view of Canadian crime. The rate of convictions per 100,000 of population is plotted for each of the categories of crimes. Thus, the rate of criminal convictions increased from about 75 per 100,000 popu-

lation in 1886 to about 500 per 100,000 in the late 1960s. The rate of conviction for property crimes rose from 44 to 304 per 100,000; conviction for violence against persons from 16 to 58 per 100,000; and conviction for violence against property from 6 to 118 per 100,000.

The long-term crime trends shown in figure 5 are remarkable in several ways. First, they show a massive growth in the overall volume of crime as measured by the rate of convictions. Second, they show that in terms of numbers, the greatest growth involved various kinds of property crime rather than crimes of violence against persons. Third, there is a clear indication that Canadians have experienced a series of crime waves—periods of accelerated rises in crime marked by peaks and subsequent sharp declines. As measured in convictions, Canadian crime waves peaked in 1914, in 1940, and in 1963. Figure 6, which uses rates of “actual offences”—crimes known to the police—from the Uniform Crime Reports, shows that more recent crime waves peaked in 1981 and 1991.

**Short-term trends**

Figure 6 charts Canadian crime trends since 1962, when the current Uniform Crime Reporting (UCR) system started, using



the historical Canadian categories of offences found in the long-term convictions data: violence against the person, violence against property, and property offences. All three categories grew rapidly during the 1960s and 1970s. By 1981, rates for these categories of crime were three times higher than they were in 1962. The rates of property crime showed a mild downward trend through most of the 1980s but surged in 1990 and 1991, reaching the levels never before recorded in Canada. They declined substantially after 1991 and by 1996 crimes against property with violence had declined by 11 percent and crimes against property without violence had declined 18 percent, reaching the lowest levels since the late

1970s. The rate of violent crime increased at essentially the same pace as rates of property crime between 1962 and 1983. Thereafter, following a comprehensive expansion of the laws against assault and sexual assault, the rate of violent crimes known to the police continued a sharp growth that peaked in 1992 but have since declined. By 1996, the rate of violent crimes known to the police were down 13 percent from their 1992 peak, although they remained four times higher than they were in 1962.

In addition to the crimes known to the police, which are drawn from the UCR system, there is also the data on victims that Statistics Canada periodically collects as part of its broader General Social Survey (GSS). People are asked whether they have been victimized by selected types of crimes against the person—assault, sexual assault, robbery, and theft of personal property—and crimes against their households—breaking and entering, motor vehicle theft, theft of household property, and vandalism—during the preceding year. These surveys were conducted in 1987 and 1993 and Canadian rates of victimization generally support the trends seen in the UCR data for this 6-year period. The rate for personal theft declined 14 percent and the rate for robbery declined 31 percent between 1987 and 1993 while the rate for assault declined by 1 percent. The rate of household breaking and entering (burglary) declined by 7 percent between 1987 and 1993; the rate for household vandalism declined by 13 percent; the rate for household motor-vehicle theft declined 37 percent; the rate for household theft was unchanged.

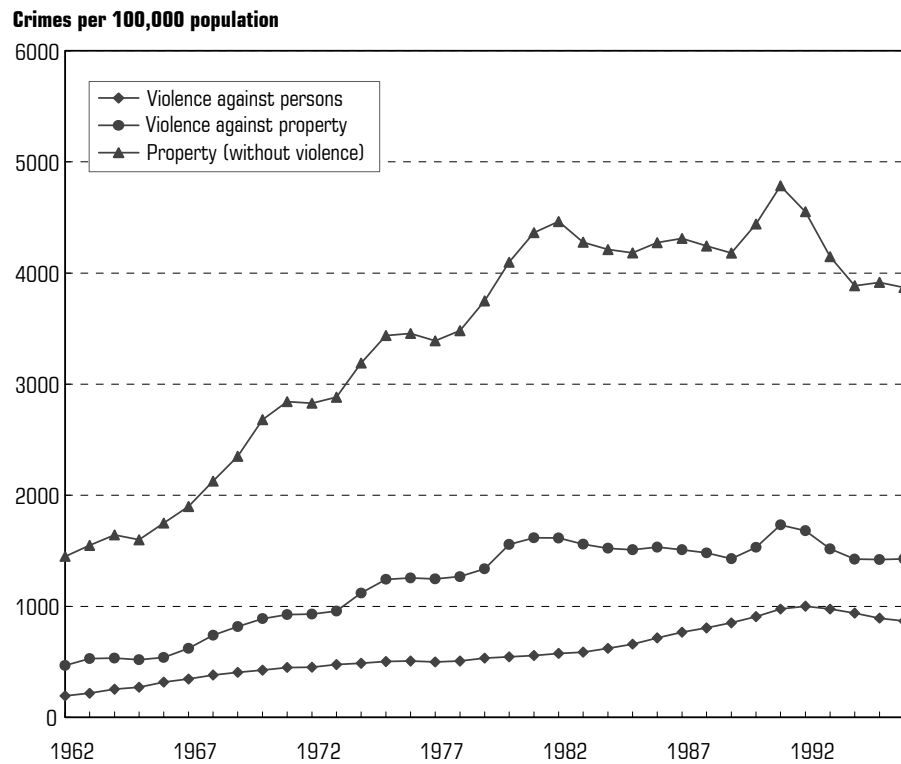
It is worth noting that the transition in the quality of Canadian crime observed in the long-term data on convictions continued in recent decades. Although it is small comfort, Canadians now suffer relatively more violent property crime such as burglary and robbery and relatively less violent crime against the person such as assault and sexual assault than did their grandparents and great grandparents.

Still, the evidence shows that after a massive expansion in the number of crimes per capita from 1960 to 1981 and a sharp peak in the early 1990s, the rates of crime per 100,000 population have declined appreciably, although they remain at levels unimaginable 30 years ago. On the basis of these data, there is little doubt that your house is not as safe as it used to be and that you are personally at greater physical risk than you were in 1962. Compared to the number of crimes in 1962, there are 400 percent more violent crimes per person and 300 percent more property crimes per person in Canada today. On the brighter side, the crime rate now appears to be on the decrease.

**Interprovincial differences in crime**

Canadian crime rates, overall, are highest in the West and lowest in the East. Table 2 gives the numbers for 1996. This general pattern has been relatively consistent for most of the twentieth century. The overall crime pattern is dominated by the distribution of property crimes: breaking and entering, thefts, motor-vehicle thefts, frauds. British Columbia reported the highest rates of property crime among all Canadian jurisdictions in 1996, followed by the Yukon and Northwest Territories, Saskatchewan, Manitoba, and

**Figure 6: Canadian crime trends, 1962–1996**



Source: Calculated by authors from Canadian Centre for Justice Statistics, Cat. No. 85–205.

- Alberta. The pattern of violent crime is different. In 1994, Nova Scotia had a higher rate of violent crime than Alberta; Newfoundland reported a higher rate of violent crime than Ontario. Manitoba reported the highest rate of violent crime among the provinces, followed closely by British Columbia. The Yukon and Northwest Territories reported rates of violent crime that were enormously higher than those reported by any province.

**Table 2: Crime rates per 100,000 in 1996**

	<b>Violent crimes</b>	<b>Property crimes</b>	<b>Other Criminal Code offences</b>	<b>Total Criminal Code offences</b>
<b>Newfoundland</b>	969	2,703	2,255	5,927
<b>Prince Edward Island</b>	814	3,505	3,143	7,483
<b>Nova Scotia</b>	1,119	4,018	3,215	8,352
<b>New Brunswick</b>	905	3,302	2,475	6,682
<b>Quebec</b>	655	4,490	1,763	6,907
<b>Ontario</b>	901	4,685	2,358	7,943
<b>Manitoba</b>	1,478	5,578	3,541	10,596
<b>Saskatchewan</b>	1,326	6,291	4,017	11,634
<b>Alberta</b>	1,002	5,059	2,841	8,901
<b>British Columbia</b>	1,421	8,738	3,759	13,918
<b>Yukon</b>	3,175	8,302	8,527	20,003
<b>Northwest Territories</b>	5,032	7,419	9,941	22,392
<b>Canada</b>	973	5,192	2,593	8,758

Source: Kong 1997: 18, table 5.

Data from Quebec are anomalous. Quebec reported the lowest rate of violent crime in the country in 1996, lower even than Prince Edward Island. Given the cosmopolitan, urban character of Quebec, this is difficult to accept. It is particularly unusual since Quebec's rate for property crime is very similar to that of Ontario, and the two provinces share many of the same demographic characteristics. Montreal has a rate for violent crime that exceeds that of Toronto but the two provinces differ in province-wide reported assaults. In Quebec, they stand at only 50 percent to 60 percent of those in Ontario. Quebec also reports a much lower rate for other Criminal Code offences than any other Canadian jurisdiction. This statistical category includes such crimes as gambling and prostitution—known volumes of which are extremely sensitive to police enforcement—as well as property vandalism, arson, weapons offences, kidnapping, and disturbing the peace, among others.

The most probable explanation for these anomalous patterns in the Quebec data is that Quebecers living outside Montreal are much less likely than other Canadians to call the police about minor assaults and a variety of other criminal code offences. It is also possible that Quebec police forces outside Montreal are less likely to record and report minor offences. A possible, though less probable, explanation is that the cultural differences between Quebec outside Montreal and the rest of Canada result in real differences in the amount of crime experienced. Such an interpretation would not be supported by comparisons between victimization in France and in Canada (figure 1) or rates for crimes recorded by police (table 1), but the culture of Quebec is in many ways as different from the culture of contemporary France as it is from that of the rest of Canada. Until Canada conducts a sufficiently detailed victimization survey to permit comparison of victimization rates within provinces, we must accept these data as an indicator of a problem needing additional research.



## Profiles of the victims

Most Canadians are not the victims of criminal acts in any given year. For instance, the victimization component of the General Social Survey (GSS) conducted by Statistics Canada estimated that 74 percent of Canadian men and 77 percent of Canadian women had not been the victims of a personal crime such as robbery, sexual assault, assault, or personal theft during 1987. Statistics Canada estimated that 76 percent of Canadian men and 77 percent of Canadian women aged 15 and over had not been the victims of a crime against the person during 1993. In 1995, the International Victimization Survey (Mayhew and van Dijk 1997) estimated that 24 percent of Canadian adults were the victims of one of the 11 crimes surveyed.

What is true of Canadians individually is also true of Canadian households. In 1987, Statistics Canada estimated that about 22 percent of Canadian households had suffered breaking and entering, a motor-vehicle theft, a theft of household property, or an act of vandalism. In 1993, Statistics Canada estimated that some 19 percent of Canadian households were the victims of at least one of these common crimes.

These are not comforting figures and, to most Canadians, they will seem astonishingly high. If the figures for 1993 hold for the future, over a lifetime the average Canadian is very likely to be the victim of a criminal act at least once. Put another way, if you are average, there are only 3 chances in 100,000 that you will not be victimized during your lifetime. Further, you are very likely to suffer a criminal act that you report to the police. It is little wonder that Canadians fear crime when it is so likely that they will be personally exposed to it.

Little is known at present about the rates of criminal victimization suffered by Canadian businesses or public institutions, although recent data from the Canadian uniform crime reports (Kong 1997) indicate that shoplifting and business break-ins together with cheque and credit-card fraud account for about 19 percent of all property crimes known to the police. Canadians have poor reporting mechanisms for capturing the extent and consequences of organized crime.

### Victims of crime are most often young

Most of the victims of crime are relatively young. In both 1987 and 1993, the General Social Survey conducted by Statistics Canada found that Canadian youths between 14 and 24 years of age had rates of criminal victimization that were about twice as high as the rates of victimization of Canadians between 25 and 44 years, and 5 to 6 times higher than the victimization rates of persons between 45 and 64 years. On the other hand, the victimization rates of persons aged 65 years and over were so low that Statistics Canada could not estimate them using survey techniques. Figure 7 illustrates this pattern.

There are a few selected crimes that differ from this general pattern. The majority of Canadian victims of homicide, for instance, are in their late 20s and 30s. This can be explained by the fact that most Canadian homicides occur as a result of arguments between people who know one another—spouses and ex-spouses, lovers and ex-lovers, family, friends, and acquaintances. Many of these homicides follow the collapse of an intimate relationship, intimacy remains largely a social relation between adults, and it often takes some years of intimacy before relations collapse and situations arise in which an argument can trigger lethal action.

### Victims of crime are most often men

Table 3 displays the incidence, distributed by sex, of victimization by robbery and assault in 1987 and 1993. Overall, men experience higher rates of criminal victimization than women. Two-thirds of all Canadian homicide victims in 1996 were men, a pattern that has held for at least a quarter of a century. Men had higher rates of victimization by robbery and assault than women in both 1987 and 1993. Men and women reported similar rates of personal theft in 1993; women report much higher levels of sexual assault than men.

**Table 3: Victimization by sex (per 1000 population)**

Year	Robbery		Assault	
	Male	Female	Male	Female
1987	17	10	74	63
1993	12	6	68	66

Source: Gartner and Doob, 1994: 6.

### Lifestyles and risk

Although we are all at some risk from crime, different groups of people suffer very different risks of victimization. In general, criminal victimization is related to lifestyle and routine activities that create exposure to risk. This is seen in a variety of activity indicators.

### Work and leisure

Some patterns of daily activity impose discipline upon one's use of time and one's location that limits exposure to the risk of criminal victimization. Other routines allow people to spend time in high-risk situations and locations and so to expose themselves to the risk of criminal victimization. Work seems to insulate people from criminal victimization: in 1987, those who described their main daily activity as

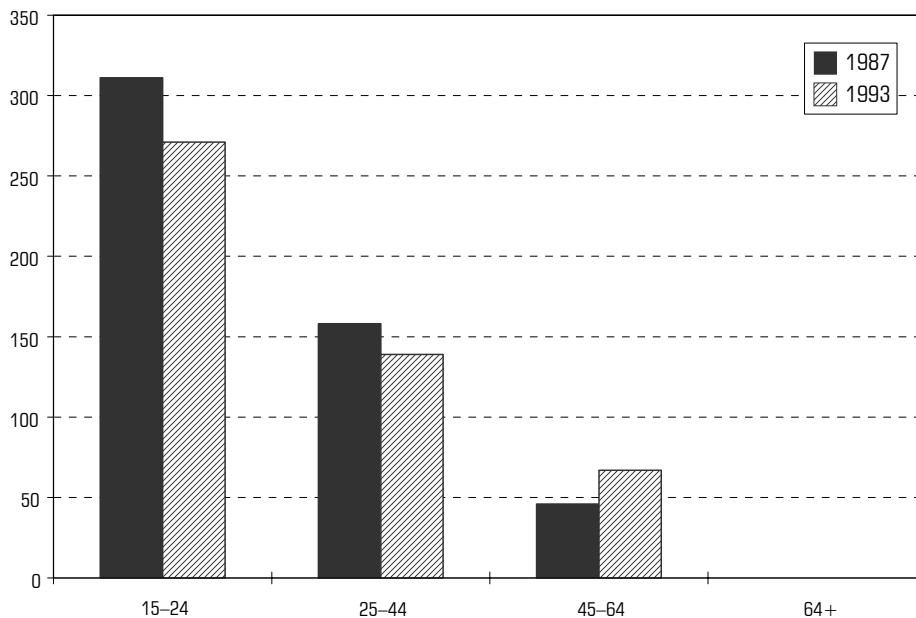
working had lower victimization rates than those who said they were looking for work. Students reported victimization rates more than twice as high as either workers or those looking for work. Those who described their main activity as keeping house suffered only about one-half the victimization rates suffered by those whose main activity was working at a job or business. Moreover, people are much less likely to be victimized at work than at home or at some other place outside working hours.

The seeming anomaly in these findings is reconciled by the way in which exposure to crime is structured by the context in which someone makes contact with other people. Compared to those working outside the home, full-time home-makers have relatively little contact with other people and are therefore less exposed to criminal attack during the course of the working day. Because they are home, they also protect the house and its property from thieves and burglars. Workers are less likely to be victimized during the working day than those looking for work because the job itself structures activities so tightly that the number of opportunities for stealing and of situations triggering assaults are reduced. Students and those looking for work are more likely to be victimized because they have more unstructured time during the day. Unstructured time creates windows of opportunity for thieves, who can look for unguarded property while others are concentrating on work. Unstructured time also permits unstructured interpersonal contacts in settings and situations that facilitate and trigger criminal attack. People are more likely to be victimized outside working hours than at work because their time and activities are less structured; they are more likely to be victimized at home than at work for the same reason. Leisure time increases the risk of crime.

As figure 8 shows, victimization rates increase with the frequency of evening activities outside the home. Canadians engaging in more than 10 evening activities a month have about double the victimization rates of those

**Figure 7: Personal victimization rates by age**

Crimes per 1,000 population



Source: Gartner and Doob, 1994: 6.

Note that rates for victims of 64 years and older are too low to be estimated.



going out less than that, and those who go out 30 or more times a month suffer crimes rates almost four times higher than those who go out fewer than 10 times a month. Similar patterns were found in studies of victimization conducted in Canada in 1981 and in 1987 as well as in studies conducted in other countries, including the United Kingdom and the United States (Mayhew and van Dijk 1997; van Dijk, Mayhew and Killias 1990; Mirrlees-Black, Mayhew and Percy 1996; Maguire and Pastore 1997). Going out in the evening is the occasion for a substantial number of exposures to criminal attack: for instance, going out for a drink exposes one to risk from strangers on the street, at the bar, and in the parking lot; one's car is placed at risk where it is parked and one's home is left empty, exposed to burglars, for the duration of the evening activity.

From this perspective, the role of employment in reducing crime may have as much to do with the discipline of time and the control of routine activity imposed upon potential victims by their jobs as it does with the way the usual economic incentives of a job reduce criminal motivation amongst offenders. To the extent that this is so, welfare may have little impact on crime rates because it does not change the amount of unstructured time available to recipients, but work-fare schemes could substantially reduce crime by doing so.

**Family life**

In 1987, married Canadians (including those living in a stable common-law relationships) reported a rate of victimization that was, at 88 per 1,000, less than one-third the victimization rate reported by single persons or those who said they were separated or divorced (274 per 1,000).

Family break-down creates different risks for men and women. Single men suffer much a higher rate of personal victimization than men who are separated or divorced whereas separated and divorced women suffer a much higher rate of personal victimization than single women. Separated and divorced women report a rate of victimiza-

tion from assault that is about five times higher than the rate of assault reported by married women whereas single women suffer three times as much assault as married women. It should be stressed that these figures come not from crimes known to the police but from a survey of victims. In all these cases, the victimization rate is higher than the rates reported to the police. Table 4 displays the rate, distributed by marital status, of victimization for all crimes.

**Table 4: Total victimization by sex and marital status, 1993 (per 1000 population)**

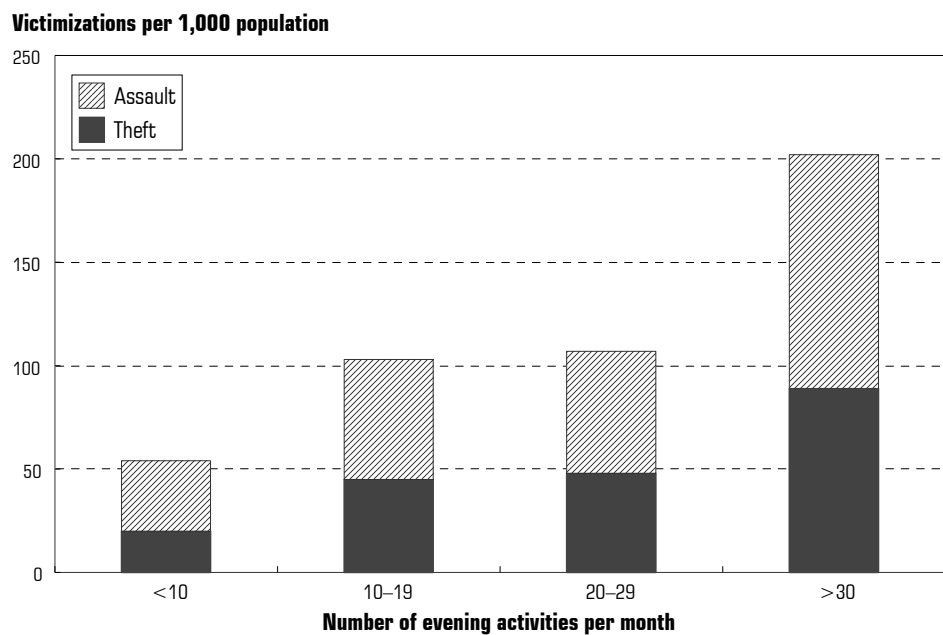
Married		Single		Separated / Divorced	
Male	Female	Male	Female	Male	Female
85	85	245	311	187	374

Source: Gartner and Doob 1994: 8.

Those who are formally married are much less likely to be victims of homicide than persons living in a common-law marriage. Those living in a continuing relationship are less likely to be victims of homicide than estranged persons who have had a marriage or common-law relationship break down. Married people are much less likely to be murdered than those who are single. Nevertheless, homicide is usually a crime that involves those who know each other: in 1996,



**Figure 8: Personal victimization by frequency of evening activity, 1993**



Source: Gartner and Doob, 1994: 10.

- almost half of all homicides occurred in the victim's own residence; more than one-third of homicide victims were killed by a family member and one-half were killed by an acquaintance. Only 13 percent of Canadian homicides were committed by strangers.

Children are much more likely to be killed by a step-parent or the unrelated lover of a parent than by a parent. Although the absolute risk for homicide at any age is low, the relative risk associated with step-parents is substantial, especially for the very young.

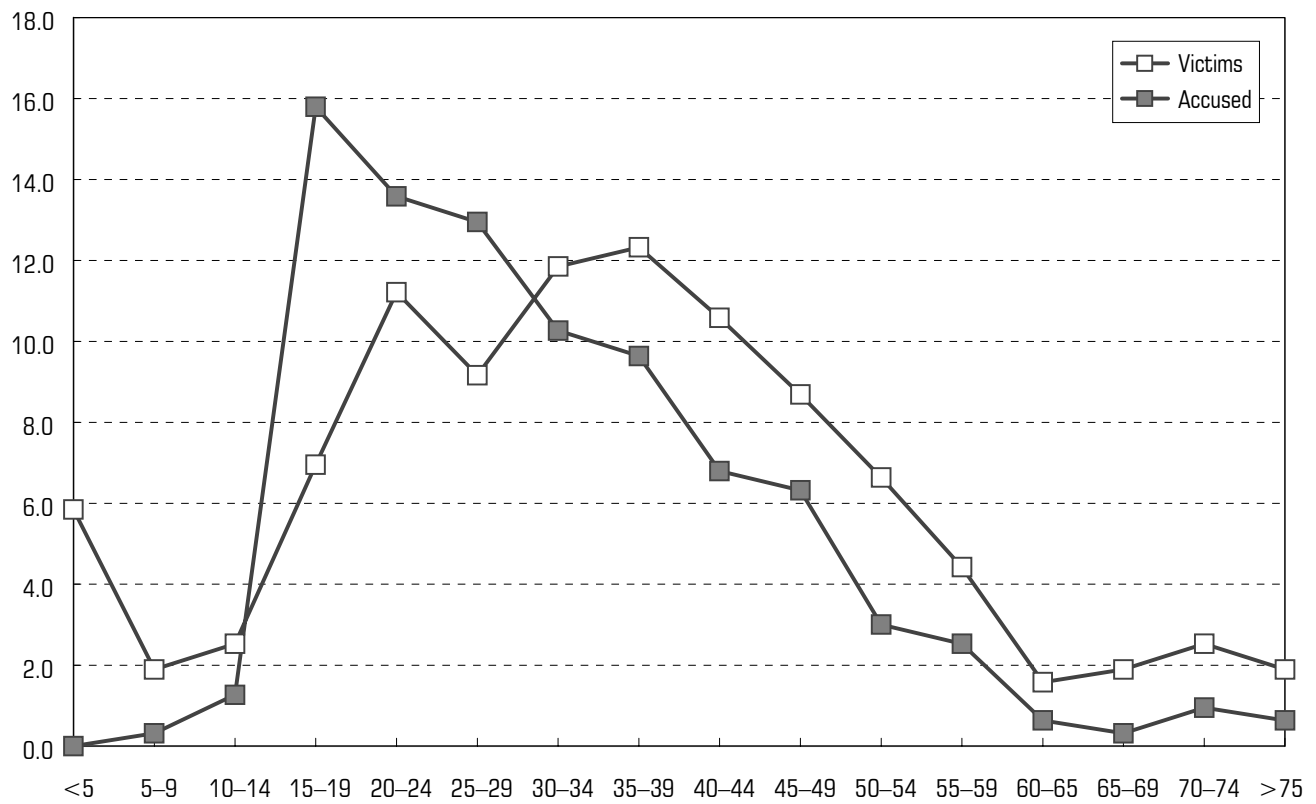
Figure 9 shows the proportions of homicide victims and persons accused of homicide in Canada in 1996 by age group. As is apparent, homicide is a crime the afflicts the young. Very young children run a relatively high risk of being murdered in Canada. The rate of victimization rises by age group, peaking at the group between ages 35 and 39, then declining sharply with increasing age. Those accused of homicide were much younger than victims: the rate of offending rose sharply to a very high peak for the group aged from 15 to 19, then declined steadily with increasing age.

**Drinking and drugs**

Drinking alcoholic beverages or taking illegal drugs also increases the risk of victimization. In Canada in 1987, drinkers were more than twice as likely as non-drinkers to be the victims of assaults and other violent crimes. Heavy drinkers—those who reported consuming 14 or more drinks a week—were more than twice as likely as those who consumed less to be the victims of assault or other violent crimes; they were more than four times as likely as non-drinkers to be victimized. Overall, heavy drinkers were more than three times as likely as non-drinkers to be victimized by some kind of crime. Risk of victimization increased steadily with increased weekly consumption of alcohol (Sacco and Johnson 1990: 42). In 1996, 50 percent of those accused of homicide and 38 percent of homicide victims were intoxicated by alcohol or illegal drugs or both at the time of the crime (Fedorowycz 1997: 10). American data indicate that between 50 and 90 percent of persons arrested in large cities have illegal drugs in their systems at the time of arrest (Maguire and Pastore 1997).

**Figure 9: Age of homicide victims and accused, 1996**

Percent in age group



Source: Fedorowycz 1997: 8-12.

### Income

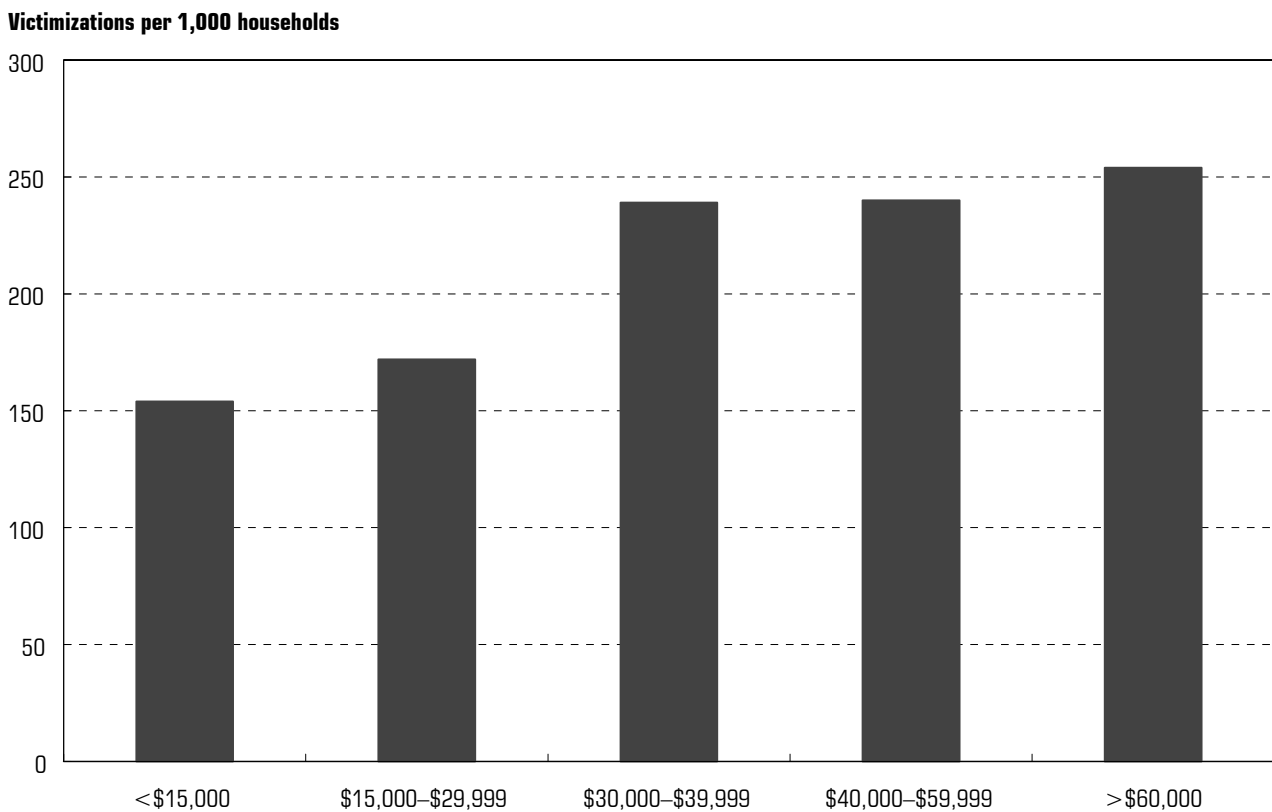
Canadian victimization rates derived from GSS data (Gartner and Doob 1994: 12) indicate that the risk of being a victim of property crime rises with income. Households with family incomes of \$60,000 per year or higher in 1993 reported victimization rates 65 percent higher than households with family incomes below \$15,000. As figure 10 illustrates, the correlation between income and victimization by property crime persists for other income brackets. The differences among rates of victimization from personal or violent criminal acts for those with different levels of income are less clearly defined. Canadian data from the early 1980s seem to show that rates of victimization from sexual assault and robbery decline as family income rises, that the rate of victimization from personal theft rises with income, and that the rate of victimization from assault is not related to income levels.

### Minority groups

Victimization data from the United States, from Britain, from the Netherlands, and elsewhere indicate that selected minority groups suffer much higher rates of criminal victimization than members of the dominant ethnic or cultural group. Data from the United States, for instance, indicate that black Americans suffer violent crime at a rate (50.4 per 1000 persons) almost twice that of white Americans (29.9 per 1000 persons) and more than twice that of other Americans, including Asians and Native Americans (23.7 per 1000 persons) (Maguire and Pastore 1997). Canada, however, collects no information about the victimization rates of different minority groups although the collection of such data might permit more efficient targeting of efforts towards crime prevention for highly victimized groups.



**Figure 10: Victimization rates by household income, 1993**



Source: Gartner and Doob, 1994: 12.



## Profiles of the offenders

Data on the characteristics of Canadian criminals, where available, are parallel to what is known about victims. In Canada, we do not examine the backgrounds of offenders on a systematic basis other than by recording basic information on sex, age, and, to a limited extent, ethnicity. We do not have a useful history of the offender population available. We do not have data about their previous convictions, nor is the duration of their incarcerations available for study. We do not have systematic information about their family and social backgrounds. Are they typically products of single-parent families? Do they tend to have parents who have been involved in crime? Are they from rich families or are they stealing for bread? How many crimes does the average offender commit? Except for occasional research studies, these kinds of data are not presently available to help us understand the kinds of criminals we observe. Data of this sort were collected about convicts until the late 1960s and, although old, some of these data will be referred to in what follows.

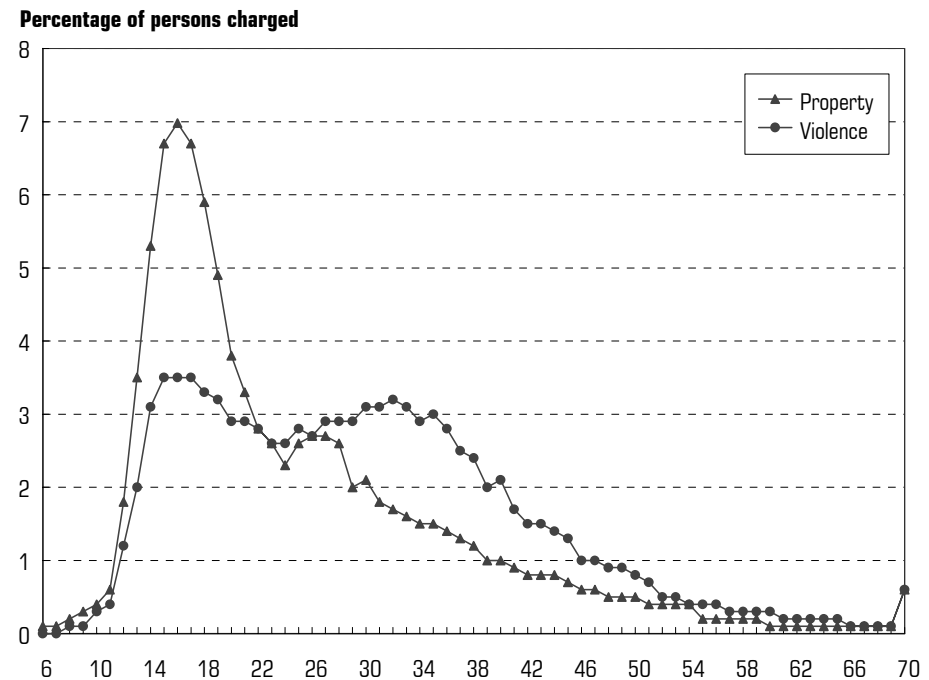
### Offenders are most often young

Figure 11 shows the age of those accused of crimes in Canada in 1996. Teenagers and young adults make up a disproportionately large number of those accused of crime in Canada, just as they make up a disproportionately large number of the victims of crime (figure 7). They also make up a disproportionately large number of both victims and perpetrators of homicide (figure 8). Young offenders (those aged 12 to 17 years)

were over-represented, relative to their share of the general population, by a factor of three among those accused of property offences and by a factor of almost two among those accused of violent offences. Young adults (those aged 18 to 24 years) were over-represented among those accused of property offences by a factor of almost three and among those accused of violent offences by a factor of two.

Violent offenders tend to be somewhat older than those committing crimes against property. Much violent crime in Canada is related to situations that depend, socially, on adulthood: alcohol consumption and cohabitation. Although some teenagers drink and engage in sexual relations, as persistent behaviours these remain the preserve of Canadian adults. Those who commit homicide tend to be in their late 20s and 30s. Those who commit fraud tend to be older still, in part because they need to reach a fiscally responsible age in order to become involved in situ-

**Figure 11: Age of persons accused of crime, 1996**



Source: Kong 1997: 12.

ations where fraud is possible: few merchants will take cheques from 15-year-old youths; few banks will give teenagers credit cards or mortgages. Some 93 percent of fraud is committed by adults.

### Offenders are most often men

Known offenders are most often men. As figure 12 illustrates, more than 88 percent of those charged with homicide and robbery and 84 percent of those charged with assault in Canada in 1996 were men. More than 90 percent of those charged with breaking and entering and vehicle theft were men. Men made up 98 percent of those charged with sexual assault, 69 percent of those charged with theft under \$5,000, 81 percent of those charged with theft over \$5,000, and 71 percent of those charged with fraud. Offences connected with prostitution made up the only substantial category of crime in which a majority of those charged in 1996 were women. These patterns have persisted for many years.

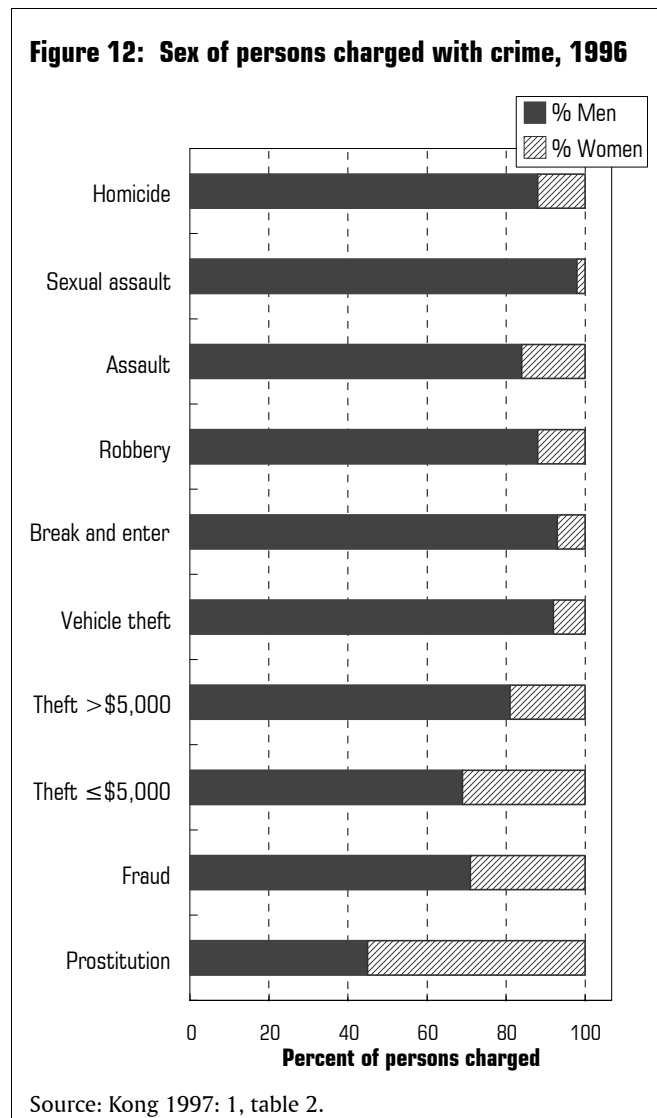
### Lower income, education, and status

Known criminal offenders tend to come from segments of the population having lower income and working in jobs requiring lower skills and conferring lower prestige. Figure 13 illustrates this point by showing the Criminal Code convictions rates per 100,000 Canadians in some 14 occupational categories in 1966 (more recent data are not available). Unskilled labourers had conviction rates double that of any other group. The unemployed were convicted at rates only slightly higher than those of construction or transport workers. Persons in managerial and professional occupations, housewives, and persons employed in finance had very low conviction rates.

These patterns have persisted over very long periods of time. Similar distributions of conviction rates by occupational category can be observed in Canada in the 1880s, in Elizabethan England, and in medieval England. American data suggest this pattern also holds for the very specialized crime of income tax evasion (Mason and Calvin 1978).

Many observers examine these data and assert that lack of income is the underlying explanation for criminal acts. From this assertion flows a wide variety of prescriptions based on the notion that increasing low-end incomes through social transfer payments will reduce crime. However, it is wrong to infer from these data that there is a simple

causal pattern between low income and criminal activity, for income seems to be less critical than the constraints upon time imposed by different occupations. Occupations that restrict free time and limit external mobility over the course of the working day consistently produce fewer criminals and fewer victims than those that do not impose such restrictions. Cities dominated by employment in occupations that restrict free time have lower crime rates than cities dominated by occupations that do not restrict free time. Moreover, American research (e.g. Holzman 1983; Rengert and Wasilchick 1985; Cromwell, Olson and Avary 1991) has shown that a large proportion of persistent offenders adopt occupational strategies that accommodate their criminal activities. Burglars in particular are known to moonlight at burglary initially, then quit their legitimate jobs in order to have more free time in which to expand their criminal careers.

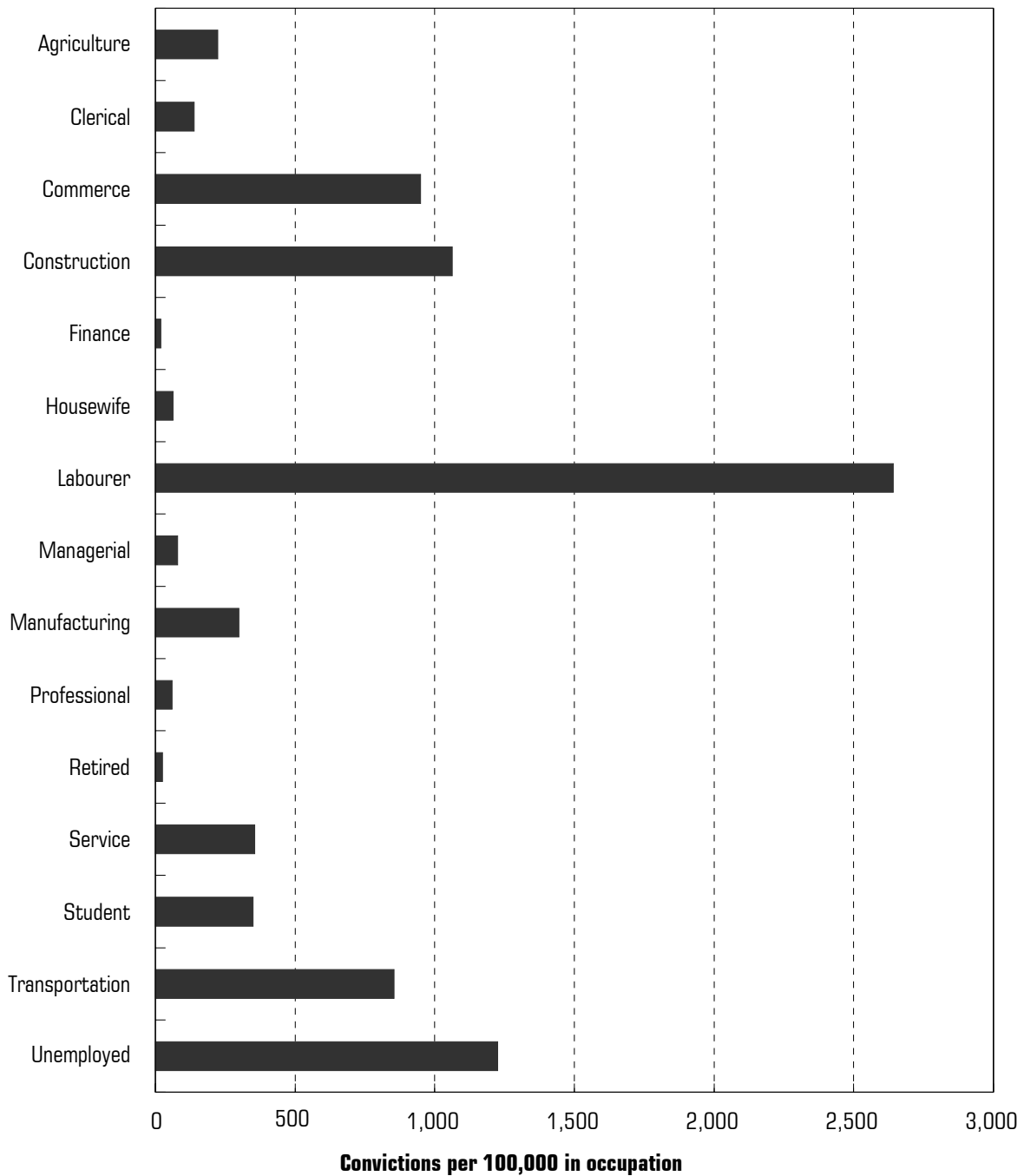


**Minority groups**

Canada collects little data on the racial or ethnic characteristics of known offenders. Correctional data (Statistics Canada 1992) do distinguish between native Indians and other prisoners and these data indicate that native Indians are substan-

tially over-represented in prisons and jails compared with their numbers in the population at large. In 1991, for instance, native Indians made up two percent of Canada's population but 24 percent of those held in correctional custody.

**Figure 13: Crime and occupational categories**



Source: Tepperman, 1977: 183



## Fear of crime

Canadians are increasingly concerned about personal safety, despite a rate of violent crime that is low relative to the rate of property crime. As we have seen from the figures, the rate of most crimes has been decreasing for the past five years. Yet, if we watch television news broadcasts: we receive the opposite impression. A study done for the Fraser Institute (National Media Archive 1997) compared the incidence of homicide with the reporting of murder on CBC and CTV national news. It found that the reporting of murder cases on television went up even as the number of murders fell during the early 1990s, and recent television coverage has fallen even as the murder rate has risen slightly.

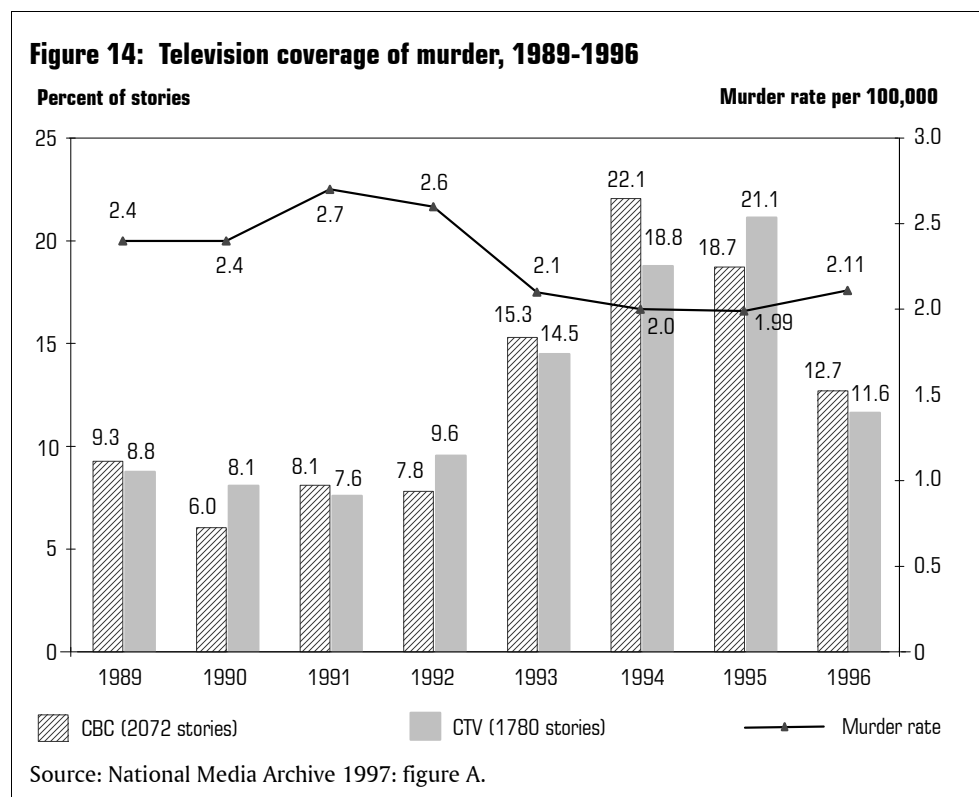
In 1994 and 1995, stories were dominated by the trials of O.J. Simpson and of Paul Bernardo and Karla Homolka. But, over the past five years, while the murder rate has fallen 20 percent, coverage of murder has risen. Of the stories on murder covered for CBC television during the 8 years from 1989 to 1996, 69 percent were aired during the four years from 1993 to 1996; at CTV, 66 percent of the stories on murder covered from 1989 to 1996 were aired from 1993 to 1995 (see figure 14).

Extensive coverage of crime is not limited to the broadcast media. The same study examined coverage of murder by four major newspapers in Toronto, Ottawa, Vancouver and Calgary. The *Calgary Herald* was 13 times more likely than the *Vancouver Sun* to report on murder, and 27 times more likely to report on murder than the *Toronto Star*, even though the murder rate in Calgary was lower than the murder rate in Vancouver or Toronto.<sup>8</sup>

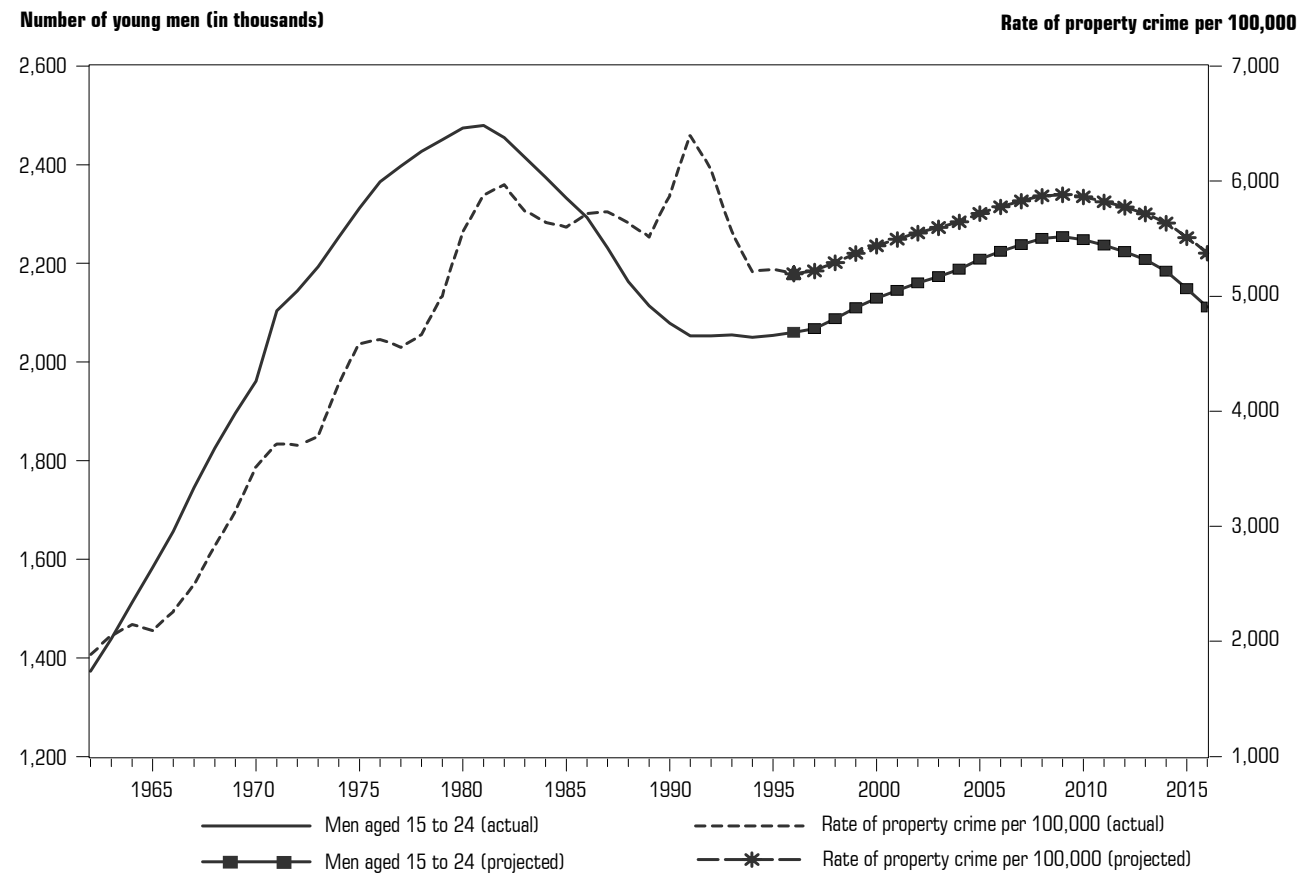
The fear of crime is also based on our own experience. Regardless of the recent decline in the crime rate (figure 5), it is likely that many Canadians have already been the victims of criminal acts. The rates for both violent crime and property crime have increased greatly from the rates of 30 years ago. We are also an aging population and our concern mirrors our perceived inability to fend off thieves and murderers. With the enthusiastic reports from television and newspapers giving urgency to our own experiences, it is little wonder that our fears about our personal safety have been growing.

### How long will crime rates fall?

We cannot be sanguine about the falling crime rates although we certainly should be pleased. Figure 15 plots the



**Figure 15: Young men aged 15 to 24 and the rate of property crime**



Source: Statistics Canada, *Cansim Matrix*, 6430; D740047, D740046; Canadian Centre for Justice Statistics, Cat. No. 85-205.

rate of property crime per 100,000 on the right axis and the number of young men in ages between 15 and 24 on the left axis. As we have seen, this is a group that is frequently arrested. The property crime rate is plotted as the solid line. The actual number of young men is plotted until 1997, after which a Statistics Canada forecast is used. There is a clear association between the size of this age group and property crime.

The peaks of the two series match and, except for a blip in the mid-1990s, the gradual decline in the rate of crime is mirrored by a smaller population of young males. By using the demographic forecasts of the future population of young men from Statistics Canada, we can predict a gradual increase in the amount of crime from, roughly, 2000 until 2010. This is shown in figure 15 as a continuation of the actual crime rate.<sup>9</sup>



## Losses from crime in Canada

The costs of crime are extremely difficult to measure precisely. On the one hand, we have costs such as the amounts spent on the police, the courts, and the legal profession, which are relatively easy to measure. On the other hand, we have the costs that arise from the physical and psychological distress caused by criminal acts, which are extremely difficult and sensitive to estimate. Anyone who has been attacked or threatened or has been the victim of breaking and entering knows the anger and frustration caused by such acts. Frequently, we take strong measures to prevent our being victims a second (or a third) time, and these psychological costs of crime are every bit as real as the costs of policing or corrections although they are far harder to measure. Costs of crime to victims is a phenomenon insufficiently studied, and presently only a few estimates exist.

What is easier to assess, however, is the direct monetary costs attributable to some Canadian crimes. These data are most frequently gathered through studies in which victims report the amount of their loss and the amounts they have recovered. There may also be direct monetary losses from the crime to the victim over and above those of the incident recorded as, say, an assault. This is because, for statistical reporting purposes, only the most serious crime in an incident is reported as the consequence of the incident. Thus, the theft that took place during an assault may be catalogued but it may not figure independently as an incident. Consequently, we tend to understate the amount of violent crime and the full cost of each incident.<sup>10</sup>

### Property crime

Nearly 60 percent of all Criminal Code violations reported to the police are crimes against property. Table 5 gives the amounts for 1996, although the costs have been updated from average costs of victimization studies that have been done at different times. The most common incident is theft, followed by vandalism (mischief) and by breaking and entering. Average losses per incident caused by theft and breaking and entering are about the same. An average incident of vandalism causes only about 28 percent of the loss caused by a theft or by breaking and entering. The average loss caused by robbery is about 25 percent higher than that caused by breaking and entering, while the average losses to victims from a fraud is about 50 percent greater than average loss caused by breaking and entering. The cost of an average motor-vehicle theft is nearly 300 percent that caused by breaking and entering. The total annual cost from these property crimes is almost \$4.6 billion. This is an extremely conservative estimate that does not assess other losses associated with these incidents or the psychological and medical impact of these crimes upon the victim. If we take the average cost of each crime that is known to the police and multiply it by the number of crimes identified by victims through surveys rather than by the counts of crimes known to the police, the cost of crime from victims' losses would increase by a factor of 2.6 to about \$10 billion.

**Table 5: Partial costs of property crimes to victims by type of crime, 1996**

	Theft	Mischief	Breaking and entering	Motor vehicle theft	Robbery	Fraud
<b>Number of incidents reported</b>	849,529	364,021	396,085	178,580	31,342	101,007
<b>Average loss (1996\$)</b>	2,131	638	2,309	6,649	2,857	3,531
<b>Total losses (millions 1996\$)</b>	1,810	232	914	1,187	90	357
<b>Total losses from all sources in this table (millions 1996\$): 4,591</b>						

Sources: Statistics Canada, *Juristat* 12,5 (1992); 16, 2 (1996); *Canadian Crime Statistics 1995*; CPI is series P719500 used for deflation. For earlier estimates see Brantingham and Easton, 1996: table 5.

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Since more important crimes tend to be reported, the average loss caused by crimes known to the police is higher than the average loss caused by those that remain unreported. Such a figure tends to overestimate costs. Nonetheless, the estimates presented here represent a substantial underestimate of the costs of crime to victims. It is important to remember that these estimates are based on a limited set of very common property crimes. According to the Law Reform Commission of Canada, there are more than 40,000 different offences defined in federal and provincial laws and regulations. We know little or nothing about the losses that victims suffer from most of them. We do not currently have official estimates of the losses caused to victims by such important and often expensive crimes such as arson, counterfeiting currency, and kidnapping. We do not have estimates of the losses caused by criminal violations of federal statutes such as the Bankruptcy Act, the Customs Act, or the Income Tax Act; nor do we have estimates of the losses caused by criminal violations of provincial securities acts. We do not have estimates of losses caused by drug trafficking, prostitution, or illegal gambling. Research on the costs of these and other crimes is likely to expand our estimates of the formal costs of crime substantially.

## Violent crime

### Direct monetary losses

Although there are many costs to violent crime, the best data are for those crimes, assault and sexual assault, for which it is possible to get an estimate of the direct monetary losses caused by the incident. These are displayed in table 6. If we confine ourselves to counting crimes known to the police as we do in this table, there were losses of \$103.9 million in 1996 from assaults and sexual assaults. This method, however, causes us to understate the true losses associated with assaults and sexual assaults. The data on monetary losses drawn from victimization surveys include a large number of incidents that are not reported to the police. Although the incidents known to the police are likely to be more serious than those not reported, if all incidents of assault reported by victims in the Survey are counted, then the dollar cost is as much as 8.08 times greater: \$840 million.<sup>11</sup>

### Cost of hospitalization

There are also costs for hospitalization as a result of violent crimes and these should also be included as part of the direct costs of violent crime. The average number of days of

**Table 6: Direct monetary losses associated with selected violent crime (1996)**

Type of Crime	Average loss per incident	Number of incidents	Total in \$millions
All assault not related to sexual assault	\$400	227,678	91.2
Sexual assault	\$476	26,762	12.7

Sources: Solicitor General, 1985, reports the average loss associated with each type of incident. These have been updated where possible.

hospitalization—not including simple out-patient treatment—amount to roughly one-quarter of the total number of violent incidents. That is, for the 254,000 assaults known to police in 1996, about 64,000 hospital days costing about \$64 million (at \$1,000 per day) were required to repair the physical harm done to victims. Since the data on the number of hospital days required to treat the victims of assault are from victimization surveys, utilization of data on crime incidence derived from victimization surveys rather than from incidents reported to the police may prove more appropriate. Applying the adjustment factor (8.08) from victimization surveys suggests an estimate of over 2 million assaults with hospitalization costs of \$518 million.

### Losses to productivity

It is difficult to estimate the loss to society that results from a murder. If we think only of the loss of the production that these victims could have accomplished during the rest of their lifetimes, then we can get some kind of estimate, although it is very crude. Of those who are murdered, 90 percent are over the age of 15 and four percent are over the age of 65. If we look only at those who are in the workforce, then the average loss of output is the national annual income per worker, about \$51,000. This is not the full cost of the murder, however, since it does not capitalize the loss over the lifetime of the victim. The cost of the murders known to police in 1993 from the loss in productivity over the lifetimes of the victims is \$526 million.<sup>12</sup> In most cases, this cost must be expanded to account for the lifetime suffering of the victims' families and, in some cases, the suffering of victim as well.

The losses in productivity due to assaults are roughly in proportion to the days of output lost: on average, about one day lost per victim. Since roughly one-third of all victims are attacked more than once in a year, the number of days lost is two-thirds the number of incidents reported to the

police. Thus a calculation of days lost of  $(2/3)(270,000)/365 = 493$  years of labour lost;  $493 \times \$50,860 = \$25.1$  million. If we use data from the victimization survey, then losses are roughly \$200 million.

**Non-pecuniary costs to victims**

Welsh and Waller (1995) estimate the costs of “shattered lives” at \$12.5 billion dollars each year between 1991 and 1993 (measured in 1996 dollars to compensate for inflation). This estimate is produced by measuring American court awards for the suffering and loss of productivity associated with such crimes as assault, rape, and murder and adding to this the cost of social services used by the victims. We caution, however, that the parameters used by Welsh and Waller are primarily from the United States and that awards and costs of social services may differ in Canada.<sup>13</sup>

**Summary of losses due to major crimes**

On a conservative estimate, the losses associated with property crime in 1996 amount to \$4.6 billion. The direct monetary losses from violent crime are reported as another \$104 million, hospitalization as \$64 million, loss from income foregone by murder victims as \$526 million, and yet we have only catalogued a few of the more obvious costs from some of the most important categories of crime.

We have not measured the lost output and the outrage and fear associated with property crime or violent attacks, which were estimated tentatively at \$12.5 billion. Nor have we calibrated the results from surveys of victims for

the number of incidents that go unreported. Thus we have deliberately chosen a very conservative calculation of the costs of crime to the victims of \$4.7 billion.<sup>14</sup> Moreover, we have worked with a limited set of the most frequently committed crimes. Further research is very likely to increase this number substantially. Table 7 gives both a conservative estimate—based on crimes reported to the police—of the costs to the victim of Canada’s crime and a more generous estimate of these costs based on the numbers from surveys of victims. These two measures are presented in the two columns of the table. The purpose of such a table is to emphasize both the limits of our ability to make significant calculations of the costs of crime to victims and to suggest the order of magnitude of the actual losses.

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**Table 7: Costs of violence to the victims (1996)**

	<b>Cost based on crimes known to police (\$millions)</b>	<b>Cost based on victimization survey (\$millions)</b>
<b>Property crime</b>	4,600	11,500
<b>Violent crime: productivity losses</b>	25	200
<b>homicide</b>	526	526
<b>hospitalization</b>	64	518
<b>direct monetary losses</b>	104	840
<b>“Shattered Lives” (Welsh &amp; Waller)</b>		12,500
<b>Total not including “shattered lives”</b>	4,729	13,584
<b>Total including “shattered lives”</b>		26,084

## Prevention and punishment of crime

The calculation of the cost of crime to victims reflects the number of crimes taking place but this is only part of the total cost. There is a large (and growing) establishment in both the public and the private sectors dedicated to the prevention and punishment of the acts themselves and the preventive and penal measures adopted by this establishment should also be included as costs of crime. Before we examine the costs of providing these services, however, we need to examine the efficiency with which the police, the courts, and the prisons catch, prosecute, sentence, and rehabilitate those who commit crimes.

There are four aspects to a criminal's punishment: a convicted criminal pays a debt to society for his actions; punishment deters others from committing the same crime; imprisonment, by keeping the criminal off the streets, protects others from becoming his victims; and rehabilitation makes it less likely that this criminal will repeat the crime. Although each of these components of justice may serve to protect Canadians, we need to know how much punishment is meted out by Canada's criminal justice system before we can understand its impact on potential criminals. This section explores the deterrent value of penalties, that is, *the expected cost of a crime to the criminal*. This is the other side of the equation giving us the cost of crime: the efficiency with which we spend what we do to prevent and punish criminals can be gauged by the deterrent value—the cost to the criminal—of the measures that we adopt.

The links between the crime and its punishment are complex. Once a crime has been committed, it may or may not be reported to the police. Once it has been reported to the police, it may or may not be cleared by the laying of a charge. Once the charge has been laid, the suspect may or may not be prosecuted. Once the defendant has been prosecuted, the court may or may not decide that he is guilty. Once guilt has been established, the criminal may or may not face a serious sanction.

We have already discussed the extent to which the prevalence of crime is reflected in the crimes reported to police (see table 7 and page 23). In this section, to establish what risk of punishment is incurred by committing various

crimes, we follow as closely as possible the path from reported act to punishment. This is a very conservative approach that overestimates the probability that a perpetrator will be caught and punished since at least some of the crimes reported in the victimization surveys are not reported to police.

### Clearance rates

Table 8 shows some measures of the effectiveness of our police. The first column lists a selection of crimes; the second reports the rate at which incidents are "cleared." An incident is considered "cleared" when either a suspect is charged for a crime committed or the police believe they know who committed the crime but cannot lay a charge (because, for example, the victim refuses to give evidence or because the suspect has died or has diplomatic immunity or, in the case of property crime, because the youth caught is too young to be charged). Thus, a cleared case is one to which the police do not want to devote additional scarce resources. The third column of the table reports the number of each type of crime known to the police, giving some sense of the magnitude of the kinds of crimes associated with the clearance rates.

**Table 8: Clearance rates (1994)**

<b>Selected major crimes</b>	<b>Clearance per crime known to police</b>	<b>Number of crimes known to police</b>
<b>Assault</b>	0.81	236,364
<b>Homicide</b>	0.80	596
<b>Sexual assault</b>	0.70	31,690
<b>Fraud</b>	0.65	103,210
<b>Abduction</b>	0.55	1,130
<b>Robbery</b>	0.33	28,888
<b>Theft &lt;\$1000</b>	0.20	727,364
<b>Breaking &amp; entering</b>	0.17	387,877
<b>Mischief</b>	0.15	396,596
<b>Motor vehicle theft</b>	0.15	159,663
<b>Theft &gt;\$1000</b>	0.10	116,295

Source: Easton and Brantingham

As is apparent from the table, the police clear the vast majority of murders and assaults. Most fraud is solved as well. There is a substantial drop, however, when it comes to robbery, theft, breaking and entering, and mischief. These types of crimes do not usually have easily identifiable suspects. Unlike assault, where there is generally at least one eyewitness, the victim, breaking and entering or motor-vehicle theft typically do not involve eyewitnesses and few clues are left at the crime scene. Thus, while almost 8 out of 10 homicides and assaults are cleared, only 10 to 20 percent of the most common property crimes—thrift under \$1000, breaking and entering, mischief, motor-vehicle theft and theft over \$1000—are cleared. Yet, these accounted for nearly 50 percent of the 2.95 million criminal incidents in 1994.

It is clearly appropriate to measure clearance rates. This tells us the fraction of those incidents reported to the police that have been dealt with in some more or less satisfactory fashion.<sup>15</sup> But the data that follow-up the clearance rate are to a large extent missing. What is the success rate in prosecuting those who are charged? Of those who are convicted, how many reoffend? How many are committing the kinds of crimes that we observe? Are Canadians the victims of a “few bad apples” committing many crimes or are there many offenders each committing a few, mostly minor, crimes? The data available in Canada do not permit an ongoing description of criminals or a description of the crimes committed by each criminal. We have very poor exchange of information among those who catch the criminals, those who prosecute them, those who sentence them, and those who evaluate the success of Canadian justice. Publicly available data do not permit us to trace cases systematically through the justice system. Where the data exists, it is not organized in a simple and effective way that would permit Canadians to see whether their money is being well spent.

## Prosecution

A sensible assessment of the cost and benefits of our criminal justice system should enable us to know how efficiently we prosecute. That is not to say that a 100 percent conviction rate is desirable. If we were to prosecute only those who could be prosecuted with certain success, then many who are guilty would remain at large. Beyond reasonable doubt does not require mathematical certainty. In addition to being one input into the cost and benefit of the legal system, changes in the conviction rate help to assess the impact of new rules and new rulings on the ability of prosecutors to convict.

Table 9 displays the conviction rate by province. (There are gaps in the data: British Columbia, Manitoba, and New Brunswick do not make data about convictions available.) As is apparent, conviction rates differ from province to province. Some of these differences are attributable to the different mechanisms by which charges are filed,<sup>16</sup> but those that remain are important to the debate about the efficacy of justice as we need to know whether we are successful in convicting those who are brought to trial.

**Table 9: Conviction rates, 1995/1996**

Province	Total cases	Conviction rate
Newfoundland	8,362	75.8
Prince Edward Island	1,520	85.9
Nova Scotia	17,573	62.9
New Brunswick	—	—
Quebec	89,891	75.7
Ontario	215,317	56.5
Manitoba	—	—
Saskatchewan	27,737	70.0
Alberta	59,739	65.0
British Columbia	—	—
Yukon	2,051	58.4
Northwest Territories	3,116	77.2

Source: Grimes 1997: 7.

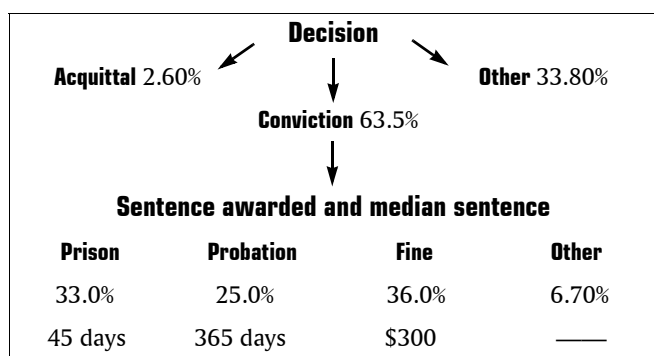
The Canadian rate (excluding, once again, British Columbia, Manitoba and New Brunswick) for convictions in cases of violent crime is 52 percent; the rate in cases involving property crimes is 65 percent (Grimes 1997: 7). Are these rates too high or too low? This is a substantial issue that should be considered in balancing the rights of the accused against those of the victims and often we can rightly be sceptical about the balance that the courts maintain. In a recent case, for example, because of procedural irregularities on the part of the police conducting the search for evidence, the Supreme Court of Canada excluded key evidence against a man who had been convicted of bludgeoning an 85-year-old man to death. As dissenting justice Claire l’Heureux-Dubé remarked, the police should be “commended not rebuked” for their actions. “When an attacker or a murderer is acquitted in the name of the regularity of the criminal process, it is not only past victims who are ignored, but also future victims who are sacrificed” (Vancouver Sun, September 24, 1997: A9). Like many in the public service,

- the courts are shielded from the consequences of their actions. Were this man to kill again, who would the new victim's family be able to hold accountable?
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## Sentencing

When convictions are obtained (and sustained), what are the outcomes of these convictions? Table 10 displays the results. Of the 63 percent who are convicted of a crime, about one-third are imprisoned, one-quarter placed on probation, and one-third fined. For those who are imprisoned, the median sentence is 45 days; that is, there are as many cases with sentences longer than 45 days as there are with sentences less than 45 days. The median length of probation is one year. The median fine is \$300.

**Table 10: Results of charges heard in Provincial Court, 1995/1996**



Sources: Grimes 1997: 7, 10. British Columbia, Manitoba and New Brunswick do not report conviction rates.

## Prison sentences by province: a variation worth explaining

Although the Criminal Code is federal law and thus is uniform across provinces, the provincial courts administer the law except in a few of the most serious cases. As a result, there is often variation in the length of the sentence awarded for the same crime. Table 11 shows the average provincial sentence of imprisonment for offences for which data are available (there are no data for British Columbia, Manitoba, or New Brunswick).

The remarkable variation from province to province in the average length of sentence awarded for the same offence is not, however, to be interpreted without further refinement, as there are also substantial differences from province to province in the rate of imprisonment. For example, although in Quebec breaking and entering brings an average sentence of 275 days in prison, only 33 percent of those convicted for breaking and entering are sentenced to prison! In Ontario, although the average sentence is shorter—190 days, 77 percent of those convicted of breaking and entering are sentenced to prison. In table 12, therefore, we present an adjusted set of data derived by multiplying the likelihood of a convicted criminal being sent to prison by the length of sentence. This provides a measure of the “expected” length of a prison sentence following a conviction for each crime. In this table, we see that while those convicted of breaking and entering in Quebec face only 91 days imprisonment, Ontario confronts those convicted of breaking and entering with an expected length of term of 137 days—a 50 percent difference but *not* in Quebec’s favour, as one would have expected from the data on the duration of the sentence alone.

**Table 11: Average length of prison sentence (days) by crime and province**

	NF	PEI	NS	PQ	ON	SK	AB	YK	NWT	Mean
<b>Assault (2)</b>	61	167	147	164	115	195	161	119	200	132
<b>Assault (1)</b>	56	20	59	83	46	97	66	66	78	51
<b>Breaking and entering</b>	92	270	337	275	190	245	236	70	171	210
<b>Possession of stolen goods</b>	44	11	73	114	83	123	111	53	45	85
<b>Theft &lt;\$1,000</b>	14	36	41	63	46	78	66	27	52	47
<b>Mischief &lt;\$1,000</b>	38	17	33	67	38	66	55	38	54	44
<b>Impaired driving &gt;.08</b>	47	10	44	55	45	34	54	61	45	46
<b>Driving while disqualified</b>	53	85	29	51	47	79	67	30	30	53
<b>Failure to appear</b>	22	17	39	32	32	37	33	23	26	32
<b>Failure to comply</b>	27	32	37	53	39	49	40	29	36	42
<b>Possession (Narcotics Control Act)</b>	29	9	37	48	39	42	55	25	14	41

Source: Birkenmayer and Roberts 1997.

Table 12 shows wide variation in the administration of justice from province to province and it is important for provincial justices in Canada’s jurisdictions to reflect upon these differences. The public looks to them for protection, retribution, and the rehabilitation of offenders through sentencing. How can it be that a uniform Criminal Code engenders such

different outcomes for the offenders? Which justices’ sentencing practices and rationales are best for the public? Further, British Columbia, Manitoba, and New Brunswick should also provide data on convictions and sentences since, as it is now, taxpayers in these provinces have no idea how their justices’ practices compare with those in the rest of the country.



**Table 12: Expected length (in days) of prison sentence by crime and province**

	NF	PEI	NS	PQ	ON	SK	AB	YK	NWT
<b>Assault (2)</b>	31	72	47	31	68	62	72	73	154
<b>Assault (1)</b>	6	8	5	4	12	11	11	15	20
<b>Breaking and entering</b>	51	211	155	91	137	115	132	23	63
<b>Possession of stolen goods</b>	8	2	12	14	36	36	28	23	8
<b>Theft &lt;\$1,000</b>	1	3	3	13	12	7	7	7	12
<b>Mischief &lt;\$1,000</b>	5	3	1	6	7	5	3	3	6
<b>Impaired driving &gt;.08</b>	9	8	2	4	10	4	6	18	9
<b>Driving while disqualified</b>	22	12	5	18	37	16	27	20	9
<b>Failure to appear</b>	11	6	9	8	20	8	5	11	10
<b>Failure to comply</b>	14	20	11	15	24	12	11	17	8
<b>Possession (Narcotics Control Act)</b>	1	0	1	4	8	3	3	2	0

Source: Birkenmayer and Roberts 1997. There are no data for British Columbia, Manitoba, or New Brunswick.

Official or expected length of sentence is not the same as the time in jail that offenders actually serve after conviction. This issue—the length of time that an offender contemplating a crime can realistically expect to serve—and our justice system’s potential for deterrence is assessed next.

**Expected time in jail**

With what risks do we confront someone about to commit a crime? If that person were to go through a rational calculus before breaking a car window to grab a purse or smashing his fist in someone’s face, what kind of expected costs would he expect? To what extent would he be deterred from the act by the combined forces of Canadian justice?

There are, as we have seen, several steps in this process. When a crime is committed, it has to be reported to the police. We know that as many as three out of four acts that are judged to be crimes by the general public are not reported. Once the crime is reported to the police, the police try to catch the offender; clearance rates give us a sense of their success. Since we are interested in the deterrence value of our justice system, we consider the rate of clearance by charge. Once charges have been laid, they must be

assessed in court. The rate of conviction for various charges gives a sense of the likelihood of being punished. Once punishment is meted out, the offender spends a lesser amount of time in jail because of parole and statutory release. Table 13 assesses the product of these increments to give an estimate of the deterrence value of our justice system.<sup>17</sup>

The first column identifies the type of crime for which consistent data about sentencing are available.<sup>18</sup> The second column reports the percentage of all cases of each type that are cleared where the police feel there is enough evidence to lay a charge. The third column reports the percentage of cases for which charges have been laid in which the accused is found guilty. Unfortunately, we do not have crime-by-crime records of conviction but have to use a broad average of all violent crime and all property crime. The fourth column reports the percentage of sentences in which time in jail rather than probation or another disposition is awarded. The fifth column reports the average length of sentence for each crime. The last column calculates the length of time in jail that can be expected for each charge made by the police. That is, this column reports the number of days that, once an incident has been reported, a person accused of that act could expect to spend in jail.<sup>19</sup>

**Table 13 Expected days of incarceration for a single convicted offence in adult court, 1993–1994**

	Cases cleared by laying a charge	Cases cleared; those charged found guilty	Sentences in which time in jail is awarded	Sentence: average length (days in jail)	Length of time in jail (days) expected for each charge made by the police <sup>A</sup>
<b>Robbery</b>	29.8%	Average for all violent crimes	88.0%	646	69.1
<b>Sexual assault (2&amp;3)</b>	59.0%		89.0%	1,129	241.8
<b>Sexual assault (1)</b>	52.6%		52.0%	312	34.8
<b>Aggravated assault</b>	74.9%		79.0%	440	106.2
<b>Assault with a weapon</b>	66.2%		49.0%	132	17.5
<b>Simple assault</b>	48.9%		20.0%	51	2.0
<b>Assault of a police officer</b>	94.1%		40.0%	54	8.3
<b>Use of firearm for offence</b>	52.7%		83.0%	291	51.9
<b>Other weapon offences</b>	57.3%		15.0%	177	7.8
<b>Breaking and entering</b>	11.6%	Average for all property crimes	61.0%	210	7.6
<b>Theft &gt; \$1,000</b>	6.5%		46.0%	140	2.1
<b>Theft &lt; \$1,000</b>	13.2%		20.0%	49	0.7
<b>Fraud &gt; \$1,000</b>	48.0%		65.0%	142	13.2
<b>Fraud &lt; \$1,000</b>	48.0%		26.0%	73	4.6
<b>Mischief &gt; \$1,000</b>	13.2%		19.0%	49	0.6
<b>Mischief &lt; \$1,000</b>	6.8%		13.0%	44	0.2

Sources: Birkenmayer and Roberts 1997: table 5, “Most Severe Sanctions Imposed by Adult Provincial Courts Nine Jurisdictions: 1993 and 1994”; Canadian Crime Statistics, 1993 (cat. 85-205); Reed and Morrison 1997: 11. It is an unfortunate feature of our justice reporting system that the three provinces—British Columbia, Manitoba and New Brunswick—do not report data about their treatment of offenders.

<sup>A</sup> Of those sentenced to jail at any one time, 22 percent are not in cells but are out on parole. This is counted as reducing the time in jail. Subject to certain conditions, eligibility for parole is mandatory after one-third of the sentence is served, or is required by statutory release after two-thirds of the sentence is served.

The deterrence is obviously not great. Although a serious crime like sexual assault can be expected to net the perpetrator two-thirds of a year in jail, the most serious assault not connected with sex will, on average, bring a little over three months in jail. A robbery can be expected to bring a perpetrator a little over two months in jail and a simple sexual assault may bring the assailant one month in prison. An assault with a weapon normally brings a mere 17 days and even assaulting a police officer may bring only two days in jail. As might be expected, property crimes bring less time in jail: fraud greater than \$1,000 can be expected to net two weeks in jail; breaking and entering brings an expected jail term of a week. For theft and mischief over \$1,000, the expected jail time is 17 hours; theft or mischief

less than \$1,000 gets less than a day—four hours. If these are the costs facing those contemplating criminal acts, there would seem to be little to deter them from acting.

### Prisons

Imprisonment is used for more than retribution and deterrence; it is also a way of taking people who are likely to commit additional crimes off the street. A study from the United States (Levitt 1995b; there is no comparable study for Canada) shows that one of the reasons for the falling crime rate is the rapid increase in incarceration over the past 20 years: one additional incarceration reduces the



crime rate by 15 crimes. In the United States, this provides a social benefit of \$45,000(US), while the cost of one incarceration is measured as \$25,000(US) to \$30,000(US) per prisoner per year.

**Parole**

In Canada, however, the effectiveness of prisons in keeping criminals off the street is restricted by the rules for the granting of parole (see table 13, note B, for the effect of parole upon the calculations of expected length of sentence in the section above). Eligibility for parole is by application if an inmate has a sentence of less than 6 months. Any offender can apply for parole after having served 6 months in a provincial prison (where sentences are less than two years) or after serving one-third of his sentence in federal prison (where sentences are longer than two years). And, we should note that of the 6,550 who were out of jail on parole in 1995/1996, 1,277 (19.5 percent) had their parole revoked because they violated the terms of their parole or committed a new offence. Of these, 94 percent were federal offenders.

**Rehabilitation and recidivism**

The fourth function of our justice system is the rehabilitation of the offender. Are prisons (or any other part of the justice system) an effective instrument of rehabilitation? Is it commonly the case that those who offend will commit another crime after they have been in contact with Canadian justice? How well or how poorly the justice system rehabilitates offenders is described, at least partly, by the recidivism rate—or, rather, it would be so described if we had systematic data from the Canadian courts and prison system. Unfortunately, only episodic data about recidivism are available. It would be a useful indicator of the effectiveness of the justice system generally, and of prisons in particular, if we tracked the rate of recidivism among offenders held in particular institutions or programs or the rate of recidivism among those committing particular crimes. As those who pay billions of dollars in court and prison costs, and suffer billions more in damage from crime, it is reasonable to ask whether the dollars spent on rehabilitation in prisons and throughout the justice system make a difference. The meager and occasional evidence that bears on this issue suggests that this question has never been posed in a substantive way as a matter of urgent public policy. What few Canadian studies there are do not engender confidence that our prisons successfully rehabilitate offenders.

A study for the Solicitor General (Corrections Research and Development 1996) examined recidivism among child molesters in contrast to that among criminals who were not accused of crimes related to sex (and who had been held in maximum security facilities). It comes to this painful conclusion: “Although the long-term recidivism rates for the child molesters were substantial, the recidivism rates for the non-sexual [sic] criminals were even higher, 61 percent versus 83.2 percent, respectively, for any reconviction.” These rates of long-term recidivism are dismayingly high for both types of serious crimes.

Among all the convicted and not solely those guilty of major crimes, there is still a substantial rate of recidivism. One recent study (Correctional Services Canada 1993) reports that, of 3,267 offenders released in 1983/1984, 49 percent returned to prison within three years for committing the same offence for which they had originally been convicted and imprisoned. These data are summarized in table 14. There is little data on recidivism over a longer period so we simply do not know if our prisons are in any way successful in correcting behaviour, or whether they are simply warehouses to keep offenders off the streets.

**Table 14: Adult recidivism**

Offence for which prisoner was last imprisoned	Percent of prisoners reoffending within 3 years
Breaking and entering	63
Other property crimes	57
Robbery	53
Other crimes against persons	47
Sexual assault (type 1)	35
Sexual assault (type 2)	33
Drugs	31

Source: Correctional Service Canada, 1993: 14–16.

**Recidivism among youths**

We have a Young Offenders Act that has been specifically designed to discriminate between young people and adults. Yet, the crime rate among youth is shockingly high and rising more quickly than the adult crime rate and the rate of incarceration for those aged 12 to 17 is 21 per 10,000 while the rate of incarceration for adults (those over the age of 17) is 15 per 10,000 (Reed and Morrison, 1996). Even more daunting, recidivism among youths is clearly a serious problem.



- Table 15 shows the data. Of those who are convicted in court at age 12, 16 percent have prior convictions, which must have been acquired at age 12, since children under that age are not charged. Of those convicted in youth court at age 17, only 43 percent are first-time offenders; a full 57 percent have prior convictions, and nearly 20 percent have three or more convictions.

We need more precise data on recidivism among adults and youths. Such a set of data would analyze by crime, past record of conviction, and length of punishment who it is that is convicted for specific new crimes and provide another necessary tool for assessing the effectiveness of our justice system.

**Table 15: Youth recidivism, 1993/94**

	Number of Prior Convictions			
	None	1	2	3 or more
<b>Age 12</b>	0.84	0.11	0.04	0.01
<b>Age 13</b>	0.71	0.18	0.06	0.04
<b>Age 14</b>	0.50	0.20	0.09	0.07
<b>Age 15</b>	0.47	0.21	0.09	0.11
<b>Age 15</b>	0.45	0.21	0.11	0.14
<b>Age 17</b>	0.43	0.21	0.11	0.18

Source: Doherty and de Souza, 1995: 17–18.



## Costs of policing, security, and justice

### Policing and the crime rate

Do the police have an impact upon the crime rate? If they do, how great an impact? The answer is very difficult to determine because of a basic simultaneity between the crime rate and the size of the police force. There are two interlocking effects: the effect of the crime rate on the numbers of police hired and the effect of additional police on the rate of crime.

If the crime rate rises, municipalities (or cities or provinces) tend to hire more police. This may lead to better reporting of crime, especially if police forces that are larger relative to local population are seen as more likely to solve cases or if overworked police officers have been using their discretion to minimize reported incidents. Thus, a higher crime rate tends to lead to greater numbers of police officers. This is the effect of the crime rate on the police complement.

We are more interested, however, in identifying the effect of the number of police on crime. This is the most important question when one is actually at risk on the street. What happens to the crime rate when we add an additional police officer? Evidence from the United States suggests *that once the effect of more crime in enlarging the police complement is taken into account*, an increase of one police officer reduces crime by 8 to 10 events per year. These events are spread across the categories of murder, rape, assault, robbery, burglary, larceny, and auto theft. It would take some 20 additional officers to prevent one murder but one additional officer reduces auto theft by 5 to 7 vehicles per year. Values of loss associated with these estimates suggest that there is a savings of \$280,000 (CDN) per additional police officer in the United States.<sup>20</sup> Although these figures are not directly applicable to Canada, there is a reasonable likelihood that we can decrease the number of crimes by adding appropriately to law enforcement.

### Cost of private security and public policing

Family expenditure surveys tell us that one in 8 Canadian families buy security devices and about one in 50 purchase

some kind of security system such as monitored alarms and the like. Canadians spend about \$195 million, split equally between security devices and security systems. Of course, everyone locks doors nowadays and most take out some kind of theft insurance, but we do not have a good estimate of these kinds of individual costs. This means that the full costs of crime prevention are understated. However, we do have estimates of some private decisions about security, and we can measure them by the cost of their provision.

The number of security firms has increased substantially over the past quarter of a century. In Table 16, we report the number and rate per 100,000 of the population for private investigators, security guards (also private), and police officers (figures are limited to those legally empowered to make arrests and exclude civilian office personnel.) For each of our census years (1971, 1981, and 1991), we see the amount of security that Canadians have purchased. For 1991, we also have comparative figures for average and total salary paid to both our private and public security agents. It is worth keeping in mind that the crime rate for both property and violent crimes increased steadily during this period. The overall crime rate rose from 5,418 (501 violent) in 1971, to 8,907 (666 violent) in 1981, to 10,736 (1,099 violent) per 100,000 of population in 1991 (see figure 6).

Between 1971 and 1991, there was a much larger increase in the number of private security agents than in the number of police officers. The number of police officers per 100,000 has increased from 182 to 202; an increase of one officer per year per hundred thousand people although the actual crime rate fell between 1981 and 1991! The number of private security guards has risen far more dramatically. Whereas in 1971 we employed 233 per 100,000, we now employ 411 per 100,000—an increase of almost 10 per year. Today there are almost *twice as many security guards as police officers* while, in 1971, there were only about 28 percent more. The number of private investigators has not increased as rapidly as the number of guards but private investigators constitute a much smaller share of the security establishment than do either police officers or security guards.

**Table 16: Private and public security employees**

Year	Number employed	Rate per 100,000	Average salary (\$)	Total salaries (millions 1991\$)
<b>Private investigators</b>				
1971	3,465	16.0		
1981	4,390	18.0		
1991	5,925	21.0	33,503	199
1996 <sup>A</sup>	6,550	21.7		
<b>Security guards</b>				
1971	51,220	233		
1981	83,245	334		
1991	115,570	411	21,263	2,457
1996 <sup>A</sup>	127,800	427		
<b>Police officers</b>				
1971	40,148	182		
1981	50,563	203		
1991	56,774	202	47,444	2,694
1996 <sup>A</sup>	55,451 <sup>B</sup>	191		

Source: Census 1991. Campbell & Ringold 1994: tables 1–4.

<sup>A</sup> Authors' estimates.

<sup>B</sup> 1994 values.

Since the census year of 1991, data about police and private security have been more sporadic. We know the number of police officers but less about their salaries, although we have information about the total expenditure on policing. In table 16, we provide an estimate of the number of security guards and police officers present in Canada in 1996. As is clear, the trend toward the substitution of private security for public policing is continuing.

Police officers are more carefully recruited and thoroughly trained than security guards; their salaries are more than twice that of security guards. But what is striking is that the total salaries for private security are almost equal to those for public police. In 1991, the last year in which we have complete data, police salaries total \$2.694 billion, and salaries in the private sector total \$2.656 billion, adding up to a total bill of almost \$5.4 billion for salaries alone.

This is, of course, an underestimate. Although we know how much the police services spend on expenses not directly paid out for police officers, we do not have a similar estimate for private security firms. The police, of course,

have many functions that are not mirrored in the private sector but the total spent on policing for 1994/1995 is \$5.8 billion.<sup>21</sup> If we update our 1991 figures to reflect 1996 prices, then our costs for the rest of the police establishment is roughly \$3.0 billion. If private security firms are assumed to spend nothing on clerks, accountants, and managers, then a low-end estimate of the total costs of policing is \$9.1 billion for 1996. If private security firms had the same overhead as the police, then we would have an estimate of \$12.6 billion. To add the \$200 million spent by private citizens on security devices and systems would involve some small element of double counting as some, at least, of this is spent on security firms; a conservative estimate is that all the money spent on security systems is already counted as part of wages on private guards and security services. This means that only the \$100 million spent on security devices should be counted.

But what we spend for policing and security is only the front line of defence. What are the costs of the courts and the correctional system?

## Cost of the courts

In 1994, the expenditures on the courts amounted to \$835 million (Reed and Morrison 1997a: 11). This figure, however, includes only such items as the administration of the courts and the payment of judges and staff; it does not count the costs for defence counsel and prosecution. Legal aid, which is available under a wide range of circumstances to both civil and criminal defendants, amounted to an additional \$646 million in 1994 (Reed and Morrison 1997a: 7). Roughly one-half of all legal-aid cases are civil rather than criminal cases, so it would not be reasonable to count all costs as associated with crime *per se* (although many civil cases will arise from crime, and all complainants are seeking the redress of some perceived wrong). In 1994, Statistics Canada (Reed and Morrison 1997a: 10) provided for the first time an estimate of expenditures on prosecutorial services: \$258 million. It is interesting to note that if civil cases are about one-half of legal aid, then the state spends roughly 25 percent more to defend than to prosecute criminals. If criminal cases are one-half the costs of the court, and legal aid to criminals is 42 percent of all legal-aid cases, the cost of the criminal side of the legal system amounts to  $(.5 \times 835) + (.42 \times 646) + 258 = 947$  in 1994 dollars or \$980 million in 1996 dollars.

It is very difficult to get accurate figures on the private costs of defendants but one only has to think of the costs of O.J. Simpson’s defence team in the United States or the cost of the murder trial of Paul Bernardo and Karla Homolka in Toronto to recognize how expensive it can be. Although private defence costs in Canada are undoubtedly lower than those in the United States, we do not have hard data. Thus our estimate of \$980 million again errs on the conservative side.

### Cost of correctional institutions

On an average day in 1995/1996, Canada held about 33,800 people in correctional institutions, 19,700 in provincial jails and 14,100 in federal prisons.<sup>22</sup> In addition to those in jail, 101,000 were on probation, 6,550 were on parole, and another 2,750 were on statutory release in the community.

The cost of adult corrections during 1995/1996 was \$1.92 billion of which \$950 million was paid by the federal government—two percent more in inflation-adjusted dollars than the previous year. The average annual cost of housing a federal offender was \$46,250 or \$127 per day while it cost \$39,470 (or \$108 per day) to keep an average provincial inmate incarcerated during the year. Spending on corrections by the provincial governments, \$970 million, had decreased by 1 percent from 1994/1995.

There were more than 30,000 corrections staff in 1994/1995, of whom 22,100 performed custodial duties. There were, therefore, 1.5 inmates per staff member and, if we exclude those inmates who are only in remand, then there were fewer than 1.3 inmates per staff member.

Spending on corrections for youth absorbed another \$526 million of our tax dollars in 1994/1995. Some 4,900 persons classified as Young Offenders were in custody on any given day and, on average, an additional 36,000 were on probation.

Total operating costs of the corrections system were \$2.45 billion; adding capital costs of 10 percent gives a total cost of \$2.7 billion.

### Summary of the costs of crime and punishment

We have catalogued a number of costs in the preceding section. Table 17 brings them together to give us some idea of the overall costs that crime imposes upon us. The list is, as

we have been at pains to explain, an estimate of some of the costs of some of the crimes; it is not a complete list. In the first column of the table, we give our conservative estimate of the costs of crime. This is based upon crimes known to the police and reported costs allocated in a manner that minimizes most cost extrapolation. The second column gives costs based upon data from victimization surveys and upon what we believe to be reasonable extrapolations of known costs. Finally, we break out the cost for “shattered lives” since it represents a tentative effort at assigning a monetary assessment to the cost to victims of violent crime. We have not made any effort to make the same calculation for property crime or the fear of crime that both property and violent crime engender and, in that sense at least, all our estimates are subject to an upward revision.

**Table 17: Estimates of some of the costs of crime, 1993**

	<b>Conservative estimate (\$billions)</b>	<b>More extensive estimate (\$billions)</b>
<b>Direct costs of victimization</b>	4.73	13.58
<b>Shattered lives</b>	—	12.50
<b>Policing and private security</b>	9.10	12.60
<b>Court and legal costs</b>	0.98	0.98
<b>Corrections costs</b>	2.70	2.70
<b>Total excluding shattered lives</b>	17.50	29.90
<b>Total including shattered lives</b>	—	42.40

Source: calculated by authors

The total estimated cost of crime as shown in table 18 is between 2.2 percent and 5.3 percent of gross domestic product (GDP), about the same percentage of GDP that we spend on our public schools, which service five million children. On average, this amounts to between \$586 and \$1,420 per year for every man, woman, and child in the country; a family of four would pay between \$2,343 and \$5,680 per year.

Canadians have been concerned about crime because they see it around them, they see reports of it in the media, and worry about the response of the systems in place that are supposed to make their streets safer. We have good reason for concern. News reports typically describe the crime rate or particularly horrific crimes but very seldom attempt to calculate the full cost of criminal activity. In



- this monograph, we have described some of the characteristics and costs of crime in Canada and identified the kinds of gaps that exist in the statistical data about crime. It is an important part of our understanding of the way in which Canadian society works that we recognize the types and costs of crime. Crime costs the victims a great deal and taxpayers are incurring substantial costs for its remediation and prevention. Unfortunately, the Canadian justice system does not encourage scrutiny and systematic data on how efficiently this system catches, convicts, incarcerates and rehabilitates criminals are not easy to obtain. Yet any thoughtful analysis of justice surely requires we know how efficiently the justice system operates. We need to know the characteristics of the offenders and how they find their victims. We need to know all that we can about who is caught and how often, how they are treated once they are apprehended. Above all, we need to know how much is spent and how much we all pay.
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## Notes

- 1 In recent years the Canadian Centre for Justice Statistics at Statistics Canada has stopped reporting counts of by-law violations and has severely restricted its reporting of provincial offences, so that most of the discussion in this paper must focus on violations of federal law. Note, however, that much of the case burden in criminal courts involves such provincial offences as public drunkenness.
- 2 Some argue that deviant behaviour should properly be considered a crime even when no government has prohibited it by law. We do not agree. First, in this definition crime becomes any behaviour of which someone might disapprove. The standard is, thus, relative and gives no warning as to what is prohibited and what is permitted at any given time and place. Without such warning, people cannot elect not to engage in crime. Second, experience teaches that a relative definition of crime, which is not bounded by discrete criminal law, is an open invitation to governmental abuse of citizens. Third, the relativity of crime in this approach makes quantitative assessment of the phenomenon almost impossible; this definition renders crime and criminal justice immune to systematic scrutiny.
- 3 Some researchers ask people to report on the crimes they have committed. It appears that people will report an amazing number of their own personal criminal activities when asked, and that such reports are reasonably accurate where they can be cross-checked against police records. To date, no country has mounted a continuing attempt to utilize this technique to make a continuing estimate of the total of number of crimes committed.
- 4 Note that the counting rules used by police in Canada and most other countries overstate the number of violent crimes reported relative to the number of property offences. In violent crimes, one crime is counted for each victim. In property crimes, one crime is counted for each criminal event, regardless of the number of victims. Thus, if three roommates are attacked in a bar and each suffers a bloody nose, the police record three assaults. If the same three roommates have their apartment burglarized and each has a portable computer stolen, the police record a single crime of breaking and entering. An alternative recording system that separately records all crimes reported is being phased in by the Canadian Centre for Justice Statistics but is still patchy in its coverage and remains unrepresentative of Canadian cities and towns.
- 5 In this context, we are not counting deaths from civil wars or other political murders or the like. The same inverse relationship with income is still likely to be true but reliable data on these kinds of activities are particularly difficult to obtain.
- 6 The Criminal Code was amended in 1995 to raise the boundary between serious property offences punishable on indictment and less serious property offences punishable by summary conviction from \$1,000 to \$5,000. The practical effect of this change has been to render most acts of theft and vandalism punishable only on summary conviction so that the maximum fine that can be levied for a typical theft, \$2000, is less than the average dollar loss to the victim. (See table 5 below.) Note also the trivial expected jail time per theft known to police (see table 12 below).
- 7 Assault level 1 applies to something like a punch in the nose or a fist fight; level 2 tends to be associated with a weapon of some kind; level 3 describes something involving real savagery. In 1996, there were 177,728 level-1 assaults, 35,194 level-2 assaults, and 2,731 level-3 assaults. There were 25,821 level-1 sexual assaults, 651 level-2 sexual assaults, and 290 level-3 sexual assaults.
- 8 It is worth considering whether the pattern of reporting we observe reflects increased community concern about an increasingly rare event or a mistaken belief that the problem is one that is growing and thus needs greater attention than in the past.
- 9 When there are strong trends in the data, there is a tendency for no crime prevention to work when the rate

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- 10 The Canadian Centre for Justice Statistics is currently migrating from the “most serious crime only” reporting scheme used by the Uniform Crime Reports since 1962 to a full-incident reporting system that records substantial detail about every crime occurring during a given criminal incident as well as detailed information about victims and suspects. As of 1993, some 79 of the more than 400 Canadian police forces and detachments had migrated to the new system.
  - 11 That is, the overall assault rate known to the police is 829 per 100,000 while during the same period the assault rate reported from victimization surveys is 6,700 per 100,000.
  - 12 This is based on an interest rate of 2.5 percent, which is consistent with American practice (Welsh and Waller 1995). At 4.5 percent, the total cost would be \$404 million. There are many pitfalls to this calculation and it is, at best, a stop-gap. The actual income earned by victims would be a guide to their productivity and a life-cycle earnings profile would be better than a simple average for each year.
  - 13 The source for the American data is Miller, Cohen, and Rossman (1993), which is cited by Welsh and Waller (1995). In this piece they assess the lifetime contribution of acts of violence to the costs of health and happiness of each of the victims.
  - 14 We have not looked at the so called “victimless crimes” like gambling offences or prostitution as deriving costs for these is particularly difficult.
  - 15 Charges may be cleared not only by the laying of charges but also when the suspected perpetrator dies or is already be in prison for a more serious offence.
  - 16 For example, in Ontario charges are filed by police. In other provinces, charges are filed by Crown prosecutors. It is not surprising that more cases in Ontario are filed but are stayed or otherwise withdrawn.
  - 17 The kinds of crimes described in table 14 are not the most serious of all crimes. These are dealt with in Superior Court. We do not know the outcomes of this level of justice.
  - 18 In the data cited in table 14, Juristat has reported the punishments for a single most serious crime to which a person was sentenced. That is, unlike many other data sets, it does not look at multiple crimes, a procedure that obscures what the sentence is for any particular crime. It also reports average sentences whereas many other studies report median lengths of sentence. It does not report the prior record of the convicted offender.
  - 19 The formula is the probability of a charge being laid  $\times$  the probability of the suspect’s being convicted  $\times$  the probability of a sentence of jail time  $\times$  the number of days per average sentence.
  - 20 This evidence is discussed in detail in Levitt 1995a and 1997. This recent work is relatively sophisticated in accounting for the simultaneity of the size of a police force with the crime rate. We are not aware of similar studies in Canada.
  - 21 There are some caveats here. Although police are charged with security, they certainly have other functions not entirely related to crime. Traffic control is probably the most important example.
  - 22 Data for this section are drawn from Reed and Morrison 1996a, 1996b, 1997.



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