FRASER FORUM

The Crime Bill:
Who Pays and How Much?

by Paul Brantingham
and Stephen T. Easton

1996

FRASER FORUM

The Crime Bill: Who Pays and How Much?
by Paul Brantingham and Stephen T. Easton

Contents

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 Brantingham and Easton provide the first readily available survey of crime and its attributes. In it, we discover the enormous costs which 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 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 police outnumber public sector police two to one, and we find out why there has been this explosion of the private police force.

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

This is the second in The Fraser Institute series on crime in Canada.[1] The purpose of this primer is to describe the kinds of crime to which Canadians are exposed, who is at risk for those crimes, who commits them, some of the costs the victims face, and some of the 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 have a lot to be concerned about when we discuss crime. *There were 3 million crimes known to the police in 1994* for our population of 30 million; one in four Canadians reported that they were victimized by some kind of criminal act during the year, although most of these acts were not brought to the attention of the police. If crimes known to the police were evenly spread across the population, it would mean that you, as an average Canadian, would have a one-in-ten chance 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 a more than 99 percent chance of reporting a criminal act perpetrated against you or your property to the police.

Fortunately, most criminal acts are relatively minor. But anyone who has had to report a "relatively minor" crime, such as a break and enter, or has been subjected to criminal vandalism would probably be offended by any trivializing of such events. 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 when we describe even simple property crime. If your home has been broken into or your house vandalized, it casts an entirely different complexion on simple things. 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 of it, that people feel unsafe, and that it is upsetting that criminals get off or get out of jail and re-offend. Some police agree. Ray Canuel, the Vancouver Chief of Police, recently suggested 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, let's do that."[2] Yet newspapers are full of reports about how the crime rate is actually decreasing. And it is true. For many crimes, the Canadian crime rate has been decreasing by about 2 percent per year for the past several years. Most crimes rates peaked recently in 1991.

Millions of people are exposed to crime each year at a cost of at least $15-30 billion. To understand how we may want to change in our criminal justice system, we begin by reviewing where we stand today, and how we got there. Although many of the estimates we present are precise, there are wide ranges associated with estimates about the amount of crime in Canada, and its associated costs. We offer very conservative estimates of both, along with more expansive estimates. Readers will have to decide which among them are more appropriate based on their own experiences.

---

1   The first is Gary Mauser, "Gun Control is not Crime Control" *Fraser Forum Critical Issues Bulletin*, 1995.

2   *Vancouver Sun*, October 31, 1995, p. B1.

Canadian crime patterns

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 Canadian media. Canadian governments spend in excess of $8.8 billion a year trying to control crime, and private security firms contract for at least another $2.7 billion trying to protect what people produce and sell.

How well do we do for all the tax money that we spend on crime control? How much crime do we really have to endure? How much economic damage does crime do to us? Are things better in Canada than in other countries, or worse? Are things better in Canada now than they used to be, or worse? What additional strategic approaches to crime control should Canadian governments be exploring?

What is a crime and how do we know what the crime rate is?

Crime is a generic term that people use to mean 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 everything from murder, to breaking into someone's home in order to steal, to forcing unwanted sexual contact on somebody, to driving an automobile while intoxicated, to selling a company share on the basis of falsified information, to smuggling wine and groceries through customs without paying duty, to practising medicine or law without a license, to parking in a fire lane, to polluting a salmon stream, to using unlicensed game software on a home computer, and more. According to the Law Reform Commission of Canada, various kinds of crimes and offenses 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 state-administered punishment of violators. For Constitutional reasons, only those offenses defined and punished under federal law can technically and legally be called "crimes" in Canada. Offenses against provincial or local law, which can result in jail terms, fines, and other typically "criminal" sanctions upon conviction, must technically be considered penal offenses. We will not make this distinction and will treat both penal offenses and federal offenses as one.

The offenses 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 widely understood crimes such as drug trafficking, income tax evasion, and smuggling are defined in other specific Acts of Parliament. Such offenses carry the possibility of serious punishments. The vast majority of Canadian penal offenses defined by provincial and municipal enactments carry relatively minor penalties. For both practical and scientific reasons, crime is defined in this study as an offence against some penal law currently in force.[3] All data relate to violations of such legal rules. Activities that are legal, however loathsome in the view of some particular interest group, are not treated as crimes.

---

3   Some people argue that deviant behaviour should properly be considered crime even if 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 a relative one; it 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 that is not bounded by discrete criminal law is an open invitation to governmental abuse of citizens. Finally, the relativity of crime in this approach makes it almost impossible for anyone to get any kind of quantitative handle on the phenomenon. This approach renders crime and criminal justice immune to systematic scrutiny.

Moreover, the focus of this paper is on those commonly understood, serious crimes characteristically defined in the Criminal Code and a few other well known Acts of Parliament.

Incidence from victimization surveys and crimes known to the police

There are three kinds of crime rates most frequently mentioned: crimes that are known to the police, data on convictions for various crimes, and crime rates estimated from victimization surveys. Crimes known to the police represent counts of offenses discovered by or reported to the police. They have been recorded in a uniform format since 1962. Convictions data count the outcomes of criminal prosecutions. They require the government to collect court level data. 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. Data from victimization surveys permit estimates of the total numbers of selected crimes that occur in Canada in a given year. Victimization survey data suggest a higher incidence of crime than is recorded by counts of crimes that become known to the police. Each data set has its uses and we will discuss which data are appropriate in context, although counts of crimes known to the police and victimization survey estimates are most frequently used today.

For most crimes, the rate of victimization is much higher than the number of crimes reported to the police. For example, in the 1993 General Social Survey, only 28 percent of violent victimizations identified through the survey were reported to the police. Thus, over 70 percent of perceived violent criminal incidents were not reported to police by the victim.

Most of the time the victim's decision not to report a crime to the police is grounded on a rational assessment of the costs and benefits of reporting: the victims think that the incident, though technically criminal, is too unimportant to bother reporting, or that they themselves can handle it more satisfactorily than can 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 of considerable 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, or a count of the number of crimes estimated to have occurred on the basis of victimization survey results, or a count of the number of persons convicted of crimes in court. The incidence is important for understanding the number of police constables, or courtrooms, or judges, or prison cells required to respond to crime.

When criminologists talk about crime rates, they are talking about 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 50 times the population, would be expected to have a higher incidence of crime than the small interior city of Williams Lake, and so it does. In 1994, Vancouver reported 8,246 violent crimes known to the police, almost 20 times the 424 violent 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 violent crime: their rate of 39 violent offenses per 1,000 population was more than double Vancouver's 1994 rate of 16 violent offenses per 1,000 residents. And this same pattern holds true for a number of cities. Toronto, with a population of 2.15 million, has a crime rate per thousand of 15.4, while in Lindsay, Ontario, the population is 18,000 and the crime rate is 19.9 per thousand. Vanier, Quebec, with just a few more people (18,600) nonetheless has a crime rate of 26.6 per thousand.

In 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 victimization incidence estimates drawn from survey data. The cost estimates using numbers known to the police are underestimates of the real cost to victims, while cost estimates based on survey data are likely to be substantially higher than the estimates based on police data. We also distinguish, as necessary, between crime incidence and crime rates.

World patterns

Although it may be cold comfort to victims of crime, Canada's crime patterns are consistent with those around the rest of the world. We have relatively low rates of violent crime and relatively high rates of property crime. World crime data observed over the past 40 years in statistics collected by the International Criminal Police Organization (Interpol), by various United Nations agencies, and, more recently, through surveys of victims conducted by a consortium of national governments, suggest a few broad, world-wide patterns.

In general, *property crime rates are directly related to a nation's level of economic development*: the higher a nation's per capita gross domestic product (GDP per capita is a standard measure of a nation's economic well being); the more women there are in the workforce; the richer and more urbanized a nation's citizens; then the higher that nation's property crime rates. For 1986, a year in which the greatest number of countries were willing to release data, this was true across the set of nations reporting to Interpol, as well as for a number of major nations such as India and the Soviet Union for which comparable data could be obtained.[4]

The patterns for violent crime rates are much weaker, but persist across more than 40 years of accumulated Interpol data. *Violent crime rates 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 violent crime rates.[5]

Canada's crime pattern, viewed in international perspective, is consistent with this broad generalization. Compared to many other countries, Canada has relatively lower violent crime rates and relatively higher property crime rates. These patterns are illustrated in Table 1, which shows na-

tional rankings for murder (a violent crime) and for theft (a property crime) in 1986. 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 Mexico, Sweden, the United Kingdom, and Japan.

Similar patterns could be shown for serious assault on the one hand, and for burglary, motor vehicle theft, and fraud on the other. The thrust of these data is to suggest that in keeping with the rest of the patterns around the world, Canada has relatively high property crime rates, and relatively low violent crime rates as measured by world standards. This is hardly a reason to be complacent.

Canadian patterns of crimes

What types of crime?

The international patterns that suggest Canada has relatively high levels of property crime and much lower levels of violent crime is reinforced by an overall breakdown of broad categories of crime and offenses for 1994. In figure 1, in terms of crimes known to the police, property crime accounted for about half (53 percent) of all federal crimes and provincial offenses, and this pattern has been a consistent one over the years. The property crime category includes breaking and entering, theft, fraud, motor vehicle theft, and being in possession of stolen goods. Much of the "other criminal code" category, which made up about 28 percent of all offenses in 1994, was comprised of property damage offenses such as mischief (commonly referred to as vandalism) and arson.

---

4   This study uses 1986 because a particularly rich Interpol data set is available for that year. In particular, the People's Republic of China reported crime data to Interpol for 1986. In addition, comparable crime data for the United States, the Soviet Union, and India are available for 1986. Throughout this paper, some data are available for dates that may be only more or less contemporary. It is a sad commentary about data collection by governments that crime statistics are only occasionally collected in ways that permit sensible international comparisons across large numbers of crime categories and countries. 1986 was one such year.

5   In this context we are not counting 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.

Table 1: Interpol Crime Rates for Murder and Theft, 1986

Rank	Murder		Theft		Rank	Murder		Theft	
	Country	Rate per 100,000	Country	Rate per 100,000		Country	Rate per 100,000	Country	Rate per 100,000
1	Lesotho	45.62	Sweden	8,386	34	Burundi	4.27	Hungary	846
2	Philippines	34.93	Denmark	8,039	35	Hungary	4.20	Chile	837
3	Bahamas	29.24	Netherlands	5,472	36	Australia	4.16	Lesotho	698
4	Sri Lanka	25.75	Australia	5,332	37	New Zealand	4.11	Yugoslavia	677
5	Jamaica	19.20	United Kingdom	5,233	38	Ecuador	4.08	Venezuela	665
6	Guyana	15.49	United States	5,077	39	France	4.04	Costa Rica	563
7	Grenada	13.29	Canada	5,059	40	Sudan	4.02	Dominican Republic	552
8	Thailand	11.31	Bahamas	4,889	41	Kenya	3.99	Cyprus	393
9	Botswana	9.31	Germany	4,501	42	Barbados	3.94	Panama	355
10	Dominican Republic	8.69	France	3,777	43	Malta	3.19	Greece	354
11	Dominica	8.66	Israel	3,584	44	India	3.16	Bahrain	349
12	United States	8.53	Norway	2,976	45	Luxembourg	3.15	Tunisia	309
13	Honduras	8.29	Austria	2,389	46	Belgium	3.08	Sri Lanka	269
14	Trinidad	8.08	Trinidad	2,250	47	Singapore	2.55	South Korea	262
15	Papua New Guinea	8.04	Finland	2,220	48	Mauritius	2.52	Morocco	205
16	Venezuela	7.90	Ireland	2,119	49	Austria	2.41	Kuwait	200
17	Tanzania	7.72	Belgium	2,060	50	Malaysia	2.40	Papua New Guinea	193
18	Kuwait	7.31	Spain	1,913	51	Spain	2.25	Peru	173
19	Rwanda	7.28	Dominica	1,848	52	Nepal	2.23	Argentina	155
20	Mexico	6.74	Barbados	1,735	53	Canada	2.19	Cote d'Ivoire	145
21	Sweden	6.70	Fiji	1,600	54	Cyprus	2.03	Soviet Union	141
22	Ethiopia	6.18	Botswana	1,450	55	Switzerland	2.00	Jordan	140
23	Seychelles	6.02	Seychelles	1,435	56	Fiji	1.94	United Arab Emirates	134
24	Denmark	5.82	Guyana	1,380	57	Tunisia	1.87	Kenya	129
25	Chile	5.77	Malta	1,323	58	Syria	1.83	Senegal	101
26	Yugoslavia	5.39	Luxembourg	1,197	59	Jordan	1.82	Rwanda	94
27	Soviet Union	5.30	Italy	1,143	60	United Arab Emirates	1.79	Honduras	94
28	Panama	5.25	Japan	1,133	61	Cote d'Ivoire	1.73	Thailand	75
29	Pakistan	4.86	Mauritius	1,027	62	Greece	1.54	Philippines	58
30	Costa Rica	4.75	Jamaica	1,024	63	Somalia	1.50	Somalia	44
31	Israel	4.62	Singapore	973	64	Morocco	1.49	Indonesia	43
32	Germany	4.47	Hong Kong	933	65	United Kingdom	1.44	India	41
33	Italy	4.31	Grenada	911					

Table 1 (continued)

Rank	Murder		Theft	
	Country	Rate per 100,000	Country	Rate per 100,000
66	South Korea	1.41	China	40
67	Japan	1.38	Malawi	39
68	Hong Kong	1.28	Ethiopia	31
69	Bahrain	1.20	Burundi	31
70	Peru	1.20	Syria	29
71	Netherlands	1.15	Pakistan	28
72	China	1.09	Mexico	26
73	Finland	1.08	Burkina	24
74	Senegal	1.03	Tanzania	21
75	Libya	1.00	Mali	14
76	Indonesia	0.95	Libya	13
77	Norway	0.94	Nepal	4
78	Congo	0.75	Congo	4
79	Ireland	0.62	Ecuador	N. D.*
80	Argentina	0.20	Malaysia	N. D.
81	Malawi	0.20	New Zealand	N. D.
82	Burkina	0.19	Sudan	N. D.
83	Mali	0.01	Switzerland	N. D.

*Note: N.D. = no data

As figure 2 shows, the property crime category is dominated by two offenses: theft under $1,000 value,[6] which makes up one-half of the number of all property crimes, and breaking and entering, which accounts for one-quarter of such crimes. Fraud, theft over $1,000, and motor vehicle theft each account for 7 to 10 percent of all property crime known to police.
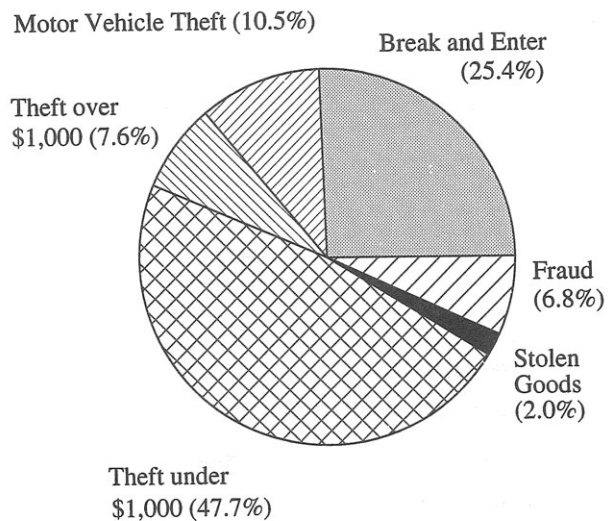
Violent offenses made up 10 percent of all known federal crimes and provincial offenses in 1994. The violence category was dominated by assaults. The most serious offenses—homicide, attempted murder, and abduction—each comprised less than one half of one percent of known violence offenses. These three categories have been aggre-

Figure 1: The Distribution of Crimes, 1994

Property (52.2%)
Violent (10.4%)
Drugs and Other Federal (3.5%)
Traffic (6.4%)
Other (27.6%)
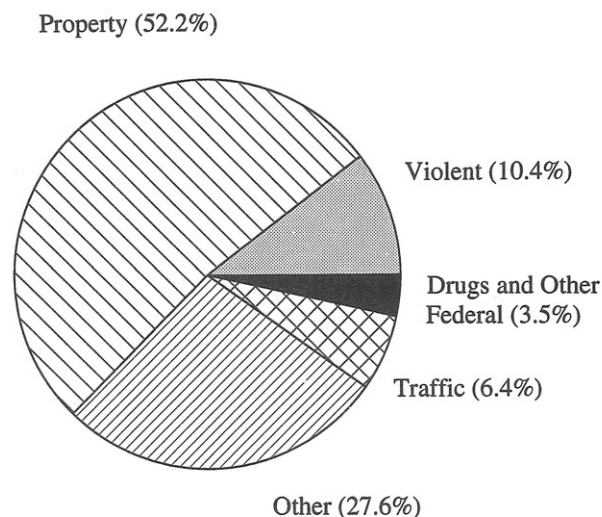
Source: Dianne Hendrick, "Canadian Crime Statistics, 1994," *Juristat* vol. 15, no. 12, table 2, cat.

Figure 2: Property Crime, 1994

Motor Vehicle Theft (10.5%)
Break and Enter (25.4%)
Theft over $1,000 (7.6%)
Fraud (6.8%)
Stolen Goods (2.0%)
Theft under $1,000 (47.7%)

Source: Dianne Hendrick, "Canadian Crime Statistics, 1994," *Juristat* vol. 15, no. 12, table 2, cat.

6   During 1995 the criminal code was amended to raise the dollar value break point between serious property offenses punishable on indictment and less serious property offenses punishable by summary conviction from $1,000 to $5,000. Adjustments of this type over time make it difficult to study patterns in some offenses, in particular theft and mischief.

gated into "Murder + Abduction." As figure 3 illustrates, robbery and sexual assault each accounted for about 10-12 percent of known violent offenses. It is worth noting that the least serious categories—level 1—of assault and sexual assault dominate their respective categories of crime.[7]

In terms of numbers, Canadian crime is dominated by property crime rather than violent crime in the proportion of 5-to-1. Crimes of violence (known to the police) are relatively few. Naturally, their impact is comparatively more serious and more greatly feared, and so we turn next to the way in which Canadian crime patterns have evolved.

Trends in crime: Where have we come from? Where are we going?

Two different series of data allow us to explore Canadian crime trends. The first data series counts judicial convictions for different categories of offenses. This series started shortly after Confederation 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 a few provincial court systems. The second data 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 offenses.

Long Term Trends

The three sets of crimes tracked in figure 4 are clustered somewhat differently from the way they would be clustered at present. Over the period from Confederation to the end of the 1960s, Canada, as part of the British Empire, clustered crimes into categories developed in England. Violence against the person ("VAperson" in the figure) included criminal homicide, rape, and assault. Violence against property ("VApropert") included robbery, burglary and other breaking-in offenses, and extortion. Property ("Property") offenses included theft and fraud. (Robbery is counted as a violent offence in modern crime statistics.)

Figure 3: Violent Crime, 1994

Assaults (77.9%)

Robbery (9.5%)

All Murder and Abduction (0.9%)

Sexual Assaults+ (11.7%)
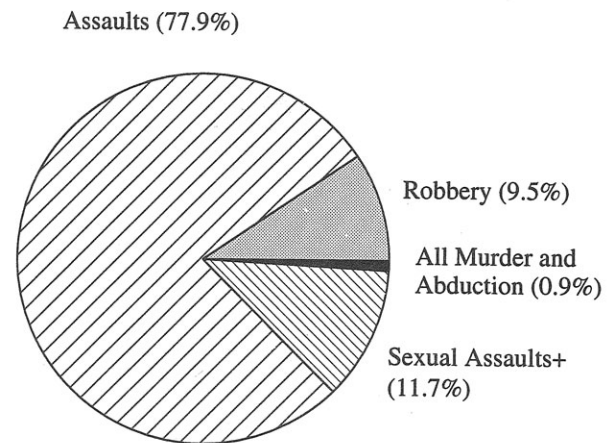
Source: Dianne Hendrick, "Canadian Crime Statistics, 1994," *Juristat* vol. 15, no. 12, table 2, cat. 85-002.

Figure 4 looks at the long view of Canadian crime. The rate of convictions per 100,000 of population is plotted for each of the categories. Thus, the rate of criminal convictions "progressed" from about 75 per 100,000 in 1886 to about 500 per 100,000 in the late 1960s. Property conviction rates rose from 44 to 304; violence against persons from 16 to 58; and violence against property from 6 to 118.

The long term crime trends shown in figure 4 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 5, which uses "persons charged" data from the Uniform Crime Reports, shows that more recent crime waves peaked in 1981 and 1991.

---

7   Assault Level 1 applies to something like a punch or a fist fight. Level 2 tends to be associated with a weapon of some kind. Level 3 describes something involving real savagery. In the event, there were 181,400 Level 1 assaults, 37,706 Level 2 assaults and 2,993 Level 3 assaults. In the sexual assault categories the numbers were: 30,580; 768; and 362.

Figure 4: Conviction Rates for Violent and Property Crimes: 1886-1967
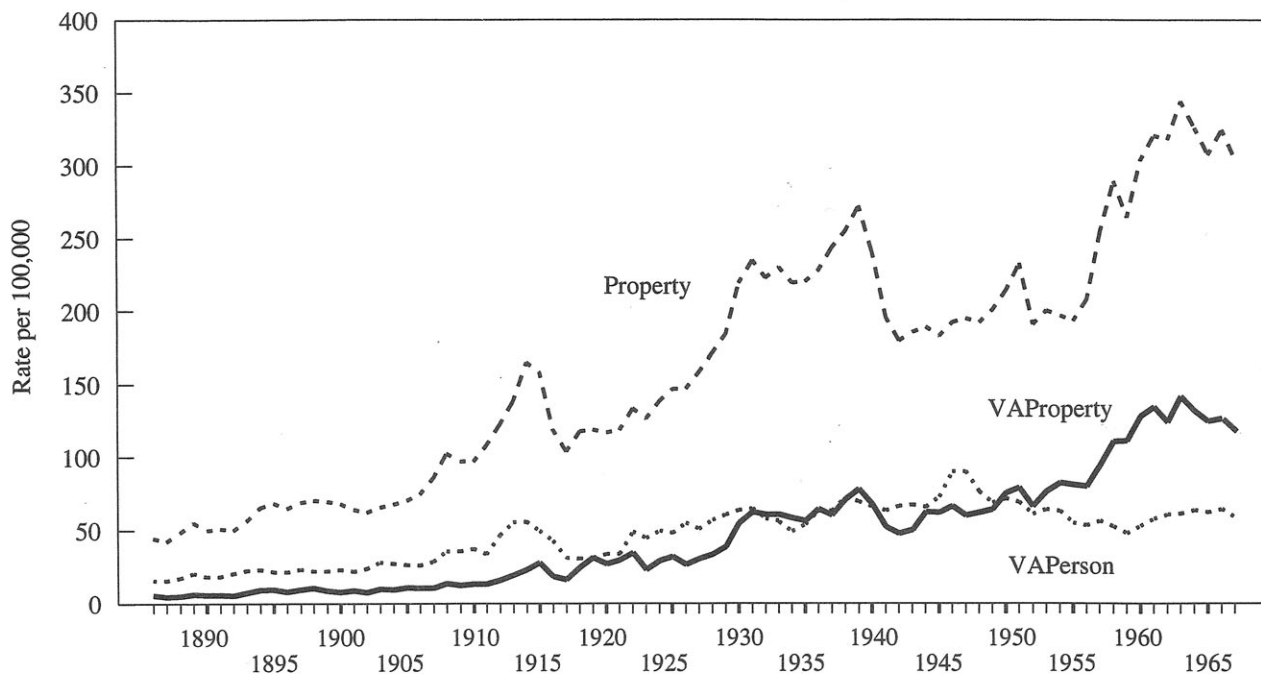
Source: M.C. Urquhart and K.H.H. Buckley, *Historical Statistics of Canada* (Toronto: MacMillan Co., 1965), Y27-32; and Statistics Canada, cat. 85-201, various issues.

Near Term Trends

Figure 5 charts Canadian crime trends since 1962 (when the current Uniform Crime Reporting system started) using the same categories of offenses as in the long term convictions data. Three categories are tracked: property crimes, violent crimes, and drug offenses, all of which grew rapidly during the 1960s and '70s. By 1981, violent and property crimes rates known to the police were three times higher than in 1962. Property crime rates showed a mild downward trend through most of the 1980s, but surged in 1990 and 1991. They have declined sharply since 1991. Violent crime rates increased at essentially the same pace as property crime rates between 1962 and 1983. Thereafter, following a comprehensive expansion of the laws to do with assault and sexual assault, violent crime rates known to the police continued a sharp growth that peaked in 1992. Violent crime rates declined in 1993 and again in 1994, but remain almost five times higher than they were in 1962.

In addition to the crimes known to the police, which are drawn from the UCR system, Statistics Canada periodically collects data on victimization

as part of its broader General Social Survey. People are asked whether they have been victimized by selected types of personal crimes—assault, sexual assault, robbery, and theft of personal property—and crimes against their households—breaking and entry, motor vehicle theft, theft of household property, vandalism—during the preceding year. These surveys were done for 1987 and 1993, and indicate that criminal victimization rates either declined or remained unchanged during this recent period. Rates of personal theft declined 14 percent, and robbery rates declined 31 percent during this period, while assault rates declined by 1 percent. Rates of household breaking and entering (burglary) declined by 7 percent between 1987 and 1993. Household vandalism rates declined by 13 percent, while household motor vehicle theft rates declined 37 percent. Household theft rates were unchanged.

The evidence shows that after a massive expansion of the number of people charged with crimes from 1960 to 1981 (and of course from earlier periods as well), the rates of charge per 100,000 have levelled off, albeit at levels unimaginable thirty

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 times past. Compared to 1962, there are 300 percent more violent crimes per person in Canada today. On the brighter side, the growth in the crime rate has slowed, and may even be on the decrease.

Interprovincial differences in crime

**High rates in the West,
Low rates in the East**

Canadian crime rates, overall, are highest in the West and lowest in the East. Table 2 gives the numbers. This general pattern has been relatively consistent for most of the 20th century. The overall crime pattern is dominated by the distribution of property crimes: breaking and enterings, motor vehicle thefts, thefts, frauds. However, the violent crime pattern is different. In 1994, Newfoundland had higher violent crime rates than Alberta; Nova

Scotia reported higher violent crime rates than Ontario. Manitoba reported the highest violent crime rates among the provinces. The Yukon and Northwest Territories reported violent crime rates that were enormously higher than those reported by any province.

Quebec anomalous

Quebec reported the lowest violent crime rate in the country in 1994, 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 property crime rate is very similar to that of Ontario, and the two provinces share many of the same demographic characteristics. On a city-to-city basis, Montreal has a violent crime rate that exceeds that of Toronto. Where the two provinces do differ is in province-wide reported assaults. In Quebec they run at only 50-60 percent of those in Ontario.

Figure 5: Canadian Crime Rates, 1962-1994
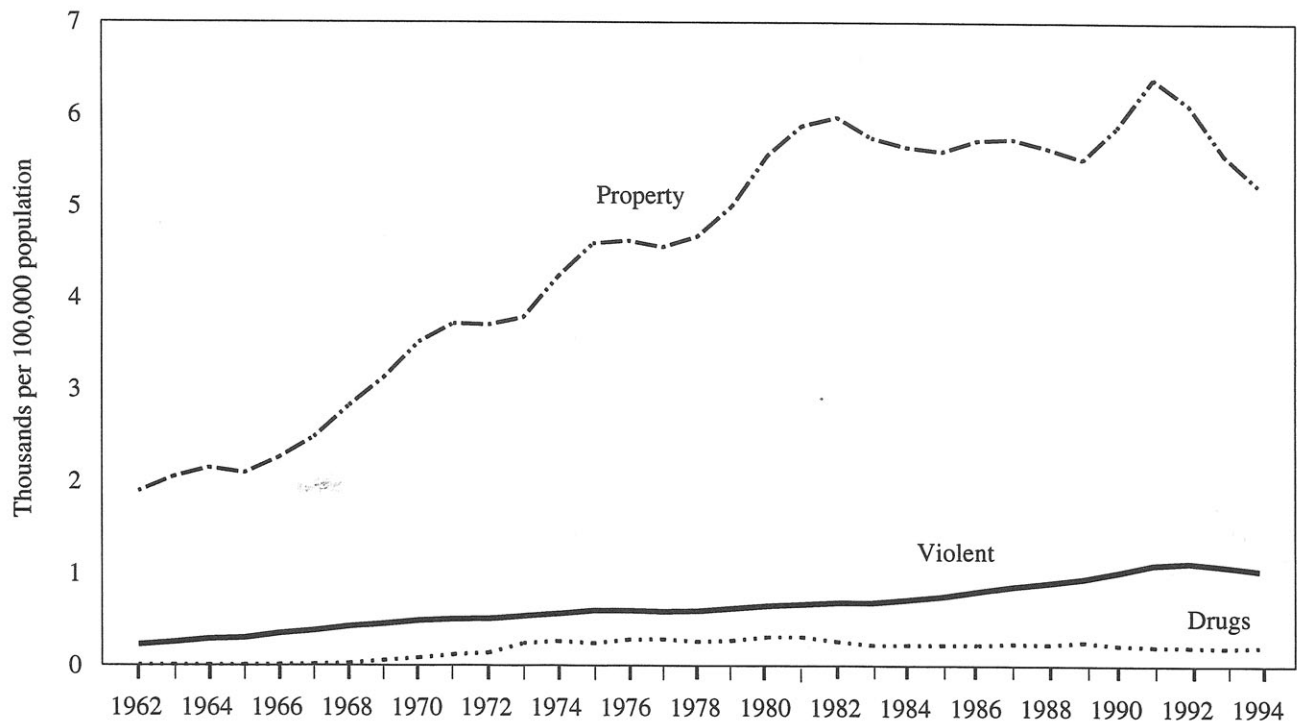
Source: 1962-1993, Statistics Canada, *Canadian Crime Statistics* [and predecessor titles], cat. 85-205 (annual); 1994, Statistics Canada, "Canadian Crime Statistics, 1994: Preliminary Figures," *Juristat* vol. 15, no. 12, cat.

Table 2: Crime Rates Per 100,000 in 1994			
Jurisdiction	Violent Crime Rate	Property Crime Rate	Total Criminal Code Offence Rate
Newfoundland	1,102	2,568	5,570
Prince Edward Island	765	3,413	7,019
Nova Scotia	1,088	4,048	8,175
New Brunswick	935	3,262	6,808
Quebec	730	4,361	6,824
Ontario	994	4,873	8,532
Manitoba	1,600	6,327	11,668
Saskatchewan	1,208	5,818	10,655
Alberta	1,050	5,416	9,355
British Columbia	1,464	8,384	14,106
Yukon	2,714	8,488	19,123
Northwest Territories	5,543	7,334	24,661

Source: Dianne Hendrick, "Canadian Crime Statistics, 1994," *Juristat* vol. 15, no. 12, table 7, cat. 85-002.

Who is involved in crime? Profiles of the victims

Victimization Rates

Most Canadians are not victimized by crime in any given year. In 1987, for instance, the national crime survey conducted by Statistics Canada estimated that 74 percent of male Canadians and 77 percent of female Canadians had not been victimized by a personal crime such as robbery, sexual assault, assault, or personal theft during that year. In 1993, Statistics Canada estimated that 76 percent of male and 77 percent of female Canadians aged 15 and over had not been victimized by personal crime during the year.

What is true of Canadians personally is also true for Canadian households. In 1987, Statistics Canada estimated that about 78 percent of Canadian households had not been victimized by a break and enter, or a motor vehicle theft, or a theft of household property, or an act of vandalism. In 1993, Statistics Canada estimated that some 81 percent of Canadian households were free of victimization by these common crimes.

But these are anything but comforting figures. To most Canadians these numbers will seem astonishingly high. If the 1993 figures hold for the future, over a lifetime the average Canadian is very likely to be victimized at least once. Put another way, if you are average, you have only a $\frac{3}{1000}$th of a percent chance 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 criminal victimization rates suffered by Canadian businesses or public sector institutions, although recent Uniform Crime Reports data indicate that shoplifting and business break-ins account for about 15 percent of all property crimes known to the police. Canadians also have relatively poor reporting mechanisms for capturing the extent and consequences of organized crime.

Young

Most victims of crime are relatively young. In both 1987 and 1993, the General Social Survey conducted by Statistics Canada found that Canadians aged 14-24 suffered criminal victimization rates that were about twice as high as the victimization rates suffered by persons aged 25-44. The youngest age group suffered victimization rates that were five to six times higher than the victimization rates suffered by persons aged 45-64. The victimization rates of persons aged 65 and over were so low that Statistics Canada could not estimate them using survey techniques. Figure 6 illustrates this pattern.

A few selected crimes differ from this general pattern. The Canadian homicide pattern, for instance, is dominated by persons in their late 20s and 30s. Most Canadian homicides occur as re-

sults of arguments between people who know one another: spouses and ex-spouses, lovers and ex-lovers, family, friends, and acquaintances. Many of these crimes follow the collapse of some sort of intimate relationship. Intimacy is something that remains largely a social relation between adults. It often takes some years of intimacy before relations collapse, which in turn can lead to situations in which an argument can trigger lethal action.

Males

Table 3 displays the incidence of victimization by sex for the crimes of Robbery and Assault. Overall, males experience higher rates of criminal victimization than females. Males constituted two-thirds of all Canadian homicide victims in 1994, a pattern that has held for at least a quarter of a century. Males had higher robbery and assault victimization rates than females in both 1987 and 1993. Males and females reported similar rates of personal theft in 1993. Females report much higher levels of sexual assault than males.

Particular Lifestyles

Although we are all at some risk from crime, in practice, 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.

Routine Activities and Work

Some daily activity patterns discipline personal use of time and personal location in ways that place limits on exposure to the risk of criminal victimization. Other routines allow people to expose themselves by spending time in high risk situations and locations.

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

**Table 3: Victimization by Sex (rate per thousand of population)**

Year	Robbery		Assault	
	Male	Female	Male	Female
1988	17	10	74	63
1993	12	6	68	66

Source: R. Gartner and A.N. Doob, "Trends in Criminal Victimization 1988-1993," *Juristat* (1994), vol. 14, no. 13.

twice as high as either workers or those looking for work. Those who described their main activity as "keeping house" suffered only about half the victimization rates suffered by those whose main activity was working at a job or business.

From this perspective, the role of employment in reducing crime may have as much to do with time discipline and routine activity control as it does with the usual economic incentives. To the extent that this is so, welfare schemes will have little impact on crime rates, but workfare schemes could have substantial effects.

Figure 6: Personal Victimization Rates by Age in Canada
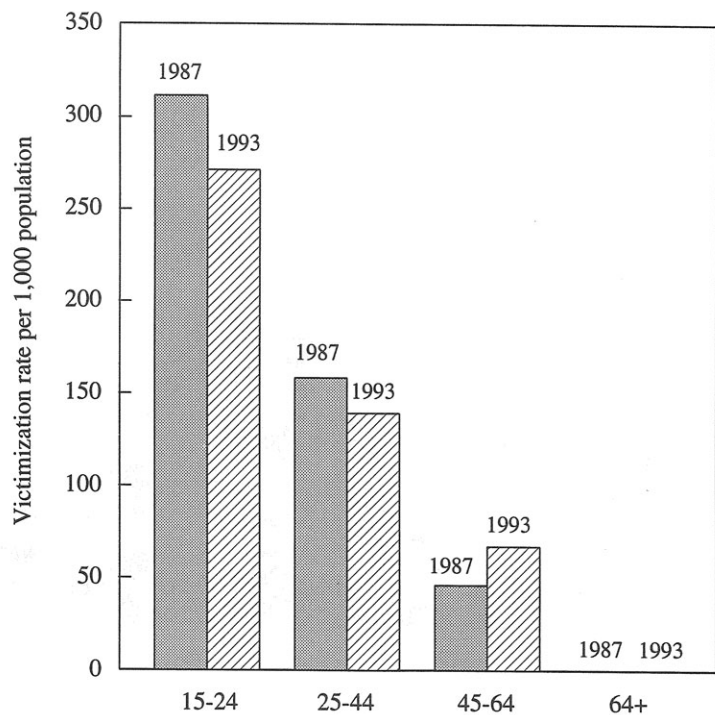
Source: R. Gartner and A.N. Doob, "Trends in Criminal Victimization 1988-1993," *Juristat* (1994), vol. 14, no. 13, table 2, p. 6.

Family Life

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

The effect of family breakdown creates differential risks for males and females. Single males suffer much higher rates of personal victimization than separated or divorced males. Separated and divorced females suffer much higher rates of personal victimization than single females.

Separated and divorced women report assault victimization rates that are about five times higher than the assault rates reported by married women. 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 of these cases, the victimization rate is higher than the rates reported to the police. Table 4 displays the rate of victimization for all crimes by marital status.

### Table 4: Total Victimization by Sex and Marital Status, 1993 (rates per thousand)

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

Source: R. Gartner and A.N. Doob, "Trends in Criminal Victimization 1988-1993," *Juristat* (1994), vol. 14, no. 13.

Adult homicides. Formally married persons are much less likely to be victims of homicide than persons living common law. Persons 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 persons are much less likely to be murdered than single persons.

Child homicides. Figure 7 describes the ages of the victims who were murdered in Canada in 1994. Very young children run a relatively high risk of being murdered in Canada. In 1994, more murder victims were under one year of age than
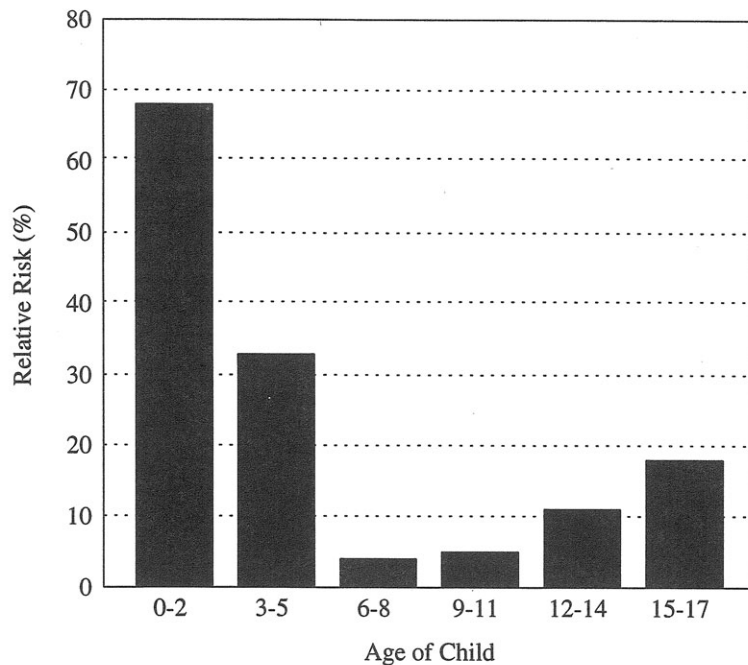
Figure 7: Homicide Victims by Age, 1994
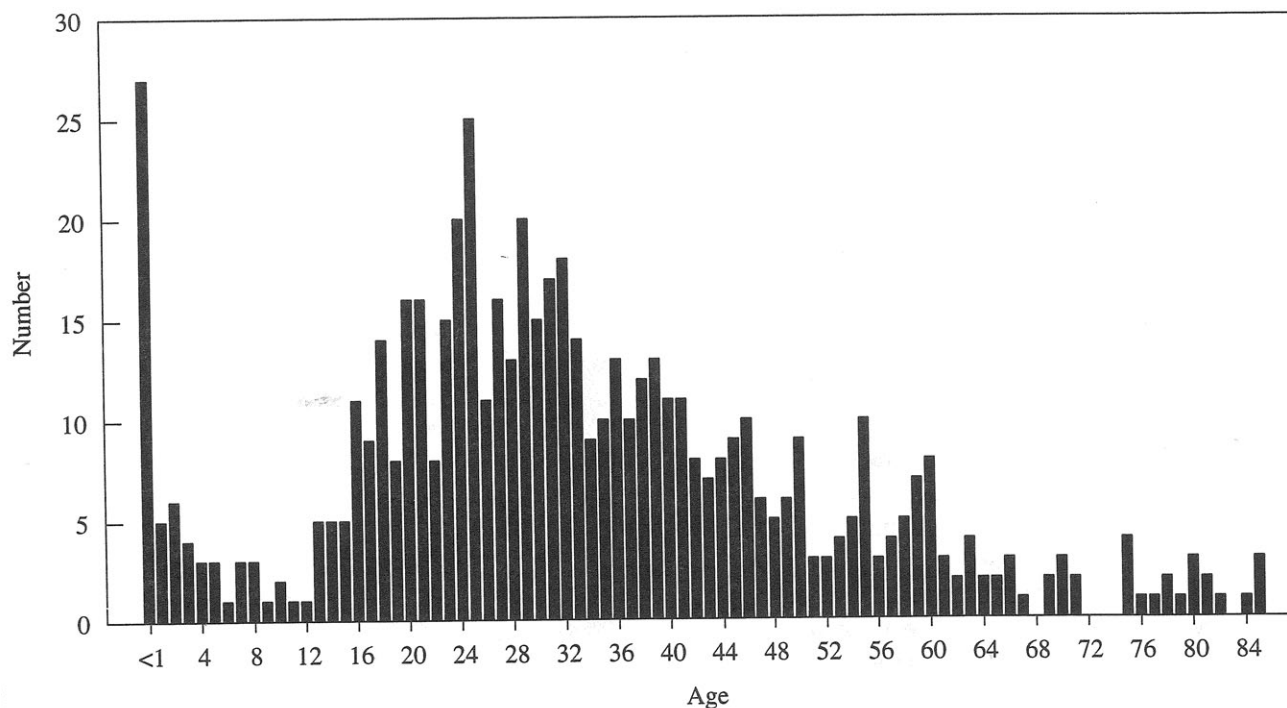
Source: Orest Federowycz, "Homicide in Canada—1994," *Juristat* (August 1995), vol. 14, no. 11, p. 15.

Figure 8: The Relative Risk of Child Death Caused by Step-parent/Natural parent
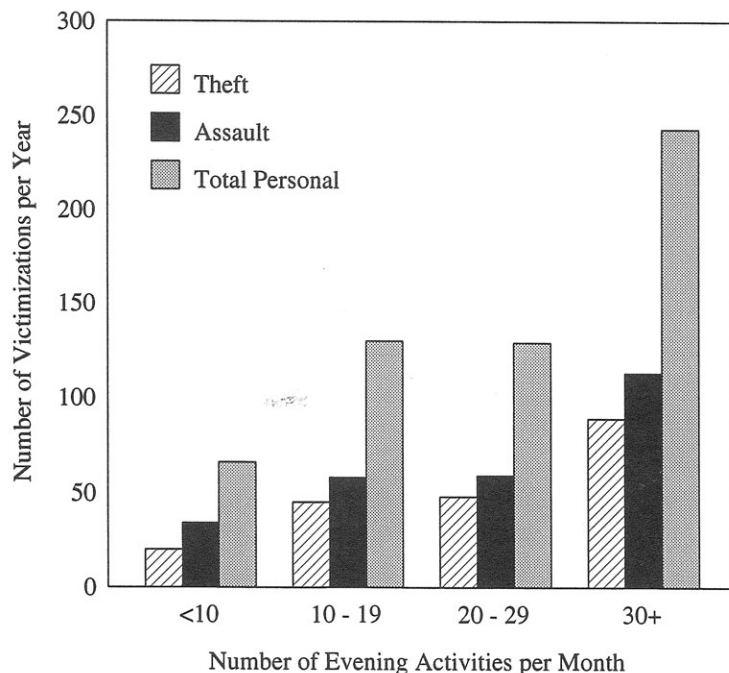

Source: Martin Daly and Margo Wilson, *Homicide* (Aldine de Gruyter, 1988), p. 92.

Figure 9: Canadian Personal Victimization by Frequency of Evening Activity

Source: R. Gartner and A.N. Doob, "Trends in Criminal Victimization 1988-1993," *Juristat* (1994), vol. 14, no. 13, fig. 3, p.

in any other single year of life. Children are much more likely to be killed by a step parent or an unrelated lover of a parent than by a genetic parent. Figure 8 describes the risk that a child faces when a step-parent is part of the family relative to the risk when both parents are the child's natural parents. 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.

Recreation

Evening Activities. As figure 9 shows, victimization rates increase with the frequency of evening activities outside the home. Canadians engaging in more than ten evening activities a month experience about double the victimization rates of those going out less than that. Canadians who go out 30 or more times a month suffer crimes rates almost four times higher than those who go out fewer than ten times a month. Similar patterns were found in victimization studies conducted in 1981 and in 1987, and are found in victimization studies in other countries including the United Kingdom and the United States.

Going out in the evening generates a substantial number of exposures to criminal attack. For instance, the person going out for a drink is exposed to risk from strangers on the street, at the bar, and in the parking lot; that person's car is placed at risk where it is parked for the duration of the evening activity; and that person's home is left empty, exposed to burglars for the duration of the evening activity.

Drinking. Drinking alcoholic beverages also increases the risk of victimization. Active drinkers were more than twice as likely to be the victims of assaults and other violent crimes as non-drinkers in Canada in 1987. Among active drinkers, those who reported consuming 14 or more drinks a week were more than twice as likely to

be the victims of assault or other violent crimes as those who consumed less.

Income

Canadian victimization from the General Social Survey (GSS) data indicate that risk of property crime victimization rises with income. Households with family incomes of $60,000 per year or more in 1993 reported victimization rates 65 percent higher than households with family incomes below $15,000. As figure 10 illustrates, this increase is continuous.

The violent and personal victimization rates of persons with different levels of income are less clear cut. Canadian data from the early 1980s seem to show that rates of sexual assault and robbery decline as family income rises, while rates of personal theft victimization rise with income. These data suggest that assault rates are not related to income levels.

Selected Minority Groups

Canada collects no information on the victimization rates of different 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. United States data, for instance, indicate that black Americans suffer rates of violent crime (50.4 per thousand population) almost twice that experienced by white Americans (29.9 per thousand) and more than twice the rate (23.7 per thousand) suffered by other Americans (including Asians and Native Americans).

Figure 10: Victimization Rate by Income in Canada
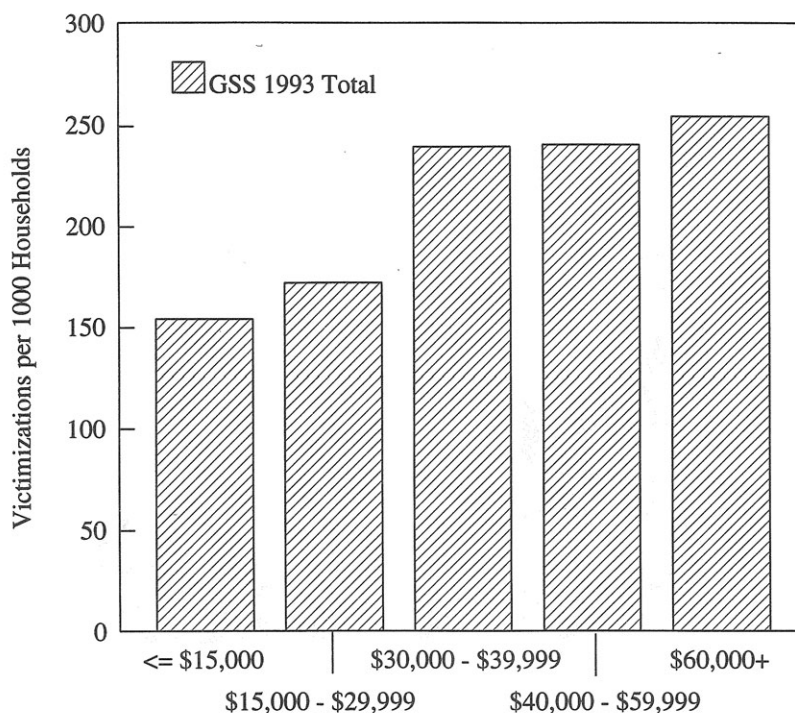
Source: R. Gartner and A.N. Doob, "Trends in Criminal Victimization 1988-1993," *Juristat* (1994), vol. 14, no. 13, fig. 5, p. 12.

Figure 11: Age of Persons Accused of Crime in Canada, 1993
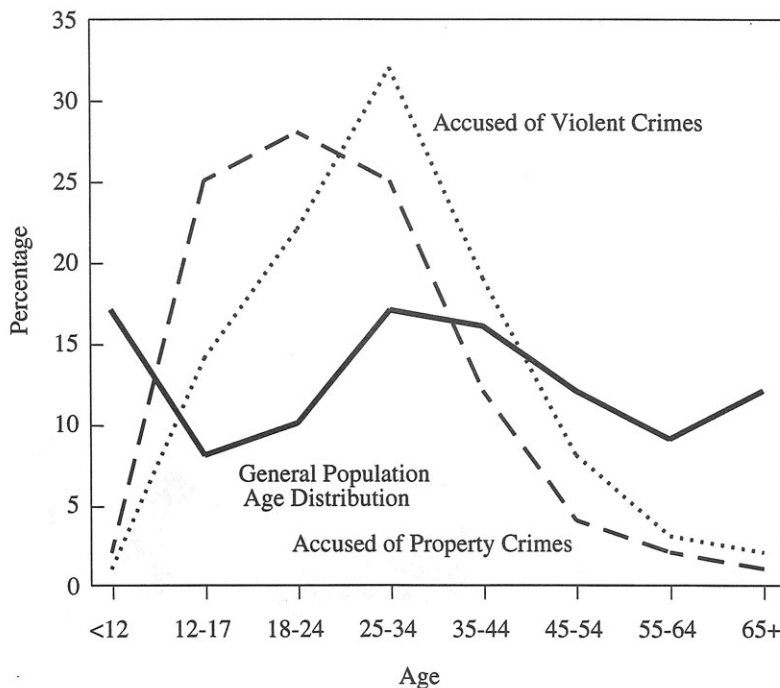
Source: Statistics Canada, *Canadian Crime Statistics—1993*, summary table 5, cat. 85-205 (annual).

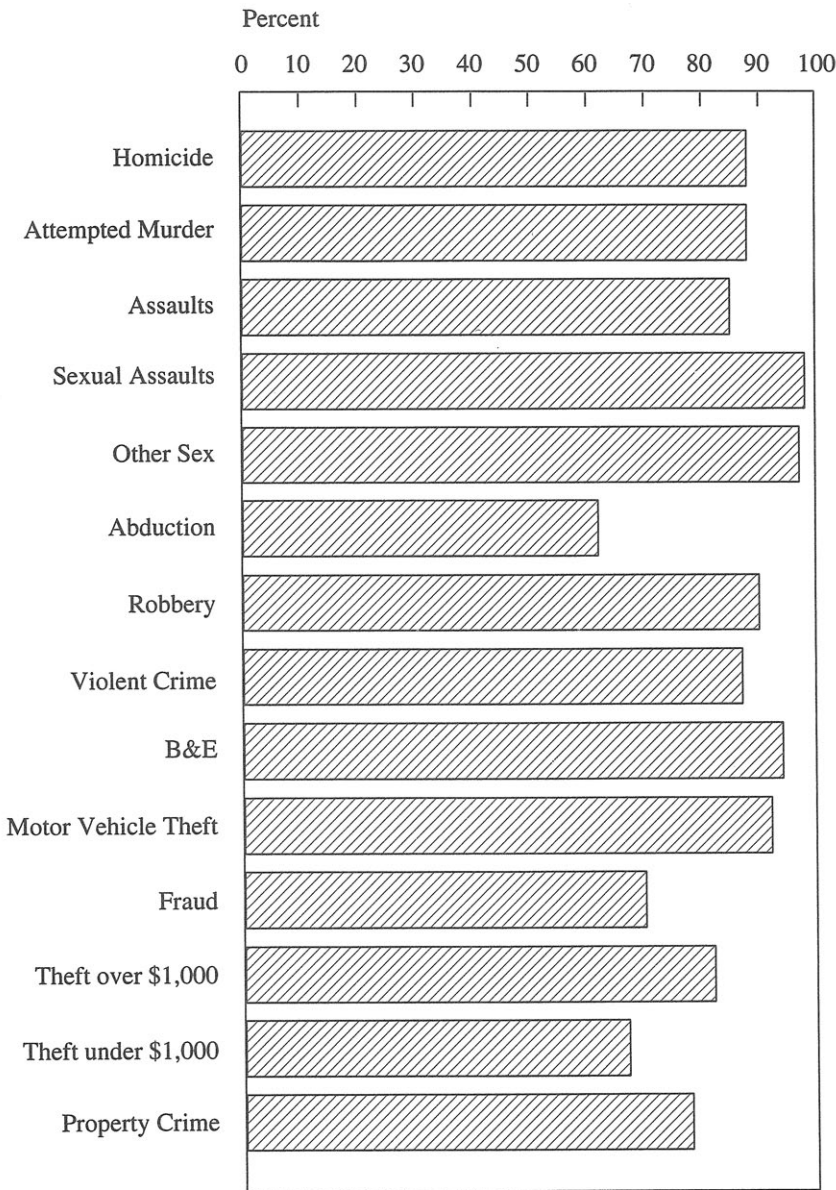## Figure 12: Proportion of Male Offenders by Crime Category, 1994

Percent

Crime Category	(bar chart, 0–100%)
Homicide	
Attempted Murder	
Assaults	
Sexual Assaults	
Other Sex	
Abduction	
Robbery	
Violent Crime	
B&E	
Motor Vehicle Theft	
Fraud	
Theft over $1,000	
Theft under $1,000	
Property Crime	

Source: Statistics Canada, "Canadian Crime Statistics, 1994: Preliminary Figures," *Juristat*, vol. 15, no. 12, cat. 85-002.

Profiles of the offenders

Data on the characteristics of Canadian criminals, where available, parallel what is known about victims. In Canada we do not presently examine the backgrounds of offenders on a systematic basis other than to record basic information on sex, age, and, to a limited extent, ethnicity. We do not have a significant 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, these kinds of data are not presently available to help Canadians understand the kinds of criminals we observe. Such data were collected with respect to convicts until the late 1960s, however. Although old, we will refer to some of these data in what follows.

Young

Figure 11 describes the age of those accused of crimes. The solid curve is the Canadian age distribution showing the percentage of population at each age grouping. The dotted line reflects the percentage of all violent crimes, while the dashed line reflects the percentage of all property crimes attributed to people in each age category. Most offenders are young—in their late teens or early 20s. As figure 9 illust-rates, teenagers and young adults make up a disproportionately large share of persons accused of crime in Canada. Young offenders (persons aged 12 to 17) were over represented relative to their share of the general population by a factor of three among those accused of property offenses and by a factor 1.75 among those accused of violent offenses. Young adults (aged 18-24) were over represented among those accused of property offenses by a factor of almost three (2.8) and of those accused of violent offenses by a factor of 2.2.

Violent offenders tend to be older than property offenders. Much Canadian violent crime is related to situations that depend, socially, on adulthood: alcohol consumption and cohabitation. Although some teenagers do drink and do engage in sexual relations, as persistent behaviours these remain the preserve of Canadian adults.

Homicide offenders tend to be in their late 20s and 30s. Fraud offenders tend to be older still, in part because of the need to reach a fiscally responsible age in order to become involved in situations where fraud is possible. Few merchants will take cheques from 15 year olds. Few banks will give teenagers credit cards or mortgages. Some 93 percent of fraud is by adults.

Males

Known offenders are overwhelmingly male. As figure 12 illustrates, males comprised more than 85 percent of persons charged with homicide and assault in Canada in 1993, some 90 percent of persons charged with robbery, and 94 percent of persons charged with break and enter offenses. Males comprised 65 percent of persons charged with theft and 70 percent of persons charged with fraud. These patterns have persisted for many years.

Lower Income, Education, Status

Known criminal offenders tend to come from the lower skilled, lower income, lower occupational prestige segments of the population. 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 work-

ers. 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 convictions 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.

Figure 13: Criminal Code Conviction Rate by Occupation in Canada, 1966
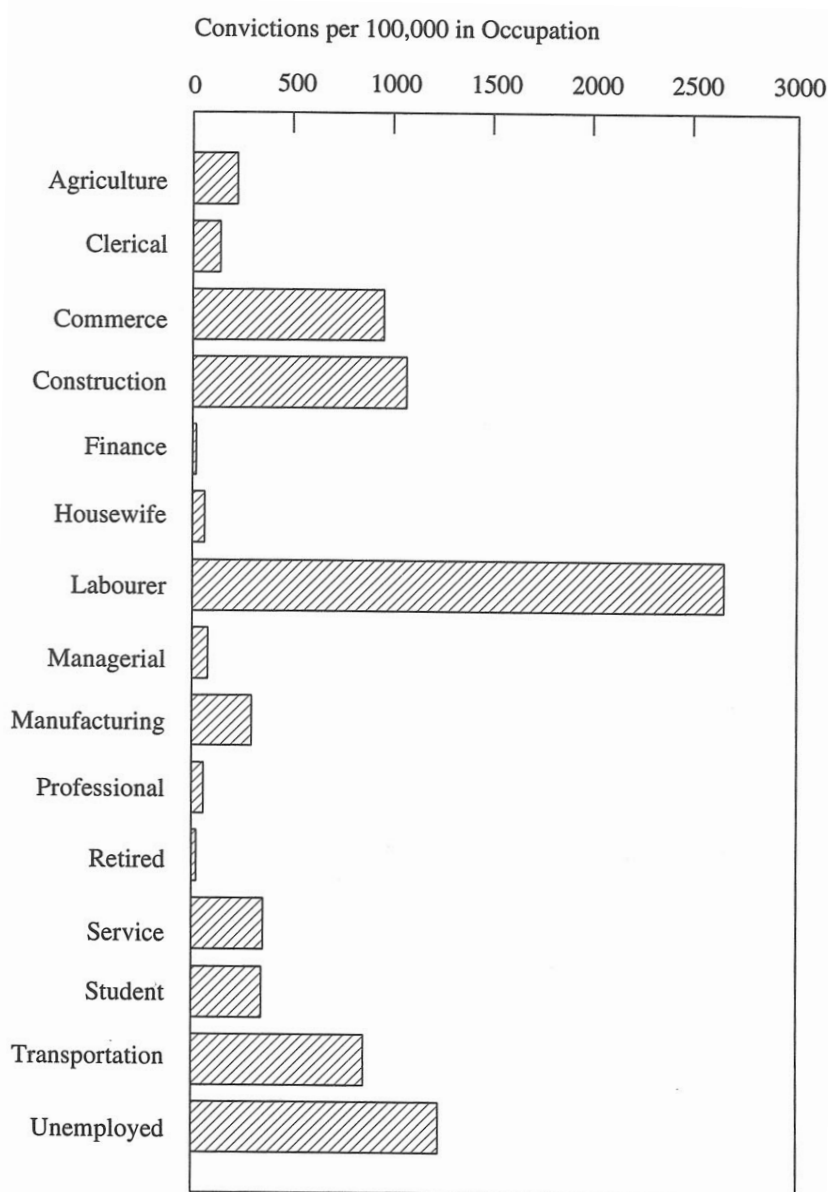
Source: L. Tepperman, *Crime Control: The Urge Toward Authority*, (Toronto: McGraw-Hill Ryerson, 1977), p. 183.

Figure 14: Stories on Murder, January 1989 to June 30, 1995

*1995 estimated from January 1 to June 30, 1995.
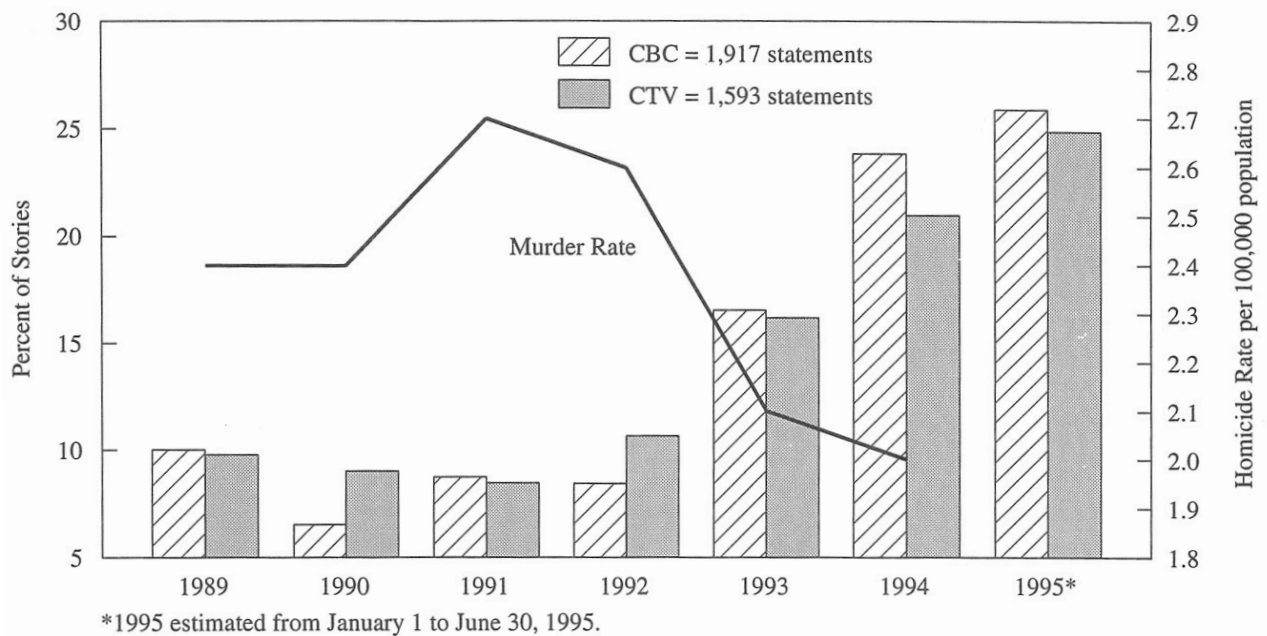
Source: The National Media Archive, *On Balance*, vol 8, no. 7, 1995.

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 a simple causal pattern from these. Income seems to be less critical than the time budgets associated with different occupations. Occupations that restrict free time and limit external mobility over the course of the work day consistently produce lower proportions of criminals and fewer victimizations than those that do not impose such restrictions. Cities dominated by employment in time-restrictive occupations have lower crime rates than cities dominated by time-flexible occupations. Moreover, American research 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.

Selected Minority Groups

Canada collects little data on the racial or ethnic characteristics of known offenders. Correctional data do distinguish between "native Indians" and "Others." These data indicate that native Indians are substantially over represented in prisons and jails compared with their representation in the population at large. In 1991, for instance, natives comprised 2 percent of Canada's population, but 24 percent of persons held in correctional custody.

In sum, although we have little systematic data about either our victims or our offenders other than their age and sex, we have a far poorer profile of our offenders. This is ironic since in many cases this is a captured population about which we could accumulate information.

Fear of crime

With the high property crime rate and relatively low violent crime rate, it is important to note that Canadians are increasingly concerned about personal safety. As we have seen from the figures, the crime rate has been decreasing in the past four years for most crimes. Yet if we watch our television news broadcasts, we receive the exact opposite impression: media reports lead us to believe that violent crime has been rising rapidly in Canada in recent years. A study done for The Fraser Institute ("Murder Statistics: Murder Down for

Third Year in a Row, Murder Coverage Up for Third Year in a Row" *On Balance*, September 1995) tracking the incidence of homicide and the reporting of murder on CBC and CTV national news found that reporting of murder cases has gone up even as the number of murders has fallen (see figure 14). Public perceptions of crime are strongly shaped by this media presentation rather than by the actual underlying crime patterns which, while no reason for complacency, are much less malign.

It is certainly the case that local news broadcasts are almost always concerned with crime, at least in part, although we are not aware of any sustained comparative studies over time comparable to the national analysis.

But the fear of crime is also based in part on our own historical experience. Regardless of the recent small decline in the crime rate as shown in figure 5, it is likely that more and more Canadians have already been the victims of crime. Compared to thirty years ago, the crime rates for both violent and property crime are up massively. With the enthusiasm of national reporting giving urgency to our own personal experiences, it is little wonder that our fears about our personal safety have been growing.

We have been examining the incidence and rates of crime and their relationship to the victims and offenders. We turn now to an assessment of the cost of crime.

The costs of crime

The costs of crime are extremely difficult to measure precisely. On one hand, we have relatively easy-to-measure costs such as the amounts spent on the police, the courts, and the legal profession. On the other, we have extremely difficult and sensitive costs that arise from the physical and psychological distress caused by criminal acts. Anyone who has been attacked or threatened, or has been victimized by a break and enter knows how angry and frustrated they felt. Frequently we take strong measures to prevent being victimized

again. These costs of crime are every bit as real as the costs of policing or corrections, but they are far harder to measure. The costs of crime to victims is an understudied phenomenon, and only the most tentative 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 victimization studies in which victims report the amount of their loss and the amounts they have recovered. There may also be direct costs of the crime to the victim over and above the incident recorded as, say, an assault. This is because only the most serious crime in an incident is reported as the consequence of the incident for statistical purposes. Thus, the theft that took place during an assault may be catalogued, but it may not figure independently as an incident. Thus we tend to understate the full cost of each "incident."[8]

Property crime

The most common crimes in Canada are property crimes. Nearly 60 percent of all criminal code violations reported to the police are against "property." Table 5 gives the numbers for 1993, although the costs are updated from average costs of victimization studies that have been done at different times.

As is apparent from the table, the most common incident is theft, followed by vandalism (mischief), and break and enters (B&E). Average per incident losses caused by thefts and B&Es are about the same. An average incident of vandalism causes only about 30 percent of the loss caused by a theft or break-in. The average loss caused by robbery is about 25 percent higher than that caused by a B&E, while the average loss to a victim from a vehicle theft or fraud is about 50 percent greater than average loss caused by a B&E. The total cost from these property crimes is $4 billion. This is an extremely conservative estimate as it does not assess other losses associated with these incidents, nor does it assess the psychological and social impact of these crimes on the victim.

---

8   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 within 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.

Table 5: The Partial Costs of Property Crimes to Victims by Type of Crime in Canada, 1993

Victim Losses	Theft	Mischief	B&E	MVT*	Robbery**	Fraud
Number of Incidents Reported	886,617	415,645	406,582	156,811	29,961	113,054
Average Loss (1993 $)	2,054	615	2,225	3,500	2,754	3,403
Total Losses (millions of 1993 $)	1,821	255	905	549	83	385
Total from all sources in this table (in millions of 1993$)	3,998					

Notes: *MVT is Motor Vehicle Theft for which we have aggregated subcategories for this table.
**Robbery is a violent crime, but the value of the monetary losses are usually recorded so it is included in this table.

Sources: values of average loss: Insurance Corporation of British Columbia for MVT, others from *Juristat* 12(5): 1981; number of crimes from Statistics Canada, *Canadian Crime Statistics 1993*, table 3, cat. 85-202; CPI, *Bank of Canada Review*, various issues.

If we were to take the same average cost of each crime that is known to the police, and multiply it by the number of crimes identified by victims through victim surveys (rather than use only the counts of crimes known to the police), we would increase the victim's cost of crime losses by a factor of 2.6—to about $10 billion. 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.

Table 6: Direct Monetary Losses Associated With Selected Violent Crime in Canada, 1993

Type of Crime/ Incident	Average Dollar (1993) Loss per Incident	Numbers of Incidents	Total in millions of 1993 dollars
All Assault	386	273,234	105.5
Sexual Assault	459	34,764	16.0

Sources: Solicitor General, *Cost of Crime to Victims*, 1985, reports the average loss associated with each type of incident.

The estimates presented here nonetheless 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 high volume property crimes. According to the Law Reform Commission of Canada, there are more than 40,000 different offenses defined in federal and provincial laws and regulations. We know little or nothing about the losses 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 as arson, counterfeiting currency, or 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. Future research on the costs of these and other crimes is likely to expand our estimates of the cost of crime quite substantially.

Violent crime

Incidental Monetary Losses

Although there are many costs to violent crime, the best data are for those crimes for which it is possible to get an estimate of the incidental monetary loss. These are displayed in table 6. There are

two categories for which we have the incidental monetary loss: assault and sexual assault.

In the context of committing violent crimes there were additional losses of $105.5 million in 1993 from assault cases if we confine ourselves to using reported crimes known to the police. These values understate the true losses associated with assaults. The monetary loss data are drawn from victimization surveys and include a large number of incidents that are not reported to the police. The incidents known to the police are likely to be more serious than those not reported. If all assault incidents reported by victims in the survey are counted, then the dollar cost is as much 8.08 times as much: $852 million.[9]

Hospitalization Costs

There are hospitalization costs associated with violent crimes which should also be included as part of the direct costs of violent crime. The average number of days of hospitalization—not including simple outpatient treatment—amount to roughly one quarter of the total number of violent incidents. That is, for the 270,000 assaults known to police in 1993, about 68,000 hospital days costing about $68 million (at $1,000 per day) were required to repair or ameliorate the physical harm done to the victims. Since data on the number of hospital days required to treat the victims of assault are from victim survey data, using crime incidence counts derived from victimization surveys instead of incidents reported to the police might prove more appropriate. Applying the victimization survey adjustment factor suggests an estimate of almost 2.2 million assaults with hospitalization costs of $550 million.

Productivity Losses

It is difficult to estimate the loss to society from a murder. If we think of the loss in terms of production that these victims could have accomplished

during the rest of their lifetimes alone, 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 4 percent are over the age of 65. If we look at those who are in the workforce, then the loss of output on average is the per worker national income: about $50,860 per member of the workforce in 1993. In effect, we assume that the homicide victim is an average Canadian with average income throughout their working lifetime. 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 for the loss in productivity aged over the lifetimes of the victims is $526 million.[10] 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 the victim as well.

The productivity losses due to assaults are roughly in proportion to the days of output lost. These average out to be about one day lost per victim.[11] 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, day losses of $(2/3)(270,000)/365 = 493$ years of labour lost or $493 \times \$50,860 = \$25.1$ million. If we use survey victimization data, then losses are roughly $200 million.

The non-pecuniary costs to victims

Welsh and Waller estimate the costs of "shattered lives" at $12.1 billion dollars each year between 1991-93. They produce this estimate by measuring U.S. court awards for the suffering and loss of productivity associated with such crimes as assault, rape, and murder, and add to this the cost of social services used by the victims, and ultimately reach an assessment. Although this is one possible way to measure these kinds of costs, we caution that the parameters they use are primarily from the

---

9   That is, the overall assault rate known to the police is 829 per 100,000 while that reported from victimization surveys is 6,700 per 100,000.

10   The interest rate is 2.5 percent which is consistent with U.S. practice (Brandon Welsh and Irvin Waller, "Crime and Its Prevention: Costs and Benefits," Dept. of Criminology, University of Ottawa, April 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.

11   Sol. Gen, 1985, p. 4, column 5.

U.S., and that awards and costs of social services may differ in Canada.[12]

Summing up the losses due to major crimes

A conservative estimate of the losses associated with property crime amount to $3.998 billion, the direct incidental monetary losses from violent crime are reported as another $105 million, hospitalization at $68 million, output loss from income foregone by murder victims at $526 million, and yet we have only catalogued a few of the more obvious costs from some of the most important crime categories. We have not measured the lost output, outrage, and fear associated with property crime or violent attacks which were characterized tentatively at $12.1 billion. Nor have we calibrated the reported results 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.[13] Moreover, we have worked with a limited set of the most frequent and commonly understood crimes. Further research is very likely to increase this number substantially. Table 7 gives both a conservative estimate of the costs of Canada's crime to the victim, based on crimes reported to the police, and a more generous measure of these costs based on the number of victims. These two measures are presented in the table's two columns. The purpose of such a table is to emphasize both the limits of our ability to make significant calculations for the costs of crime to victims and to suggest the order of magnitude of the actual losses.

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 that crime exacts. There is a large (and growing) establishment dedicated to the prevention and punishment of the acts themselves. These preventative and punishment measures should also be included as a cost of crime. We turn now to the costs of prevention and explore the kinds of expenditures that are undertaken by both the public and the private sector.

Table 7: Counting the Costs of Violence to the Victims in Canada, 1993 (millions of 1993 $)

Type of Crime	Numbers of Incidents Drawn From:	
	Crimes Known to Police	Victimization Survey
Property Crime	4,000	10,000
Violent Crime		
Productivity Losses	25	200
Homicide	526	526
Hospitalization	68	550
Direct Monetary Losses	106	852
Different Estimating Technique (Welsh and Waller)		
"Shattered Lives"	0	12,100
TOTAL *not* including shattered lives estimate	4,725	12,128
TOTAL including shattered lives estimate		24,228

Private security and public policing costs

To catch a thief

In table 8 we look to some measures of the effectiveness of our police—as opposed to our courts or our correctional institutions. The first column

---

12   The source for the U.S. data is Miller T.R., M.A. Cohen, and S.B. Rossman, (1993) "Victims Costs of Violent Crimes and Resulting Injuries," *Health Affairs* 12(4): 186-197, which is cited by Welsh and Waller. In this piece they assess the lifetime contribution of acts of violence to the costs of health and happiness of each of the victims.

13   We have not looked at the so-called "victimless crimes," like gambling offenses or prostitution, as costing these is particularly difficult.

Table 8: Clearance Rates for Selected Major Crimes in 1994		
Type of Crime	Clearance per Crime Known to Police	Number of Crimes Known to Police
Assault	0.81	236,364
Homicide	0.80	596
Sexual Assault	0.70	31,690
Fraud	0.65	103,210
Abduction	0.55	1,130
Robbery	0.33	28,888
Theft Under $1000	0.20	727,364
Break and Enter	0.17	387,877
Mischief	0.15	396,596
Motor Vehicle Theft	0.15	159,663
Theft over $1000	0.10	116,295

identifies a selection of crimes, while the second column reports the number of incidents "cleared." "Cleared" means that someone is charged, or, alternatively, that the police believe they know who committed the crime, but cannot lay a charge.[14] Thus, the case is no longer one in which the police want to devote additional scarce resources. The final column reports the number of each type of crime known to the police. This is to give a sense of the magnitude of the kinds of crimes associated with the clearance rates.

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, break-ins, and mischief. These types of crimes do not have relatively easily identifiable suspects. After all, if someone assaults you, there is generally an eyewitness—you. Break and enters or car-thefts, however, typically do not involve eyewitnesses, and few clues are left at the crime scene. This is re-

flected in the observation that while almost 8 out of 10 homicides and assaults are cleared, only 10 to 20 percent of the most common property crimes are cleared. Those listed from theft on down in the table amount to 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. But what we miss are data that follow-up the clearance rate. Of those who are charged, what is the success rate in prosecution? Of those who are convicted, how many re-offend? How many people are committing the kinds of crimes that we observe? Are Canadians the victims of a "few bad apples" who commit many crimes, or are many people committing just a few crimes, most of them minor? The data available in Canada do not permit an ongoing characterization of the criminals or a characterization of the crimes by each criminal. We have poor coordination of information among those who catch the criminals, those who prosecute them, and those who sentence them. Publicly available data do not permit us to trace cases across the justice system. Such data may exist, but there is no effort to organize the information that will permit Canadians to see in a simple and effective way whether their money is being well spent. And this brings us to the costs of policing, the justice system, and incarceration.

Policing and the Crime Rate

One question we need to address is the impact the police have on the crime rate. Do police make a difference? And if so, how much? Understanding the impact that the police have on crime is very difficult to determine because of a basic simultaneity between crime and police force size. There are two effects to be identified: the effect of crime on numbers of police hired, and the effect of an additional police hire on the rate of crime.

If the crime rate rises, municipalities (or provinces or cities) tend to hire more police. This may lead to better reporting of crime, especially if larger police forces (relative to local population) are seen as more likely to solve cases, or if overworked police

---

14   Most typically, this occurs when the victim refuses to give evidence, or because the suspect has died or has diplomatic immunity.

Table 9: Private and Public Security Employees				
Year	Levels	Private Investi- gators	Guards	Police
1971	Number	3,465	51,220	40,148
	Rate per 100,000	16	233	182
1981	Number	4,390	83,245	50,563
	Rate per 100,000	18	334	203
1991	Number	5,925	115,570	56,774
	Rate per 100,000	21	411	202
1991	Average Salary ($)	33,530	21,263	47,444
	TOTAL SALARY (in millions of 1991 $)	199	2457	2694

Source: Census 1991 cited in *Juristat* (March 1994), vol. 14, no. 10, tables 1-4, cat 85-002.

United States, these figures give some flesh to the speculation that we can affect the number of crimes by adding appropriately to law enforcement.

The cost of security

Family expenditure surveys tell us that one in eight Canadian families spend money on security equipment, and about one in fifty purchases some kind of security system, such as monitored alarms and the like. Canadians spend about $195 million split equally on security devices and security systems. Of course everyone locks their 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 and their establishment have increased substantially over the past quarter of a century. In table 9 we report the number of private investigators, security guards, (also private) and police (in particular those who are peace officers legally empowered to make arrests rather than civilian office personnel.)

For each of our census years, the table shows both the number and rate (per 100,000) of the security Canadians have purchased. It also shows the comparative figures on average and total salaries paid to both private and public security agents for 1991. 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.

officers tend to use their discretion in the direction of minimizing reported incidents. Thus, the higher crime rate will tend to be associated with higher police numbers. This is the effect of the crime rate on the police complement.

But we are more interested in identifying the effect 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 constable?

Evidence from the United States suggests that once the effect of more crime enlarging the police complement is taken into account, an increase in one peace officer (an officer permitted to wear a gun and make arrests) reduces crime by 8-10 events per year 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 $118,000 to $174,000 (Canadian dollars) per additional peace officer in the U.S.[15] Although Canada is not the

---

15   This evidence is discussed in detail in Steven D. Levitt, "Using Electoral Cycles in Police Hiring to Estimate the Effect of Police on Crime," Working Paper No. 4991, National Bureau of Economic Research, January 1995. This recent work is relatively sophisticated in accounting for the simultaneity of police force size with the crime rate. We are not aware of any similar studies in Canada at the present.

Between 1971 and 1991, there was a much larger increase in the number of private security agents than police constables. The number of police per 100,000 increased in that time from 182 to 202; an increase of one constable per year per hundred thousand people, although the actual rate fell between 1981 and 1991! The corresponding figures for the number of private security guards rose far more dramatically during the same time. From 233 per 100,000 in 1971 there are now 411 employed per 100,000 people. This is an increase of almost 10 per year. Today there are almost twice as many private security guards as police. 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 either police or guards.

Police are more extensively recruited and thoroughly trained than guards. Their salaries are more than twice that of guards. But what is striking in these numbers is that the total salaries devoted to the pointed end of the security stick are equally split between private and public expenditures: police salaries total $2.7 billion, and private sector salaries total $2.7 billion, adding up to a total salary bill alone of $5.4 billion.

This is an underestimate. Although we know how much the police services spend on non-peace officer related costs, 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 by the public sector on policing in 1993 was $5.717 billion.[16] If we update our 1991 census figures to reflect 1993 prices, then the costs of the rest of the police establishment were roughly $3.0 billion in that year. 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 $8.4 billion for 1993. If private security has the same overhead as public sector policing, then we would have an estimate of $10.4 billion for 1993. Adding the $196 million spent by private citizens on security devices and systems creates some small element of double counting as at least some 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 $98 million should be counted as reflecting equipment purchases by families.

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

The courts

In 1992, Canadian expenditures on the courts amounted to $867 million. But this figure includes only such things as the administration of the courts: the payment to judges and staff workers. It does not count the costs associated with the legal counsel for both defence and prosecution. Legal aid, which is available under a wide range of circumstances to both civil and criminal defendants, amounted to an additional $603 million. Roughly one-half of all legal aid cases are attributable to civil cases 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 are seeking redress of some perceived wrong. If civil cases are one-half the costs of the court, and the costs of the defence are the same as those of the prosecution, then the cost of the criminal side of the legal system amounts to .5(867 + 2 x 603) = $1.047 billion. It is very difficult to get accurate figures on the cost of the defence of defendants. One only has to think of the costs of the O.J. Simpson defence team in the United States or the cost of the Bernardo murder trial in Toronto to recognize how expensive these matters can be. Although private defence costs in Canada are undoubtedly less than those in the United States, we do not have hard data.

The correctional institutions: one-to-one

In 1991-92, Canada incarcerated about 4,800 youth, about 12,000 adults in federal prisons, and another 14,000 adults in provincial jails. An additional 103,000 adults were on probation or parole. A further 5,000 adults were held in custody on re-

---

16   There are some caveats to this. Although police are charged with security, they certainly have other functions not entirely related to crime. Traffic control is probably the most important example.

Table 10: Estimates of Some of the Costs of Some of Canada's Crime, 1993 (billions of dollars)

	Conservative Estimate	More Extensive Estimate
Direct Costs of Victimization	4.725	12.128
Shattered Lives		12.1
Policing and Private Security	8.5	10.6
Court and Legal Costs	1.047	1.047
Corrections Costs	2.38	2.38
Total not including shattered lives	16.7	26.2
Total including shattered lives		37.3

in a manner that minimizes most cost extrapolation. The second column uses costs based on victimization survey information and what we believe are reasonable extrapolations of known costs. Finally, we break out the costs associated with "shattered lives" since it represents a tentative effort at characterizing a monetary assessment of the cost of violence 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 engenders. So in that sense at least, all our estimates are subject to an upward revision.

The cost of crime in the totals rows is between 2.3 percent and 5.2 percent of gross domestic product. To put this in perspective, we spend about the same on our public schools which service 5 million children. On average, crime costs amount to between $560 and $1,240 per year for every man, woman, and child in the country. For a family of four, we pay between $2,240 and $5,000 every year. Canadians are concerned about crime because they see it around them, they see 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 focus on particularly horrific crimes. We very seldom calculate the cost of criminal activity except for a particular crime, or at most one kind of crime. Once we begin to recognize the full costs of crime, we may well become more concerned, not less.

Crime is clearly an important problem for all Canadians. This monograph has described some of its characteristics and costs, and identified the kinds of gaps that persist in our knowledge. We must recognize the types and costs of crime if we are to understand how Canadian society works. We are spending a great deal on crime and incurring substantial costs for its remediation and prevention. These costs are borne by the victims and the taxpayer. The Canadian justice system does not encourage scrutiny. Data on how well we do at catching criminals, convicting them, and keeping them from re-offending are not easy to obtain in any systematic way. Yet any thoughtful analy-

mand awaiting court appearance. The cost of federal custody operations in 1991-92 was about $136 in operating costs per day per inmate, and $974.3 million in total (Statistics Canada, *Adult Correction Services in Canada, 1991-92*, cat. 85-211, p. 14) for 4.3 million inmate days.

For 1992-93, total expenditures on custodial services was $1.89 billion for adults and $487 million for youth. This was spent on housing 12,000 federal and 14,000 provincial prisoners. Staff numbering more than 28,500 operated the correctional system. The staff directly involved in custodial operations—some 23,000—were in almost a one-to-one ratio with inmates: an average of 0.88 custodial staff per inmate in Canadian prisons and jails. The total cost of corrections was $2.38 billion.

The costs of crime and punishment: a summary

We have catalogued a number of costs in the preceding section. Table 10 brings them together to give us some idea of the overall costs involved in crime. 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 on crimes known to the police, and reported costs allocated

sis of social justice surely requires we know how well and efficiently we do what we are doing. We need to know the characteristics of the offenders and how they find their victims. We need to know all we can about who is caught and how often, how they are treated once they are apprehended, how much is spent, and how much we all pay. This monograph begins that process of assessment.

About the Authors

PAUL J. BRANTINGHAM, A.B., and J.D. (Columbia), Dip. Crim. (Cambridge), a lawyer and criminologist by training, is Professor of Criminology at Simon Fraser University. Professor Brantingham was Director of Special Reviews at the Public Service Commission of Canada from 1985 through 1987. He has been a member of the California Bar since 1969.

Professor Brantingham is the author or editor of more than 20 books and scientific monographs, and more than 100 articles and scientific papers. His best-known books include *Juvenile Justice Philosophy* (1974, 2d ed. 1978), and *Environmental Criminology* (1981, 2d ed. 1991) and *Patterns in Crime* (1984), both co-authored with Patricia Brantingham.

STEPHEN T. EASTON is a professor of economics at Simon Fraser University. He received his Ph.D. from the University of Chicago in 1978 and has published in the fields of international economics, economic history, education, and legal studies. With Paul J. and Patricia L. Brantingham he recently wrote *Legal Aid: Efficiency, Cost and Competitiveness*, Government and Competitiveness Project, School of Policy Studies, Queen's University, 1994. Professor Easton has also written and edited a number of books for The Fraser Institute.