

2014

Economics of Policing: Complexity and Costs in Canada, 2014

27 November 2014

ECONOMICS OF POLICING SUMMARY REPORT
INSTITUTE FOR CANADIAN URBAN RESEARCH STUDIES



1 TABLE OF CONTENTS

1	Introduction.....	1
2	Research Strategy	2
3	The Reported Crime Rate as a Measure of Work Undertaken by Police	3
3.1	Closer examination of the Crime Drop	3
3.2	Crime Rates.....	3
3.3	Expenditures, Municipal	6
3.4	Expenditures, Provincial.....	7
3.5	Expenditures National.....	8
3.6	Evolving Calls For Service	12
3.6.1	More calls.....	13
3.6.2	Vast and varied demands for their attention	13
3.6.3	Acceptance of tasks from other Criminal Justice System (CJS) agencies	14
3.6.4	Data entry	14
3.6.5	Increased burden of less serious calls	15
3.6.6	Technology, crime and investigations	15
3.6.7	Mental health.....	16
3.7	Investigative Activities for Selected Crime Types.....	16
3.7.2	Length of time to complete tasks.....	23
3.7.3	Community-based policing	23
4	Conclusion	23
5	Selected References	25

2 TABLE OF FIGURES

FIGURE 1 – TRENDS IN CRIME MEASURES, BC, 1999-2013	4
FIGURE 2- RATIO OF CALLS FOR SERVICE TO UNIFORM CRIME REPORT VIOLATIONS.....	6
FIGURE 3 - POLICE SERVICES PROPORTION OF MUNICIPAL OPERATING EXPENSES, 1983-2013.....	7
FIGURE 4- MINISTERIAL BUDGET SHARE, BC FISCAL YEAR, 2014-2015	8
FIGURE 5 - POLICE EMPLOYEES AND POLICE EXPENDITURES FOR CANADA, 1986-2011	9
FIGURE 6 - REGULAR UNLEADED FUEL COSTS (AVERAGE CENTS PER LITRE) FOR VANCOUVER, VICTORIA, AND WHITEHORSE.....	10
FIGURE 7 - AVERAGE 1ST CLASS CONSTABLE SALARIES BY PROVINCE	11
FIGURE 8 - HEALTH, POLICE AND SCHOOL BOARD EXPENDITURES, PER CAPITA, 1986-2010	12
FIGURE 9 - BREAK AND ENTER, PART 1	17
FIGURE 10 - BREAK AND ENTER, PART 2.....	18
FIGURE 11 - BREAK AND ENTER, PART 3.....	19
FIGURE 12 - HOMICIDE, PART 1.....	20
FIGURE 13 - HOMICIDE, PART 2.....	21
FIGURE 14 - HOMICIDE, PART 3.....	22

Abbreviations and Acronyms:

CAD – Computer Aided Dispatch

CAFC – Canadian Anti-Fraud Centre

CCJS – Canadian Centre for Justice Statistics

CFS – Call for Service

CGS – Crime Gravity Score

CJS – Criminal Justice System

CMA – Census Metropolitan Area

CSI – Crime Severity Index

PIRS – Police Information Retrieval System

PRIME-BC – Police Records Information Management Environment – British Columbia

PROS – Police Reporting Occurrence System

RCMP – Royal Canadian Mounted Police

SCR – Standard Crime Rate

UCR – Uniform Crime Report

Economics of Policing: Summary Report

1 INTRODUCTION

In 2005, the Institute for Canadian Urban Research Studies (ICURS) at Simon Fraser University and the School of Criminology and Criminal Justice at the University of the Fraser Valley jointly conducted a historical analysis of the evolution of police workloads in British Columbia over the prior thirty years. The 2005 “30 Year Study” study found that police work had become much more complex and therefore more expensive. ICURS has conducted a follow up to the original study aimed at understanding further developments in the complexity and economics of police work.

Overall, ICURS found that the demand for police services has been increasing over the past ten years through increases in non-criminal calls for policing, continuing increases in the legal complexity of equitable handling of cases, the growing policing response to mental health and addiction needs, and the increases in technical demands on services. While we document here a range of changes to the way policing ‘gets done’ in the Canada, it is important to state at the outset, that it is the police and civilian staff, at a local level, who must respond to an increasingly dynamic set of requirements and expectations. Police agencies, large or small, urban, rural or remote, must adapt to increased pressure in their daily work and are required to serve multiple, and at times, seemingly incongruent roles. These pressures stem from internal and external forces, reflecting, we believe, an evolving social and economic context in our communities.

This trend marks a continuation of the findings reported in our first look at the changing nature of policing complexity. In fact, these trends appear to be increasing at a more rapid rate, placing policing in a more difficult position as the first responder to many social and safety needs for the population in general and marginalized populations in particular. The current study starts with an inquiry into the potential changes first identified in the “30 Year Study”, exploring these issues through police incident-based database and dispatch records systems, such as PRIME-BC, PIRS, PROS, the national Uniform Crime Reports (UCR), as well as municipal, provincial and federal costing data.¹

1.1 Overview of Policing Context

Policing agencies experience continual change. The earliest days of policing saw police officers performing a wide variety of roles—many of which would now be described as social services work—rather than what most would think of as police work in the modern sense. The 19-Century police officer would not be shocked to be called upon to arrange for temporary housing and ‘victualing’ for their community’s unemployed youth, to arrange for transportation for persons appearing in court or to look after the safety of those with mental health, or substance abuse issues. In the first 30 Year Study, the majority of identified changes in police work stemmed from changes in new and evolving law and technology. The challenge we find is that police officers now face an additional set of dynamic public expectations and accountability demands, which can change quickly, and at times, are contradictory.

The sources of these expectations are multifaceted. The general public's expectations are a key contributor to this dynamic. We take the position that this is a natural product of a mix of local custom, geography and social and economic context. Rural municipalities—particularly those in the North or well outside of major centres—have different expectations of the criminal justice system as a whole than typically are found in larger municipalities. In our major cities, police must respond to the full range of calls for service including, of course, major crimes, such as homicide or organised crime investigations that many rural or remote municipalities would not see in any given year.

Economic conditions have also changed substantially since the 2005 report. Over the years 2006-9 in particular, the subprime lending crisis in the United States, bank collapses in Europe, and dramatic stock market losses, led to pressures on the Canadian economy. Within this context, and in the backdrop of apparently widespread declines in Criminal Code crime rates, a surge of research and policy work has emerged, including: Parliamentary hearings and discussions; the British Columbia Ministry of Justice reform study commonly known as the Cowper Report (2012)ⁱⁱ and the development of a British Columbia Policing and Community Safety Plan (2013)ⁱⁱⁱ that all reflect more broadly the role of policing. Clearly, there is an increased awareness of and interest in the role of police services as part of a wider programme addressing public safety, community needs, and the needs of marginalized persons. Such a focus will also bring natural questions regarding how to manage resources with the best possible return on investment (ROI). This report addresses these issues with special reference to the need to better understand the interconnected roles of all the agencies involved in public safety.

2 RESEARCH STRATEGY

For the current study, our goal was to better understand the economics and complexities of policing through an expansion of the 2005 “30 Year” study. To this end, we increased the breadth of the 2005 study in terms of our direct contact with civilian support staff, sworn police officers (particularly those described as “front line”), and specialized policing team members, on the one hand, and focused in the other hand on more specific, activity-based costing estimates using more extensive budgetary reports and records (see Box-1).

Box 1 – Data Sources

- A systematic review of government, police and academic publications used to assess both historical and current costs of policing in Canada and internationally
- Federal, Provincial, and Municipal operational and infrastructure budgets
- RCMP “E” Division (British Columbia) operating and infrastructure budgets
- Guided focus groups, with more inclusive participant feedback encompassing expert and front line individuals in addition to municipal, contract, and federal government employees working for RCMP and municipal police forces
- Direct observation of police work via ride-alongs with individual officers and event observation during a major social event involving thousands of citizens
- Updated criminal investigation flowcharts employed in the 2005 study

Overall, our goals included the desire to gain a better understanding of the proportion of activities related to calls for police service, crime, and the resulting crime statistics and to graphically explain policing as more than simply responding to calls for service.

3 THE REPORTED CRIME RATE AS A MEASURE OF WORK UNDERTAKEN BY POLICE

A common misconception concerning the effectiveness of police work is its apparently direct relationship to the crime rate. Police, politicians and academics alike were and are still interested in the phenomenon known as the “crime drop” which began in the early 1990s following three decades of continually rising crime rates. Clearly, reported crimes that comprise most crime rates did drop, and generally have continued to trend downward since that time, but it is also important to acknowledge that neither police, government nor academics have arrived at a consensus regarding the causes of this decline.

3.1 CLOSER EXAMINATION OF THE CRIME DROP

Notwithstanding our incomplete understanding of the drop in police reported crime, there are a few important observations to be made. The dramatic view of the steep drop in crime is deceptive in terms of understanding how that drop, whatever it may be, relates to police effort. A key point here is that most of the drop derives from lower reporting rates on property crime. Property crimes generally receive little police attention and response today in Canada, particularly in urban areas; a point that can clearly be seen in the very low clearance rates for these crimes. On the other hand, violent crime, which has always, quite properly, been given higher priority and more investigative resources by police, has decreased at a significantly slower pace than property crime. The decline in the overall crime rate has not reduced the police resources required to investigate contemporary crimes to the extent sometimes assumed by external observers.

3.2 CRIME RATES

Our current research indicates that the declines in the rate of UCR reported crime in Canada is not matched by a corresponding drop in calls for police service. In the focus groups held with a broad range of police officers and support staff across British Columbia, the Yukon Territory and Manitoba, staff consistently indicated that they were not experiencing a decline in workload. Admittedly, this could be a highly subjective evaluation, however, it is borne out by our analysis of calls for police service that highlight an empirically unambiguous disconnect between “crime rates” and police activity. There is an

unfortunate tendency for such simplifications to be taken seriously—especially in communications directed at a general public audience. Statistics Canada and the Canadian Centre for Justice Statistics (CCJS) have offered an alternative index of crime, the Crime Severity Index (CSI). However, this measure is tied to sentencing outcomes— one measure of the seriousness with which Canadians view different types of crime. While useful for many purposes, the CSI at best provides only limited insight into the amount of police activity, resource use or costs related to responding to different types of crime. The current study avoids these limitations by measuring activities of police and supporting staff.

Three different measures of crime intensity are available in British Columbia: the Standard Crime Rate (SCR) that measures the number of crimes per 100,000 population; the Crime Severity Index (CSI) that measures the weighted risk to residents of a police jurisdiction; and the Crime Gravity Score (CGS) that measures the seriousness of the set of crimes handled by police in a particular jurisdiction. Data provided here show the trends in these three measures for British Columbia as a whole during 1999-2013.

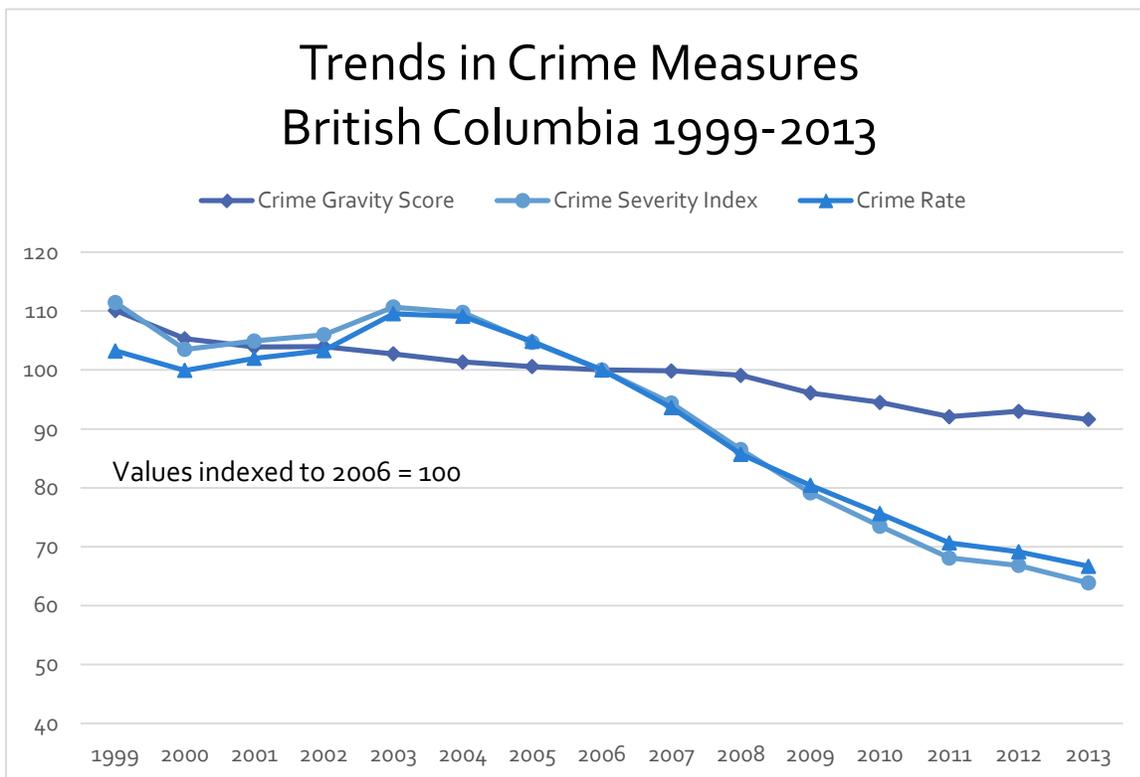


Figure 1 – Trends in Crime Measures, BC, 1999-2013

Source: 1 - Trends in Crime Measures, British Columbia, 1999-2013 (CSI & Crime Rate are from Statistics Canada; CGI calculated using Statistics Canada data.)

All three measures show declines over the past decade. However, police resource implications of the measures are different. The SCR and CSI have both declined by about 45% since their peak in 2003; the CGS has declined much less, about 17% between 1999 and 2013. This difference suggests that the

demand for police resources continues at a higher level than indicated by declines in the SCR and CSI: the crime decline has occurred most intensely among high volume, lower seriousness offences; the continuing crime mix has experienced relatively smaller declines among the high seriousness crimes that typically carry higher response and investigative resource requirements.

Further, not all crime has been adequately tracked over the past two decades given that many crimes such as Internet-based crime and crimes against businesses are not yet commonly reported to police. With the exception of child pornography and child-luring, Internet-based crime has been completely excluded from the UCR2. Thus, cybercrime is not yet correctly counted at all (Perrault, 2012). Results of the 2009 General Social Survey indicate that 7% of Internet users, aged 18 and over, report being victimized online by cyber-bullying, cyber-stalking, and/or cyber-harassment and 4% of Canadian Internet users report being the victims of Internet fraud. This, however, may be a very low estimate given that the 2009 GSS was conducted solely via landline telephone numbers excluding the entire population of cellular phone owners which is currently estimated to be 30% of Canadians, most of whom are under the age of 35 (Government of Canada, 2014; National Health Interview Survey, 2011 as cited in McKendrick, 2011; Perrault, 2011). Data collected by Kapersky Labs and B2B International, a Canadian anti-virus and software company, show that 62% of Canadians report at least one attempt of online victimization during which cybercriminals stole personal financial information and 41% claim to have lost money they were unable to retrieve due to cybercrime (Udemans, 2014). Recently it came to light that viruses, such as the "Heartbleed" bug, (OpenSSL Vulnerability) can lurk within a person or agency's computer for lengthy periods of time, slowly siphoning off personal and private information that can be used for credit card fraud, identity theft, and other crimes, which the individual or agency may not notice until something significant occurs such as theft of a large quantity of money or theft and illegal use of their identity by someone else (Symantec, 2014).

The Canadian Anti-Fraud Centre (CAFC) found that in 2009, 11,095 Canadians reported being the victim of identity fraud totaling losses of over 10 million dollars. The Canadian Bankers Association (April 8, 2014) reported a much higher number, stating that debit card fraud alone cost 142 million dollars the same year and that credit card fraud had reached 440 million dollars in 2012. Payment card fraud remains the most commonly reported incident but the CAFC states that most cases of identity theft and other forms of online fraud simply go unreported (RCMP, 2013). Stolen or reproduced personal or financial information can be used to access existing bank accounts and open new ones as well as transfer funds between accounts; to apply for loans, credit cards, and other goods or services in another person's name; to make purchases, hide criminal activities, and apply for and obtain pieces of government identification such as passports or drivers licenses, or to receive government benefits (RCMP, 2013).

Recent analysis of data within the PRIME records management system indicates that roughly 30% of the PRIME files (Calls for Service) generated are reflected in some way in the UCR, therefore roughly 70% of the PRIME files are not captured in the UCR. Figure 2, below, shows that for many RCMP detachments (a sample of 28 for these data), for every three CFS, one UCR recorded violation is reported to Statistics Canada.^{iv}

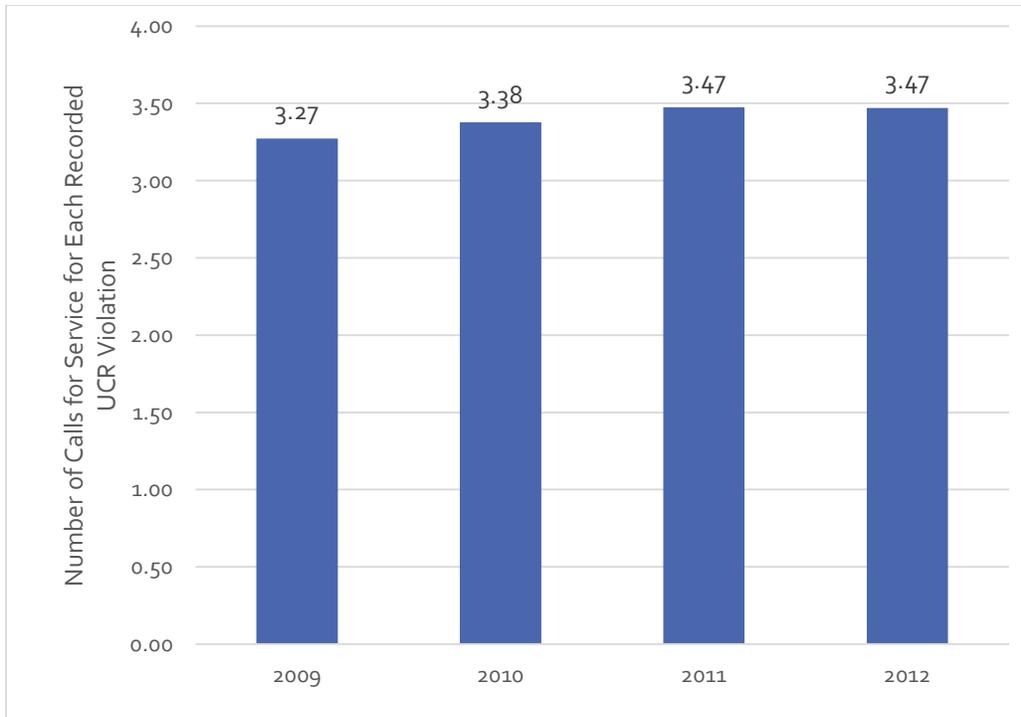


Figure 2- Ratio of Calls for Service to Uniform Crime Report Violations

The findings of the Fourth Report of the House of Commons Standing Committee on Public Safety and National Security, *Economics of Policing*, released in May (2014), and by several Canadian Police Chiefs and other senior police executives are consistent with our research over the past five years (ICURS, 2013). Other findings from these hearings corroborated those in our work including an increase in demand for police services related to mental health and social disorder issues and were reflected in the report recommendations.^v

3.3 EXPENDITURES, MUNICIPAL

Figure 3, below, shows the trend in the proportion of municipal operating expenditures for police services in the aggregate for all incorporated municipalities that are required to provide standardized financial data to the provincial government (Local Government Division of the Ministry of Community, Sport and Cultural Development, and presented in Schedule 402).

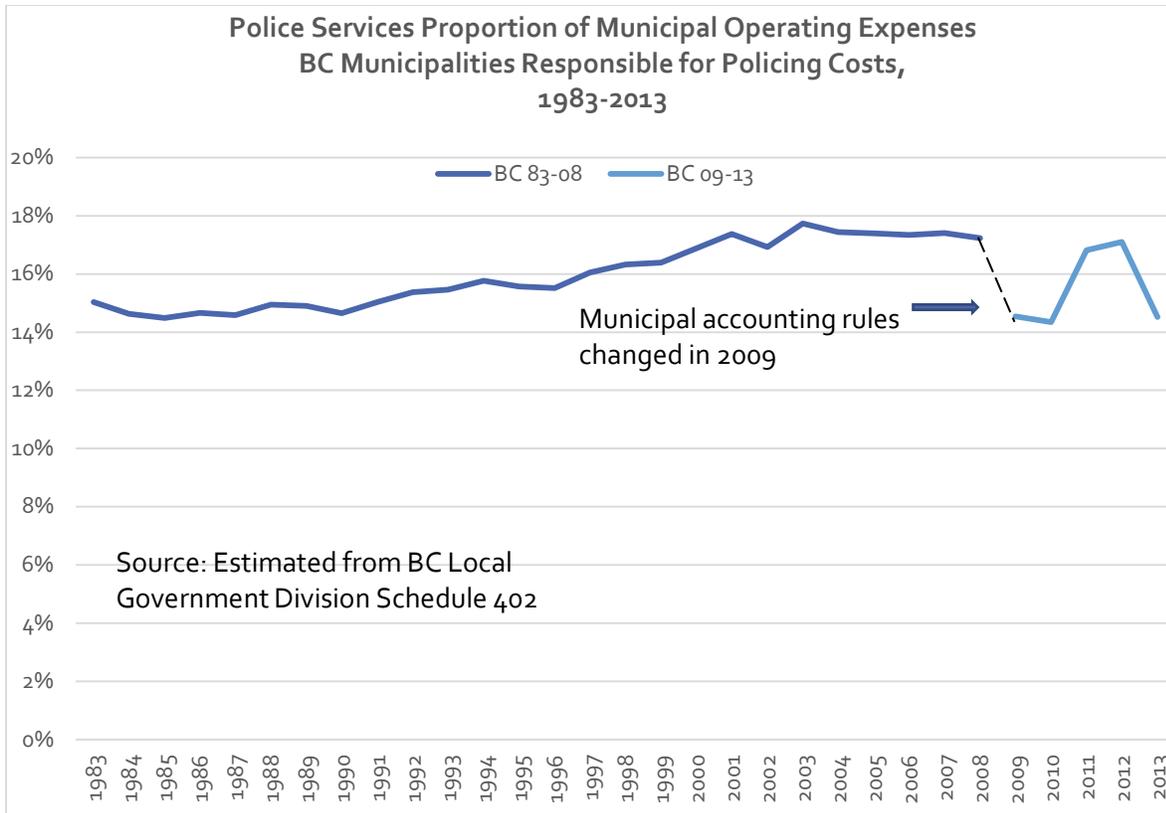


Figure 3 - Police Services proportion of municipal operating expenses, 1983-2013

For those municipalities responsible for paying directly for police, their aggregate costs have ranged between 14 and 19% of total operating expenditures for the past 30 years. Patterns vary somewhat between different municipalities, of course. Detailed data by municipality are provided in the full technical report.

3.4 EXPENDITURES, PROVINCIAL

The Ministry of Justice is one of the smaller budget units within the Provincial government. In fiscal year 2014-2015 the Ministry of Justice, which is responsible for provincial policing, courts administration, prosecution, legal aid, judicial salaries, provincial corrections and a variety of related functions, received 3.54% of the Provincial government's budget. For comparative purposes, Children and Family Development received 4.16%, Advanced Education received 5.94%, Social Development and Social Innovation received 7.76%, Education received 16.5% and the Ministry of Health received 51.9% of the Provincial Government budget.

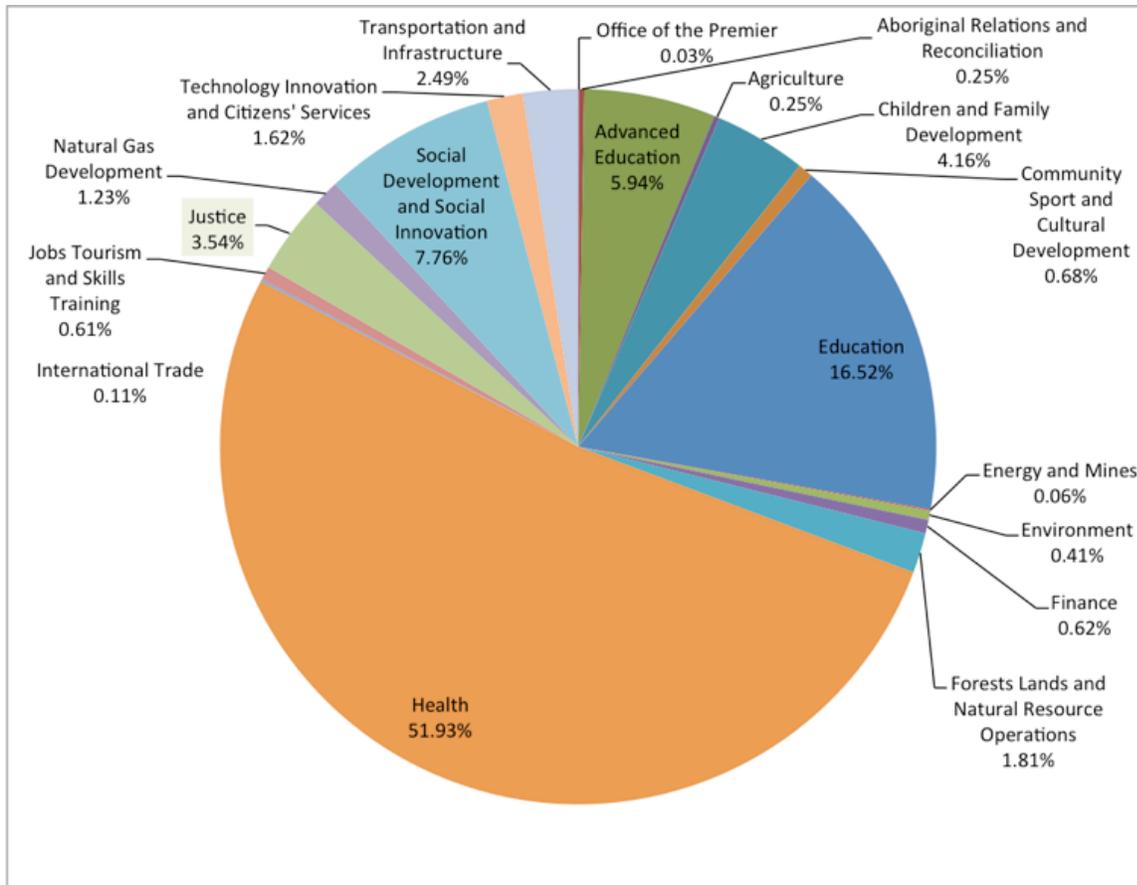


Figure 4- Ministerial Budget Share, BC Fiscal Year, 2014-2015

Figure 4 costs include those for provincial policing contract, provincial courts and prosecutions services and provincial corrections; it does not include municipal police costs. Future costing research will seek to include all costs for policing services incurred through municipal, provincial, and federal government contributions.

3.5 EXPENDITURES NATIONAL

At the national level, total police expenditures have increased over the past 25 years, along with the number of police employees. The total employed figures reflect both officers (sworn) and civilian staff.

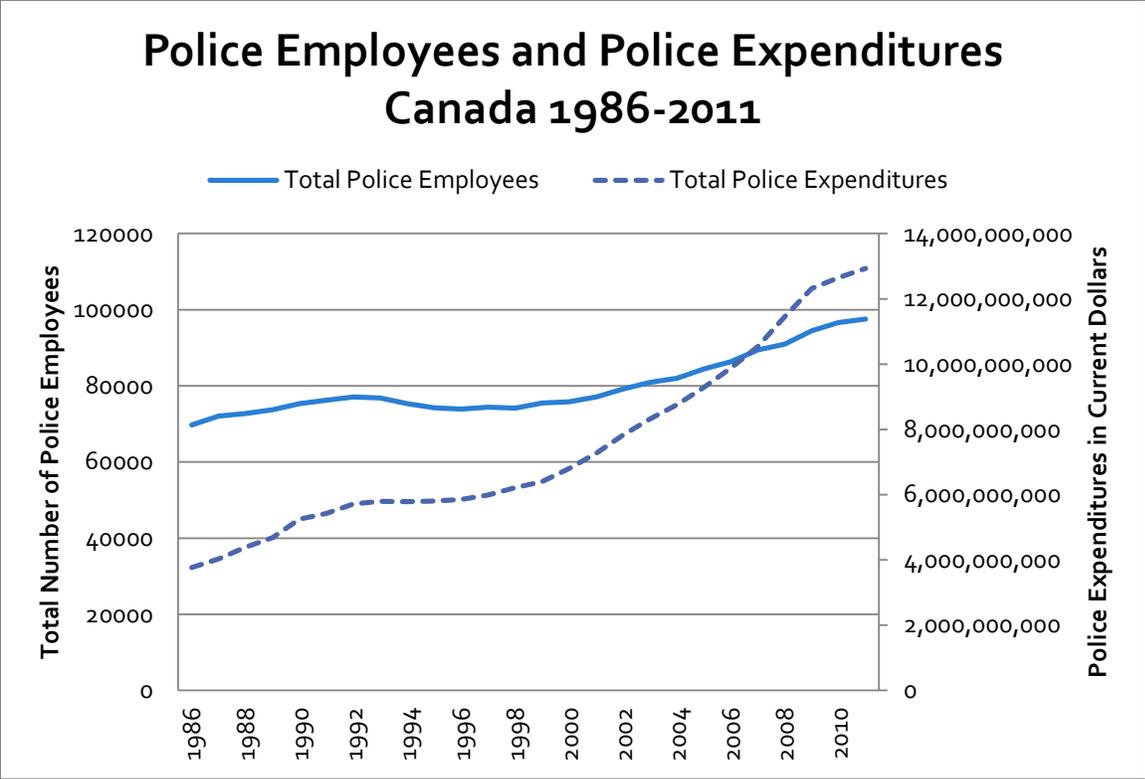


Figure 5 - Police employees and police expenditures for Canada, 1986-2011

According to the Consumer Price Index (CPI), we see that the 'costs of doing business' in Canada is increasing. Figure 6 illustrates the increase in regular unleaded fuel for three municipalities: Vancouver, Victoria and Whitehorse since 1990. The policing function across Canada is energy intensive. Fuel costs are important but only part of the increased expenditures policing agencies have faced in recent years. While efforts and programmes or policy can limit the use of fuel (and become more efficient), it is not something that police can control.

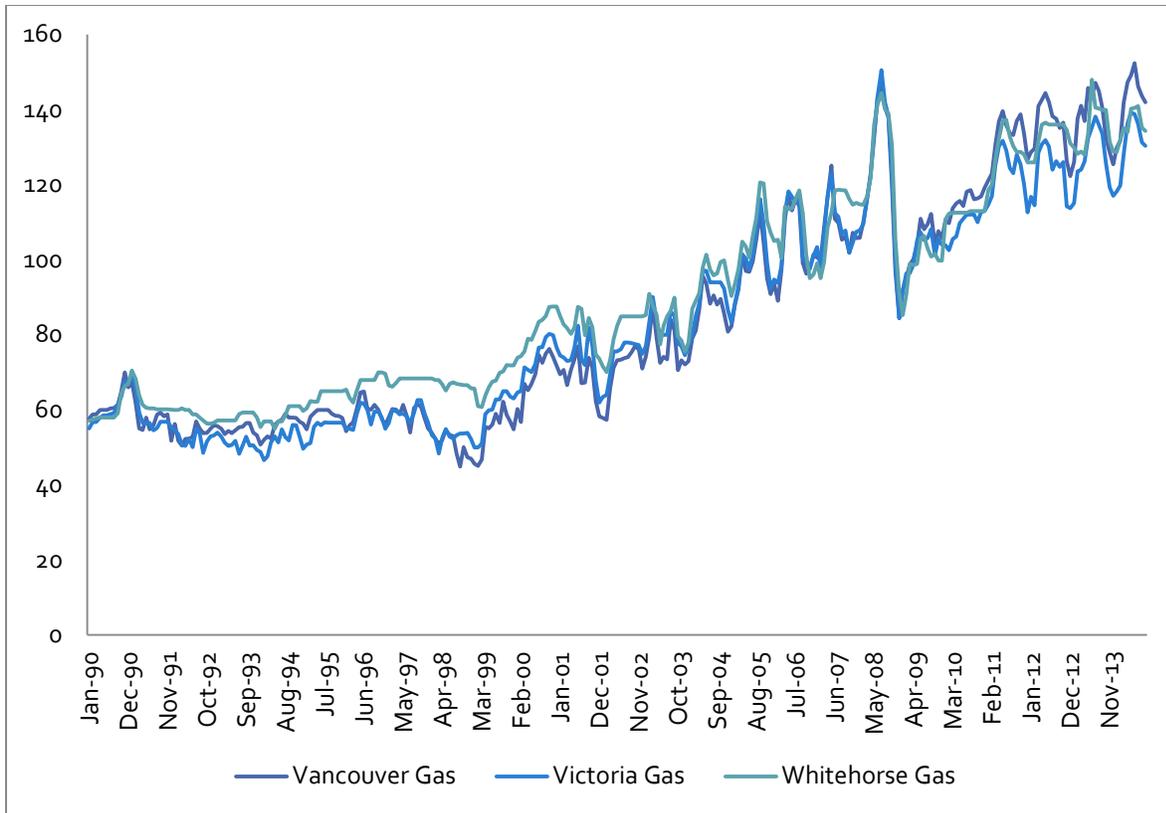


Figure 6 - Regular unleaded fuel costs (average cents per litre) for Vancouver, Victoria, and Whitehorse

Source: 2 - Statistics Canada, Table 326-0009

The next series of figures provide an overview of costing factors, including First Class Constable salaries across Canada.

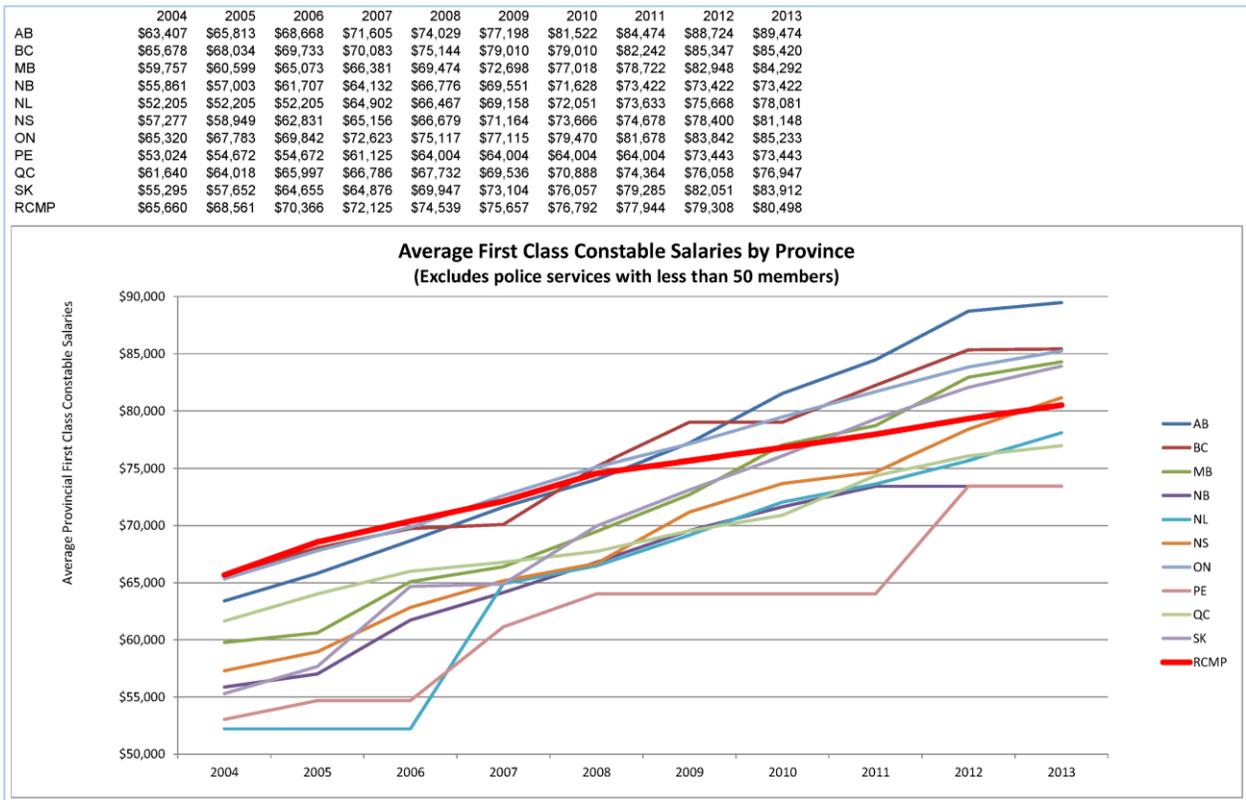


Figure 7 - Average 1st Class Constable Salaries by Province

Source: 3 Figure and data from Table 3, p.12 (SECU 41-2, May 2014).

Substantial declines in the Canadian crime rate have led many observers to question whether or not expenditures for policing services, which have increased substantially since the mid-1980s in both absolute, and per capita, terms, have grown out of proportion to expenditures for other major government services. Examination of expenditure increases for health and education over the same time frame suggest that while expenditures for police services and education have more than doubled over the interval 1986-2010, the rate of increase is less than as seen for health (CANISM data, Figure 8).

In 1986 Canadians spent about \$140 per capita for police services; in 2010 they spent \$371 per capita for police. School Board expenditures increased from \$746 per capita to \$1,522. Health expenditures increased from \$768 per capita to \$2,193. Increases in expenditures for police services were very much in line with expenditures for education and health and do not, in context, appear to have been out of line.

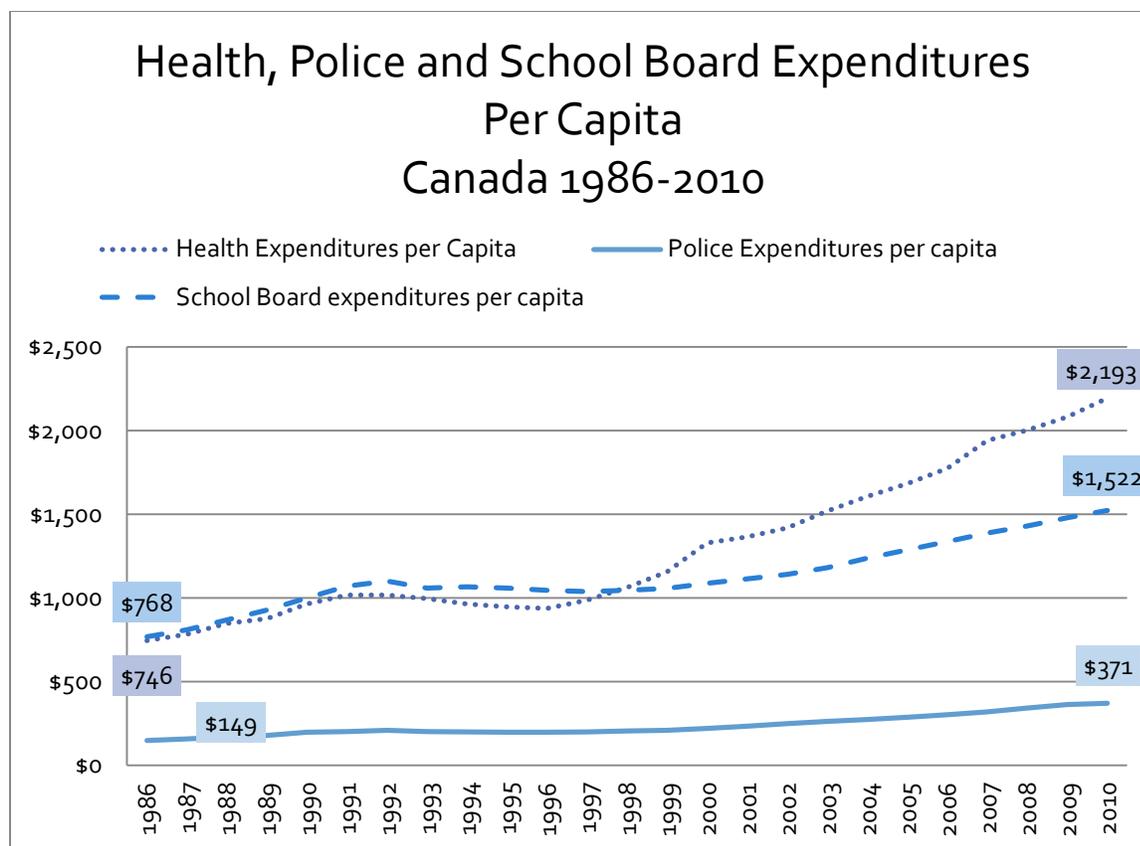


Figure 8 - Health, Police and School Board Expenditures, per capita, 1986-2010

A recent Statistics Canada Juristat article (Huggins, 2014)^{vi} examined a number of police strength trends, including police officer salary levels, based on the Labour Force Survey (LFS) for the period 2002-2012. That document reports that for frontline, sworn, officers (but not including the management-level “commissioned” officers) the typical hourly salary was approximately \$25-27 per hour. This figure is close to those considered ‘comparable’ by Statistics Canada (teachers, registered nurses, fire fighters, etc.)^{vii}. These estimates do not account for over-time, a significant source of additional expense. According to a *Maclean’s* magazine article (April 15, 2013), median police officer yearly salaries (all sources, 2012 earnings) were approximately \$95,000. These yearly salary estimates also track with teachers and fire fighters.^{viii}

3.6 EVOLVING CALLS FOR SERVICE

In the current study, the scope of the focus groups was extended beyond that of the 2005 report in two ways: first, they were widened by geography and agency with information collected from RCMP and municipal police forces in British Columbia, Yukon, and Manitoba^{ix}; second, participants included front-line officers, municipal support staff, and specialty staff (such as forensics personnel, data analysts, and records management experts and assistants).^x Given the sheer volume of contributions, we offer only a short summary here.^{xi} Box 2 contains the key themes identified in the focus group data. These issues are, at once, the most impacting on their day-to-day work and the most relevant factors to consider when attempting an economic/costing analysis of police service delivery.

Box 2 – Focus Group Findings (Key Themes)

- changes in police roles, tasks, training, and responsibilities,
- impact of changing technology,
- change in public expectations,
- changes in agency expectations,
- changes in recordkeeping, specifically the move to new records management systems including PRIME-BC and PROS,
- increased evidence preparation,
- unique factors related to roles, detachment location and size,
- challenges of cross-sector cooperation,
- increased disclosure and court requirements,
- pressures related to clearance rates,
- increased leave (maternity, paternity, and stress/injury related), and,
- pressures stemming from limited resources.

The following sections provide a modest elaboration of the general, or commonly reoccurring themes from the focus groups. These observations provide vital depth to our empirical observations and conclusions regarding CFS records, and for those incidents that result in police attendance. In short, the focus group responses seem to track well with our overall conclusions that: 1) the crime rate (or its like, such as the CSI score) has only a limited relationship to policing work volume; 2) that police work has continued to expand in complexity since the original “30 Year Study”; and 3) that with more and increasingly complex tasks and responsibilities being demanded of police, increases in the costs of these services are only to be expected.

3.6.1 More calls

Officers and support staff have all experienced a highly dynamic environment over the past decade. Front line officers feel the pressures of conflicting demands from both within their agencies and from the citizens they interact with. Sensationalized media reporting has led to the practice of ongoing and pervasive self-scrutiny that has led to a “rear-view mirror” style of policing. Sworn officers often expressed feeling perplexed as to their real role as police officers exacerbated by conflicting mandates within their respective communities. Many commented that their roles and tasks in relation to technology, with ever-increasing data collection and entry for a variety of different data collection tools, have left them confused and frustrated by increasing time constraints related to the increasing levels of data entry and oversight related to investigations yet, at the same time, found that increased information facilitated more complex, resource-intensive, and time-consuming investigations. Front line officers commonly stated that the police role they learned in training conflicts regularly with the roles they are required to perform on patrol. While the majority of respondents expressed sharing a certain level of frustration, others, primarily the most junior of officers, were not as sure.

3.6.2 Vast and varied demands for their attention

While policing has always been a dynamic field of work, the multiple demands for the attention of front line officers has led many to feel pulled in many different directions. While most would like to focus on crime discovery and investigation they stated that competing demands for crime prevention activities,

increased reporting requirements with less clerical support, technology that requires immediate attention (computers, cell phones, smart phones), increased public expectations, and increased oversight have left them feeling frustrated they cannot concentrate on the job they most want to do – “catching the bad guy.” As with the focus group participants’ contributions about increased call load and changing nature of policing tasks there appears—at least at this preliminary stage of the qualitative analysis—that there are differences in response clusters by time in service. Our findings to date suggest, perhaps unsurprisingly, that those persons with more years of police service tend to see change as more significant.

3.6.3 Acceptance of tasks from other Criminal Justice System (CJS) agencies

In the current context of crime reduction initiatives, members noted that they were increasingly conducting activities (such as curfew checking, and other tasks) that have traditionally either been the responsibility of other agencies, or had not been pursued at all. Members expressed concern that much of this work is not reflected in traditional crime statistics, which many people use as an indicator of all police work. This highlights the need for further research on inter-agency and cross-sector coordination.

3.6.4 Data entry

Focus group participants consistently mentioned that the increase in the volume of data being captured and processed had taken a great deal of time away from front-line policing. Added to this, the change from clerical staff entering information to officers entering information may seriously impact the cost of policing. In the past, clerical staff, paid a considerably lower annual income, entered a great deal of the data with an officer simply checking and approving it. Now, with the advent of computers and mobile computers, officers are ultimately responsible for their own entries and to maintain a high level of quality and accuracy.

While investigators at the higher levels, such as detectives in homicide, or serious crime, claimed that the increase in quality and quantity of information combined with ready access improved their ability to conduct investigations, this view was not typically shared by front line officers and staff responsible for data entry. On the contrary, the front line officers were often frustrated with the amount of time it took, the ways in which it required duplicate or triplicate entries, and the unwieldiness of the computer programmes they were required to use. Repeatedly, officers stated that the majority of their time was spent on the computer entering data. The biggest change was, again, linked to the PRIME data management system, with officers stating that while it provided a vast amount of information for investigations it took far longer to create the files than in the past. One respondent suggested that the data collection and entry required of police officers and staff can be characterised as “feeding the beast”—a tongue in cheek comment on the often one-way flow of data from “the ground” on up to investigators.

One interpretation of this sentiment is that it reflects the frustration stemming from not knowing or seeing the benefits of their efforts. That the front line officers and staff felt this way is understandable; these are the groups that are impacted most directly with reduced budgets, policy and practice changes and the ever-changing demands from the public. There is value to the collection of these data, and of

intelligence gathering generally: there may be benefits to exploring more effective communication of this to front line members and staff.

3.6.5 Increased burden of less serious calls

Officers identified routine, less serious, situations as taking larger proportions of their time on patrol. Long-term officers noted a dramatic change in public behaviour related to the types of calls police were expected to attend. Some worked in detachments or forces where a “no call too small” policy was in place, resulting in them feeling as though their time on patrol was being used inappropriately. This is difficult to assess empirically, however, as it is not clear in the CFS data which events are more or less deserving of a designation such as “disturbance” or “assist general public”, or their like. There may also be differences in how different police agencies, services and/or detachments handle the reporting of their less serious incidents. Typically, police serving larger populations, such as those within BC’s Census Metropolitan Areas (CMAs), are among the most likely to adapt (by limiting or restricting) responses to low priority calls. In short, police dispatched events (as captured typically in the “CAD” dataset for each agency) may not be recorded as an official “occurrence” the same way for each town or city across BC. The impact of this variation is that smaller towns and cities tend to capture more of the so-called ‘lesser’ incidents than our larger cities, as the latter tend to have more incidents to respond to at any one time than can possibly be attended by an officer.

3.6.6 Technology, crime and investigations

The computer and Internet have dramatically changed the type of crimes officers are investigating. Cyber-bullying and online stalking/harassment are able to follow individuals into their homes, disallowing any respite from them, while potentially hiding the identity of the individual committing those acts. Civilians, especially children and adolescents, are often unaware that these acts are criminal in nature and, thus, do not know how to accurately report them. Officers struggle with accessing information from reluctant service providers, who are often located out of the country, along with what is necessary information to collect to ensure the investigation is successful. Production orders are often necessary to gain access to the information, that takes additional time especially when compared to bullying cases in the past where it was often a simple matter of speaking with the individual who was doing the bullying. Many crimes committed today have become increasingly complex due to the addition of social media, cell phones, computers, and other forms of electronic communications offered via many video game chat functions that do not require use of a traditional phone number or mobile data plan. Officers often feel inadequate to the task of investigating these and feel that their training on new, and ever evolving forms of communicating for the purpose of committing crimes is often incomplete, missing, or comes too late with criminals having already moved onto new forms of communication. A further complication includes recent interest from all sectors regarding the use of new forms video surveillance, such as equipping officers with body-worn cameras. While still being tested, it remains to be seen what the cost-benefit estimates might look like. As found with video surveillance requirements for monitoring cell blocks, or the implied (if not formally required) expectation that witness statements be video recorded, and the substantial digital storage requirements, all add up to significant pressure to costs incurred by police over time.

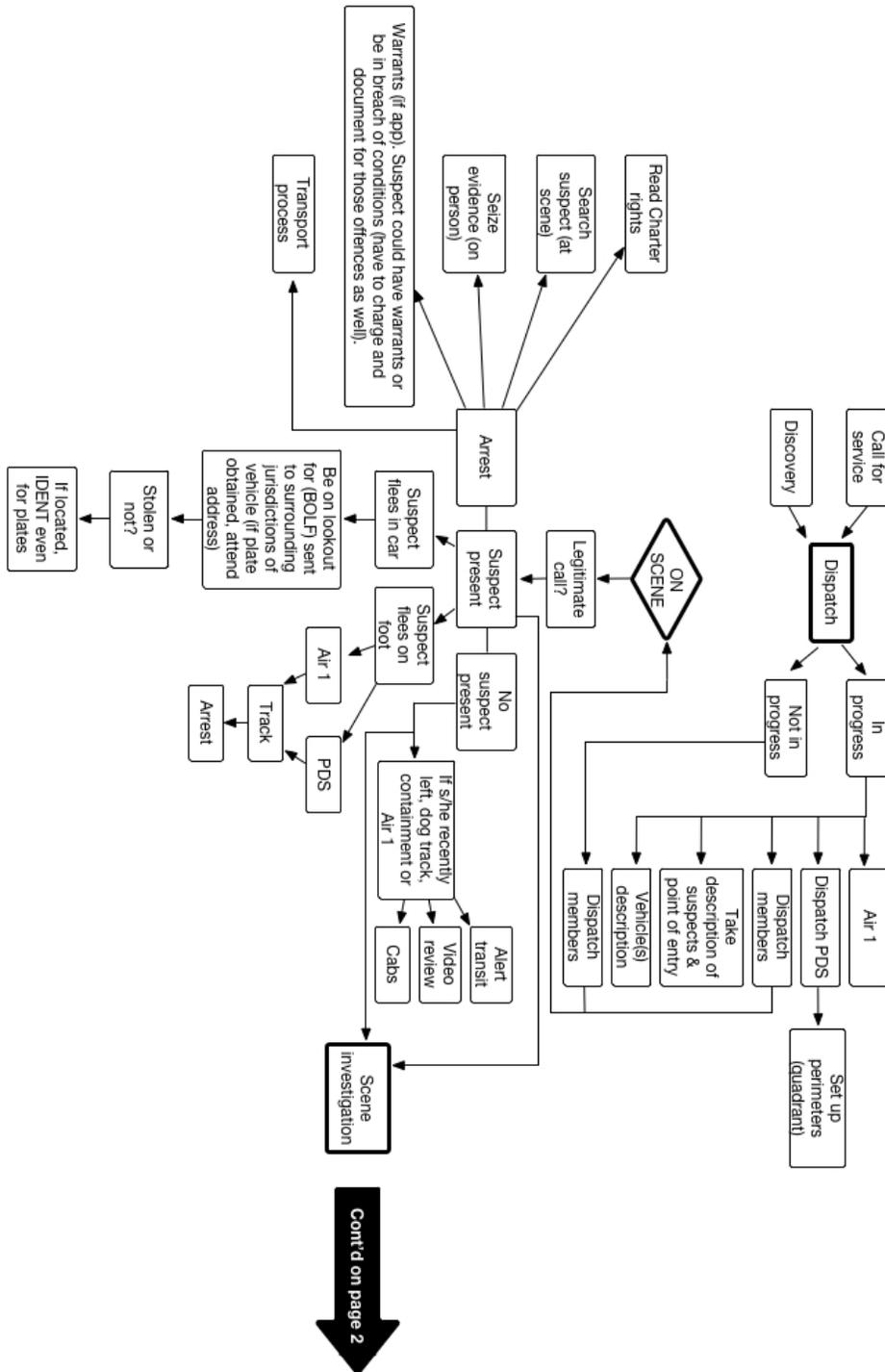
3.6.7 Mental health

Mental health related calls and police interactions with mentally disturbed persons has become an increasingly larger part of front line policing. Findings from our focus group discussions are consistent with the consultations found in the British Columbia Police and Community Safety Plan, (December 2013, p. 50). Despite additional training, many stated that they felt ill-prepared to deal with those mentally ill, under the influence of illicit substances causing psychosis, or a combination of the two. Given changing policies at hospitals with emergency physicians often unwilling to admit those under the influence of illicit substances and unable to forcibly admit individuals with mental illness (when deemed to not be a threat to themselves or others), officers expressed they were spending a great deal of time simply guarding these individuals in the emergency ward knowing that should they leave soon after the individual would be released potentially leading to a second, third, or multiple subsequent interactions during the same shift. Police officers suggested that approximately one-third of dispatches involve emotionally disturbed persons. This issue seems to be a common policing challenge. It was present in every community we visited, regardless of the size of the community, its degree of urbanisation, and proximity to other municipalities. Early evidence from the focus groups suggests that there may be concentrations of disadvantaged persons where community services are more readily available or concentrated. This possibility will need further empirical testing and the full report will continue this line of inquiry.

3.7 INVESTIGATIVE ACTIVITIES FOR SELECTED CRIME TYPES

The best way to see the increases in complexity is to understand something of the number of steps (or stages) involved in handling specific offenses. We include break and enter and homicide here as examples of this complexity. These flow charts are the result of dozens of hours of careful crafting and validation by actively serving police experts. Typically, each flow chart underwent a series of revisions, calibrations and checks with several subject matter experts. When compared to the flow charts of the original “30 Year Study” it is clear that case support and investigative work continues to grow both in volume and sophistication. For the complete analysis, see the technical appendix of the final report.

Break and enter, Part 1 (of 3)



Break and Enter - Current -

Figure 9 - Break and Enter, Part 1

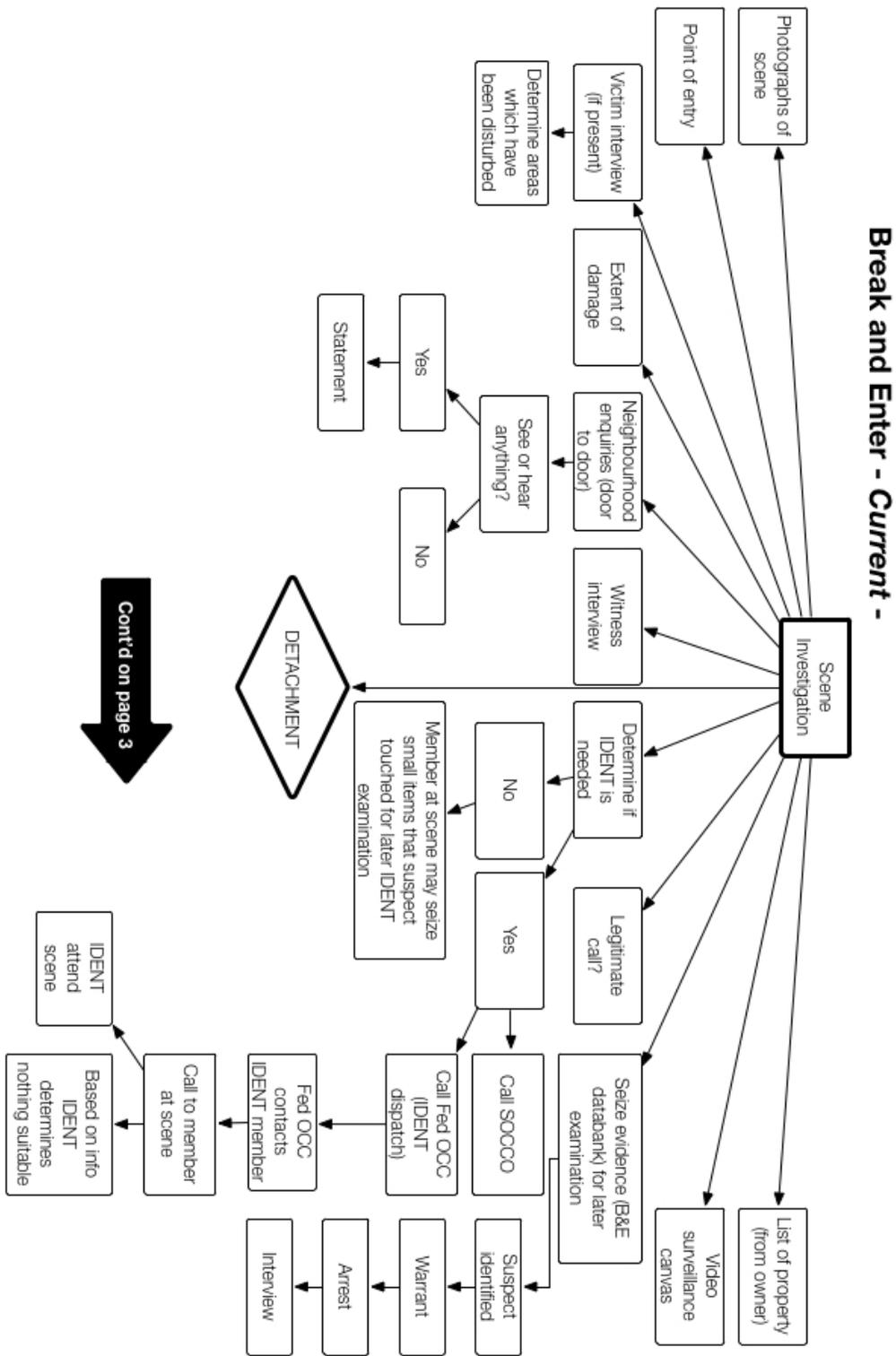


Figure 10 - Break and Enter, Part 2

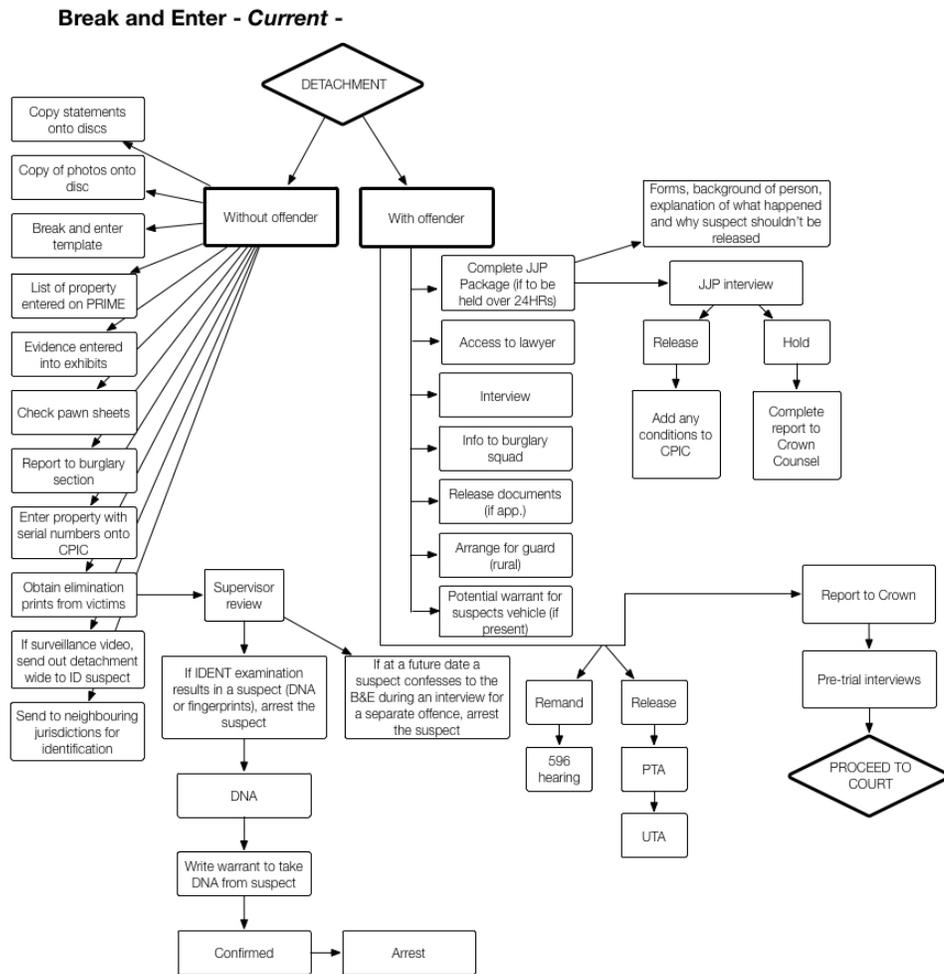


Figure 11 - Break and Enter, Part 3

3.7.1.1 Homicide flow charts, Parts 1, 2 and 3

Homicide, Part 1 (of 3)

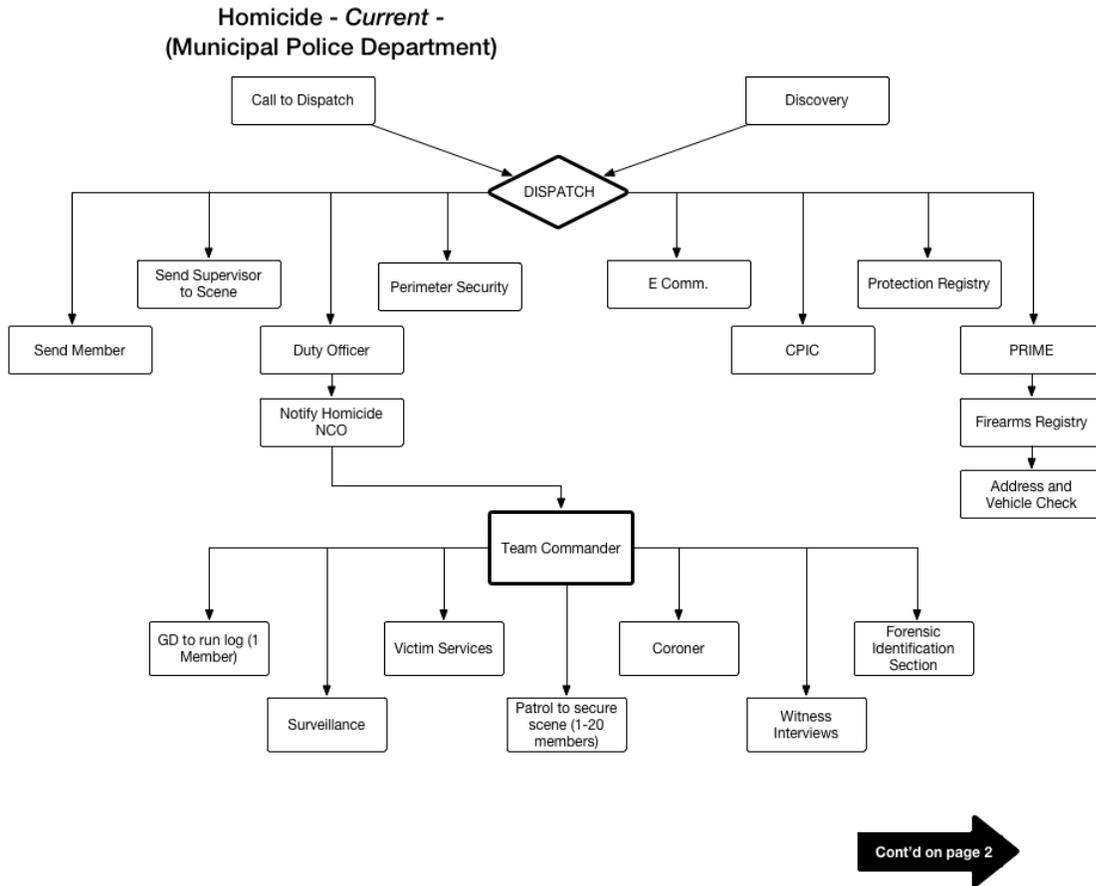


Figure 12 - Homicide, Part 1

Homicide, Part 2 (of 3)

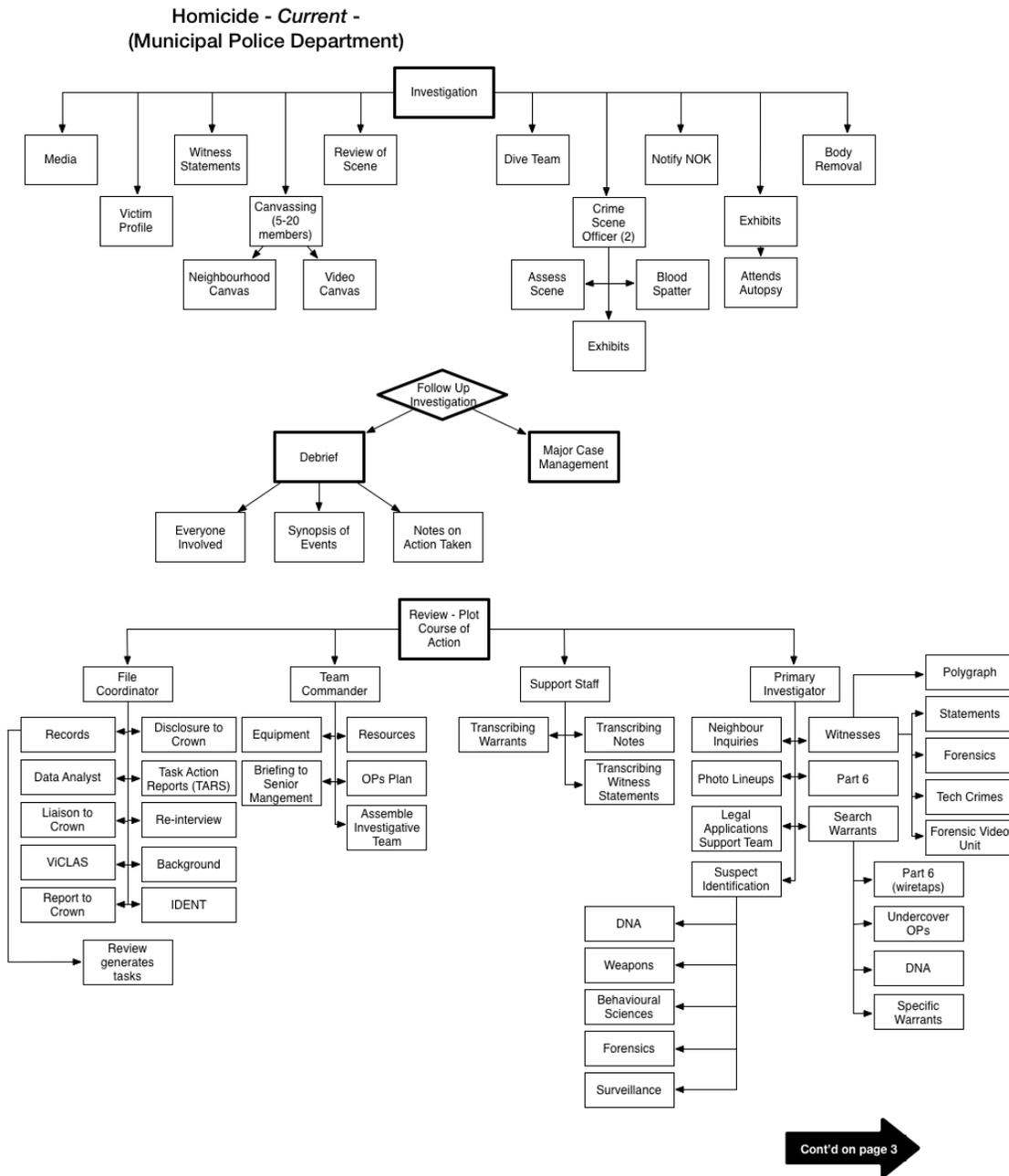


Figure 13 - Homicide, Part 2

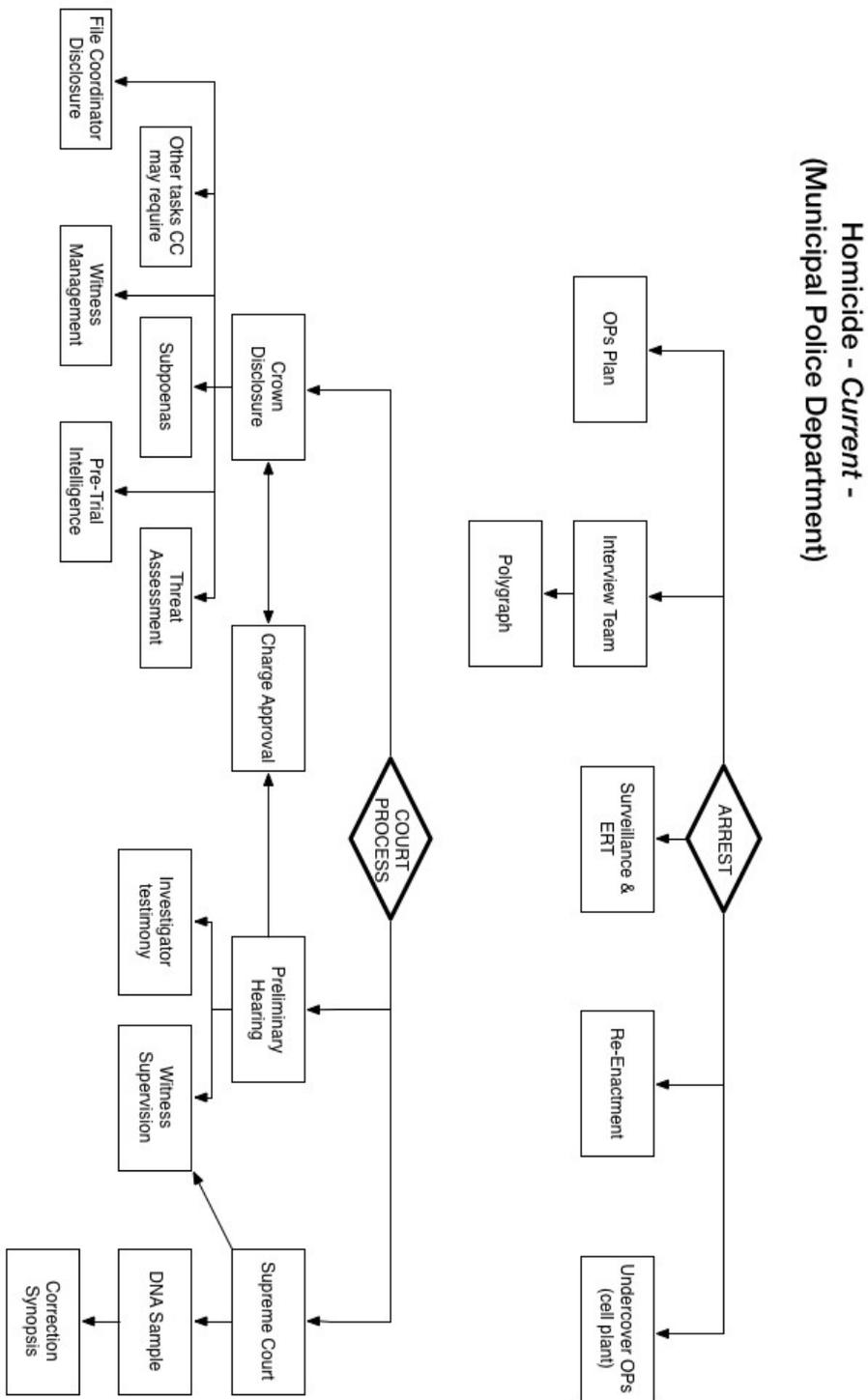


Figure 14 - Homicide, Part 3

3.7.2 Length of time to complete tasks

Every activity that police officers and support staff complete takes significantly longer today than in the past. While the adoption of PRIME was heralded as a way to access new efficiencies, the reality of their use is that they have, instead, increased the complexity and time necessary to input crime file information. This is partly as a result of the non-user-friendly structure of PRIME. The increasing quantity of information required seems to be partly driven by the increased scrutiny on policing by the public and oversight from outside agencies. While working with information database management systems requires added time—both in gathering new and possibly more detailed information—there is no question that there are gains as well, particularly in establishing linkages within criminal organisations and dealing effectively with prolific offenders. Crime prevention and reduction efforts, for example, are predicated upon this level of detail.

3.7.3 Community-based policing

Officers, at all levels, insisted that while there have been many changes, they still attempt to spend the majority of the time conducting community-based policing that is grounded on the relationships they form with community members. One particularly forceful theme that emerged from our focus group sessions was that there were differing levels of public expectations in communities of different sizes. These differences imposed substantially different limitations on the availability of police officers' time.

4 CONCLUSION

This report updates the original 2005 ICURS “30 Year Study” of the changing nature of police work and associated costs. The first report found substantial changes in the policing environment from the 1970s through to the turn of the new Millennium. We see a continuation many themes identified in the 2005 study. While the legal context of criminal investigations continues to change, it is no longer, in our view, the predominant factor driving policing complexity. Many, if not most of the increasing demands and complexity on policing are external to policing, and are beyond the control or influence of the police, yet have a significant impact on police activity. We observe in the current study that a new dynamic of these same forces has emerged: the expansion of the role of policing itself. Police in Canada are now being asked to take on new (or renew old) functions in our communities. We see this clearly in both our empirical (police calls for service records) and our qualitative (focus group interviews) data.

Another factor adding to police workload is that related to ever increasing requirements needed to ensure accountability and transparency, both of which are critical components of good governance. This phenomenon is certainly not limited to policing but can be seen throughout our democratic institutions. Clear examples of this can be observed in the numbers of Freedom of Information requests made but there is also clear evidence of the need for individual police officers to take more time in explaining their work in the day to day interactions with the public. Clearly, this is a positive process but

there must be a recognition that it comes at a cost in terms of time and effort police need to put into their work, both at the operational and administrative levels of police organizations.

While a subset of Criminal Code of Canada offenses reported to the Uniform Crime Reports survey (UCR) have been in a general decline for much of the 1990s and early 2000s, we find that Calls for Police Service (CFS) remain high. As the Standard Crime Rate (SCR) only captures about one of every three CFS, we find the former a poor metric for gauging police activity, and especially for any determination of efficiency or value for service.

While the costs of providing police services are rising, these are not out of proportion to other public sectors. In BC, for example, municipalities over the past three decades (1983-2013) saw approximately 16% of their yearly operating expenditures go to policing. At the provincial scale, 2014-2015 Fiscal Year reports the Justice Ministry of provincial expenditures (including police but also courts and corrections) at 3.54 per cent, with comparable categories such as education and social development at 5.94 and 7.76 per cent, respectively.

An additional finding that also surfaced in the original study is that of “technology”. While we noted technology, and particularly the computerization of police data, as an issue in the first study, we see technology as a key factor in the current report. Technology is itself expensive to obtain, maintain and update, as are the human factor costs, such as those associated with training and certification. Technological advancements make it much easier to gather and archive data and support police investigations, but with improved methods come increased expectations, both members of the general public and by criminal justice professionals themselves. Technology is also changing the literal environment of crime events themselves, to include cyberspace. Offenses such as using a computer to lure a child, commit identity theft or frauds are often resource intensive to investigate and prosecute.

Police services in Canada, like many organizations, be they public or private sector, are challenged with the goal of keeping service levels high and costs low. This natural and unavoidable tension is new neither to those tasked with delivering public safety nor those for whom the question is its governance. What is important, however, is that the discussion of how to measure “service” or “cost”, be based on an understanding of the best available evidence. The current study takes a mixed methods approach at providing such a foundation. Empirical forecasting of current government budgetary line items against commonly considered measures of police work is compared to a systematic collation of detailed expert focus groups. We offer alternative strategy for taking stock of both the sustained volume of police work not captured by traditional police officer to population ratios or basic crime rate comparisons to police officer outputs.

Towards this end, we recommend that work continue to research the expanding role of police and their involvement with other public sector agencies in general and those that are in regular contact with at risk or vulnerable populations, such as mental health. Inter-agency sharing of data and resources, such as through integrated teams seems to be the main suggestion emerging from our interviews and focus groups. Further research may suggest ways of sharing the service load and resources that could reduce the overall costs. As a first step towards inter-agency sharing of resources, information and challenges, we recommend further research comparing the relative merits of regionalism and regionalization, the results of which, could provide insight into keeping provincial and federal standards while providing a locally relevant services.

5 SELECTED REFERENCES

- Brennan, S. & Dauvergne, M. (2011). Police-reported crime statistics in Canada, 2010. *Statistics Canada, Juristat*, 2011. Cat. No. 85-002-X. Retrieved from <http://www.statcan.gc.ca/pub/85-002-x/2011001/article/11523-eng.htm>
- Burczyka, M (2013). *Police Resources in Canada – 2012*. 85-225-X Statistics Canada (2012), Ministry of Industry (2013) Government of Canada (2013). Retrieved from: <http://www.statcan.gc.ca/pub/85-225-x/2012000/part-partie1-eng.htm>
- Canada's police among the best paid in the world, (2012, March 20). *The Globe and Mail*. Retrieved from www.theglobeandmail.com/globe-debate/editorials/
- Canadian Bankers Association (2014). Debit Card Fraud. *Consumer Information/Fraud*. Retrieved from <http://www.cba.ca/en/consumer-information/42-safeguarding-your-money/59-debit-card-fraud>
- Caputo, T. (2013). The future of policing in Canada: If you can't think it you can't do it. *RCMP Gazette*, 75(1), 14-15. Retrieved from [RCMP-grc.gc.ca](http://www.rcmp-grc.gc.ca)
- ComScore (2012). Top 10 need-to-knows about social networking and where it's headed. ComScore, 2012. Retrieved from http://www.comscore.com/Press_Events/Presentations_Whitepapers/2011/it_is_a_social_world_top_10_need-to-knows_about_social_networking
- Dauvergne, M. & Turner, J. (2010). Police-reported crime statistics in Canada, 2009. *Statistics Canada*, cat. No. 85-002-X, *Juristat* 30(2): 1 – 37.
- Department of Justice Canada (2010). Backgrounder: Credit for time served in pre-sentencing custody, Ottawa. Retrieved from http://www.justice.gc.ca/eng/news-nouv/nr-cp/2010/doc_32485.html
- Department of Justice Canada (2013). Disclosure Reform: Consultation Paper. *Department of Justice*. Government of Canada. Retrieved from: <http://www.justice.gc.ca/eng/cons/ref/2.html>
- Gelfand, J. (1999). Grey Literature: Plausible Applications for Distance Education Practices. *GL'99 Conference Proceedings: Fourth International Conference on Grey Literature "New Frontiers in Grey Literature"* 4-5 October 1999, Washington D.C. - Amsterdam : GreyNet, January 2000, pp. 1-11. – (GL-conference series, ISSN 1386-2316 ; No. 4). - ISBN 90-74854-24-9
- Government of British Columbia (2013). Overview of crime data collection in British Columbia, 2012. *Ministry of Justice, Police Services Division*. Retrieved from www.pssg.gov.bc.ca/policeservices/shareddocs/crime-data-collection.pdf
- Government of Canada (2014). General Social Survey – Victimization (GSS). *Statistics Canada, Definitions, data sources and methods*. Retrieved from www23.statcan.gc.ca/imdb/
- Griffiths, C. (2007). Crime, victimization, and the Canadian public. In *Canadian Criminal Justice: A Primer*, 3rd ed, pp. 51-89. Toronto, Ont: Nelson.
- Haarhoff, T. (2014). Calls for service, "E" Division RCMP. EDCAS, RCMP Headquarters, "E" Division.
- Harrendorf, S., Heiskanen, M., Malby, S. (2010). *International statistics on crime and justice (2010)*. Retrieved from http://www.unodc.org/documents/data-and-analysis/Crime-statistics/International_Statistics_on_Crime_and_Justice.pdf

Human and Constitutional Rights (2014). *Regina v. Stinchcombe* (1991). Retrieved from http://www.hrcr.org/safrica/arrested_rights/stinchcombe.html

Institute for Canadian Urban Research Studies (ICURS). Presentation to the Annual Meeting of the Union of British Columbia Municipalities, 19 September 2013. "The economics of policing".

Local Government Statistics, Expenses Schedule 402. Annually, 1983-2012. Victoria: Local Government Department, British Columbia Ministry of Community, Sport and Cultural Development. Retrieved from: http://www.cscd.gov.bc.ca/lgd/infra/statistics_index.htm.

Mackrael, K. (2013, January 16). Canada's police forces have to innovate or cut back, Toews tells summit. *Globe and Mail*. Retrieved from: <http://www.theglobeandmail.com/news/politics/canadas-police-forces-have-to-innovate-or-cut-back-toews-tells-summit/article7409314/>

McKendrick, J. (2011). One-third of US households chuck landlines; now use mobile only. *SmartPlanet*, December 21, 2011. Retrieved from <http://www.smartplanet.com/blog/business-brains/one-third-of-us-households-chuck-landlines-now-use-mobile-only/20746>

Ministry of Justice, British Columbia (n.d.). Description of policing in B.C. *Ministry of Justice*. Retrieved from <http://www.pssg.gov.bc.ca/policeservices/description/index.htm>

Mishra, S. & Lalumiere, M. (2009). Is the crime drop of the 1990s in Canada and the USA associated with a general decline in risky and health-related behavior? *Social Science & Medicine*, 68(1), 39-48. DOI: 10.1016/j.socscimed.2008.09.060

Perrault, S. (2011). Self-reported Internet victimization in Canada, 2009. *Statistics Canada, Juristat*, Government of Canada 85-002-X. Retrieved from: <http://www.statcan.gc.ca/pub/85-002-x/2011001/article/11530-eng.htm>

Perrault, S. (2012). Police reported crime statistics. Government of Canada, *Statistics Canada, Juristat*, 2011. Cat. No 95-002-X. Retrieved from: <http://www.statcan.gc.ca/pub/85-002-x/2013001/article/11854-eng.htm#a1>

Porter, L. & Calverley, D. (2011). Trends in the use of remand in Canada. *Statistics Canada, Juristat*, 2011. Cat. no. 85-002-X. Retrieved from <http://www.statcan.gc.ca/pub/85-002-x/2011001/article/11440-eng.htm#r11>

Royal Canadian Mounted Police (2013). Identity Theft and Identity Fraud. *Scams and Fraud*. Retrieved from <http://www.rcmp-grc.gc.ca/scams-fraudes/id-theft-vol-eng.htm>

Royal Canadian Mounted Police (2014). Internet security. *RCMP Publications – Internet Security*. Retrieved from <http://www.rcmp-grc.gc.ca/qc/pub/cybercrime/cybercrime-eng.htm>

Smyth, S. (2010). Preface. In *Cybercrime in Canadian criminal law*, pp. v – ix. Toronto, Ont.: Thomson Reuters Canada Limited.

Standing Committee on Public Safety and National Security (2014). Economics of Policing, Report of the Standing Committee on Public Safety and National Security, Parliament of Canada, SECU 41-2, May 2014. Retrieved from: http://eprints.cpkn.ca/33/1/412_SECU_Rpt04-e.pdf

Statistics Canada (2013). Police Resources in Canada, 2012. Government of Canada, Cat. No. 85-225x. Retrieved from <http://www.statcan.gc.ca/pub/85-225-x/2012000/part-partie1-eng.htm>

Symantec (2014). Heartbleed: Information from Symantec on OpenSSL Vulnerability. Retrieved from <http://www.symantec.com/outbreak/?id=heartbleed&sl=QWHND-0000-01-00>

Udemans, C. (2014). 62% have experienced attempted cybercrime – survey. *HumanIPO* Monday, January 27, 2014. Retrieved from <http://www.humanipo.com/news/39231/62-have-experienced-attempted-cybercrime-survey/>

Wallace, M., Turner, J., Matarazzo, A., & Babyak, C. (2009). Measuring crime in Canada: Introducing the Crime Severity Index and improvements to the Uniform Crime Reporting Survey. *Statistics Canada*, Cat. No. 85-004-X.

Notes

ⁱ In addition to costing and police data sources, we have a concentration of focus group interviews in British Columbia, Yukon and Manitoba. Many RCMP Detachments outside of British Columbia use the Police Reporting and Occurrence System (PROS). Within BC, police are required (beginning in approximately 2003/4) to use the Police Records Information Management Environment (PRIME). Prior to the PRIME implementation, RCMP within BC used a different records management system Police Information Retrieval System (PIRS). The bulk of the police event data used in this study take the form of extracts from PRIME and an ICURS archive of the RCMP PIRS database, covering 2002-2007, the period before, during and after the Division's transition to the PRIME environment.

ⁱⁱ <http://www.ag.gov.bc.ca/public/justice-reform/CowperFinalReport.pdf>

ⁱⁱⁱ <http://www.pssg.gov.bc.ca/policeservices/shreddocs/BCPolicingPlan.pdf>

^{iv} ICURS Fact Sheet, "Crimes and Calls for Service, British Columbia, 2009-2012". (Forthcoming, 2014), <http://www.sfu.ca/icurs/projects/factsheets.html>

^v <http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=6583312&Language=E&Mode=1&Parl=41&Session=2&File=9>

^{vi} Huggins, Hope. (2014). Police resources in Canada. Juristat article, catalogue number 85-002-X, ISSN: 1209-6393, released March 27, available at: <http://www.statcan.gc.ca/pub/85-002-x/2014001/article/11914-eng.pdf>

^{vii} See Text Box 5, and supporting table data, pp. 14-5 of the Huggins (2014) Juristat PDF.

^{viii} Macdonald, N. (15 April 2013). "The \$100,000 club". Online edition, available at <http://www.macleans.ca/economy/business/the-new-upper-class/>

^{ix} ICURS researchers traveled to a range of police jurisdictions across British Columbia. We were able to extend the coverage to locations outside of British Columbia, one in the Yukon, and another in Manitoba. We are grateful for their contributions. Specifically we met with municipal police departments, large population urban RCMP, medium population urban RCMP, small population urban RCMP, rural RCMP, mixed rural and urban RCMP, municipal surrounded and/or divided by RCMP, specialty units, and a division.

^x Persons involved in the Expert Focus Groups included a variety of ranks, roles and appointments: Inspectors, Superintendents, Officers in Command, Chief Constables, Staff Sergeants, General Investigators, Community Programme Officers, Crisis Intervention Officers, General Duty Corporals, Plain Clothes Officers, Traffic Division Officers, Forensics Identification Experts, Traffic Reconstruction Experts, Major Crime Investigators, Youth Officers, Non-Commissioned Officers, Community Response Officers, Robbery and Serious Crime Investigators, Homicide Detectives, Researchers, Public Order Investigators, Sex Crime Investigators, Community Safety Officers, General Duty Officers, Drug Investigation Officers, Integrated Auto Theft Task Force Investigators, Gang Task Force Investigators, Organised Crime Task Force Investigators, Federal Drug Investigators, and individuals from the Combined Forces Special Enforcement Unit. To ensure we heard from those not normally included in police work discussions, we recruited support staffers as well, including: federal public servants, criminal analysts, project assistants for organised crime, quality assurance clerks, PRIME records clerks, office managers, financial managers, rural support staff, records clerks, court liaison clerks, transcription clerks, and personal assistants to Officers in Command, Chief Constables, Superintendents, and Inspectors. We are grateful for the opportunity to meet with each of our participants.

^{xi} For a full discussion of the Expert Focus Group themes, please see the full report.