

**THE CEDAR PROJECT:  
VULNERABILITY TO RECIDIVISM AMONG  
ABORIGINAL YOUNG PEOPLE  
WHO USE DRUGS**

by

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Bachelor of Arts, University of British Columbia, 1998

PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF PUBLIC POLICY

In the  
Faculty  
of  
Arts and Social Sciences

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Spring 2008

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## **Abstract**

Aboriginal young people are significantly over represented in BC's youth custody centres. This paper investigates the demographic, traumatic life experiences, drug use patterns, criminal charges and incarceration histories of a cohort of Aboriginal young people who use drugs in Vancouver and Prince George, British Columbia. Using Cedar survey data collected in 2003 and 2004, logistic regression finds that Aboriginal young people who use drugs and have a history of incarceration are more likely to be recidivists if they were first incarcerated under the age of 17, had ever slept on the streets, been charged with a minor offence, injected drugs, or participated in drug and alcohol treatment. This paper recommends that the provincial government engage with Aboriginal communities in the development and implementation of intensive and holistic services that can address the multiple challenges facing Aboriginal youth in custody to decrease the high rates of recidivism among Aboriginal youth.

**Keywords:** recidivism; Aboriginal; youth; custody; drugs; trauma.

## **Executive Summary**

In British Columbia, the proportion of youth in custody who are Aboriginal has doubled over the last decade to the point that Aboriginal youth now account for two in every five admissions to youth custody centres. Researchers examining the over-representation of Aboriginal youth in custody find significantly higher rates of drug use and traumatic life experiences than among non-Aboriginal youth. Aboriginal scholars suggest the high rates of drug use and incarceration among Aboriginal youth is evidence of a legacy of colonial trauma that increases vulnerability to drug use and crime (Barlow, 2003). The current framework of services for Aboriginal youth in custody is not effective in keeping Aboriginal youth from re-offending after release. Through multiple logistic regression of Cedar project survey data of Aboriginal young people who use drugs in Vancouver and Prince George, this paper investigates the underlying vulnerabilities to recidivism of these young people. The goal of this research papers is to locate policy alternatives that can decrease recidivism among Aboriginal youth in BC.

The strongest finding is that first incarceration under the age of 17 makes study participants six times more likely to be recidivists. Other significant risk factors for recidivism included sleeping on the streets, injecting drugs, being convicted of minor offences and ever participating in alcohol or drug treatment. The findings of the study within the context of what is known of historical trauma, suggests that policy interventions to decrease recidivism among Aboriginal youth should:

- Focus interventions at Aboriginal youth at first contact with youth custody
- Address vulnerability to homelessness among Aboriginal youth who use drugs
- Address the multiple challenges facing Aboriginal youth

- Address the underlying root causes of crime and recidivism that stem from historical trauma
- Appropriately engage Aboriginal communities in the design, delivery and implementation of services

Two policy alternatives and the status quo were analyzed for their effectiveness in addressing recidivism and meeting the identified needs of Aboriginal youth, their acceptability to government and Aboriginal communities, and the administrative ease and costs of implementation. An Aboriginal Family Integrated Transitions (AFIT) program is found to be the best option for decreasing recidivism among Aboriginal youth in BC, and the paper recommends that the BC government partner with Aboriginal communities to implement a comprehensive and intensive program for Aboriginal youth in custody along the lines of AFIT.

**For my husband David.**

## **Acknowledgements**

I thank my family and friends for their love and encouragement over the last three years. I am especially grateful to David for the many late night discussions, post-it note wall diagrams and well-timed words of encouragement that got me through this project. And too my mother Isobel, whose incredible optimism and perseverance in the face of so many challenges made me want to study public policy.

I am indebted to the Cedar Project for allowing me to participate in their research project. I am grateful for the support, assistance and encouragement of Dr. Patricia M. Spittal, Margo E. Pearce, Akm Moniruzzaman, Earl Henderson and Vicky Thomas. And finally I want to thank the participants in the Cedar survey, who so generously and bravely share of their life experiences so that the challenges they face can be better understood.

The support and guidance of my supervisor, Dr. Olena Hankivsky, was indispensable in the process of writing this paper. I am grateful to Dr. Kennedy Stewart and Dr. Nancy Olewiler for their enthusiastic teaching and mentorship through my time at SFU. I owe a debt of gratitude to my colleagues at UBC, especially Janet, in supporting my return to school. I've met many wonderful students in this program and I'm particularly thankful for the friendship and support of Whitney, Hannah and Lyndsay.

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## **Glossary**

<b>Aboriginal</b>	Term used in this study to collectively reference individuals who self-identify as Métis, Aboriginal, First Nations, Inuit, and non-status Indians. <sup>1</sup>
<b>CAGE Assessment</b>	An acronym for a test that assess alcoholism based on four questions on alcohol use assessing: ability to <u>cut</u> down, <u>annoyance</u> from criticism of others for drinking habits, <u>guilt</u> over drinking, and drinking in the morning as an <u>eye-opener</u> to deal with a hangover.
<b>Custody</b>	Under the Youth Criminal Justice Act, each province or territory must have at least two levels of custody which are distinguished by the degree of restraint of the young people within them. In BC these forms of custody are commonly referred to as Open Custody or Close Custody.
<b>Criminogenic</b>	Factors or characteristics that are found to correlate with crime, incarceration and recidivism.
<b>HepC</b>	Hepatitis C Virus
<b>HIV</b>	Human Immunodeficiency Virus
<b>MCFD</b>	Ministry of Children and Family Development
<b>PTSD</b>	Post-Traumatic Stress Disorder
<b>Remand</b>	To hold a young person temporarily in custody, pursuant to a Remand Warrant, while awaiting trial or sentencing, or prior to commencement of a custodial disposition.
<b>VCAPC</b>	Vancouver Coastal Aboriginal Planning Committee
<b>YCJA</b>	Youth Criminal Justice Act
<b>Youth Custody Centre</b>	A facility designated for the incarceration of men and women between 12 and 18 years of age.

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<sup>1</sup> Cedar Project Partnership, 2008.

# 1: Introduction

Aboriginal people in Canada account for just 2.5 percent of the national population but make-up more than 20 percent of all the prison inmates (Statistics Canada, 2005). The over-representation of Aboriginal people in prison is just one indication of the profound social and economic marginalization of Canada's Aboriginal communities. Around the world the majority of crime is committed by young people. In Canada, people between the ages of 18 and 25 commit the majority of crime but for most of these offenders their first contact with the justice system comes between the ages of 15 and 18 (Statistics Canada, 2005: 122). Aboriginal youth (age 12 to 17) currently account for one in every five admissions into youth custody across Canada and are eight times more likely to be incarcerated than non-Aboriginal youth (Calverely, 2005). In British Columbia, the proportion of youth in custody who are Aboriginal has doubled over the last decade, to the point that Aboriginal youth now account for two in every five admissions to youth custody centres (BC Child and Youth Officer, 2006: 2).<sup>2</sup> A recent study of youth in Lower Mainland custody centres found that 55 percent of Aboriginal male offenders and 43 percent of Aboriginal female offenders had already accumulated a minimum of four convictions, enough to be labelled "chronic offenders" (Corrado & Cohen, 2002). Aboriginal leadership and community organizations are deeply concerned about the high proportion of young Aboriginal people cycling in and out of Canada's youth custody centres, provincial jails and federal prisons (Native Women's Association of Canada, 2006; Assembly of First Nations, 2006). Such high rates of recidivism suggest that the existing framework of services for youth in custody do not meet the challenges facing the Aboriginal youth in their care.

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<sup>2</sup> Throughout this time Aboriginal youth have accounted for approximately 6 percent of the youth population in BC (Caverely, 2007).

Researchers examining the over-representation of Aboriginal youth in custody find many important distal and proximal factors that put Aboriginal people at greater risk of incarceration and recidivism. Proximal risk factors for recidivism are those experiences that precipitate the crime that leads to incarceration; whereas, distal factors occur further from the crime and increase vulnerability to crime later in life. In Corrado and Cohen's 2002 survey of youth in BC custody, they found significantly higher rates of drug use among Aboriginal youth (73 percent) compared to non-Aboriginal youth (56 percent). For Aboriginal youth who had committed violent crimes or were recidivists the rate of drug use rose to 94 percent, with a median age of first drug use of 11 years of age (2002). Drug use is one of the most significant and pervasive proximal risk factors for incarceration and recidivism among Aboriginal youth in BC (Corrado, Cohen & Watkinson, 2008; Latimer & Foss, 2004; Corrado & Cohen, 2002). Aboriginal scholars suggest the high rates of drug use and incarceration among Aboriginal youth is evidence of a legacy of colonial trauma that increases vulnerability to drug use and crime (Barlow, 2003). There is a lack of research that investigates both the impact of distal risk factors from historical trauma, and more proximal risk factors such as drug use and crime patterns, and the high rates of recidivism among Aboriginal youth.

This paper investigates how demographic characteristics, traumatic life experiences, drug use patterns, and criminal charge and incarceration histories increase the likelihood of recidivism among Aboriginal young people who use drugs. Through the use of Cedar project survey data of young Aboriginal people (age 14 to 30) who are currently using drugs and have a history of incarceration it is possible to analyze these different risk factors through youth and into young adulthood. In short, the life experiences of Cedar participants' sheds light on the opportunities for decreasing recidivism among Aboriginal youth in custody today. Though the interrelated nature of the problems facing Aboriginal youth raises causality and temporality issues in the analysis, the regression findings locate significant windows of opportunity for addressing

recidivism among youth in custody. Section 2, continues the discussion of the policy problem with a review of literature and research on historical trauma and Aboriginal incarceration, reviewing recent research on youth recidivism and rehabilitation, and outlining the current practice and policy within BC's youth justice and corrections system. Section 3, describes the methodology of the logistic regression of the Cedar data, presents the model and discusses the risk factors found to increase recidivism among Aboriginal young people who use drugs. Section 4 contains policy alternatives to address Aboriginal youth recidivism based on the analysis of the findings. The paper concludes with recommendations for developing intensive service frameworks in partnership with Aboriginal communities as a means of decreasing recidivism. The results of this study should be of interest to provincial governments, in particular ministries responsible for youth custody services and children's and social services, as well as Aboriginal communities and Aboriginal organizations interested in the provision of services for Aboriginal youth.

## **1.1 Policy Problem**

The high rate of recidivism among Aboriginal youth suggests that the current framework of services for youth in custody is not effective in keeping Aboriginal youth from re-offending after release. Aboriginal youth in custody experience multiple risk factors for recidivism, including drug use, histories of childhood trauma and abuse, and profound social and economic marginalization (Corrado, Cohen & Watkinson, 2008; MCFD, 2006; Corrado & Cohen, 2002). As drug use is such a widespread risk factor among Aboriginal youth in custody, this study aims to explore the risk factors that contribute to recidivism among Aboriginal youth who use drugs. This study asks *why some Aboriginal young people who use drugs are more likely to be recidivists than others*. The question is analyzed via Cedar project survey data of Aboriginal young people (age 14 to 30) who have previously been incarcerated, are currently living in Prince George or Vancouver, and are currently using drugs. While not all Aboriginal youth in custody

are currently using drugs, the less than 10 to 20 percent of youth in custody who are not are significantly vulnerable to future drug use. While caution should be exercised in applying the analysis of this paper to Aboriginal young offenders who are not using drugs, similarities in the other underlying risk factors suggest that the policy alternatives generated could have a positive effect on all Aboriginal youth in custody. While there are multiple approaches to decreasing Aboriginal incarceration (broad social development, early childhood education, addressing child poverty, etc.) this research focuses on alternatives to decrease recidivism among Aboriginal youth through the youth justice system.

## **1.2 Research Goal & Objectives**

The problem of Aboriginal peoples' over-representation in prison is far too large and complex for this research paper. This capstone investigates the specific risk factors for recidivism among Aboriginal young people who use drugs, to increase understanding of the multiple challenges and risks facing youth who end up in custody. The Cedar project collects considerably more detailed information on the individual vulnerabilities, life histories and dynamic risk factors of young Aboriginal offenders than most other justice research projects.<sup>3</sup> The research goal and supporting objectives of this paper, listed below, were determined by the policy problem, the available data, and the need for research on the intersections of drug use, trauma and crime among Aboriginal youth offenders.

### **Goal:**

- To find policy alternatives to decrease recidivism among Aboriginal youth

### **Objectives:**

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<sup>3</sup> See the Youth in Custody Snapshots for a rare combination of quantitative and qualitative research on Aboriginal youth in custody.

- To investigate the underlying vulnerabilities to recidivism among Aboriginal young people who use drugs and have a history of incarceration
- To locate and evaluate policy alternatives that can address the risks for recidivism among Aboriginal youth in custody
- To identify the necessary relationships and partnerships between Governments and Aboriginal communities that are required for the development and implementation of effective policies for decreasing the recidivism of Aboriginal youth
- To recommend short-term and long-term for the provincial government to begin addressing the problem of Aboriginal youth recidivism

## **2: Background**

This section outlines the historical, social and policy contexts of Aboriginal incarceration and recidivism. First, the context of Aboriginal peoples' over-representation in prisons is discussed. Important connections are drawn between the history of colonialism, high rates of substance use and the high rates of incarceration of Aboriginal people. The policy problem is then supported by a review of the current rates of Aboriginal youth in custody and their recidivism. This is followed by a discussion of both the opportunities and challenges in effecting rehabilitation for Aboriginal youth through the imposition of custodial sentences. Finally, this section closes with an overview of both the current youth justice service frameworks and important political contexts of youth justice in BC.

### **2.1 Aboriginal Incarceration in Context**

#### **2.1.1 Colonialism & Residential Schooling**

An Aboriginal child is more than twice as likely to be born into poverty (Chartrand, 2006: 314) and seven times more likely to be murdered than a non-Aboriginal person (Brzozowski, Taylor-Butts & Johnson, 2006). Child mortality rates are higher among Aboriginal people and Aboriginal adults die younger (Walters, 2002). Aboriginal people are more likely to struggle with drug use and become infected with HIV and HepC (Spittal, 2007). That Aboriginal people are so profoundly over-represented among the poor, abused and imprisoned is indicative of the harsh legacy of colonialism (Walters, 2002). It is now widely acknowledged that the political, cultural, economic and physical traumas of colonialization are at the root of the wide health and welfare gap between Aboriginal and non-Aboriginal people in Canada (Adelson, 2005; Walters, 2002; Government of Canada, 1994). Centuries of war, disease, loss of traditional territories, forced

relocation and restriction to inferior reserve lands, served to decimate and marginalize Aboriginal communities (Ross, 2006).

Indigenous researchers looking at the health of American Indians in the 1980s and 1990s, incorporated into their analysis the concept of inter-generational trauma, where trauma was understood to be not just a single event but the compounded effect of a series of traumatic events and experiences, including war, cultural dislocation and abuse (Whitbeck, 2005: 121). One particularly significant source of trauma for Aboriginal people in Canada comes from the residential school system (Ross, 1992). Across Canada, it is estimated that over a hundred thousand Aboriginal children were taken from their families between 1874 and 1986 (Miller, 1996; RCAP, 1996). In British Columbia, Aboriginal children were sent to 22 to different residential schools where their culture and language were prohibited, and they were victims of physical and sexual abuse by the adults charged with their protection (Pearce et al., Fournier & Crey, 1997). Fournier and Crey find that sexual abuse prior to European contact was relatively rare in Aboriginal communities, but colonization and residential schooling broke down the cultural practices and knowledge that gave Aboriginal communities resiliency in the face of these traumas (Walters, 2002; 1997). The abuse suffered in residential schools went unacknowledged and untreated for decades, and even lifetimes. Without any experience of healthy kinship and community, many of the survivors of residential schools found themselves without the skills to lead healthy families of their own when they returned to their communities. In essence, residential schooling “infected” Aboriginal communities with “sexual abuse as virulently and persistently as the introduced diseases of smallpox or flu” (Fournier & Crey, 1997: 117).

### **2.1.2 Trauma, Drug Use and Crime**

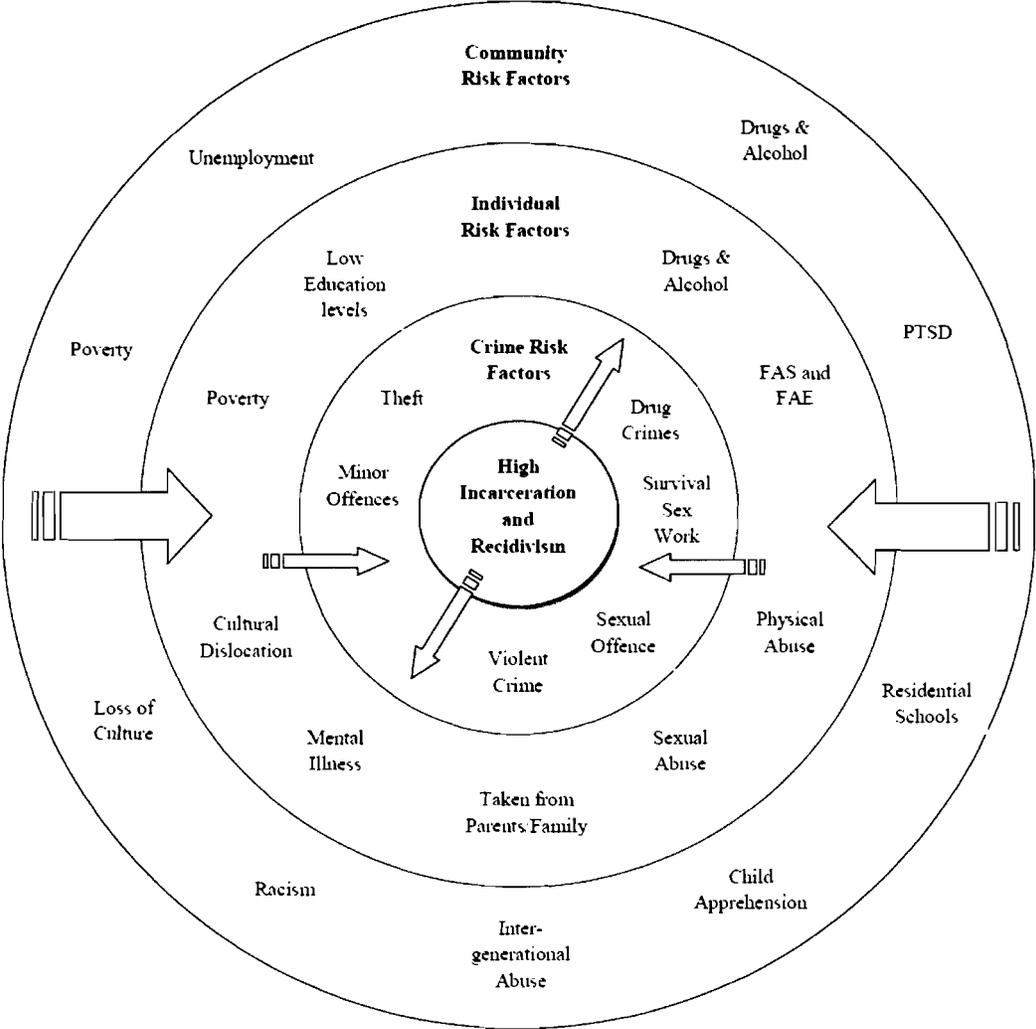
Research has shown that when people are victimized and marginalized as children, they are more likely to use drugs and alcohol, victimize others, and engage in criminal activity later in life (LaPrairie, 1995; Walters, 2002; Ross, 2006). Persistent poverty, cultural dislocation, and the

breakdown of kinship, combine to increase the likelihood that Aboriginal people will turn to drugs and alcohol to manage their in pain. According to Barlow, drugs and alcohol become a way of momentarily escaping and numbing the pain (2003). La Prairie's 1995 study of Aboriginal people in Canada's inner cities found that 75 percent of all those surveyed had experience some form of daily child abuse growing up (38). Rupert Ross, a Crown Attorney in Ontario, and a respected author on the topic of Aboriginal people and the justice system has written one of the most compelling arguments for understanding the high rates of crime and incarceration within the context of historical trauma (2006). From his work with Aboriginal victims and offenders he finds the compounded effects of residential schooling, inter-generational physical and sexual abuse, and drug and alcohol use, to be at the root of the crimes that come before his court (3). More recently a study of child apprehension in BC found that that 65 percent of the parents of Aboriginal children currently in care had spent time in care themselves (Pivot Legal Aid Society , 2008: 20). The inter-generational connection between past placement in residential schools and present placement in Ministry of Children and Family Development care is becoming more evident.

While each Aboriginal community is different, and each young Aboriginal person's experience is unique, the compounding effects of historical trauma and drug use become the context within which the majority of crime is committed by Aboriginal youth. In Figure 1, a simple model of risk factors for incarceration and recidivism demonstrates how historical trauma envelops many Aboriginal communities (outer circle), and how these traumas victimize and re-victimize the individual and the community (second layer). Trauma instigates drug use that becomes a catalyst for criminal activities (third layer) that drive up the rate of incarceration among Aboriginal people, particularly the young and vulnerable. The arrows demonstrate how the pressure of historical trauma pushes in on the community and individuals, but also how incarceration and recidivism become fresh trauma for the individual and the community by creating cycles of incarceration. An appreciation of the depth and the co-occurring challenges

facing Aboriginal youth offenders and their communities is critical to understanding the roots of their vulnerability to recidivism.

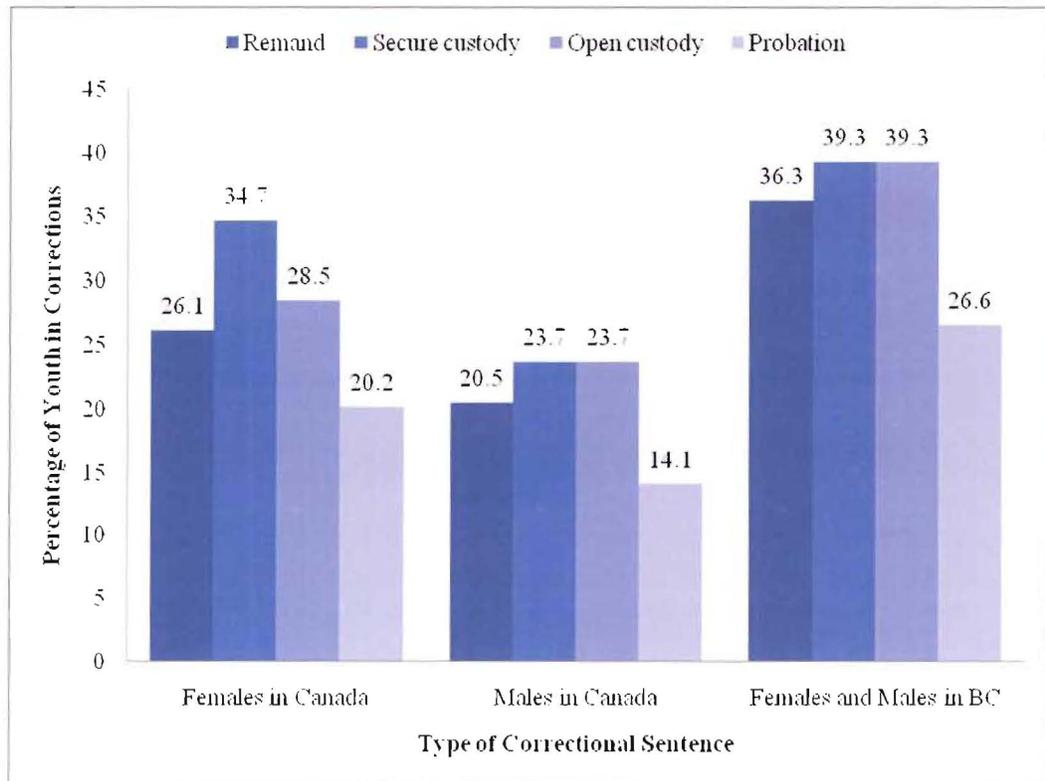
Figure 1 Risk Factors for Incarceration and Recidivism among Aboriginal People



### **2.1.3 Aboriginal Youth in Custody**

The latest figures on youth incarceration show that Aboriginal youth (age 12 to 17) account for 25 percent of all the youth in custody in Canada (Calvery, 2006: 1). In British Columbia, Aboriginal youth account for 6 percent of population but are 40 percent of the youth in custody centres, a 100 percent increase since 1996 (Child and Youth Officer of British Columbia, 2006: 1). As will be discussed later in this section, recent legislation in the *Youth Criminal Justice Act* has facilitated an increase in non-custodial (non-incarcerated) sentencing options for first time youth offenders with non-violent charges. A 2005 report by the BC Government's Child and Youth Advocate found that legislative changes substantially decreased the number of overall youth sentenced to custody centres, but it had the unexpected effect of creating a smaller population of "the most troubled youth" within these centres (McCreary Centre Society, 2005: 4). As seen in Figure 2, Aboriginal youth are significantly over-represented among youth serving the more restricted sentences of custody and remand. Aboriginal male and female youth make up almost 40 percent of all the youth serving custodial sentences, and 36 percent of those in remand (waiting in custody for a court hearing or sentencing).

Figure 2 Aboriginal Youth as a Percentage of All Admissions to Youth Corrections<sup>4</sup>



While national and provincial data on the number of Aboriginal youth in custody are readily available, comparative data on the rates of recidivism of Aboriginal youth are not available. Two recent snapshot studies of youth in BC custody found very high recidivism rates among those youth sentenced to custody. The 2005 report on youth in BC custody found that 82 percent of all youth were serving a sentence for a second offence (McCreary Centre Society, 18). A 2002 study of 500 youth in a Lower Mainland custody centre found that 55 percent of Aboriginal males and 43 percent of Aboriginal females could be classified as “chronic offenders”, as they had accumulated at least 4 convictions at the time of interview (Corrado & Cohen). This study also found that the Aboriginal youth in the sample had spent considerably more time in custody than non-Aboriginal youth, with Aboriginal male offenders averaging a total of 409 days in custody and Aboriginal female offenders averaging 191 days in custody (2002). As the mean age of this cohort was 16 years of age, the authors note that this is a significant amount of time

<sup>4</sup> Data re-organized into table is from Caverley, 2007.

for these young people to have spent in prison. Recidivism is clearly an issue among Aboriginal youth receiving custodial sentences. It should be noted that it was not the focus of this paper to examine the fit or fairness of the imposition of custodial sentences on Aboriginal youth.

Researchers in the field raise debate the equity of sentencing results between Aboriginal and non-Aboriginal youth. This is an important issue for research but is beyond the scope of this paper.

For the purpose of this study, we understand the imposition of custodial sentences on the youth in question to be indicative of the serious and repeat nature of their offences.

## **2.2 The Problem of Recidivism**

This section explores the issue of recidivism in more detail. The section begins with an overview of a project studying Aboriginal youth drug in a region of British Columbia, including an analysis of the rates of recidivism among the observed population. This is followed by a review of the social and economic costs of recidivism for individual youth, their communities and society. This section closes with a discussion of how rehabilitation fits in the youth justice system.

## **2.3 Cedar Project**

The Cedar project is an on-going observational study of Aboriginal young people ages 14 to 30 living in Vancouver and Prince George who use injection and non-injection drugs. The Cedar Project is primarily concerned with the escalating rates of HIV and HepC infection in Aboriginal communities and aims to “estimate the prevalence and incidence of HIV and HepC infection amongst these at-risk youth, and to identify risk factors for transmission among participants who smoke or inject drugs” (Spittal et al., 2007). The Cedar survey was conceived, designed and implemented under the guidance of Dr. Patricia Spittal and a board of First Nations’ investigators, Aboriginal AIDS service organizations and representatives of Bands local to the survey areas. The results of all Cedar Project research and the final manuscripts are evaluated and approved by

an Aboriginal elder prior to submission. The Cedar Project was approved by the UBC and Providence Health Care Boards, and this specific research project on recidivism was approved by Simon Fraser Ethics Review Board.

In this study, participants self-identified as being of 'Aboriginal status', and were understood in the Cedar project research framework, to include Métis, Aboriginal, First Nations, Inuit, and non-status Indians.<sup>5</sup> All survey participants were living in Vancouver and Prince George, Canada, and had self-reported the use of injection drugs at least once in the last month or non-injection drugs once in the last week, prior to enrolment in the study. The drugs used by participants included crystal methamphetamine, crack cocaine, heroin, cocaine and other illegal substances. Aboriginal interviewers administered a comprehensive baseline questionnaire containing demographic and health related questions, and saliva screens were used to confirm the use of drugs. All participants were asked to provide informed consent before participating and were allowed to decline to respond to any question. HIV and HepC testing was a component of the interview process, and results were kept confidential so that survey staff were shielded from the participants results. Those participants who wanted their results could receive them and every effort was made to reconnect with youth so they could obtain these results. Each participant received 20 dollars for participating in the survey. Survey staff offered referrals and support for any health or welfare issues participants raised, and some participants asked for traditional healing support, addiction treatment and housing.

For the purpose of this capstone, only participants in the baseline survey data are used in the analysis. For the purpose of investigating recidivism, only those survey participants who identified as having ever been incarcerated in jail, prison or detention overnight or longer were included in the study sample (n=361). The gender division of incarcerated participants was 60 percent males (n=214) and 40 percent females (n=145). A similar split was found between the two cities of interview, with 60 percent of the ever incarcerated population coming from

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<sup>5</sup> As defined by the Cedar Project Partnership, 2008.

Vancouver and 40 percent coming from Prince George. The median age of first incarceration was 16 years old, and a review of the distribution of first incarceration shows that 81 percent of those who had ever been incarcerated were first incarcerated between the ages of 12 and 19.

The Cedar Project is, to the knowledge of study organizers, the only cohort based study of Aboriginal young people who use drugs in North America. The Cedar Project has recruited a large cohort of Aboriginal young people and continues to expand its baseline of survey respondents. The Cedar Project uses a respondent-driven sampling method to develop the sample. Young people who may be eligible for participation are referred by other young people in the community, by community service agency staff, and through outreach work by Cedar project staff. While a random sample of at-risk Aboriginal young people who use drugs would provide a more statistically representative sample it is simply not feasible given the realities of this marginalized, transient and at-risk populations. Many youth are reluctant to disclose criminal and drug related activities for fear of the consequences. Past and recent experiences of trauma, racism and marginalization, make Aboriginal young people in this cohort hesitant to participate in this type of research. Due to transient lives of many of these youth they can be hard to locate in the community. Studies of referral-chains find that if chains are long enough and penetrate deeply into the network of a hidden population, it is possible to draw non-biased sample (Magnani, Sabin, Sidel & Heckathorn, 2005). The Cedar survey's questionnaire is incredibly rich in dynamic demographic, life history and incarceration information collected from the participant's viewpoint. The views and life experiences of marginalized Aboriginal former offenders are hard to come by making this research relevant and valuable to the study of youth recidivism in Canada.

### **2.3.1 Defining Youth and Young People**

In this study the terms youth and young people are used to refer to two different definitions of the cohort. The Cedar survey data which is analyzed in this study includes *young*

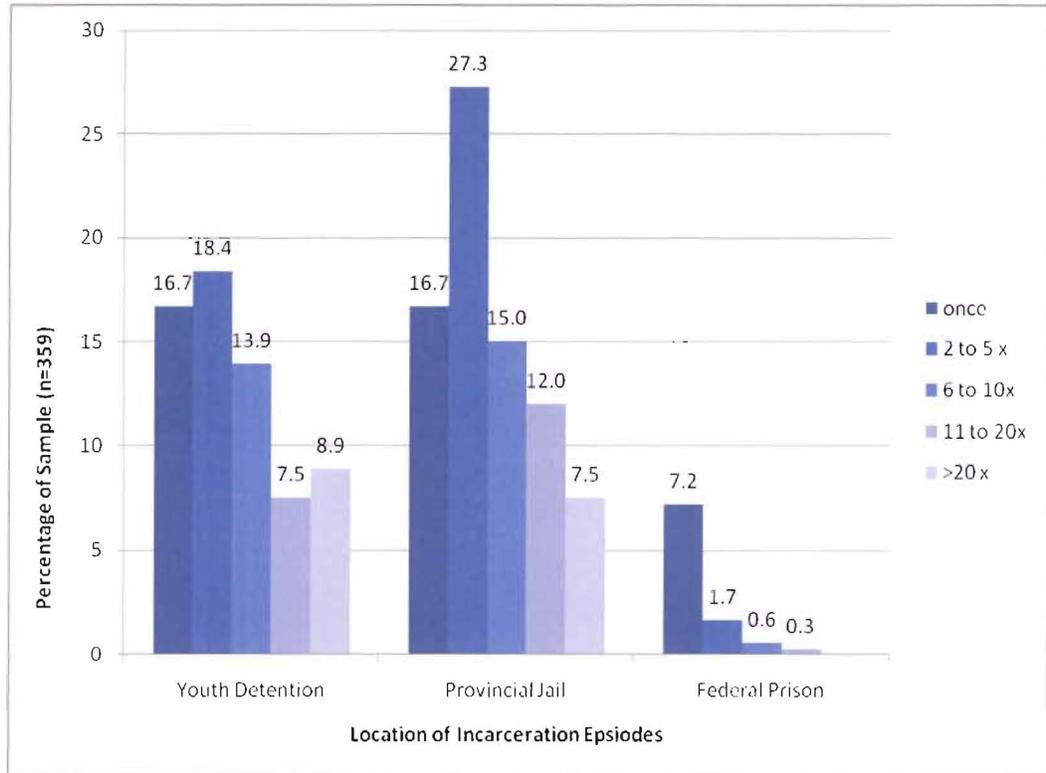
*people* aged 14 to 30 years of age. The Cedar project is interested in understanding the experiences and vulnerabilities that Aboriginal young people experience overtime. They hypothesize that for young, marginalized, drug involved Aboriginal people, the trajectories of their lives and the consequences of drug use and trauma are better illuminated by examining the portion of their lives until the age of 30. The bottom end of 14 years of age is dictated by ethical guidelines in researching young people. In this capstone, the objective is to better understand the factors that contribute to recidivism among Aboriginal young people (aged 14 to 30), so that policies for *youth*, aged 12 to 17, can increase rehabilitation through the youth justice system.

### **2.3.2 Recidivism Rates in Sample**

That so many of the Aboriginal young people in this survey have been incarcerated more than once, speaks to the severity of the recidivism problem within this sub-population. As seen in figure 3, the bulk of incarceration episodes experienced by the sample population took place within the youth custody and provincial jail system. In total 65.5 percent of the entire sample had experienced incarceration in a youth custody centres (n=235), 78.6 percent had spent time in a provincial jail (n=282), and 9.7 percent (n=37) had spent time in a federal prison. The frequency of incarceration, what could be considered the degree of recidivism within the cohort is particularly startling. Of those with any incarceration experience in youth custody centres, 46.4 percent reported being incarcerated more than 6 times in that institution. Of those with any incarceration experience in provincial jail, 44 percent reported being incarcerated more than 6 times. Among the sample, 8.9 percent and 7.5 percent report more than 20 episodes of incarceration in youth custody centres and provincial jails respectively. Corrado and Cohen's 2002 study of youth in custody found that more than half of the sample of youth in custody (age 12-18) had a minimum of 4 or more convictions. The BC Government recently found that the most chronic ten percent of adult offenders have a minimum of 24 convictions between the ages of 18 and 25 (2008). The findings of other research and the levels of recidivism observed in the

sample support the hypothesis that recidivism is a significant problem for the young Aboriginal people who use drugs.

Figure 3 Location and Reported Number of Incarceration Episodes of Participants



### 2.3.3 Individual Costs

Few public policies exact a more significant cost for an individual than imprisonment (Caverly, 2007). For a young person, being sentenced to custody not only separates them from their family and community but also finds custodial sentences have negative long-term consequences for health, education, employability, and increase the likelihood of future incarceration (Forrest, 2002; Department of Justice, 2002; LaPrairie, 1995). For inmates with an existing history of drug use, incarceration and recidivism can present additional health risks, such as engaging in the sharing of needles and pipes while in custody (Canadian Centre for Substance

Abuse, 2004). Research on the impact of early life involvement in the criminal justice system shows it to be a “predictor of prolonged involvement in the adult system, and marginalization in adult life” (LaPrairie, 1995: 480). Due to the significant and lasting effect of incarceration on youth, the Canadian youth justice system intends for custody to be reserved for those crimes that are deemed by law to require punishment of the offender so that the community believes justice has been met (Campbell, 2007). The exercise of caution in the use of custody with youth is also attributable to a desire to address the underlying causes of youth crime. Studies of Aboriginal youth in custody found that more than half reported being physically abused and more than half reported significant mental health issues (McCreary Centre Society, 2005; Corrado and Cohen, 2002).

#### **2.3.4 Community Costs**

Capturing the community-level effects and costs of youth incarceration and recidivism is difficult. Aboriginal communities clearly struggle with the emotional, social and economic impact of having so many of their young people in custody. Costing this over-representation is beyond the scope of this paper but it is an important consideration. Other costs of recidivism include the costs for victims of crime, the court system in processing offences, policing, insurance claims, etc. For the scope of this paper, the focus of the costs to community is on the cost of providing the youth justice system in BC. In the 2007/2008 BC Provincial Budget estimates, the total cost to support youth custody centres, the youth forensic psychiatric services, specialized programs in custody and on parole totalled \$62,000,000. The exact yearly cost of incarcerating a youth in BC was not available, but other sources estimate the cost of keeping one youth in custody for a year to be between \$96,000 and \$126,000 annually (Department of Justice Canada, 2004; Campbell, 2007: 265). Accurate data on the length of time a youth spends in custody and on parole is difficult to obtain, due to the way information is collected. Generally youth sentenced to open or secure custody in Canada will spend less than 6 months in custody before being

released on some form of parole (Caverely, 2007). In BC, less than 8 percent of all youth sentenced to closed custody spend more than 6 months in custody. Clearly, the cost of incarcerating youth is significant.

### **2.3.5 Recidivism as System Failure**

Youth recidivism rates are often treated as a measuring stick of the success of youth justice systems (Dobb, 2004: 109). For proponents of a tough on crime approach, a high rate of youth recidivism is evidence of the need for tougher consequences. For proponents of rehabilitation, a high rate of recidivism suggests a degree of failure in the services provided. Less often considered is that high recidivism rates might indicate that the mandate of the youth justice system in question does not prioritize rehabilitation. Or perhaps lasting rehabilitation of the youth in question is not a reasonable expectation given the level of challenges and the existing state of knowledge on interventions. Youth Justice Services in Canada are expected to walk a difficult line between punishment of the offender, protection of the public, and rehabilitation of the offender (for the sake of the offender and society). This is all to make the point that the youth justice system has many goals in relation to youth offenders, of which rehabilitation is only one. Another important consideration is that many of the factors that contribute to recidivism are beyond the control of the youth justice system. While it would be inaccurate and unfair to measure the total effectiveness of youth justice by the rate of recidivism (Dobb, 2004), it remains an important measure of the ability of the system to foster lasting rehabilitation (Corrado & Cohen, 2008).

### **2.3.6 Rehabilitation**

While incarceration is meant to serve a punitive purpose, youth corrections systems put great emphasis on rehabilitation and reintegration of youth back into the community (MCFD, 2005). Rehabilitation is one of the three central goals of Youth Custody Services. Considerable

programming and services are provided in the youth custody centres and on parole that aim to support the rehabilitation of young offenders. Yet high rates of recidivism persist. Since the inception of a youth justice system debate has raged about the ability of the system to facilitate rehabilitation for the youth in its care (Campbell, 2007: 276). Rothman's controversial work in the 1970s suggested that nothing worked in youth custody (1973). LaPrairie and others contested that while there is no perfect program for "all offenders and offences", there is potential to find effective solutions "for certain offenders, offences, and circumstances" through "focused" experimentation (1995: 480). More recent meta-analysis of different *interventions* (programs delivered during and after custody) provide a rigorous evaluation and find measureable decreases in recidivism for specific types of services (Bonta, Capretta & Rooney, 2000). Here in BC, there is a paucity of evidence-based research on what programs are specifically effective for Aboriginal youth with a history of drug use who are in custody. Rigorous testing of rehabilitation alternatives for Aboriginal youth who use drugs is beyond the scope of this paper, but an analysis of risk factors for recidivism assist in developing a rough checklist of needs for alternatives considered.

## **2.4 Youth Justice in British Columbia**

While the responsibility for the provision of youth justice services is a provincial responsibility, federal legislation dictates how youth are to be sentenced. This section includes a brief overview of the Youth Criminal Justice Act, the BC Youth Justice system and the Aboriginal stakeholders in this area.

### **2.4.1 Youth Criminal Justice Act**

While the management and provision of youth justice systems is a provincial responsibility, the legislative framework that guides the systems is under federal jurisdiction. In 2003, the Government of Canada introduced a new *Youth Criminal Justice Act* (YCJA) that

replaced the *Young Offenders Act*. The intention behind federal legislation is to ensure fairness through parity in both sentencing and services for youth across the country. The YCJA's stated mandate includes both the need to "hold a young person accountable for an offence" by imposing "meaningful consequences" and "promote his or her rehabilitation or reintegration into society" (YCJA, 2003). The YCJA was an attempt to balance the conflicting principles of retribution and rehabilitation of young offenders (Campbell, 2007: 264; Chartrand, 2007: 324). While the new legislation enables provincial justice departments to divert youth (age 12 to 17) who are first time and non-violent offenders through alternative and community-based sentences, it also enables stricter custodial sentences for those youth convicted of repeat offences and serious crimes (Campbell, 2007: 275). BC's judges seem to be embracing non-custodial options, as the such measures are credited with a 66 percent drop in the number of youth in custody between 1996 and 2006 (Child and Youth Officer of British Columbia, 2006: 1). While the YCJA makes special mention of addressing the unique needs of Aboriginal youth in sentencing, the actual impact of this guideline is not clear. The preamble of the Act states that the court must "take into consideration ... all available sanctions other than imprisonment that are reasonable in the circumstances ... for all offenders, with particular attention to the circumstances of aboriginal offenders" (YCJA, 2003).

#### **2.4.2 Youth Justice Services**

The Ministry of Children and Family Development has primary responsibility for the Youth Justice system in BC. The two branches of their role are split between Youth Custody services (custodial) and Youth Community Justice services (non-custodial sanctions). BC's youth custody centres are located in Victoria, Prince George and Burnaby. Depending on the sentence received, secure or open, a young offender will be afforded different levels of personal autonomy or housed in a different type of living arrangement within a youth custody facility. Youth are also

held in youth custody centres while awaiting trial (remand) and are more restricted in their access to services during this period.

Rehabilitation is one of three overarching goals of the Youth Custody service, and it pursues this through: “effective programs that respond to the individual and cultural needs of youth; a youth-focused integrated case management process that provides for comprehensive and dynamic case plans; and implementing strategies that promote successful re-integration to the community” (MCFD, 2008). In a case management approach, a community probation officer, social worker, program staff, parents/guardians, and the young offender may all participate to different degrees in the development of a plan for rehabilitation and reintegration that begins at committal and lasts through custody and parole. The formal responsibility of the community probation officer for the young offender terminates at the point that their custody and probation order ends (MCFD, 2008).

While in custody, MCFD provides youth with programs and services to support the rehabilitation of young offenders. These programs fall into four categories, which will be explored in more detail in section 4 of this study: basic programs required by legislation (education, religious, family visits), core programs to address skills and attitudes (substance abuse management), specialized programs for sub-populations (Aboriginal, female, mental health, drug use counselling), and reintegration programming (Intensive Support and Supervision) (MCFD, 2008). For youth who recidivate, sentencing will differ but the services available don't necessarily change unless the needs of the youth have changed in the interim period (beginning of substance abuse issues). The Community Youth Justice Services wing oversees non-custodial, community-based justice services. They also have responsibility for provision of programming to support the rehabilitation of offenders in the community, similar to those offered in custodial settings. Many of the services in this area are provided by contracted service providers, including

non-profit and private enterprises. For example, the Urban Native Youth Alliance in Vancouver provides short-term housing and support for young Aboriginal men and women.

### **2.4.3 Tsawwassen Accord & Regional Aboriginal Authorities**

Currently all youth sentenced to custody, Aboriginal and non-Aboriginal are provided roughly equivalent services when in youth custody centres but this might be changing.<sup>6</sup> In 2002, the BC Provincial Government, the Union of BC Indian Chiefs, First Nations Summit, the Métis Provincial Council of BC and the United Native Nations signed the *Tsawwassen Accord* which committed the provincial government to embark on a transfer of child and family services to Aboriginal leadership. The *Memorandum of Understanding for Aboriginal Children* (MOU) was signed shortly after that provided general outline of how new bodies know as Regional Aboriginal Authorities (RAA) would be established in five regions of BC, and how they would begin planning towards the first transfers of services in 2007. Youth justice is one of seven areas of services for Aboriginal children and youth that is slated for eventual transfer to the oversight of an RAA. Currently, no specific plan for the transfer of youth justice services for Aboriginal youth is publicly available. Youth justice appears to be one of the more distant priorities for transfer. Though the process is under way, deep differences in the opinions of Aboriginal organizations, communities and leadership have recently been voiced to the BC Government (Kines, 2008). The First Nations Directors Forum that represents 156 of the 198 delegated Aboriginal child welfare agencies in BC is pushing for "government-to-government relationships and not relationships through Crown agents" (Kines, 2008). The future of the *Tsawwassen Accord* is unclear but the spirit of the accord, that Aboriginal communities want greater authority over the delivery of services to their youth and their communities, is something that any new policy alternative or direction must take into account.

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<sup>6</sup> Native Court workers and Counselors are available for Aboriginal youth, but Aboriginal programming in Youth Custody Centers is open to all youth in custody.

## **2.5 Summary**

The over-representation of Aboriginal youth in custody and the high rates of recidivism among Aboriginal youth suggest that the current system of services provided in the youth justice system are not adequately meeting the needs of Aboriginal youth struggling with multiple challenges, including drug use, trauma and social marginalization. Co-occurring problems are a significant issue for Aboriginal youth in custody, and the history of historical trauma makes uncovering the root causes of Aboriginal youth drug use and crime critical. While the BC youth justice system does provide a wide array of services for youth, the rates of recidivism make it clear that the current status quo approach does not effectively decrease recidivism.

### **3: Methodology**

Through an analysis of demographic characteristics, drug use vulnerabilities, charge histories and life experiences of a cohort of young Aboriginal people, I investigated factors that increase the likelihood of recidivism among young Aboriginal drug users. Cross tabulations were used to establish those variables that have a significant correlation with recidivism within the observed population. A logistic regression model was then developed and tested, using the outcome variables found to be significant.

This section begins with a description of the survey data analyzed and the rates of recidivism found in the survey population. This is followed by an explanation of the methodological process of logistic regression and the particular challenges of theorizing causality in this area. This section concludes with an investigation of the hypothesized relationships between the dependant variable of recidivism and the outcome variables using cross-tabulation.

#### **3.1 Cross-tabulation**

Given the complexity of the relationships between the risk factors and recidivism (see Figure 1) it is difficult to establish with certainty causality between variables examined in this study. Theory and observation suggest causal pathways and mechanisms for causation and the results of the statistical analysis supports or undermines the hypothesized pathways based on the correlation between the dependent and outcome variables. Causal mechanisms are immensely difficult to establish, with the result that observation and analyses that extends beyond a focus solely on the numbers are needed to establish a causal relationship between two variables. The complexity of the pathways between the dependent variables and the outcomes variables in this study suggests that the findings should be approached and analyzed with some caution. In this section, an

investigation of the data using cross-tabulation is undertaken to uncover significant relationships between the outcome variables and the dependent variable and to help to establish which outcome variables should be included in the model.

### **3.2 Dependent Variable**

A strict definition of recidivism could include any form of re-offending by an individual who previously committed a criminal act (Dobb, 2004: 108). Yet many young people will commit offences are never be caught, while others may be caught and never charged. In practice, available data sources or the ability to collect data, limits the definition of recidivism. In most Canadian research Youth Court Survey Data is used to track youth corrections and crime trends, including recidivism. This data defines a recidivist as a young person with at least one previous criminal charge prior to the latest charge. For this study, recidivism is defined using self-reported incarceration histories to determine which youth have experience incarceration more than once (more on this in section 3). I constructed a binary variable for recidivism using information collected in the incarceration section of the study (see Appendix A). Participants are first asked if they have ever been incarcerated overnight or longer. The survey then includes a supplemental question asking participants to indicate the number of times they have been incarcerated in each of type of correctional institution -jail, prison and youth detention centre.<sup>7</sup> This data on frequency was collected in categorical format with participants indicating to interviewers if they had been incarcerated once, two to five times, six to ten times, eleven to twenty times, or more than 20 times for each of the three institutions. Due to the format of collection, an episode of incarceration lasting just one night or 6 months, with charges or without, is counted as a single episode of incarceration. I collapsed the answers to these questions into a single measure for recidivism, where non-recidivists were those reporting only a single episode incarceration (across

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<sup>7</sup> The original wording of this question is included in the survey and it should be noted that while the question in the survey includes the caveat “since you started using drugs”, in practice interview teams have reported that this caveat was dropped and the data collected is for lifetime not since drug use started.

all facilities), and recidivists are those with more than one episode of incarceration. The dependant variable is thus coded as a binary indicator of recidivism, where 1 is positive for recidivism, and 0 is negative for recidivism. In total, 359 survey participants reported the details of their incarceration episodes and this group makes up the sample used for analysis in this paper<sup>8</sup>. Of the sample, 87 percent (n=312) reported being incarcerated more than once (recidivists), and 13 percent (n=47) reported being incarcerated only once (non-recidivists) at the time of survey.

### **3.3 Outcome Variables**

The 15 dichotomous outcome variables investigated in this analysis include: age at first incarceration, gender, education, location, ever being taken from parents, ever being sexually abused, mental illness, ever sleeping on the streets for more than three nights, ever identifying as an alcoholic, ever injecting drugs, ever injecting opiates, ever being charged with a minor offence, ever participating in any alcohol or drug treatment, and ever in methadone treatment program. The choice of outcome variables aimed to discern what specific risk factors contribute to the recidivism of 87 percent of the participants in the sample. In this section, I define the measure for each outcome variable and hypothesize its positive or negative effect on increasing the likelihood that a participant is a recidivist (Table 1). The variables are presented in five sub-categories: demographics, traumatic life experiences, drug and substance use vulnerabilities, criminal activities, and service utilization. Statistical analysis of the bi-variable categorical data is conducted using Pearson's chi-squared test. The relevance of each variable, the hypothesis of its impact on recidivism, and the results of cross-tabulation are included in each sub-section.

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<sup>8</sup> To the question of ever having been incarcerated 361 participants responded positively, but two participants did not provide information on the location or frequency of their incarceration, and thus I am not able to code them as either recidivists or non-recidivists.

### 3.3.1 Demographic Variables

Demographic factors have strong predictive capacity in incarceration and recidivism research (Juristat, 2002; Statistics Canada, 1998). The demographic variables included in the analysis are: age at first incarceration, gender, education levels and geographic location and were developed from questions in the Cedar survey (see Appendix A).

*Table 1 Demographic Characteristics and Hypothesized Effects*

<b>Variable</b>	<b>Hypothesized Effect</b>	<b>Source(s)</b>
17 and under at first incarceration	+	Thomas, Hurley & Grimes, 2002. Statistics Canada, 1998.
Male gender	+	Thomas, Hurley & Grimes, 2002. Statistics Canada, 1998.
Did not complete high school	+	Jung & Rawana, 2008. Statistics Canada, 2005.
Living in Vancouver	+	LaPrairie, 1998. Freduenberg, 2001.

Research on recidivism among youth finds that the younger the age of first incarceration the more likely the offender is to become a recidivist later in life (Thomas, Hurely and Grimes, 2002). In the sample of Aboriginal young people who use drugs, the average age of first incarceration is 16 years old, with the majority of participants' first experiencing incarceration between 12 and 18 years old. The hypothesis is that those participants who are first incarcerated at 17 years of age or younger will be more likely to be recidivists. Gender is well-established as being strongly predictive of both incarceration and recidivism (Thomas, Hurley & Grimes, 2002; Statistics Canada, 1998). Young males, across different cultural groups, are found to be incarcerated and more likely to become recidivists than females (Johnson, 2005). Within the entire Cedar survey, gender is split fairly evenly between males (52 percent) and females (48 percent). Within the incarcerated sample males are more strongly represented at 59.6 percent

(n=214) compared to the 40.4 percent (n=145) of males. The hypothesis is that males in our sample would be more likely to be recidivists than females.

Research on the connection between education and incarceration finds that not completing one's education is strongly predictive of both incarceration and recidivism (Jung and Rawana, 2008). For young Aboriginal people who use drugs and have been incarcerated it is hypothesized that a) prior incarceration, drug use and other life experiences will have impeded completion of schooling and b) not having completed high school makes them more vulnerable to poverty, crime and reoffending. In the Cedar questionnaire, participants are asked what the highest level of education received is. Information was collected in categorical format with the options of a) none, b) elementary (to grade 6), c) grades 7, 8, 9, d) grades 10 and 11, e) high school certificate, f) technical school, g) college/university, or h) other. The hypothesis is that those participants who have not completed high school (answers a through d) will be more likely to be recidivists than those who have completed high school (e through h).

Cedar study participants were interviewed in two British Columbian cities, Vancouver and Prince George. For Aboriginal young people struggling with the challenges of drug use, cities can be unforgiving places, where youth find themselves cut off from family and community, and is marginalized to the worst districts and sub-communities of the city (LaPrairie, 1995). For these reasons, I hypothesize that those living in Vancouver are more likely to be recidivists than those living in Prince George.

*Table 2 Cross-tabulation, Demographic Characteristics and Recidivism*

<b>Description</b>	<b>Non-recidivist n = 47 (%)</b>	<b>Recidivist n = 312 (%)</b>	<b>p value</b>
17 and under at age of first incarceration	14 (30)	229 (74)	>0.000**
Male gender	29 (62)	185 (59)	0.754
Did not complete high school	33 (73)	260 (84)	0.073
Living in Vancouver	22 (47)	123 (39)	0.336

Pearson Chi-2 tests: \* Significant at <.05, \*\*Significant at <.001

In Table 2, the results of the cross-tabulation of recidivism and demographic characteristics of the sample of 359 recidivists and non-recidivists show that only one outcome variable is significant in Pearson Chi-square testing. In reviewing the table we find that a significantly larger proportion of the recidivists were first incarcerated under the age of 17 (74 percent) compared to the non-recidivists (30 percent). Using the Chi-square test we measure the goodness of fit between the observed and expected distribution of the dependant variable groups in relation to the outcome variable. The results of the Chi-square are listed under the column labelled p-value. The p-value measures the likelihood that the difference in distribution is due to chance alone. For example, the p-value of 0.754 for male gender says that approximately 75 percent of the difference is random, where >0.000 for age of first incarceration suggests that there is no measurable chance that the distribution is random. Of the 357 participants who provided information on age of first incarceration, 68.1 percent (n=243) were first incarcerated at 17 years or younger, and 31.9 percent (n=114) were first incarcerated over the age of 18 years old. That 74 percent (n=229) of those who were incarcerated under the age of 17 are recidivists suggests that early incarceration is powerfully predictive of recidivism.

That the three other demographic variables were not significant in chi-square is interesting. The percentage of females and males who are recidivists in the sample are almost exactly the same (87.6 percent of females, 86.4 percent of males). Recent Statistics Canada research on youth in custody found that female Aboriginal youth account for 35 percent of all admissions to secure custody and 29 percent of admissions to open custody, while male Aboriginal youth represent just 24 percent of admissions to each of secure and open custody (Cavelery, 2006). It seems plausible, and troubling, that the moderating effect of being female on incarceration and recidivism is diminishing. If being female no longer provides a buffer for young Aboriginal women it can be expected that this will have negative consequences for the entire Aboriginal community. Not completing high school was not predictive of recidivism within this cohort. Amongst the sample of ever incarcerated participants, just 17.2 percent (n=61) had completed high school and 82.8 percent (n=293) had not completed high school. That so few participants had completed high school speaks to severity of this problem for Aboriginal young people. And finally, it is interesting that rates of recidivism in each location were roughly the same, with 84.8 percent of those in Vancouver and 88.3 percent of those in Prince George identifying as recidivists. These results would seem to suggest that location does not have an effect on recidivism among young Aboriginal people who use drugs.

### **3.3.2 Trauma Variables**

This section explores the role of outcome variables that measure historical trauma, as outlined in section 2, on the likelihood that a survey participant will be a recidivist. The five outcome variables that capture traumatic life experiences included: child apprehension, sexual abuse, mental illness, unstable housing and sleeping on the streets. Each outcome variable is constructed from a question of the Cedar survey found in Appendix A. The overall hypothesis is that experiences of trauma increase the likelihood of a participant in the sample being a recidivist. The hypothesized effect of each variable on recidivism is included in table 3.

*Table 3 Trauma Variables and Hypothesized Effects*

<b>Variable</b>	<b>Hypothesized Effect</b>	<b>Source(s)</b>
Ever taken from biological parents	+	Pivot Legal Aid Society, 2008. Sacco & Kennedy, 1994.
Ever non-consensual sex	+	Pawagi & Lang, 1999.
Ever diagnosed with mental illness	+	McCreary Centre Society, 2004. Corrado & Cohen, 2002. Teplin et al., 2002.
Ever sleeping on the streets	+	McCreary Centre Society, 2007. Baron & Hartnagel, 1998.

In research on youth delinquency, youth who exhibit weak family and community bonds are found to be more likely to come in contact with the justice system and experience incarceration than those who have strong family bonds (Sacco and Kennedy, 1994:64). For Aboriginal young people in the Cedar survey, one prevalent experience that breaks down family and community relationships is child apprehension. This study hypothesizes that those youth who were ever taken from their biological parents as children are more likely to be recidivists due to a lack of family support during parole and the challenges of family and cultural dislocation from being apprehended.

Research of juvenile offenders in the US finds that sexual abuse makes a young person significantly more likely to be incarcerated (Dembo et al., 2000, 1998). Corrado and Cohen found high levels of sexual abuse among Aboriginal youth offenders in their 2002 study. It is hypothesized that the trauma from sexual abuse may be inadequately addressed in initial custody experiences, making Aboriginal youth more vulnerable to recidivism. Within the Cedar study, participants were asked, “Have you ever been forced to have sex against your will and/or molested.” The definition of sexual abuse is both sex and molestation occurring at any point in the participant’s life, not just childhood. The participants’ answers were coded as “no, “yes”, unsure/can’t remember” and “prefer not to answer”. In the ever incarcerated sample 6 respondents (1.7 percent) were unsure or could not remember, and 3 (0.8 percent) preferred not to

answer. For the purpose of bivariate analysis all those unsure or preferring not to disclose were re-coded as responding “no”.

Youth with a mental illness are more likely to come into contact with the justice and corrections systems (Teplin et al, 2002). While youth who come in contact with the youth justice system are often screened for mental illness, Corrado and Cohen suggest that it is possible not enough youth are receiving this screening at the time of their initial contact with the youth justice system (2002). The Cedar Survey asks participants, “have you ever been told by a doctor that you have a mental illness/disorder or other disability (e.g. schizophrenia?)”. The hypothesis is that those youth with a mental illness face significantly greater challenges to maintaining the conditions of their parole and are more likely to come in contact with the justice system after first contact. To measure homelessness vulnerability, the Cedar survey asks participants if they have ever slept on the street for more than three nights as a measure of homelessness. Given the co-occurring challenges facing this population of youth, one would expect that many youth may have experienced episodes of homelessness. Homelessness increases the vulnerability of youth to violations of probation orders, drug use and criminal activity (McCreary Centre Society, 2007. Baron & Hartnagel, 1998). The hypothesis is that youth with experiences of sleeping on the street are more likely to be recidivists.

*Table 4 Cross-tabulation, Trauma and Recidivism*

<b>Description</b>	<b>Non-recidivist n = 47 (%)</b>	<b>Recidivist n = 312 (%)</b>	<b>p value</b>
Ever taken from biological parents	31 (66)	196 (63)	0.678
Ever non-consensual sex	22 (47)	140 (45)	0.804
Ever diagnosed with mental illness	15 (32)	95 (30)	0.839
Ever sleeping on the streets <sup>2</sup>	29 (62)	241 (78)	0.017*

Pearson Chi-2 tests: \* Significant at <.05, \*\*Significant <.001  
<sup>2</sup>N=357

The only trauma variable that is significant in Pearson chi-square is ever having slept on the streets (0.017). Cross-tabulation finds that 78 percent (n=241) of recidivists reported having spent more than three nights sleeping on the street compared to 62 percent (n=29) of non-recidivists. For Aboriginal young people with a drug use problem and previous incarceration experience, a history of sleeping on the streets appears to be predictive of recidivism. It is very surprising that the three other trauma variables were not significantly correlated with recidivism. In 2007, BC Aboriginal children were ten times more likely to be taken from their parents and put into government care than non-Aboriginal children (Pivot Legal Aid Society, 2008:3). The rate of sexual abuse within the entire Cedar study cohort is 47.5 percent (68.3 percent of females and 28.1 percent of males). Among the ever incarcerated sample 45.1 percent (n=162) reported having been sexually abused and 54.9 percent (n=197) reported never being sexually abused. A 2004 survey of youth in BC custody found that 69 percent of Aboriginal youth reported ever having been diagnosed by a doctor or health practitioner as “having one or more health conditions or disabilities” (McCreary Centre Society, 2004). In the entire sample of ever incarcerated participants, 30.6 percent (n=110) reported ever having been diagnosed with a mental illness, and 69.4 percent (n=249) reported negatively for diagnosis. The similarity of mental illness rates amongst both recidivists and non-recidivists suggest that in this sample ever having been diagnosed as having a mental illness will have limited predictive capacity for recidivism. This appears to be an important area for future research. As previously addressed in section 2, the connections between sexual abuse, drug use, violent behaviour and incarceration in Aboriginal communities is well-documented (Ross, 2006) so thought these variables are not significant in this sample it does not discredit the significance of the high rates of these traumas observed among Aboriginal youth in custody.

### 3.3.3 Drug and Substance Use Variables

This section explores the connection between different patterns of drug and substance use and the likelihood that a survey participant will be a recidivist. Participants in the sample were all currently injecting or smoking drugs but the type and pattern of drug use among survey participants was different. As already discussed drug use is a significant vulnerability to incarceration and recidivism so we would expect to see high rates of incarceration and recidivism among the cohort. It is the hypothesis of this paper that more intense forms of drug use among participants increases vulnerability to recidivism among survey participants. The three outcome drug and substance use variables investigated include: ever identifying as an alcoholic, ever injecting drugs and ever injecting opiates (Appendix A). The hypothesized effect of each variable on recidivism is included in table 5.

*Table 5 Drug and Substance Use Variables and Hypothesized Effects*

<b>Variable</b>	<b>Hypothesized Effect</b>	<b>Source(s)</b>
Identify as ever an alcoholic	+	Lennings et al., 2003. Dembo et al., 2006.
Ever injection drug use	+	Dembo et al., 2006.
Ever injecting opiates	+	Dembo et al., 2006.

Qualitative data on the issue of Aboriginal drug use supports the concept that drug use is a mechanism for dulling or escaping the pain from abuse suffered personally, as well as the wide-spread poverty, discrimination and racism that impact Aboriginal young people and their communities (Barlow, 2003; Canadian Aboriginal AIDS Network, 1998). Survey findings of the number of youth in prison entering with an existing drug use issue suggests that anywhere from 75 to 90 percent of Aboriginal youth in custody have been using drugs prior to incarceration (Latimer & Foss, 2005; McCreary Centre Society, 2005; Corrado & Cohen, 2002). For youth in the criminal justice system, experimentation with marijuana or alcohol prior to a first offence is

not particularly surprising. The types of drugs being used by youth offenders, particularly Aboriginal youth offenders have moved far beyond youthful experimentation. Corrado and Cohen find that for Aboriginal youth in custody the levels of daily or weekly “level of hard drug use is extremely alarming” (2002).<sup>9</sup> The hypothesis is that for Aboriginal youth whose drug use has escalated to injecting drugs or to the point that they would classify themselves as alcoholic (based on the CAGE test) they are more likely to be a recidivist.

*Table 6 Cross-tabulation, Drug and Substance Use and Recidivism*

<b>Description</b>	<b>Non-recidivist n = 47 (%)</b>	<b>Recidivist n = 312 (%)</b>	<b>p value</b>
Identify as ever an alcoholic	14 (30)	141 (45)	0.047*
Ever injection drug use	23 (49)	204 (65)	0.029*
Ever injecting opiates	9 (19)	132 (42)	0.002*

Pearson Chi-2 tests: \* Significant at <.05, \*\*Significant <.001

The results of the cross-tabulation support the hypothesis that for youth who have transitioned to injection drug use or escalated alcohol abuse to the point of alcoholism, the likelihood of recidivism among these sample participants is significant.

### **3.3.4 Criminal Charge Variables**

This section explores the connection between the types of criminal charges received and the likelihood that a survey participant will be a recidivist. The outcome variable included in this analysis looked at the role of minor offences in increasing the likelihood of recidivism. The hypothesized effect is that for those sample participants who were ever charged with a minor offence, they will be more likely to be recidivists.

<sup>9</sup> Corrado and Cohen (2002) report the following rates of daily or weekly drug use by Aboriginal youth in custody: crack (12 percent for males, 43 percent for females), heroin (8 percent for males, 17 percent for females), cocaine (6 percent for males, 31 percent for females).

*Table 7 Criminal Charge Variables and Hypothesized Effects*

<b>Variable</b>	<b>Hypothesized Effect</b>	<b>Source(s)</b>
Ever charged with minor offence	+	Statistics Canada, 1998. Bonta, Lipinski & Martin, 1992.

In the Cedar survey participants were asked to disclose if they ever had been charged with any of a list of different crimes (see Appendix A.). While all participants in the sample had been incarcerated a minimum of once, the nature of the crime they were charged with would have a significant impact on the length and intensity of their sentence. Certain structural challenges with the form of the survey question make it impossible to sequence and connect the charges and the incarceration episodes for sample participants. For example, if a participant has been charged with both assault and mischief, it is not possible to know which charge came first. Statistics Canada’s finds that the type of offences that most often bring young people back into custody are “administration of justice” offences, such as “being unlawfully at large, escaping custody, failure to comply with a disposition and failure to appear before the court (1998: 39). In order to measure the impact of minor offending, I construct an outcome variable that re-codes each sample participant as positive or negative for committing a minor offence. Minor offences in this study include charges of mischief, possession of drugs for personal use, theft under five thousand dollars, and being found under the influence. The hypothesis is that those youth who have committed a minor offence will be more likely to be recidivists than those who have not. In cross-tabulation we find that minor offending appears strongly significant as the hypothesis predicted.

*Table 8 Cross-tabulation, Criminal Charge Variables and Recidivism*

<b>Description</b>	<b>Non-recidivist n = 47 (%)</b>	<b>Recidivist n = 312 (%)</b>	<b>p value</b>
Ever charged with minor offence	19 (40)	215 (69)	>0.000**

Pearson Chi-2 tests: \* Significant at <.05, \*\*Significant <.001

### 3.3.5 Service Utilization Variables

This section explores the connection between the utilization of services by Aboriginal young people and the likelihood that they will be a recidivist. As services provided through the youth justice system are intended to decrease recidivism we might expect that those youth who are recidivists have been unable to obtain needed services. For example, drug using former youth offenders may have not been able to access drug and alcohol counselling. The two outcome variables that are investigated are ever participating in any alcohol or drug treatment, or ever participating in a methadone treatment program.

*Table 9 Service Utilization Variables and Hypothesized Effect*

<b>Variable</b>	<b>Hypothesized Effect</b>	<b>Source(s)</b>
Ever in any alcohol or drug treatment	?	Young et al., 2007.
Ever in methadone treatment program	?	Young et al., 2007.

A simplistic hypothesis might suggest that for those sample participants who have received any drug/alcohol treatment or methadone treatment they would be less likely to be recidivists. However, in BC's youth custody system alcohol and drug treatment has long been a core component of the services provided youth. As the members of the sample all have a history of incarceration and are currently using drugs it seems more likely that the recidivists in the sample will more likely have had access to drug and alcohol counselling but the rehabilitative effect is not evident. The hypothesis then for service utilization is hard to estimate.

*Table 10 Cross-tabulation, Service Utilization and Recidivism*

<b>Description</b>	<b>Non-recidivist n = 47 (%)</b>	<b>Recidivist n = 312 (%)</b>	<b>p value</b>
Ever in alcohol or drug treatment	25 (53)	235 (75)	0.002*
Ever in methadone treatment program	6 (13)	67 (22)	0.167

Pearson Chi-2 tests: \* Significant at <.05, \*\*Significant <.001

The results of the cross-tabulation show that while participation in methadone treatment is not significant for recidivism, ever participating in alcohol or drug treatment is significant for being a recidivist (chi-square = 0.002). The direction of the relationship is that recidivists are more likely to have received alcohol or drug treatment. Still, 25 percent of the recidivists in the sample report not receiving any alcohol or drug treatment which suggests that provision of treatment is not yet complete.

### **3.4 Summary**

This section explained the methodology used to investigate recidivism among Cedar Project participants. It explains how the dependant variable was chosen and measured. Cross-tabulation of the dependant variable with the outcome variables found that only seven outcome variables were significant in relation to recidivism at a Chi-square greater than .05. These included: age at first incarceration, ever sleeping on the streets, ever identifying as an alcoholic, ever injecting drugs, ever injecting opiates, ever participating in alcohol or drug treatment, and ever being charged with a minor offence. Only significant variables are included in the logistic regression analysis in section 4 as non-significant variables can inflate the predicted beta values in logistic regression, making the effect of outcome variables appear stronger than they are. As the variable measuring ever injecting drugs and ever injecting opiates potentially measure a very

similar population of the sample for related drug use practices, there is a significant risk of correlation. After reviewing the size of the sample and discussing the risk of correlation it was decided to drop ever injecting opiates from inclusion in the regression model.

## **4: Results of Statistical Analysis**

The next step in the analysis calls for the development of a model using the outcome variables found to be significant in the Chi-square testing in section 3. This section presents and analyzes the results of the logistical regression model. The findings from the logistic regression are analyzed and used to develop policy alternatives in section 5 for the BC Youth Justice system.

### **4.1 Logistical Regression**

Multivariable logistic regression is used to estimate the probability that Cedar survey participants with certain life experiences or characteristics are more or less likely to be recidivists. Logistic regression also indicates the significance of each individual outcome variable holding all other variables constant. All bivariate categorical data included in the model have expected cell frequencies of a minimum of 5 in 25 percent of the cells. Unadjusted odds ratios and 95 percent confidence intervals were obtained and all reported p-values are two-sided. The enter method is used and all 6 variables are included in one model (table 11). The Nagelkerke pseudo- $R^2$ , that measures the model's predictive ability, is 0.307 in the estimation. This means that the model explains about 30 percent of the variation in the dependant variable. While the final model predicts less than half of the variation in the dependant variable, it finds that five of the six outcome variables have significant explanatory capacity at the 95 percent confidence level or greater.

*Table 11 Model of Logistical Regression*

<b>Outcome Variable</b>	<b>UOR (95% CI)</b>	<b>MODEL 1 AOR (95% CI)</b>	<b>p-value</b>
17 years of age and younger at first incarceration	6.383** (3.24-12.56)	6.436 (3.06-13.51)	>0.000
Ever sleeping on the streets	2.168** (1.14-4.14)	2.378 (1.14-4.96)	0.021
Identify as ever an alcoholic	1.944** (1.00-3.77)	1.845 (.849-4.011)	0.122
Ever injection drug use	1.971** (1.06-3.66)	2.381 (1.147-4.945)	0.020
Ever charged with minor offence	3.931** (2.06-7.52)	2.863 (1.39-5.92)	0.005
Ever in alcohol or drug treatment	2.686** (1.43-5.03)	2.540 (1.21-5.317)	0.013
N		355	
Nagelkerke pseudo-R <sub>2</sub>		0.307	

UOR = Unadjusted Odds Ratio; AOR=Adjusted Odds Ratio; 95% CI= 95% Confidence Interval;  
 \*\*Significant at 0.05

## **4.2 Findings**

The multivariable logistic regression model predicts the likelihood that a study participant will belong to one of two groups (recidivists or non-recidivists) based on their outcome variables. Logistic regression does not assume linearity of relationship between the independent variables and does not suggest that the explanatory variables are additive. Logistic regression allows a dependent variable to have multiple outcomes and measures the probability of outcome in the dependent variable in the form of an odds ratio. Univariate logistic regression of each outcome variable with the dependent variable provides an unadjusted odds ratio (see first column of table 11). Logistic regression results also provide information on the relationships and the different strengths of the outcome variables. For example, in model 1 first being incarcerated under the age

of 17 increases the probability of a participant being a recidivist more than any other outcome variable.

#### **4.2.1 Age at First Incarceration**

The strongest finding in Model 1 is the impact of incarceration as a young offender in the youth justice system. The regression finds that participants who report being first incarcerated at the age of 17 or younger are six times more likely to be recidivists than those whose first incarceration occurred at the age of 18 or older. A comparison of the rates of recidivism among those who were first incarcerated at the age of 17 or younger compared to those who were first incarcerated at the age of 18 or older is presented in Table 12. Among those participants who are recidivists, 73.6 percent (n=229) were first incarcerated at the age of 17 or younger, compared with only 30.4 percent (n=14) of the non-recidivists. This finding is consistent with the literature on juvenile offending and the increased vulnerability to recidivism that comes from early experiences of incarceration. A 2002 study found that even when controlling for years at risk, the mean number of convictions for youth first convicted at age 12 was 7.7, whereas for those convicted at 19 years of age it was 4.0 (Thomas, Hurley & Grimes, 2002). This finding suggests that in trying to address the vulnerability to recidivism among Aboriginal youth who use drugs, policies should focus services and interventions at Aboriginal youth when they first come in contact with the youth justice and custody system.

*Table 12 Distribution of Recidivists and Non-recidivists by Age of First Incarceration*

		Non-recidivist	Recidivist	Total
18 years and over at first incarceration	Count	32	82	114
	% within 18 years and over at first incarceration	28.1%	71.9%	100.0%
	% within recidivism	69.6%	26.4%	31.9%
17 years and under at first incarceration	Count	14	229	243
	% within 17 years and under at first incarceration	5.8%	94.2%	100.0%
	% within recidivism	30.4%	73.6%	68.1%
Total	Count	46	311	357
	% within sample	12.9%	87.1%	100.0%

#### **4.2.2 Sleeping on the Streets**

In Model 1, survey participants who report ever having slept on the street are found to be twice as likely to be recidivists as non-recidivists. This result supports the hypothesis that rough sleeping is a significant vulnerability for recidivism. A 2007 report by the McCreary Centre Society found that 47 percent of the homeless youth in BC had a history of incarceration. A study of street involved youth in Ontario looking at antecedents of violent crime, found that “aspects of the street subcultural lifestyle, economic deprivation, and victimization” coupled with family histories of serious abuse and victimization intensified violence among street youth (Baron & Hartnagel, 1998: 184). Policy alternatives that target Aboriginal youth that use drugs and have a history of incarceration with accessible and timely housing supports could increase the health and welfare of Aboriginal youth, and prevent some of the recidivism occurring once Aboriginal youth are out of custody (Corrado, Cohen & Watkinson, 2008).

### **4.2.3 Injecting Drugs**

That survey participants who had ever injected drugs were more than twice as likely to be recidivists as those participants who had never injected drugs supports the hypothesis that injecting drugs increases the likelihood of recidivism.

### **4.2.4 Minor Offences**

Model 1 finds that participants who have ever been charged with any type of minor offence are more than two and half times as likely to be a recidivist. This is consistent with literature on youth recidivism that finds that subsequent charges after a first offence are generally the same as the first charge or less serious offences (Dobb, 2004; Hagel & Newburn, 1994). The connection between drug using and minor offences is well supported in the literature (possession for use, minor theft, etc.). For Aboriginal youth who use drugs and have previously been incarcerated, the justice system responds to their minor offence (especially if it comes while the youth is on probation) with a custodial sentence (Campbell, 2007). After a first episode of incarceration, the nature of the offence appears to be less important to the sentence than the fact that the youth is now a repeat offender. Analysis of this result leads to the question of whether the youth justice system could extend non-custodial sentencing options for those youth whose secondary offences are minor in nature. While increasing access of Aboriginal youth to non-custodial services could decrease the number of Aboriginal youth in custody, public opinion and the YCJA make the practical application of such a change very difficult (Dobb & Cessaroni, 2004). Extending non-custodial sanctions to youth who commit multiple offences does not on its own address the vulnerabilities that bring young Aboriginal people into contact with the custody system. Primarily, the finding that minor offences bring so many Aboriginal youth back to prison highlights the inability of the current rehabilitation practices to enable healing and stability that can protect Aboriginal youth from recidivism. Policy alternatives that can support Aboriginal

youth through their probationary periods until a degree of stability is achieved could decrease minor offences and thus decrease recidivism.

#### **4.2.5 Alcohol or Drug Treatment**

Model 1 finds that Aboriginal young people who ever participated in any type of alcohol or drug treatment were more than twice as likely to be recidivists as those who had not. This finding supports the contention that many Aboriginal young people access drug and alcohol treatment through the current structure of the youth justice system. It would be simplistic to suggest that exposure to alcohol and drug treatment at one point in a young person's life will keep them from becoming a recidivist. The finding here is more nuanced, and seems to suggest that the for those youth who become recidivists, it is not from lack of access to drug and alcohol treatment, but perhaps the treatment provided was not culturally appropriate or sufficient in duration. The provision of drug and alcohol treatment alone is not the silver bullet to decrease recidivism among Aboriginal young people with a history of incarceration.

### **4.3 Summary**

While the findings uncover several factors that appear to increase the likelihood of recidivism among Aboriginal young people who use drugs, it is important to situate these findings in the broader realities of the life experiences of these young Aboriginal offenders. While the cross-tabulation and logistic regression did not find significance in the trauma variables, the descriptive statistics of this cohort establish that childhood physical and sexual abuse, low educational attainment and pervasive poverty are the reality of these young people's lives. The two alternatives presented in section 5 were selected and developed to address the identified risk factors from the regression. Alternatives selected for evaluation should:

- Increase the effectiveness of interventions and services for Aboriginal youth at the point of first incarceration in the youth justice system

- **Address vulnerability to homelessness among Aboriginal youth who use drugs**
- **Address the multiple challenges facing Aboriginal youth who come in contact with the youth justice system (injection drug and substance use issues, historical trauma, poverty, etc.)**

**The alternatives selected also need to address the broader vulnerabilities from historical trauma that effect so many Aboriginal youth who come in contact with the youth justice system but that are established in the literature. Alternatives considered should:**

- **Address the underlying root causes of Aboriginal crime and recidivism that stem from historical trauma**
- **Appropriately engage Aboriginal communities in the design, delivery and implementation of services**

## **5: Policy Alternatives**

This section outlines policy alternatives to address the high rates of recidivism among Aboriginal youth in custody in BC. First the status quo of services provided for Aboriginal youth in custody is reviewed. The first policy alternative considered does not alter the status quo of services but expands services for Aboriginal youth in custody and on parole and attempts to target specific vulnerabilities. The second policy alternative is a more comprehensive program based on reviews of successful interventions with multiply challenged youth recidivists in other jurisdictions.

### **5.1 Selection of Policy Alternatives**

The policy alternatives selected for addressing the risk of recidivism of Aboriginal youth who use drugs were selected based on their ability to address the risk factors found to be significant in the logistic regression (section 4) and what is known about Aboriginal youth recidivism (as outlined in the background of the paper). Due the high rates of recidivism of Aboriginal youth in custody and the regression findings that Aboriginal young people who are first incarcerated under the age of 17 are six times more likely to be recidivists, alternatives must address the needs of Aboriginal youth in custody. As discussed earlier, though not all Aboriginal youth in custody are using drugs, the 10 to 20 percent who are not are highly vulnerable to future drug use. In this light, I recommend that the policies considered are extended to all Aboriginal youth in custody. A review of policy development in the area of Aboriginal youth justice finds that non-custodial options for Aboriginal youth, such as sentencing circles and community-based, traditional healing options are receiving attention and funding in the Canadian justice community (Chartrand, 2005). The Aboriginal youth in this research are not eligible for such alternatives

because of either violent or repeat offending. Unfortunately, policy alternatives to increase the rehabilitation and decrease the re-offending rates of Aboriginal youth already sentenced to custody are hard to find. A review of North American and international custody-based programs for Aboriginal or minority youth with drug use and co-occurring challenges finds few alternatives that match the needs profile and institutional location. Thus the first alternative chosen is a moderate intervention alternative that is a direct response to the findings and not adopted from another jurisdiction. The second alternative is more intensive and balances fit with the needs of the Aboriginal youth in this cohort with evidence of effectiveness in addressing youth recidivism in other jurisdictions. Both alternatives are modified in the components and delivery of services to fit the cultural needs of Aboriginal youth in custody.

## **5.2 Policy Alternative: Status Quo**

### **Rehabilitation Goals:<sup>10</sup>**

- To facilitate rehabilitation by providing youth with optimal opportunities for healthy growth and pro-social development through:
  - effective programs that respond to the individual and cultural needs of youth
  - a youth-focused integrated case management process that provides for comprehensive and dynamic case plans
  - implementing strategies that promote successful re-integration to the community

### **Target Population:**

- All youth serving custodial sentences and on parole

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<sup>10</sup> Ministry of Children and Family Development website. Retrieved on March 1 2008, from [http://www.mcf.gov.bc.ca/youth\\_justice/custody.htm](http://www.mcf.gov.bc.ca/youth_justice/custody.htm).

**Locations:**

- Youth Custody Centres
- Community-based service providers in Prince George and Vancouver

**Case Management:**

- Facilitated by the assigned Probation Officer and Case Managers, the plan is a dynamic, individualized plan for services and interventions to aid in the rehabilitation of the young offender
- The youth, parent/guardian, community probation officer, social worker and program staff may all participate in case management

**Services Provided In Custody:**

- **Basic Programs:** services required to be provided by legislative requirements and/or national and international standards.
  - Examples: education, religious programming, recreational/ leisure programs and family visits.
- **Core Programs:** structured, interactive programs to influence beliefs, attitudes, lifestyles and skill deficits known to contribute to unlawful behaviour, these programs are led by staff members and/or other professionals.
  - Examples: substance abuse management, life skills.
- **Specialized Programs:** respond to distinct needs of particular youth or categories of youth.
  - Examples: Aboriginal youth, female youth, violent offenders, sexual offenders, mental health services, FAS/FAE program, drug and alcohol counselling.

### **Services Provided on Parole/Reintegration:**

- Support a return to the community through the provision of community based services.
  - Examples: day programs, intensive support and supervision programs, specialized residential programs, community transition beds, community service work, drug and alcohol programs, full and part-time wilderness challenge programs, counselling, violent offenders and sexual offenders counselling.

### **Duration:**

- Oversight and services commences and terminates with all continuous youth court orders requiring supervision (generally 6 to 12 months).

### **Involved Agencies:**

- Ministry of Children and Family Development
  - BC Youth Justice Services & Community Justice Services
  - Youth Forensic Psychiatric Services
- Contracted Aboriginal Service Providers

## **5.3 Policy Alternative: Increased Aboriginal Service Provision**

This alternative extends the provision of Aboriginal cultural services through custody and on parole and targets the dual vulnerabilities of post-release drug use and homelessness. The location, goals and baselines services outlined in section 5.2 would not change. Additional policy changes and services would include:

### **Target Population:**

- Aboriginal youth serving custodial sentences on probation <sup>A</sup> and/or Aboriginal youth with drug use issues at-risk of offending and re-offending in the community <sup>B</sup>

**Locations:**

- Youth Custody Centres
- Community-based service providers

**Services Provided/Policies Adopted In Custody:**

- Increase contract hours of Aboriginal cultural programming in youth custody centres, including remand <sup>A</sup>

**Services Provided on Parole/Reintegration:**

- Add Aboriginal programming to the post-release services currently offered after custody and on probation<sup>A</sup>
- Increase short-term housing for Aboriginal youth with substance abuse issues in Vancouver and Prince George <sup>B</sup>. Focus on short-term, damp housing options that can decrease street sleeping.<sup>11</sup>

**Duration:**

- Oversight and services commences and terminates with all continuous youth court orders requiring supervision (generally 6 to 12 months).
- Housing options are open to all Aboriginal youth regardless of current probationary status or history of incarceration.

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<sup>11</sup> Where *dry* housing insists upon residents being drug and alcohol abstinent to remain in the housing, *damp* housing does not penalize residents who use drugs and alcohol off-site, and *wet* housing does not interfere or penalize residents for drug and alcohol use on premises (this requires considerable collaboration with local policing units).

**Involved Agencies:**

- Ministry of Children and Family Development
  - BC Youth Justice Services & Community Justice Services
  - Youth Forensic Psychiatric Services
- BC Housing
- Local Governments
- Contracted Aboriginal Service Providers in Vancouver and Prince George

**5.4 Policy Alternative: Aboriginal Family Integrated Transitions Program**

This policy alternative is based largely on the Family Integrated Transitions (FIT) pilot programs operating in different counties of Washington State since 2000 under the direction of the Juvenile Rehabilitation Administration of the Department of Social & Health Services (Aos, 2004: 1). This program is focussed on youth at high risk of re-offending due to drug use and mental health issues. Adjustments to fit this program to the needs of Aboriginal youth in custody and Aboriginal communities are added to the program and noted with an asterisk in the description of services outline below. Some of the policy adjustments also come from other jurisdictions that have instituted similar “wrap-around” services with youth at high-risk of re-offending who come from marginalized communities (Burchard & Clarke, 1991).

**Specific Rehabilitation Goals:**

- Lower risk of re-offending
- Focus on family and care-giver strengths and empowerment
- Emphasize Aboriginal community involvement and capacity building to strengthen community ability to support youth\*

- Individualized services to meet the unique needs of each family
- Connect the youth and the family with appropriate community services
- Improve mental health status and stability of the youth
- Convert structured abstinence to motivated abstinence and have an early focus on relapse prevention
- Connection with on-going services upon discharge from the program

**Target Population:**

- Aboriginal youth age 11 to 17.5 with a substance abuse/dependency and a secondary health need\*
- Families of youth offenders
- At least 2 months left on sentence, 4 months on parole supervision
- Youth with the ability to reside in catchment area of pilot programs upon discharge
- Living with a family or stable placement
- Sex offenders are NOT excluded from the target population

**Locations:**

- Youth Custody Centres
- Services provided in the family's home
- Services provided through community-based service providers in Prince George and Vancouver

**Case Management:**

- Facilitated by the FIT Therapist, working in conjunction with the Probation Officer, Case Managers, family members and community members
- Involve Aboriginal elders and Aboriginal community-based service providers\*
- Involve staff from Ministry of Income Employment and Assistance

**Services Provided In Custody and on Release:**

- Utilizes a hybrid of evidence-based therapies:
  - Multisystemic Therapy (MST) is the core treatment model, plus:
  - Dialectical Behavior Therapy (DBT)
  - Motivational Enhancement Therapy (MET)
  - Relapse Prevention/Community Reinforcement
- Promotes behavioral change in the youth's home environment, emphasizing the systemic strengths of family, peers, school, and community to enable positive change
- Incorporates Aboriginal models of healing and Aboriginal perspectives\*
- Therapists available to family/care-giver and youth 24 hours a day, seven days a week
- Therapists carry small caseloads of just four to six families at any given time
- Therapists collaborate and partner with other MCFD and Community Service staff members
- Therapist Adherence Measures (TAMs) ensure the fit of the therapist and family through third-party contact with the families to discuss the fit of the therapist so therapist can adjust intervention to meet the needs of the family

**Duration:**

- Fit begins 2 months prior to release to strengthen and engage family and community supports. Program continues for 4 months after release.

**Involved Agencies:**

- Ministry of Children and Family Development
  - BC Youth Justice Services & Community Justice Services
  - Youth Forensic Psychiatric Services
- Aboriginal Community-Based Contracted Services
- Ministry of Education (supporting role)
- Ministry of Health (supporting role)
- Ministry of Income and Social Assistance (supporting role)

## **6: Criteria and Measurement**

The criteria employed in the evaluation of the status quo and two policy alternatives include effectiveness, acceptability, administrative ease and cost. Each criterion is given measure(s) to allow for accurate comparison across the alternatives. The measurements used for each criterion are derived from data found in case studies, information from relevant stakeholder documents and interviews with frontline service providers. All measurements including cost are converted into a value rating of good, fair or poor for each measure. A “poor” rating is one where the alternative did not meet the measurement. A “fair” rating means that the alternative partially met the measurement. A “good” rating means that the alternative met the measurement. All ratings for an alternative are summed up from a numerical proxy (poor = 1, fair = 2, good = 3) and the final rating is the sum of all values.

As the goal of this research project is to decrease recidivism among Aboriginal youth who use drugs and experience incarceration, each criterion is weighted according to its contribution to this goal. Finding an effective policy alternative is central to decreasing recidivism, and thus effectiveness is weighted more heavily than the other three criteria. The second most important criterion is acceptability. In light of the history of the BC government’s interventions in the lives of Aboriginal young people, it is critical that any policy alternative can obtain the support of Aboriginal and government stakeholders. The last two criteria of administrative ease and cost are important considerations in ascertaining the likelihood that any new policy alternative would be adopted yet these two criteria are weighted as slightly less important to the evaluation as the previous two criteria. Given the severity of the problem of recidivism among Aboriginal youth in custody, new expenditures and administrative adaptation by government and Aboriginal stakeholders is warranted.

Table 13 Definition, Measurement and Value of Criteria for Evaluation

Criteria	Definition	Measurements	Value
<b>Effectiveness</b>			
Recidivism	<i>How effective is the alternative in decreasing recidivism?</i>	Expected percentage decrease in recidivism of Aboriginal youth in custody based on case study comparisons	Good = 3 Fair = 2 Poor = 1
Targets Known Needs	<i>Are the multiple vulnerabilities of Aboriginal youth in custody addressed by the alternative?</i>	Addresses multiple vulnerabilities of Aboriginal youth	Good = 3 Fair = 2 Poor = 1
Culturally Appropriate	<i>Are the culturally holistic needs of Aboriginal youth met by the alternative?</i>	Addresses spiritual, emotional/mental/physical needs of Aboriginal youth	Good = 3 Fair = 2 Poor = 1
<b>Acceptability</b>			
to Aboriginal community	<i>Does the alternative fit with the expressed objectives of Aboriginal communities?</i>	Position papers of Aboriginal leadership, communities, and service organizations	Good = 3 Fair = 2 Poor = 1
to BC Government Agencies	<i>Does the alternative fit with the expressed objectives of relevant BC Government agencies?</i>	Position of Ministry of Children and Family Development	Good = 3 Fair = 2 Poor = 1
<b>Administrative Ease</b>			
	<i>How complex is the administration of the policy alternative?</i>	Number of government agencies and Aboriginal services expected to be involved	Good = 3 Fair = 2 Poor = 1
<b>Cost</b>			
	<i>The costs of providing the alternative in BC custody centres?</i>	Implementation and cost per youth Projected cost savings from reductions in recidivism	Good = 3 Fair = 2 Poor = 1

## **6.1 Effectiveness**

The effectiveness of each policy alternative is evaluated by three different measures. The ability of the policy to decrease recidivism among Aboriginal youth in custody is estimated using case study data of similar interventions with youth offenders. Secondly effectiveness is measured by the alternatives ability to target the specific vulnerabilities identified in the findings and the broad multiple and systemic challenges that effect Aboriginal youth who use drugs and come in contact with the justice system. And finally, the effectiveness of the policy is measured by the cultural appropriateness of the alternative for Aboriginal youth. It is important to acknowledge that Aboriginal communities in BC are diverse, and use different approaches to traditional culture-based healing practices. The evaluation requires a general typography of cultural practice that can be used to evaluate the fit of the alternative. The alternatives are assessed for their ability to address the four basic components of Aboriginal healthcare: spiritual health (smudging, sweats, speaking with/listening to elders, deepening connection with culture), emotional health (having balance in emotional state, space to express joy and sadness), mental health (developing self-esteem and balance) and physical health (healthy body and protection from harm), (Saskatoon Aboriginal women's Healthy Community Committee, 2004). The measure of cultural appropriateness is strictly a basic test of cultural fit of the alternatives considered, and in the recommendation and implementation discussion in section 8, the importance of Aboriginal involvement in the development phase of any alternative will be discussed in more detail.

## **6.2 Acceptability**

This criterion measures the acceptability of the alternatives evaluated to both the provincial government and Aboriginal communities in British Columbia. The alignment of the policy alternative with the provincial government's goals is measured using the publicly available goals and objectives of the Ministry of Children and Family Development. MCFD oversees the

current youth justice services and would play a significant role in any new policy alternative for Aboriginal youth in custody. As mentioned previously, MCFD's three goals for rehabilitation and reintegration of youth in custody include (MCFD, 2008):

- respond to the individual and cultural needs of youth
- provide youth-focused integrated case management process that provides for comprehensive and dynamic case plans
- implement strategies that promote successful re-integration to the community

The role and views of Aboriginal communities, leadership and service providers in relation to Aboriginal youth in custody is challenging to define. The majority of Aboriginal leadership in relation to the youth justice system is in the design and delivery of alternative sentencing programs, which are not applicable to recidivist Aboriginal youth who end up in custody. In recent years, youth custody centres have contracted Aboriginal service providers to deliver cultural programming in the centres. While interviews with the service providers in Prince George provided insight into the development of policy alternatives and the state of existing services, these organizations are not involved with the breadth of services provided for youth in custody. Aboriginal leadership at the provincial, nation and band level hold a significant and growing role in the design, delivery and evaluation of child welfare services in British Columbia. Aboriginal communities and organizations, responding on related issues such as MCFD's child welfare practices, have articulated clear expectations of how services can be delivered in line with the needs and expectations of Aboriginal families and communities.

The Vancouver Coastal Aboriginal Planning Committee 2007/2008 Pre-service Plan includes a useful set of seven identified service expectations compiled from the feedback of Aboriginal communities and service organizations. The themes that emerge are used in the study

as a proxy for Aboriginal community expectations in regard to youth services (VCAPC, 2008:

10). The seven themes of appropriate services include:

- ease and simplicity of access
- clear accountability for the outcomes
- holistic services that address individual and family needs
- ability to build capacity in the family and the community
- focus on community-based services
- support for cultural preservation and survival
- building relationships between organizations and individuals

Alternatives will be assessed on their ability to meet these service expectations.

### **6.3 Administrative Ease**

This criterion measures the perceived difficulty of implementing the policy alternative.

This criterion is measured by the number of government ministries and Aboriginal service providers needed to actively design and deliver the policy alternative, and their present capacity to participate in development and provision of the alternative.

### **6.4 Cost**

This criterion measures the cost of the status quo and both policy alternatives.

Calculations are conservative, back of the envelope estimates that include two measures of cost. The implementation costs outline the necessary one-time and annual costs of the alternative over and above the existing youth justice services budget allocation in the status quo. The recidivism costs measure the current and predicted costs of providing custody and services for youth who recidivate under the status quo and each alternative.

## 7: Evaluation of Policy Alternatives

Table 14 Evaluation of Alternatives

Criteria	Alternative 1	Alternative 2	Alternative 3
	Status Quo	Increased Aboriginal Services	AFIT Program
<b>Effectiveness</b>	<b>3</b>	<b>7</b>	<b>9</b>
Recidivism	Poor (1)	Fair (2)	Good (3)
Targets Known Needs	Poor (1)	Fair (2)	Good (3)
Culturally Appropriate	Poor (1)	Good (3)	Good (3)
<b>Acceptability</b>	<b>3</b>	<b>4</b>	<b>6</b>
to Aboriginal Community	Poor (1)	Fair (2)	Good (3)
to BC Government Agencies	Fair (2)	Fair (2)	Good (3)
<b>Administrative Ease</b>	<b>Good (3)</b>	<b>Fair (2)</b>	<b>Poor (1)</b>
<b>Cost</b>	<b>Poor (1)</b>	<b>Fair (2)</b>	<b>Good (3)</b>
<b>Ranked Weight Total</b>	<b>10 / 21</b>	<b>15 / 21</b>	<b>19 / 21</b>

## 7.1 Status Quo

The status quo of youth custody services in BC is not effectively addressing recidivism among Aboriginal youth who receive custodial sentences. Almost all Aboriginal youth in custody have an existing problem with drug and substance use. The rate of recidivism among Aboriginal youth in custody is conservatively estimated at 75 percent of the annual admissions of Aboriginal youth to custody (McCreary Centre Society, 2005; Corrado & Cohen, 2002). Without any significant changes in the delivery of services in custody and through parole, the expectation is that the high rate of recidivism among Aboriginal youth will continue or possibly increase overtime. The status quo of services does include a wide array of in custody services that target individual vulnerabilities that Aboriginal youth experience such as drug and substance use, violence and mental health. Yet once Aboriginal youth are on probation in the community, the availability of drug and alcohol services, emergency housing, and Aboriginal healing and cultural development services are limited (PARCA, 2004). Overall, the effectiveness of the status quo is significantly hampered by a lack of integration and continuity in the services provided Aboriginal youth in custody and on parole. Important strides have been made in recent years in increasing the provision of services for Aboriginal youth in custody that address spiritual, emotional, mental and physical. The recent addition of sweats, smudging, healing circles and counselling with elders to the services provided in custody have significantly increased the provision of holistic healing services for Aboriginal youth in custody (Interview with V. Thomas, 2008). Still, Aboriginal cultural services are only contracted for youth in custody, and are not yet considered an integral part of post-release services.

The acceptability of the status quo to MCFD and the Aboriginal community is mixed. The status quo is not adequate two the three core objectives of MCFD in relation to rehabilitation and reintegration of youth who receive custodial sentences. While services in custody include greater individualization and cultural appropriateness, this is not carried into the critical parole

component of Aboriginal youth services. If MCFD is held to their final objective of “implementing strategies that promote successful re-integration to the community” the status quo is not addressing this objective. The status quo receives a poor mark on its ability to meet the seven points of service expectation of Aboriginal communities. While there has been some advances in making the custody based services more accessible and holistic, the entire program of services for Aboriginal youth in custody and through parole are not holistic, do not develop capacity or significantly involve the Aboriginal community.

In the status quo of services for Aboriginal youth in custody the administration of services is quite simple. MCFD has primary responsibility and oversight of the youth justice system, custodial services and services on probation. Contracted services are used by the Ministry where they deem appropriate and necessary. The role of Aboriginal service providers in the status quo model is limited and this administratively easy.

Currently the entire budget for youth justice services, including custody centres, probationary services, youth forensic service, contracted and other services is \$66.3 million annually, of which the ministry recovers \$22 million from the federal government for the provision of youth justice services (MCFD, 2007). The status quo of services does not add any additional programming or implementation costs to this budget, but the cost of inaction is important to consider. In 2005/2006, the average number of youth in custody in BC was 134, of which 53 were Aboriginal. If we use the conservative estimate that 75% of Aboriginal youth are serving at least their second custodial sentence, then the cost of not addressing recidivism is the cost of providing annual custodial services for 40 youth. The provincial government does not provide a break-down of the individual cost of custodial and release services for individual youth. Researchers in Canada find that the yearly cost of keeping a youth offender in custody is between \$95,000 and \$125,000 (Campbell, 2007; Department of Justice, 2006). This cost estimate does not include the required judicial costs, community-servicing costs, policing costs, etc. Using the

conservative estimate of \$100,000 as the cost of a year's custody provision, the cost of Aboriginal youth recidivism in BC is \$4,000,000 per year. Relative to the expense and projected cost savings of both policy alternatives the status quo fares poorly at saving taxpayer costs.

## **7.2 Increased Aboriginal Service Provision**

In comparison to the status quo, the second policy alternative is projected to be more effective; however, estimating the degree of effect that this policy alternative could have on the recidivism rate of Aboriginal youth is difficult. Unlike with the AFIT alternative discussed next, estimating the impact of these policy measures is limited by a lack of rigorous evaluation of Aboriginal cultural-based healing services and emergency housing services on recidivism. A recent report on Aboriginal youth contact with the Vancouver Police Department, found that youth who “engaged in spiritual ceremonies, whether in a private or public setting, were less likely to be involved with the police” (Dooley, Floyd and Welsh, 2005: vi). On the first measure of effectiveness it is plausible and conservative to suggest that this alternative will be more effective than the status quo in reducing recidivism. The second alternative targets the specific vulnerabilities of homelessness among Aboriginal youth who use drugs and increases the continuity of access to Aboriginal services through the youth justice system and on parole. The holistic needs of Aboriginal youth are more consistently met in the second alternative. Overall, the Increased Aboriginal Services alternative is evaluated as being moderately effective.

In comparison to the status quo, the second policy alternative is aligned with the three core objectives of MCFD and is expected to be acceptable to stakeholders in the Aboriginal community. By increasing the Aboriginal cultural services in youth custody and through parole this alternative increases MCFD's ability to “to respond to the individual and cultural needs of youth” (MCFD, 2008). By increasing emergency, community housing options for Aboriginal youth who use drugs the alternative increases the likelihood of “successful re-integration to the community” (MCFD, 2008). In comparison to the status quo, the second alternative meets more

of the service expectations of Aboriginal communities. The alternative supports cultural preservation and survival, increases community-based provision of services, increases access to emergency housing, and supports the continuity of the relationships that Aboriginal offenders develop with Aboriginal service providers in youth custody. Still, the fact that the second alternative adds on to the existing framework of the status quo means that the fundamental nature of the system is not altered. Truly holistic services are not developed, accountability is not shared with Aboriginal communities, and the capacity and leadership of Aboriginal communities in the youth justice system are not developed.

The implementation of the second policy requires the current providers of Aboriginal cultural services for youth in custody to expand their services, and it requires MCFD to collaborate with housing stakeholders, other levels of government and other government agencies to increase community beds for at-risk Aboriginal youth. Interviews with contracted Aboriginal service providers currently working in the Prince George Youth Custody Centre finds a desire to expand Aboriginal cultural service provision to youth in custody and on probation in the community (interview with Four Winds Consulting staff, 2008). As this alternative utilizes the existing administrative process of contracting services with Aboriginal providers, no significant administrative challenges are expected. The expansion of supportive housing in the community for Aboriginal youth who use drugs requires the engagement of several government and community partners. The BC Housing Society is a “provincial crown agency that develops, manages and administers a wide range of subsidized housing options for those in greatest need” (BC Housing website, 2008). While BC Housing plays a significant role in the planning and targeting of temporary youth housing, the funding and oversight can involve local governments, contracted service providers and occasionally the federal government. In light of the need for immediate development of temporary housing beds the alternative would work with existing service providers to incrementally increase the number of emergency and transitional beds for

Aboriginal youth who use drugs in existing Vancouver and Prince George safe houses and shelters.

This policy alternative would require additional and on-going expenditure above the current provincial government budget. Piloting Aboriginal cultural services for youth on parole in both Prince George and in Vancouver is roughly estimated to cost \$100,000 per year in staffing and program costs for each location (interview with Four Winds Consulting staff, 2008). The cost of providing two more beds in a transition houses is approximately \$125,000 annually (Sinoski, 2008). While the funding based on mandate and structure would likely come from the BC Housing budget, for the purpose of analysis the costs are evaluated for their implication for the overall BC budget. It is estimated that the new annual costs of the second policy alternative would total \$450,000.<sup>12</sup> As mentioned previously in measuring effectiveness, the expected impact on recidivism rates from the measures in policy alternative two are not clear. For the sake of comparisons, if the policy alternative could decrease the annual volume of Aboriginal youth returning to custody by 10 percent (n=5 youth) the projected cost savings through decreased custody provision (5 x \$100,000/annually) would save the provincial budget more than the cost of expenditure. Relative to the status quo the costs and savings of the second policy alternative are fair.

### **7.3 Aboriginal Family Integrated Transitions Program**

FIT is a form of intensive intervention with youth at high risk of re-offending, which has been found to have a significant effect on decreasing recidivism. The Washington State Institute for Public Policy regularly undertakes extensive and detailed cost-benefit analyses of different programs and services that aim to decrease recidivism among youth offenders in North America (Aos, Miller & Drake, 2006). When the Washington State Legislature initiated pilot programs of

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<sup>12</sup> This cost includes: \$200,000 for increased Aboriginal service provision in Vancouver and Prince George and \$250,000 for two new supported transition beds in existing facilities in Vancouver and Prince George.

the Family Integrated Transitions program in 2002, they included an extensive evaluation component to be managed by the Washington State Institute for Public Policy (WSIPP), (Aos, 2004: 1). The FIT program is one of only a few North American initiatives that successfully target high risk youth offenders with multiple challenges (Aos, Miller & Drake, 2006). In 2004, the WSIPP evaluation of offending rates found statistically significant differences in the recidivism rates of youth who participated in a FIT pilot (n=104) in comparison to youth who fit the criteria for the FIT pilot (n=169) but did not reside in a pilot catchment area and thus could not participate (Aos, 2004). The recidivism rate of FIT participants' 18-months after release was 33 percent lower than for those youth who did not participate in the FIT program (Aos, 2004).<sup>13</sup>

The Washington State FIT program components are designed to meet the needs of youth sentenced to custody with both drug use and mental health issues. The innovation of the FIT model is predominantly in how services are delivered to youth and their families, rather than in the specific services given. In section 5.3, the suggested Aboriginal Family Integration Transition (AFIT) program is adapted to meet the needs of Aboriginal youth in custody who use drugs and have multiple needs, without losing the integrity of the FIT program structure. Several of the adaptations are based on “wrap-around” service models used with youth offenders that are similar to the FIT program (Burchard & Clarke, 1991). As the AFIT model addresses multiple vulnerabilities of Aboriginal youth offenders, includes drug use as a central risk factor, addresses underlying vulnerabilities from trauma and other health issues, and increases support for Aboriginal youth on probation, this alternative appears highly effective at addressing the known needs of Aboriginal youth in custody. In the amended AFIT model the role of Aboriginal elders, communities and families in the decision-making and implementation is made more prominent. With Aboriginal leadership and the integrated design of the FIT program the alternative is expected to be able to meet all four objectives of the Aboriginal healing model.

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<sup>13</sup> FIT participants recidivism rate after 18 months was 27 percent compared to 40.6 percent recidivism among those youth who did not participate in the FIT program.

AFIT aligns well with MCFD's goals for rehabilitation and reintegration of youth in custody. In comparison to the status quo and first alternative, AFIT is highly responsive to individual and cultural needs of Aboriginal youth, enhances the comprehensiveness and integration of case management practices, and is one of the most successful initiatives available for promoting "successful re-integration to the community" (MCFD, 2008). The amended AFIT alternative also addresses many of the service expectations articulated by Aboriginal leaders and community stakeholders. AFIT simplifies access to necessary services, enables Aboriginal youth and their families to address any short-comings in the services with service providers, takes a whole family approach to wellness, develops capacity in Aboriginal communities, supports cultural preservation, and focuses on the development and consistency of relationships between youth, families and service providers. Overall the AFIT model is rated very strongly on both acceptability measures.

The AFIT alternative's poorest rating is on the criterion of administrative ease. The design and implementation of a BC AFIT model will require the engagement and mobilization of Aboriginal communities, leaders and service providers and significant capacity development. On the side of government agencies, AFIT will require adjustments in the current structure of custody and probation services through MCFD and associated agencies. To facilitate the level of family support envisioned in the AFIT alternative it is expected that the Ministry of Health, Ministry of Economic Assistance and the Ministry of Education will play an important supporting role.

Cost data from the Washington State FIT program finds the cost of the 6-month FIT program is \$8,968 US dollars per youth and family. This cost includes all direct state expenditures (staffing, programming, evaluation, training, etc). As the adapted AFIT program requires greater involvement of Aboriginal communities in the interventions the BC alternative is expected to be a more costly initiative. A generous estimate that the service would require twice

the cost outlay of the Washington state model would require approximately \$20,000 per youth and family put through the program. With the rates of drug use among Aboriginal youth custody estimated as being between 75 and 100 percent, a conservative estimate would suggest that approximately 40 Aboriginal youth would participate in AFIT at any given time. The cost of putting 40 youth through the AFIT program would cost approximately \$800,000 in new budget expenses.<sup>14</sup> The projected savings from decreasing the rate of Aboriginal youth recidivism over the following fiscal cycle would be a 33 percent reduction in the cost of recidivism in the status quo model, if results between AFIT and the Washington FIT model are comparable. Thus the total savings from reduction in recidivism would be \$1.32 million annually or \$480,000 after the cost of service implementation.

#### **7.4 Limitations**

It should be acknowledged that the approach to recidivism analysis undertaken in this research was limited by the structure of the baseline Cedar survey questions. The baseline survey does not capture information on the length of each incarceration episode, connect conviction incidences with incarceration episodes, or distinguish between remand (short-term custody while awaiting a hearing) and sentenced custody (Juristat, 2002). Thus the dependent variables for recidivism treats sentenced and remand custody equally. Research on the effect of time lapse between an event occurrence and survey, finds that the accuracy of survey respondents' recall of minor and short-term events is decreased (Pierret, 2001). Given that the median age of young people in the Cedar survey is 28 years old, and that survey participants have experienced considerable levels of trauma, attempting to gather highly specific and date driven data on incarceration and recidivism may not be a wise choice.

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<sup>14</sup> This estimate is conservative in that utilization of existing services within the MCFD framework could likely be repurposed to deliver services in the AFIT program, which would reduce the overall cost of implementation.

## **7.5 Recommendation**

This investigation of the vulnerabilities to recidivism among Aboriginal young people who use drugs uncovers a need for effective and appropriate policy alternatives that can address the multiple and underlying risk factors Aboriginal youth experience at the point of their first contact with the youth justice system. In the evaluation of the status quo and two policy alternatives, the Aboriginal Family Integration Transition (AFIT) program is found numerically to be the most effective and acceptable alternative to meet the complex needs of Aboriginal youth in custody with a score of 19 out of 21, compared to the 15 out of 21 of the second policy alternative. Recognizing that the criteria for cost and effectiveness (recidivism measure) overlap, the scoring mechanism slightly favours the AFIT program because of its strong results and the due to the lack of information on the second policy alternative's potential to decrease recidivism. A more tempered assessment might suggest that alternative 2 and 3 are roughly equal in their strength. That the knowledge generated for the FIT program strengthens its evaluation is a short-coming of the analysis but it is also the reality of the situation. That the FIT program has been implemented in other jurisdictions and evaluated makes recommending it less risky than the second alternative. While this paper is intended as a starting point in the development of services for Aboriginal youth in custody, it is recommended that the Ministry of Children and Family Development begin seek the resources and appropriate partnerships with Aboriginal communities to implement a comprehensive and intensive program for Aboriginal youth in custody along the lines of AFIT. While the AFIT program is not intended to be super imposed on the BC system, the development of program models in British Columbia drawing upon the AFIT program is recommended.

Addressing the over-arching problem of the over-representation of Aboriginal people in Canadian prisons is a long-term objective that will require significant and lasting changes across governments, ministries and within Aboriginal communities. It is critical that the implementation

of the AFIT program is a starting point from which even more comprehensive, long-term initiatives for addressing Aboriginal youth recidivism are undertaken. The implementation of new frameworks and alternatives will require the genuine and respectful engagement of the Aboriginal community at the ground level, and will need to include both preventative and responsive policy development. It is recommended that in implementing the recommendation to draw on the AFIT program in developing future policy, the provincial government include the following short-term and long-term actions to address Aboriginal youth recidivism:

**Short-term Objectives**

- **Establish a working group to design, implement and evaluate an AFIT program for Aboriginal youth in custody**
  - Leadership of the working group should be shared by Aboriginal community members and government staff
  - Membership on the working group or sub-committees should include: Aboriginal leaders, Aboriginal community service providers, non-Aboriginal community service providers, government agencies, academic and knowledge related organizations
  - Two thirds of all working group members should come from the Aboriginal community
  - Fund research and knowledge development on what works with high-risk, multiple need Aboriginal youth in custody in Canada
  - Develop culturally appropriate means to engage Aboriginal youth offenders and their families in the design and evaluation of new service frameworks
- **Timeline of Deliverables:**

- Establish working group membership in next 6 months
- Interim report in 12 months
- Comprehensive recommendations for plan in 24 months

**Long-term**

- **Engage in broader relationship development with Aboriginal communities and stakeholders on the issue of Aboriginal youth incarceration and recidivism in BC**
  - Include community development issues such as early childhood education, child poverty, etc.
- **Develop reliable and consistent funding for policies and services to decrease incarceration among Aboriginal youth**
  - Engage the federal counterparts on the how to increase the flexibility of funding sources so that success is rewarding not penalized

## **8: Conclusion**

This research paper adds another important layer of knowledge to the problem of Aboriginal over-representation in the youth justice system. In 2006, the Child and Youth Officer of BC's review of Aboriginal youth in custody found a need for the development of a "profile of incarcerated Aboriginal youth as a first step in creating strategies for addressing the over-representation of Aboriginal youth in the youth custody centres" (3). The findings of this paper contribute to local, national and international knowledge on Aboriginal youth who are struggling with drug use and recidivism.

The rate of drug use among Aboriginal youth in custody in BC is shocking, particularly in light of the age of first use and the prevalence of hard drugs (Corrado & Cohen, 2002). This study focused on a cohort of Aboriginal young people in BC who use drugs and have a history of contact with the justice system. The experiences that these young people shared with researchers through the Cedar survey enabled a unique opportunity to look back on the trajectories of their lives to ask what drives their drug use, incarceration and recidivism. The risk factors and vulnerabilities identified through logistic regression are mixed. Findings support the need for early intervention at the point of first contact with the youth custody system, and more effective and integrated services to address the multiple risk factors of homelessness and injection drug use. Strong connections between historical trauma variables and recidivism were not evident in this sample, and future research on this topic could include an investigation of different sub-populations within the cohort. Though trauma pathways were not illuminated the levels of trauma and victimization shared by Cedar participants' demands that these risk factors be acknowledged and addressed. The analysis of policy alternatives to address youth recidivism finds much to be

hopeful for and the implementation of an AFIT program for Aboriginal youth in custody is an excellent first step.

In the 2008 throne speech, the BC government committed to the development of a “new relationship” with Aboriginal people. The speech included specific mention of the need to improve the care for Aboriginal children and it upheld Jordan’s Principle as mechanism for achieving this. Jordan’s Principle, named for an Aboriginal child whose early death was exacerbated by government disputes over jurisdictional responsibility, demands that the needs of Aboriginal children are put before the need for clarity of economic responsibility.<sup>15</sup> Federal, provincial and Aboriginal governments are expected to act immediately in the interest of the child’s safety and well-being. For Aboriginal youth in custody, most of whom are struggling with drug dependency and other multiple challenges, Jordan’s Principle demands that inter-government and intra-government jurisdictional concerns should not be allowed to diminish or derail the development and provision of services needed by Aboriginal youth.

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<sup>15</sup> The complete text for Jordan’s Principle can be found at <http://www.fnfcfs.com/more/jordansPrinciple.php>.

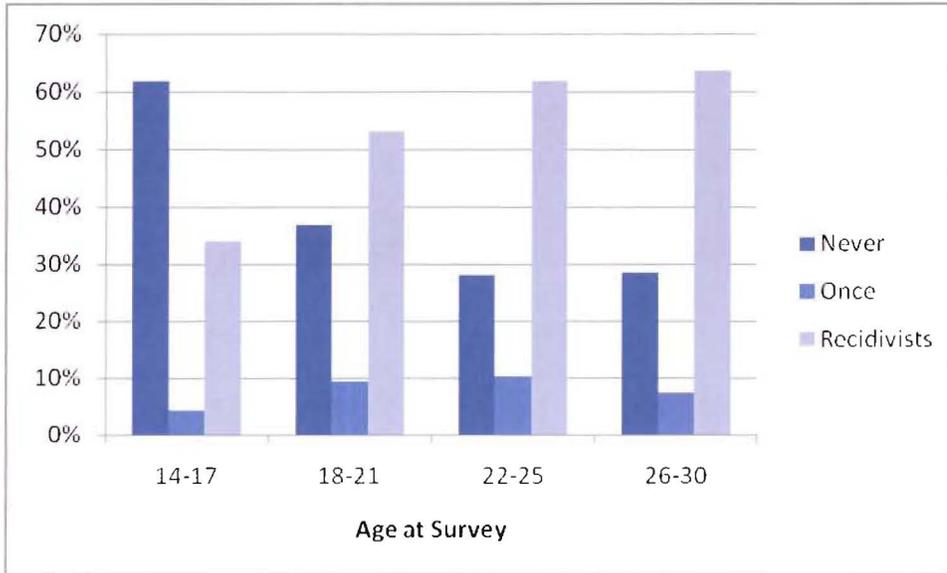
## **Appendices**

## Appendix A. Select Questions from Cedar Project Baseline Survey

1. Location of interview
2. What is your date of birth?
3. Where do you live right now?
4. Have you ever been in a methadone treatment program? (yes/no)
5. Have you ever had any alcohol or drug treatment? (yes/no)
6. Have you ever been detained by the police? (yes/no)
7. Were you ever taken from your biological parents? (yes/no)
8. Have you ever been '*on the street*' with no place to sleep for more than three nights? (yes/no)
9. Have you EVER been forced to have sex against your will and/or been molested? (yes/no/unsure/can't remember)
10. What kinds of charges have you received? (soliciting, theft over, theft under, possession of drugs, possession for the purpose of trafficking, mischief, under the influence, assault, robbery, armed robbery, B & E, other)
11. Since you started using, have you ever been in prison, jail or detention centre overnight or longer? (unsure, no, yes). If yes, how old were you the first time? Check all that apply for each of jail, prison, detention (once, 2 to 5 x, 6 to 10x, 11 to 20x, >20x, N/A)
12. Have you ever injected drugs? (yes/no)
13. Have you ever injected opiates? (yes/no)
14. Have you ever been forced to have sex against your will and/or been molested? (no/yes/unsure or can't remember/prefer not to answer)
15. Have you ever been told by a doctor that you have a mental illness/disorder or other disability (e.g. schizophrenia?)
16. Have you ever felt you should cut down on your drinking? (yes/no)
17. Have you people annoyed you by criticizing your drinking? (yes/no)
18. Have you ever felt bad, or guilty, about drinking? (yes/no)
19. Have you ever taken a drink first thing in the morning (eye opener) to steady your nerves or to get rid of a hangover? (yes/no)

## Appendix B. Age of Survey Participants & Recidivism

Figure 4 Percentage of Never Incarcerated, Once Incarcerated and Recidivists by Age Category of Survey Participants (n=543)



## Appendix C. Sentencing Options Under the YCJA

### Sentences for youths

There are two categories of sentences (or dispositions) in youth court: custody-based and community-based.

- **Custody Dispositions:** Custody dispositions require the young person to spend time in a designated correctional facility. There are two types:
  - **Secure (Closed) Custody:** the young person is committed to a facility specially designated for the secure detention of young persons.
  - **Open Custody:** the young person is committed to a community residential centre, group home, child care institution, forest or wilderness camp, or any other similar facility.
  
- **Community Dispositions:** Community dispositions can be served in the young person's community. They include a variety of sentences:
  - **Probation:** the youth must abide by a set of conditions for a maximum period of two years. At a minimum, the youth must keep the peace, be of good behaviour and appear in court when required to do so. Probation is often combined with other types of sentences.
  - **Fine:** the youth is ordered to pay up to \$1,000 within a set time period. However, credits for work performed in lieu of payment can be earned.
  - **Community Service:** the young person is ordered to perform community service work (a specified number of hours without pay for the benefit of the community).
  - **Absolute Discharge:** the young person is found guilty of the offence and is discharged absolutely (does not have to serve a sentence for his/her offence). However, a record is kept of the decision.
  - **Other:** various dispositions including conditional discharge, compensation, compensation in kind, pay purchaser (money for the innocent purchaser of

Source: Statistics Canada, *Profile of Youth Justice in Canada*, 1998.

## Bibliography

### Works Cited

- Adelson, N. (2005). The embodiment of inequity: Health disparities in Aboriginal Canada. *Canadian Journal of Public Health, 96*(2), 45-61.
- Aos, S., Miller, M., & Drake, E. (2006). *Evidence-based public policy options to reduce future prison construction, criminal justice costs, and crime rates*. Olympia WA: Washington State Institute for Public Policy.
- Aos, S. (2004) *Washington State's Family Integrated Transitions Program for juvenile offenders: Outcome evaluation and benefit-cost analysis*. Olympia WA: Washington State Institute for Public Policy.
- Artz, S., Nicholson, D., & Rodriguez, C. (2005). Understanding girl's delinquency: Looking beyond their behaviour. In K. Campbell (Ed.), *Understanding youth justice in Canada* (289-312). Toronto: Pearson Education Canada.
- Baron, S.W., & Hartnagel, T.F. (1998). Street youth and criminal violence. *Journal of Research in Crime and Delinquency, 35*(2): 166-192.
- Barlow, K.J. (2003). Examining HIV/AIDS among the Aboriginal population in Canada: In the post-residential school era. *Aboriginal Healing Foundation*, Retrieved March 20, 2008, from [http://www.ahf.ca/assets/pdf/english/hiv\\_legacy.pdf](http://www.ahf.ca/assets/pdf/english/hiv_legacy.pdf).
- Bonta, J., Lipinski, S., & Martin, M. (1992). The characteristics of Aboriginal recidivists. *Canadian Journal of Criminology*, July-October, 517-522.
- Bonta, J., Wallace-Capretta, S., & Rooney, J. (2000). A quasi-experimental evaluation of an intensive rehabilitation supervision program. *Criminal Justice and Behaviour, 27*(4): 312-329.
- Boyd, C. J. (1993). The antecedents of women's crack cocaine abuse: Family substance abuse, sexual abuse, depression and illicit drug use. *Journal of Substance Abuse Treatment, 10*(5), 433-438.
- Brzozowski, J., Taylor-Butts, A., & Johnson, S. (2006). Victimization and offending among the Aboriginal population in Canada. *Juristat, 26*(3): 1-31.
- Burchard, J.D., & Clarke, R.T. (1990). The role of individualized care in a service delivery system for children and adolescents with severely maladjusted behavior. *Journal of Mental Health Administration, 17*(1): 48-60.
- Cain, M. (1997). An analysis of juvenile recidivism. Proceedings from *Australian Institute of Criminology Conference Juvenile Crime and Juvenile Justice: Toward 2000 and Beyond*, Adelaide, SA.

- Calverley, D. (2007). Youth custody and community services in Canada, 2003/2004. *Juristat*, 26: 1-19.
- Campbell, K.N. (2007). Rehabilitation revisited: The changing nature of “intervention” in juvenile justice. In K. Campbell (Ed.), *Understanding youth justice in Canada* (260-284). Toronto: Pearson Education Canada.
- Chartrand, L. (2005). Aboriginal youth and the criminal justice system. In K. Campbell (Ed.), *Understanding youth justice in Canada* (313-333). Toronto: Pearson Education Canada.
- Child and Youth Officer of British Columbia. (2006). *Issue Paper 5: Aboriginal young people and the Youth Criminal Justice System*. Retrieved on January 3, from [http://www.rcybc.ca/Groups/Issuepercent20Papers/issue\\_paper\\_5\\_06\\_05\\_12.pdf](http://www.rcybc.ca/Groups/Issuepercent20Papers/issue_paper_5_06_05_12.pdf).
- Dembo, R., Williams, L., & Schmeidler, J. (1993). Addressing the problems of substance use in juvenile corrections. In J. A. Inciardi (Ed.), *Drug treatment and criminal justice* (pp. 97-126). Newbury Park, CA7 Sage.
- Department of Justice Canada. (2004). *One day snapshot of Aboriginal young people in custody across Canada: Phase II*. Retrieved on October 1, 2007, from <http://www.justice.gc.ca/en/ps/rs/rep/2004/snap2/index.html>.
- Department of Justice Canada. (2008). *Youth sentencing*. Retrieved on January 28, 2008, from [www.canada.justice.gc.ca/en/ps/yj/repository/3modules/04youth/3040001a.html](http://www.canada.justice.gc.ca/en/ps/yj/repository/3modules/04youth/3040001a.html).
- Department of Justice Canada. (2006). *Myths and realities about youth justice*. Retrieved, March 15, 2008, from <http://justicecanada.ca/en/ps/yj/information/mythreal.html>.
- Dobb, A., & Cesaroni, C. (2004). *Responding to Youth Crime in Canada*. Toronto: University of Toronto Press.
- Dooley, S., Floyd, R., Welsh, A. (2005). *Taking steps forward: Development of an Aboriginal youth justice programme*. Retrieved March 20, 2008, from [http://www.kwantlen.ca/\\_shared/assets/ayj\\_report\\_may2005\\_0001251.pdf](http://www.kwantlen.ca/_shared/assets/ayj_report_may2005_0001251.pdf).
- Erickson, P.M., & Butters, J.E. (2005). How does the Canadian juvenile justices system respond to detained youth with substance use associated problems? Gaps, challenges, and emerging issues. *Substance Use & Misuse*, 40: 953-973.
- Forrest, C. B., Tambor, E., Riley, A. W., Ensminger, M. E., & Starfiled, B. (2000). The health profile of incarcerated male youths. *Pediatrics*, 105.1, 286-291.
- Fournier, S., & Crey, E. (1997). *Stolen from our embrace: The abduction of First Nation's children and the restoration of Aboriginal communities*. Vancouver: Douglas and McIntyre.
- Freudenberg, N. (2001). Jail, prisons, and the health of urban populations: A review of the impact of the correctional system on community health. *Journal of Urban Health*, 78.2, 214-235.
- Government of British Columbia. (2008). Speech from the throne. Retrieved on March 28, 2008, from <http://www.leg.bc.ca/38th4th/4-8-38-4.htm>.
- Green, R. G., & Healy, K. (2003). *Tough on Kids: Rethinking Approaches to Youth Justice*. Saskatoon: Purich Publishing Ltd.

- Harrison, P. A., Fulkerson, J.A., and Beebe, T.J. (1997). Multiple substance use among adolescent physical and sexual abuse victims. *Child Abuse & Neglect*, 21.6, 529-539.
- Kines, L. (2008). *Child welfare plan hits a snag: First Nations group balks at proposal for regional services*. Retrieved on January 21, 2008, from <http://www.canada.com/victoriatimescolonist/news/story.html?id=8deb43b8-e2da-4a0e-a3f8-153baf3c6cbd&k=60207>.
- LaPrairie, C. (1995). Seen but not heard: Native people in the inner city. *The Journal of Human Justice*, 6.2: 30-45.
- Latimer, J., & Foss, L. C. (2005). The sentencing of Aboriginal and non-Aboriginal young people under the Young Offenders Act. *Canadian Journal of Criminology and Criminal Justice*, 47.3, 481-500.
- Magnani, R., Sabin, K., Saidel, T., Heckathorn, D. (2005). Review of sampling hard-to-reach and hidden populations for HIV surveillance. *AIDS*, 19(supl 2), S67-S72.
- McCreary Centre Society. (2007). *Against the odds: A profile of marginalized and street-involved youth in BC*. Retrieved on March 20, 2008, from [http://www.mcs.bc.ca/pdf/Against\\_the\\_odds\\_2007\\_web.pdf](http://www.mcs.bc.ca/pdf/Against_the_odds_2007_web.pdf).
- McCreary Centre Society. (2005). *Time Out II: A Profile of BC Youth in Custody*. Retrieved on January 15, 2008, from [http://www.mcs.bc.ca/r\\_ahs.htm](http://www.mcs.bc.ca/r_ahs.htm).
- McBride, D. C., VanderWaal, C. J., Terry, Y. M., & VanBuren, H. (1999). *Breaking the cycle of drug use among juvenile offenders*. Washington, DC: National Institute of Justice.
- McClelland, G. M., Elkington, K. S., Teplin, L. A., & Abram, K. M. (2004). Multiple substance use disorders in juvenile detainees. *Journal of the American Academy of Child Adolescent Psychiatry*, 43, 1215-1224.
- Ministry of Children and Family Development. (2007). *Factsheet: Youth Justice*. Retrieved on January 11, 2008, from [http://www.gov.bc.ca/mcf/mediaroom/cfd/facts/2007/docs/fs\\_071105\\_YouthJustice.pdf](http://www.gov.bc.ca/mcf/mediaroom/cfd/facts/2007/docs/fs_071105_YouthJustice.pdf).
- Ministry of Children and Family Development. (2002). *Memorandum of understanding*. Retrieved on March 15, 2008 from [http://www.mcf.gov.bc.ca/about\\_us/aboriginal/pdf/aboriginal\\_mou.pdf](http://www.mcf.gov.bc.ca/about_us/aboriginal/pdf/aboriginal_mou.pdf).
- O'Neil, J. D. (1995). Issues in health policy for indigenous peoples in Canada. *Australian Journal of Public Health*, 19.6, 559-566.
- Pawagi, P.W., Lang, R. (1999). Young offenders who are victims of abuse. Paper presented at the Children and Crime: Victims and Offenders Conference convened by the *Australian Institute of Criminology*, Brisbane.
- Pearce, M.E., Christian, W.M., Patterson, K., Norris, K., Moniruzzaman, A., Craib, K.J.P., Schecter, M.T., & Spittal, P.M. (Pending publication).
- Pierret, C.R. (2001). Event history data and survey recall: an analysis of the National Longitudinal Survey of Youth 1979 recall experiment. *The Journal of Human Resources*, 36.3: 439-66.

- Pivot Legal Aid Society. (2008). *Broken promises: Parents speak about B.C.'s child welfare system*. Retrieved on March 7, 2008, from <http://www.pivotlegal.org/pdfs/BrokenPromises.pdf>.
- Public Safety and Emergency Preparedness Portfolio Canada. (2004). *Corrections and conditional release statistical overview*. Retrieved on February 24, 2008 from, [www.psepc.gc.ca](http://www.psepc.gc.ca).
- Polischuk, Heather. (2007). Youth custody rate high among aboriginals. *Leader Post*, Regina, Mar 16, B3.
- Provincial Association of Residential and Community Agencies. (2004). *Strengthening youth justice partnerships: Summary of proceedings*. Retrieved on March 28, 2008 from [http://www.parca.ca/parca2004youth\\_justice\\_conference\\_final\\_report.pdf](http://www.parca.ca/parca2004youth_justice_conference_final_report.pdf).
- Roberts, Julian V, & Melchers, Ronald. (2003). The incarceration of Aboriginal offenders: Trends from 1978 to 2001. *Canadian Journal of Criminology and Criminal Justice*, 45.2, 211-242.
- Ross, R. (1992). *Dancing with a ghost: Exploring Aboriginal reality*. Toronto: Penguin.
- Ross, R. (2006). *Traumatization in remote First Nations: An expression of concern*. Paper source.
- Royal Commission on Aboriginal Peoples. (1996). *Report of the Royal Commission on Aboriginal Peoples*. Ottawa: Ministry of Supply and Services.
- Saskatoon Aboriginal women's Health Research Committee. (2004). Naspici miyomahcihowin (Continuous good health), Final report: A community-based research project examining the health needs of Aboriginal women in Saskatoon. The Prairie Women's Health Centre of Excellence, Winnipeg: Women's Health Bureau, Health Canada.
- Sinoski, K. (2008). *Federal money gives youth safe house new life: Shelter for troubled teens reopens after being shut more than a year*. Retrieved March 26, 2008, from <http://www.canada.com/vancouver/news/westcoastnews/story.html?id=25224708-eeef-4282-a5db-3e08f3b7b994>.
- Snyder, H., & Sickmund, M. (2006). *Juvenile offenders and victims: 2006 national report*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.
- Spittal, P. (2007). The Cedar Project: Prevalence and Correlates of HIV Infection Among Young Aboriginal People Who Use Drugs in Two Canadian Cities. *International Journal of Circumpolar Health*, 66.3, 226-240.
- Statistics Canada. (2005). *Criminal Justice Indicators*. Ottawa, Canada: Canadian Centre for Justice Statistics.
- Statistics Canada. (1998). *A Profile of Youth Justice in Canada*. Ottawa, Canada: Canadian Centre for Justice Statistics.
- Thomas, M., Hurley, H., & Grimes, C. (2002). Pilot analysis of recidivism among convicted youth and young adults – 1999/00. *Juristat*, 22.9: 1-20.
- Teplin, L. A., Abram, K. M., McClelland, G. M., Dulan, M. K., & Mericle, A. A. (2002). Psychiatric disorders in youth in juvenile detention. *Archives of General Psychology*, 59, 1133–1143.

- Tubman, J. G., Gil, A. G., & Wagner, E. F. (2004). Co-occurring substance use and delinquent behavior during early adolescence. *Criminal Justice and Behavior*, 31, 463– 488.
- Vancouver Coastal Aboriginal Planning Committee. (2008). *Vancouver coastal Aboriginal planning committee: 2007/2008 pre-service plan*. Retrieved on March 20, 2003, from
- Walters, K. L. (2002). Reconceptualising Native women's health: An 'indigenist stress-coping' model. *American Journal of Public Health*, 92.4, 520-524.
- Washington State Department of Social & Health Services. (2007). Exhibit a: Fit overview for solicitation. Retrieved on March 15, 2008, from <http://www.dshs.wa.gov/MSA/CCS/procurement/RFP0713-021.htm>.
- Weatherburn, D., Fitzgerald, J., & Hua, J. (2004). Reducing Aboriginal over-representation in prison. *Australian Journal of Public Policy*, 62.3, 65-73.
- Whitbeck, L.B., Adams, G.W., Hoyt, D.R., & Chen, X. (2004). Conceptualizing and Measuring Historical Trauma among American Indian People. *American Journal of Community Psychology*, 33, 345-363.
- Young, D.W., Dembo, R., Henderson, C. E. (2007). A national survey of substance abuse treatment for juvenile offenders. *Journal of Substance Abuse Treatment*, 32, 255-266.

## Interviews

Interview with staff of Four Winds Consulting, February 14, 2008.

## Statutory Laws

*Youth Criminal Justice Act*, 2002, c.1.

## Works Consulted

- Canadian Centre on Substance Abuse. (2007). *Harm reduction policies and programs for persons of Aboriginal descent*. Retrieved on January 9, 2008, from <http://www.ccsa.ca/NR/rdonlyres/9D021396-587C-4327-8FB7-42DDABCEED2E/0/ccsa0115152007.pdf>.
- Henselmann, C. (2001). *Urban Aboriginal People in Western Canada: Realities and Policies*. Retrieved on January 1, 2008 from <http://www.cwf.ca/V2/main/>.
- Krieg, A. S. (2006). Aboriginal incarceration: Health and social impacts. *Medical Journal of Australia*, 184.10, 534-536.
- Rudin, J. (1999). *Aboriginal self-government and justice*. In John H. Hylton (Ed.). *Aboriginal self-government in Canada: Current trends and issues*. Saskatoon SK: Purich.
- Small, W., Kain, S., Laliberte, N., Schechter, M. T., O'shaughnessy, M. V., & Spittal, P. (2005). Incarceration, addiction and harm reduction: Inmates experience injecting drugs in prison. *Substance Use & Misuse*, 40:6, 831 – 843.

## **Websites Reviewed**

Assante Centre for Fetal Alcohol Syndrome website at <http://www.asantecentre.org/services.html>

BC Housing website at <http://www.bchousing.org/>.

Ministry of Public Safety and the Solicitor General online at  
<http://www.pssg.gov.bc.ca/corrections/>.

Washington State Department of Social and Health Services online at  
<http://www.dshs.wa.gov/jra/about/>

Washington State Institute of Public Policy online at <http://www.wsipp.wa.gov/default.asp>

US Department of Justice, Office of Juvenile Justice and Delinquency online at  
<http://ojjdp.ncjrs.gov/index.html>