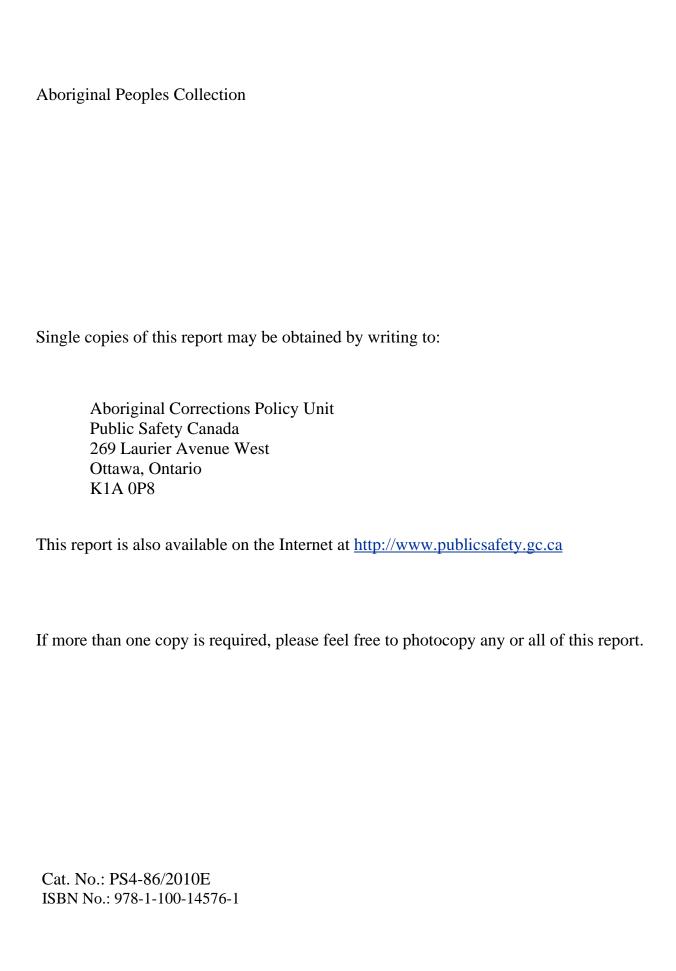
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Soccer Moms are Part of the Solution
"A Cost-Benefit Analysis of a
Volunteer-Based Gang
Prevention Initiative"
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Soccer Moms are Part of the Solution

A Cost-Benefits Analysis of Community-Based Gang Crime Prevention



BearPaw Research

A Department of Native Counselling Services of Alberta

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Executive Summary

Gang crime prevention is a large, all encompassing descriptor that includes a variety of actions that are taken at the community, municipal, provincial and national levels. For government and policy makers, crime prevention is most often the creation of legislation, policy and funding for services (correctional, policing or justice) that focuses on the reduction and prevention of crime. At the community level, crime prevention can be purposeful, community-based mobilization of members to prevent crime in their communities or may be the result of community member actions that are not necessarily intended to prevent crimes, but nonetheless clearly result in crime.

The research presented here begins with a case study of community mobilization that took place in Edmonton, Alberta in 2008. Names and information pertaining to children and community members involved in this action have been changed to protect their privacy. The event itself is recounted using narrative methodology that relates the details of the events in a coherent, holistic story that is based upon interviews with key informants who were part of the narrative. In general, the narrative describes how two self-described "soccer moms" reached out to connect Aboriginal and refugee children to soccer, and how these actions not only had an impact on these children but also describes how these acts triggered a series of actions that lead to the development of summer recreational and cultural programming for 100 children a week for a six—week period. It is a story of how change is created in the community by individuals who set out to the open doors of opportunity to vulnerable children.

The second section of the paper conducts a cost benefit analysis of this narrative and relates the actions taken to research on risk factors associated with gang recruitment, particularly for vulnerable children within the Aboriginal and refugee communities. Using a cost-benefit analysis framework the paper provides a detailed account of the costs and benefits associated with the following two probable scenarios:

1. Youth are involved with the community soccer program, which mitigates some of their risk factors and builds up protective factors. As a result, it is logical to assume a scenario whereby they will not be recruited into gangs and will not become involved in criminal and delinquent activities.

2. Youth are not involved with the community soccer program, and as such their risk factors are not mitigated and protective factors are not built up, therefore they remain at risk. As a result, it is logical to assume a scenario whereby they will be recruited into gangs and will become involved in both minor (for example, property offences) and serious (for example, offences against the person) criminal and delinquent acts.

The third section of the paper highlights the key findings drawn from the narrative and cost-benefit analysis. The cost benefit analysis clearly shows the significant net benefit of scenario one in which all viewpoints (youth, family, community, government) considered come out with a positive net benefit (everyone wins) and the negative net benefit of alternative two in which all viewpoints come out with a negative net benefit (everyone loses). While the saving of public funds in an important benefit, the ways in which the youth described in the narrative also benefited in a number of significant ways are also important. While these benefits were not given a monetary value in the cost-benefit analysis, we know they have value. Playing soccer enabled them to develop positive relationships with adults and peers, improved their behaviour and increased their connection to the community. The research shows that these protective factors are important components of effective gang crime prevention strategies.

This section also highlights how the community-based actions of individuals and organizations have an amplified effect when they are combined in a meaningful way. In the first narrative, the actions of a foster mother who lobbied for support to enable her foster son to play soccer was further strengthened by a soccer coach who created a way for the boy to develop his skills and passion for soccer through involvement in a competitive soccer league and enrolment in a school with a specialized soccer program. In the second narrative, the actions of one soccer mom contributed to the idea of using soccer to integrate immigrant and refugee children into the community which in turn contributed to the development of a sport, recreation and culture program that reached 100 children a week for a six—week period. In both instances, everything that was needed for the intervention was embedded in the community; the individuals who were responsible for these actions were connected to each other through the Community Solution to Gang Violence — and the result of these connections was a more purposeful, integrated intervention for at-risk youth in Edmonton. This is the power of community-based solutions to gang crime prevention.

The paper concludes with three critical points. First, grass-roots actions by ordinary citizens and community-based organizations can be a powerful crime prevention and anti-gang recruitment mechanism for youth who are at-risk of being recruited into street gangs. Second, the cost of these community-based actions is far lower than that incurred by youth involvement in gang criminal activity and violence. In fact, the analysis demonstrates that 95 youth could play a season of outdoor soccer for the cost of one youth committing a serious crime as a member of a gang. Third, the actions of community animation and brokerage services such as the Community Solution to Gang Violence in Edmonton can transform individual action into larger services that are cost effective and specific to youth who are at risk of being recruited into gang activity. While the solutions are embedded in communities, it takes conscious and deliberate action to identify them, bring them forward and transform them into part of the 'community solution to gang violence'. To be effective and to have a lasting and impact on crime prevention, we must find a way to connect the efforts of individual citizens, community organizations and government into a cohesive whole. As a starting point, we will follow the lead of a few soccer moms.

Section One: Community Narrative

(How Soccer Moms Save the World)

Background

Edmonton, like many of Alberta's urban centres, is a city in flux. The Alberta boom is bringing newfound prosperity to established residents and making its major cities attractive destinations for newcomers. Aboriginal people have been moving from rural regions to the urban centres in increasing numbers in recent years. The high cost of living and discrimination against Aboriginal people can cause considerable stress for these adults, and often their children lack the encouragement, support and resources to pursue sports and other healthy activities in the community. Within this context, street gangs can be a major draw for vulnerable young people who are not engaged in rewarding activities and sports like soccer.

Other newcomers including refugees are arriving in Alberta's major centres from some of the world's most unsettled regions. There are constant challenges for new immigrants to Canadian cities. Due to language barriers which restrict access to information, a lack of attachment to the broader Canadian society and the shock of adjusting to a complex new world, they often lack the opportunities to engage in healthy activities that other Canadians take for granted. When it is accessible however, soccer, the 'world's game', has the ability to draw people together from very diverse backgrounds like very few other activities. It can be a particularly rewarding pastime for new refugee and immigrant children and their families who can gain confidence and form new connections in the established community.

This narrative tells the stories of three children in Edmonton who overcame negative influences, including possible associations with youth gangs, through the encouragement and practical assistance of soccer moms, soccer coaches and the soccer community.

This first narrative recounts the events and activities that surrounded **Mark**, an Aboriginal boy who, as a ward of Children's Services, lives with his foster mother, **Carole.** The narrative revolves around how Mark became involved in soccer with this support of his foster mother, his soccer coach **Jill**, and **Pamela** and **Enid**, two soccer moms who took a particular interest in Mark.

Mark's Story

It is a Saturday morning and Pamela, a soccer mom and an enthusiastic volunteer, is watching her son's team play in the community league. They are playing an exceptional game – two goals in the first half and none let through their own net. Pamela's son has told her about newcomer on the team - Mark, an Aboriginal boy who, though brand new to the league, was showing up everyone at practice.

Pamela spotted Mark and noted his quiet intensity and astonishingly quick moves. "Hey how're you doing Pamela? See that boy Mark? He just nailed one home," remarks Coach Jill. "Look at that ball control! See how he naturally floats to where the ball is going and doesn't crowd around it like the other kids? He's got something going on."

"Yes I see. I've heard about him and now I can finally see him play," Pamela replies.
"I'd like to say hello to his parents. Where are they?" Pamela asks Jill.

"Oh they aren't here. He's a foster kid," says Jill. "See that big guy over there? He's the guy who drives Mark to the games. You'd better grab him quick 'cause he usually wanders off during the game."

Pamela introduced herself to the driver. The driver gave Pamela a few tidbits of information about the boy's background which intrigued her. At the same time, Pamela was saddened by the driver's lack of emotional connection to the boy. All the other kids had at least one parent watching their son from the sidelines. Pamela needed to know more. Why wasn't the foster mother here at the game?

Mark grew up amidst disturbing family violence, with a mother and father who frequently physically and verbally abused each other, Mark and his brothers. Drugs and alcohol were a constant presence in the household and Mark's mother was known to bring 'johns' home with her. So unstable was Mark's existence that police visits to his home were not uncommon and the boys would sometimes be forced to hide money and food.

Mark was six years old when he and his two brothers entered into Carole's foster care in Edmonton. Carole had a long history of volunteer work with children and experience as a foster mother. She first did volunteer work with homeless boys when she was 20 years old. After working with her partner in a First Nations Community for six years a teacher, she moved to Edmonton and became a foster mother. She was very quickly in high demand as she specialized in helping children from particularly disadvantaged backgrounds that are difficult to place. Finally, Mark and his two brothers were able to begin enjoying some of the stability they deserved.

But uncertainty would still remain a fixture in Mark's life. Carole had scarce time and resources for all three boys. Her health was poor and she had to stretch her limited finances amongst the boys. Mark and his brothers were forced to move and change schools when Carole took a six month break from foster parenting due to exhaustion. They were placed in a temporary living situation with their grandmother and after a difficult six months, were moved back to the care of Carole.

Carole was an experienced and dedicated foster mother. She knew how much her own children had benefited from playing soccer so she always encouraged the boys to kick the ball around in the backyard as much as they could. She knew Mark was sullen at school and not a high achiever, but she also noticed a spark of enthusiasm in the typically moody and subdued Mark whenever he was playing around with the ball. She could sense that soccer might help Mark come out of his shell.

Carole was aware that she could only enrol Mark in soccer if she could receive the necessary support to make it happen. Without support she would never have the time or the energy to keep up with the constant training and games. It would be a serious commitment for her. Carole lobbied for a youth worker to take Mark to and from games, but this was denied. She was finally able to register him when a social worker secured a driver who could take Mark to the games and trainings. Even with this support, the logistics involved in getting Mark to soccer were difficult and Carole was either too unwell or otherwise too busy to attend all the games herself. Even if Mark would not receive direct emotional support on game days, at least getting him out on the field was the first step. Mark was about to enter a whole new world of achievement.

Coach Jill became aware of Mark's talents almost immediately. He was very quiet and stand-offish, but his ball control was remarkable. Jill learned that Mark had played quite a bit of soccer at school but had never played in a league, so she made it a priority to contact Mark's foster mother. She learned about Carole's health issues and the difficulties in getting Mark to soccer each week. So Jill decided she must regularly keep in touch with Carole to keep her informed of Mark's progress.

By mid-season Jill noted that Mark's skills had improved and that he was gaining in confidence. She was now convinced that he should be playing beyond community soccer so she started to hatch a plan. Each season, the parents would chip in money to buy the coach a present. Jill decided that instead of buying a gift this season, they should pass the hat around to raise funds for Mark to attend a special end of season summer soccer camp run by the University of Alberta. Mark would have a week of intense training and go home with a new soccer ball. Anyone who had spent any time on the sidelines knew that Mark was destined for greater things so there was unbounded enthusiasm for the gift. It was agreed that Mark was a fantastic role model for the other boys on the team because he always demonstrated a quiet confidence and positive approach to team work. Thus he was a natural pick for the camp.

Coach Jill could see support building for Mark in the community. She wondered whether the camp could kick-start Mark's entry into competitive league soccer. Shortly after the decision was made to send Mark to camp, Jill asked Carole whether she'd be interested in Mark trying out for competitive league. Carole was intrigued, but was concerned with the expense of registering Mark. She had been paying for kids sports for many years and quite often had to use her own money that was not necessarily all refunded by the system.

This was also another period of uncertainly for Mark. Carole was again engaging in discussions with social workers about new placements for the boys because one of Mark's brothers was becoming an unstable influence at home, and Carole was increasingly having difficulty coping with all three boys. The social workers were aware that Mark was achieving great things in the soccer community but if his brothers left, Mark would have to go as well because of the policy to not split families up wherever possible. It was becoming increasingly probable that Mark would have to drop out of soccer entirely if the brothers left Carole's care. The social worker could not find a parent who was willing to commit to year-round club soccer.

So certain was Carole that soccer was the best thing for Mark's future she told the social workers she was prepared to keep the disruptive older boys if it meant Mark could keep playing.

Equally undeterred, Coach Jill asked her friend Enid to come and check out Mark's playing at practice to gauge whether he had what it took to move on. Enid is a soccer mom who knew a lot about the competitive league because her son, who was the same age as Mark, had been playing in that league. Enid agreed to come to training one afternoon and after witnessing him run the length of the field and power one home she instantly gave Mark the green light!

This was the turning point. Carole was now able to convince the social workers that it was crucial to Mark's development that he continue with soccer, so it was decided to allow her to just keep Mark in her care. Mark was to stay with the foster mom who loved him. Enid was overjoyed when she found this out and she decided to voluntarily drive Mark to competitive league training sessions. She knew that there was no way Carole could keep up with the competitive league schedule. Mark was entering a whole new level of competition.

Towards the end of the season, Coach Jill wanted to make sure she was leaving Mark with as much support as possible. She found out about a local school with a special soccer program for gifted youth and suggested Carole might enrol Mark so that he could continue the momentum he was building. Coach Jill decided to write an evaluation as a community level soccer coach for the school application and Carole agreed to follow this up by making a case for Mark with his social worker. He was accepted and the social worker paid the tuition.

The academy has been a major adjustment for Mark and he now plays soccer three afternoons per week. Carole has already noticed that his school marks have improved and he is finally writing neatly. He doesn't need to be pushed or pulled anymore to do his schoolwork. Mark is slowly making new friends as well and has even started bringing a friend along to the tryouts for the competitive indoor team.

This second narrative recounts the events and activities that surrounded Josef and Samy, two boys who with their parents and five siblings fled their homeland in Sudan, Africa to Canada as refugees. The narrative revolves around how Josef and Samy became involved in

community-based soccer with the support of **Pamela**, a soccer mom and concerned citizen, **Frank**, a community league volunteer, and their soccer coach **Mitch**.

Josef and Samy's Story

Its game two of the season and the Strikers are down 1-0 at half time. It's two minutes into the second half and it suddenly hits Coach Mitch that his team's opponents are two players up on them. 'Where are the new guys?!' he exclaims before spying Josef and Samy crouched over in the car-park, petting a small dog. "Hey kids, that whistle means half-time is over. Get out there and show 'em what you can do!"

Coach Mitch guides the two small boys onto the field. The boys scurry into their positions and the parents on the sideline rise into cheer. Josef and Samy's slender frames stand in stark contrast to this team of larger lads. Mitch instructs one of the other players to keep on eye on his new starters. "Make sure they stay on side," he growls.

Samy is sprightlier in his step now. Mitch noticed during the first half that Samy had to keep holding his baggy pants up to stop them falling down. He had a spare pair of small boy's soccer shorts in his car so he gave them to Samy. "We'll have to see about getting those boys some cleats, hey Pamela? Those running shoes are no good. And they aren't wearing any shin protection!"

"Oh goodness, you're right Mitch. My boys have some old gear they can give them. I'm on it," replies Pamela.

Pamela volunteered to drive Josef and Samy to soccer today. She is an energetic Edmonton 'soccer mom' who has taken great interest in the two Sudanese boys and their family. She developed an affinity with the African people following five trips to various countries for nursing work in countries torn apart by war and natural disasters.

Josef and Samy are newcomers to Edmonton. Following intense internal unrest, Josef and Samy's family were forced to flee Sudan for Uganda, where they spent the following 14 years living in a state of uncertainty in refugee camps. Life in the refugee camps was crowded and at times dangerous. Rebels attacked Josef and Samy's camp, targeting the Sudanese refugees and killing five hundred people. Josef and Samy's family was forced to relocate camps years later,

not long after their father Isak suffered the loss of his brother due to a violent attack. Isak desired a safe and prosperous future for Josef, Samy and his five other children, so he always dreamed of being allowed to relocate somewhere in the developed world. Following a lengthy application process, Isak and his family were finally granted entry to Canada.

However, Isak, with his limited English and familiarity with the contained economy of refugee camps, was suddenly thrust into making decisions for his family in a different world. In the camp he worked as group leader in charge of food distribution for United Nations supplies. In Edmonton, he now supports his very large family by working in a grocery store and spends much of his non-work time studying English in the evenings.

Even with their poor English language skills, Josef and Samy had no choice but to be thrust immediately into the public school in Edmonton, with no additional English language classes. It was up to them to sink or swim along with everyone else in their classes. Before arriving in Edmonton they had not attended school on a regular basis, and were not accustomed to sitting quietly in a classroom for six hours a day. On one occasion, Samy was punished by his teacher for wriggling around in his chair. Samy had little context for understanding the connection between his actions and the punishment.

Pamela the soccer mom grew up in South Africa and North America. She had thus become accustomed to dealing with the challenges associated with moving and had developed empathy for the dispossessed. Through her community connections Pamela was introduced to Josef and Samy's family - a definite 'red flag family' - because of their fresh arrival from a refugee camp and challenging settlement needs. To get to know the family better, Pamela arranged for them to join her family for Christmas dinner. Isak and his wife told Pamela all about the family's challenging background over dinner, and from that point Pamela decided that she would do all she could to help the family settle into their new community.

Two months after the Christmas dinner, Pamela enrolled her sons in community soccer and wondered whether Josef and Samy would be ready to embark on their own sporting adventure in Canada. She thought soccer could help the children make new friends in their strange new world, and develop much-needed confidence. Because Isak and his wife were totally consumed by their challenging new lives, Pamela knew that they would probably not even be

aware that community soccer existed. So, with Isak and his wife's agreement, Pamela decided to enrol Josef and Samy in soccer.

Pamela began phoning city officials to find out how she could register the two boys on their parents' behalf, and she found nobody who could give her any straight answers. She was met with a barrage of rules. Yes they could play but only if they had birth certificates and money for registration, and if the parents signed up to run bingo. Even Pamela found the process time consuming and confusing. Isak and his wife would never be able to deal with the process on their own.

Pamela didn't let this stop her and she decided to approach community league volunteers to see if they would by-pass the cumbersome registration process and simply let the boys play. Pamela connected with Frank, who was in charge of registration. He listened intently to Pamela's story and decided he could help. Frank knew that the boys didn't have any birth certificates and had limited funds, so he made the decision to waive the fees entirely. He called Coach Mitch and asked if he would be able to provide the support to a couple of refugee kids with limited English to play with the Strikers team. Coach Mitch was only too glad to help.

This was finally the breakthrough Pamela needed, but she knew further challenges lay ahead. Transportation would be a major issue because the boys' parents did not have a vehicle. Pamela and her husband decided they would drive the kids to practice and games to ease the burden on Isak and his family. This would require a major time commitment from Pamela and her husband, who were already committed to getting their own children to soccer. Throughout the entire season they picked up the boys for one game and one practice each week.

Josef and Samy were greeted warmly by the boys on the Strikers team. They were much smaller than the other boys on the team and their English was very weak, so they were persistently quiet during training and games. Mitch knew the two Sudanese boys were joining a well established team so he took great care to introduce the boys and explain their background. The rest of the team were amazed that their new friends hadn't even worn shoes before they arrived in Canada, let alone soccer cleats!

It's mid-way through the community league season. The Strikers have had a ball this year. The victories aren't coming their way this year but they are having fun. Josef and Samy are still very quiet around the other boys but this doesn't stop them from partaking in the sprit of fun in their own way. The sidelines are filled with supporters. Isak has finally been able to come to a game by way of a day off from the grocery store. He is chatting to Coach Mitch and parents, who warmly converse with their new friend. They have all been eagerly following the on-field exploits of his two sons and have noted their growing confidence and English speaking skills.

Josef has just been called offside for the third time this game and after a brief pep talk from Coach Mitch, cheerfully resumes his left wing position. Even on the field Samy is never far from his brother, and Coach Mitch has given up trying to keep him back in defence. A lofty throw-in lands close to Samy's boot and is promptly tapped to his brother, standing alone in left field. Head down, face twisted in a determined grimace, Josef sprints down left field and lobs the ball straight into the net. His first goal! Josef sprints over to his dad on the sideline and jumps into his arms. He grabs Pamela by the hand and pleads to use her cell to brag to his mother at home. Fred, another soccer dad, bounds over and snaps some photos of the beaming child. He's been taking candid photos of all the boys on the team for a few weeks now and has decided to burn them all CDs to take home at the end of the season. Samy and Josef are indeed important members of the team.

The Community

Pamela reflected on the community outdoor season as it drew to a close. She realized that this it had been a very special season. Pamela and her husband supported the two boys all season. Although the boys didn't set the field afire, they had fun and inspired a devoted following in the parents and friends on the sidelines. Pamela wanted the public to discover this story so that others could realize for themselves how some basic actions could make such a difference to children like Josef and Samy.

Patricia contacted a newspaper and they agreed to do a brief article on the story. Pamela then contacted Community Solutions to Gang Violence (CSGV) and related the story to Karen, the organization's Project Manager. (CSGV is a collaborative initiative of private citizens, community organizations, police, schools and non-profit organizations working together on strategic, community-wide approaches to preventing youth involvement in gangs.) Pamela

contacted CSGV because she had seen a notice that CSGV placed in a community league newsletter about how neighbours who supported children's involvement in recreation activities were "part of the solution to gang violence."

Karen immediately saw the benefits of this type of action and considered it to be a great example of how seemingly small but caring and compassionate acts by individuals can have a powerful and dramatic impact on the lives of young people. It is the view of Karen and members of CSGV that solutions to gang violence appear when individuals decide to reach out and use their influence, whatever that may be, to make a difference in the lives of youth and families. Furthermore, when linked with the actions of others, these individual actions amplify and add value to the actions of everyone involved.

CSGV arranged a meeting with Pamela and together they talked about how this story could be replicated or lead to systemic change in Edmonton so that more young people in similar situations could be connected with soccer. Karen, with her wide community reach, was aware that Big Brothers Big Sisters had developed a 'Hockey Heroes' program that held many similarities to the individual action that Patricia had taken. Furthermore she also knew that Big Brothers Big Sisters were in the process of developing an ethno-cultural mentoring program for immigrant and refugee children. While these two programs were not specific to soccer, the similarities pointed the way to the possibility of building on Pamela's story.

When Pamela met with Big Brothers Big Sisters, Liz, the Executive Director, immediately saw the connections. Same as with Karen, Pamela had demonstrated, from Liz's perspective, that the actions of one person could have wide-ranging effects and lead to a small community – in this case a soccer community – sharing the support role. This was very appealing as Big Brothers and Big Sisters, traditionally a one-to-one mentoring agency, was looking at how they could expand their role to allow for mentoring in groups. Liz was starting to envision how more healthy adults could play more roles in more ways so that more children in the community could be helped. To this end, Big Brothers Big Sisters was working with the Africa Centre to hire a Somali staff member to support mentoring programs at the Africa Centre.

So together Karen and Liz arranged a meeting whereby Pamela could explain her vision to representatives from various social service and government agencies, and instigate discussion

on the possibilities for building on Patricia's actions to have a greater impact that would reach out to more youth and their families. It was decided at that meeting that it would be appropriate to approach the Africa Centre to see if they were interested in these ideas. (The Africa Centre is an organization that brings African communities together to help individuals, families and youth meet the challenges associated with moving to and integrating into Canadian life. In particular, they are concerned about the challenges facing youth as they strive to adjust to another culture, learn another language, interact in a new community and adjust to a whole new way of life.)

Karen from CSGV worked with Pamela to prepare a concept brief about how a soccer program could be used to help integrate and connect immigrant and refugee children to the community and the tasks necessary to help make this happen. This brief was presented to representatives of the Africa Centre to determine the benefits they saw in the idea and if they wanted to work with others to **make things happen**. From this point onward the Africa Centre worked with volunteers like Pamela, and organizations like Big Brothers Big Sisters, CSGV, the City of Edmonton, Fun Team Alberta, the Edmonton Public Library, Edmonton's Food Bank and the Butler Foundation to design and deliver a six-week Sport, Recreation and Cultural Program for African children and youth. The program provided a breakfast and lunch as well as such programming as soccer, basketball, arts and crafts, media literacy, African history, cultural activities and leadership training. A value-added component of the program was that African youth acted as paid and volunteer mentors and facilitators for the program. As such, the program not only benefited children directly but built the capacity of young people to be recognized as valuable resources and contributors to the community. Almost 100 children and youth attended the program every week for six weeks and with the generous support of the United Way each child participating in the program received a backpack and school supplies.

Because the vast majority of these services were contributed in-kind by participating organizations, the total cash required for the program was less than \$10,000. The spirit and goodwill of one person had been replicated by the goodwill of many.

Section Two: Cost-Benefit Analysis

In this chapter, a cost-benefit analysis will be undertaken, using the information that was collected and presented in the community narrative described in Section 1. The model employed for this analysis is a common cost-benefit framework, which included the following actions:

- identifying alternatives;
- defining alternatives in a way that allows fair comparison;
- adjusting for occurrence of costs and benefits at different times;
- calculating dollar values for things that are not usually expressed in dollars;
- coping with uncertainty in the data; and
- summing up a complex pattern of costs and benefits¹.

Further, the cost-benefit process required first that the assumptions made at the onset of the cost-benefit process be justified. These assumptions are described in this section of the paper and provide the foundation for the subsequent definition of the two scenarios (alternatives) that will be considered for analysis. Both alternatives are thoroughly examined, with estimated and non-estimated costs described from the different viewpoints provided in the case study.

Assumptions Made For this Cost-Benefit Analysis

Assumption 1: These youth are at risk of being recruited into gangs.

Through extensive research on the formation and recruitment processes of Aboriginal gangs in western Canada, Grekul & LaBoucane-Benson² suggest that there are a number of risk and protective factors have been described that help discern whether a youth is at risk of being recruited into a gang.³ Risk factors are "conditions in the individual or environment that predicts an increased likelihood of... gang involvement," and protective factors are "conditions in the

¹ Treasury Board of Canada Secretariat. (1998) Benefit Cost Analysis Guide. Ottawa: Government of Canada, July 1998, p. 8.

² Grekul, J., & LaBoucane-Benson, P. (2006). *An investigation into the formation and recruitment processes of aboriginal gangs in western Canada*. Ottawa: Aboriginal Corrections Policy Unit: Public Safety Canada.

³ Although this report focuses on Aboriginal gangs in western Canada, with further research this report finds that it is safe to extend its conclusions to gangs in general, as the risk and protective factors appear to be standard for gangs in general Canada and the United States. See: National Crime Prevention Centre. Policy Framework for Addressing Crime Prevention and Youth Ages 12 to 18. NCPC: Ottawa, 2000. Available online: http://www.publicsafety.gc.ca/prg/cp/index-en.asp. Michael C. Chettleburgh, Young Thugs: Inside the Dangerous World of Canadian Street Gangs (Toronto: Harper Collins Publishers Ltd., 2007); Terence Thornberry et al., Gangs and Delinquency in Developmental Perspective (New York: Cambridge University Press, 2003); and Scot Wortley and Julian Tanner, Criminal Organizations or Social Groups? An Exploration of the Myths and Realities of Youth Gangs in Toronto. First Draft. (University of Toronto, 2007).

individual or environment that buffer or moderate the effects of risk factors." Using these findings primarily, but also with the support of other research, this report will examine the case studies of Mark and Josef/Samy, as laid out in the narrative, to determine whether these youth were at risk of recruitment. In doing so, this report broadly divides risk and protective factors for gang recruitment into five spheres of influence for examination: family, peer, community, school and individual. It will conclude that these youth were at risk of being recruited into gangs.

Mark

Beginning with the familial domain, Mark was exposed to many of the risk conditions identified in the research: family dysfunction, low income, deviant family members and a prevalence of abuse, drugs, alcohol, and prostitution.⁵ In Mark's case, these problems culminated in his placement into foster care, which is another risk factor.⁶ In fact, research quotes ex-gang member saying, "Kids within the family services system were especially attractive" as new recruits for gangs.⁷ Moreover, the instability of his family situation – the six-month break from his foster mother's care, the threat of having to be relocated because of his brother's behavioural problems – left Mark in even greater danger of becoming a target.⁸ Finally, because his family was dysfunctional, Mark was also unable to receive the support, understanding, and positive role modeling from family members that serve as protective factors from gang involvement (although his foster mom no doubt supplied some of this in lieu).⁹

In the peer domain, after being removed from his parents' care and being placed in the child welfare system, Mark's brother continued to experience behavioural problems, which left Mark constantly exposed to a deviant peer. Numerous studies have found that adolescents who are exposed to deviant peers increase their risk of gang membership.¹⁰

⁴ Grekul, J., & LaBoucane-Benson, P. (2006). *An investigation into the formation and recruitment processes of aboriginal gangs in western Canada*. Ottawa: Aboriginal Corrections Policy Unit: Public Safety Canada. Page 51-2. Available online: www.ps-sp.gc.ca.

⁵ Ibid. 2, 20-21, 28, 35, 39, 73-74; and Chettleburgh, Young Thugs, 202.

⁶ Grekul and LaBoucane-Benson, "An Investigation into the Formation...", 32.

⁷ Ibid.

⁸ Ibid, 32, 35.

⁹ Ibid, 39, 73-75.

¹⁰ Ibid, 35, 73; and Thornberry et al., *Gangs and Delinquency*, 59, 64, 66-67.

At school, Mark was underachieving, antisocial, and had a history of behavioural problems – three more factors the report identifies as risks. ¹¹ Furthermore, his lack of bonding and commitment to school life again makes it unlikely that he received any of the conventional support, role models, or healthy bonding opportunities that school usually offers youngsters, which are important protective factors for deterring youth involvement in gangs. ¹² In addition, again there is an element of instability in his school situation (his having been forced to change schools when his foster mom needed a break), which contributed to the overall instability of his childhood and is another risk factor. ¹³

Mark was also largely unconnected to the wider community. His foster mother was often busy or unwell, and thereby often isolated from the community. As such, so was Mark. Cultural differences, differences in appearance, and lower socio-economic status no doubt compounded the isolation. ¹⁴ The results of this lack of bonding to the community are feelings of alienation/being an outsider, which is a risk factor, and, again, a lack of role models and a source of support/healthy bonding opportunities, which would have been protective factors against gang recruitment. ¹⁵

In the individual domain, Mark's overall lack of bonding to his family, school, and community leave him with a void that he may seek to fill through association with street gangs. ¹⁶ In addition, his lack of connectedness can lead to self-esteem problems, and a desire for "belonging, respect, love, and support" that gang membership has been reported to offer. ¹⁷ The narrative explicitly mentions that Mark exhibited antisocial – "sullen", "stand-offish" "moody" and "withdrawn" – behaviour, and a lack of self-esteem. ¹⁸

Finally, Mark had to contend with demographical disadvantages. At work, school, and in the general community, Aboriginal people in Canada are a marginalized group. ¹⁹ Aboriginal families have a higher probability of familial problems than other demographic groups, and have

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¹¹ Grekul and LaBoucane-Benson, "An Investigation into the Formation...", 39, 76.

¹² Ibid, 33, 73, 76.

¹³ Grekul and LaBoucane-Benson, "An Investigation into the Formation...", 32.

¹⁴ Ibid, 40, 73.

¹⁵ Ibid, 29-30, 32, 40-42, 73, 75.

¹⁶ Ibid, 39.

¹⁷ Ibid.

¹⁸ See the narrative, this report, 3-4.

¹⁹ Ibid, 2, 31, 33-34, 40-41; and Robyn Eversole, John-Andrew McNeish and Alberto D. Cimadamore, ed., *Indigenous Peoples and Poverty: An International Perspective*. CROP: International Studies in Poverty Research (London: Zed Books, 2005): 34.

a far greater (more than two times) incidence of low income than the non-Aboriginal population in Canada (32.5 vs. 12.4 percent). Income for people of Aboriginal descent is 75 percent of that for people of non-Aboriginal descent. Moreover, Aboriginal people experience discrimination and labelling in many different settings and forms (at school, work, in the legal system), which contribute to their overall lack of connection to mainstream Canadian society, feelings of a lack of respect from others, alienation, and problems with self-esteem, again all of which contribute to the risk of recruitment into street gangs. In addition, on-going and past systemic discrimination (the residential school system, for example) serve as further risk factors for participation in criminal activities.

The result of this disadvantage is an increased exposure to risk factors (low income, family problems, unemployment), which compound into further risk factors (deviant family members and peers, abuse, prevalence of drugs), and finally a disproportionate involvement with gangs and delinquency. A report by Alberta's Crime Reduction and Safe Communities Task Force asserts that "while all communities experience some level of crime, the experience in Aboriginal communities is severe in comparison. Alcohol abuse and drugs, family violence, sexual abuse, assaults, vandalism and gangs are taking a serious and devastating toll on individuals, families and communities." This toll is reflected in gang membership and delinquency statistics: Aboriginal youth make up the second largest proportion of youth gang members in Canada (22%), and are four and a half times more likely to become young offenders than non-Aboriginal youth in Alberta. ²⁶

In conclusion, Mark's life possesses many of the risk factors (and lacks many of the protective ones) that Grekul & LaBoucane Benson (2006) found were associated with a greater

²⁰ Grekul and LaBoucane-Benson, "An Investigation into the Formation...", 31; and Statistics Canada, "Income Status (4A) and Selected Geographic, Income, Family, Demographic, Educational, Cultural, Language and Labour Force Characteristics of Economic Families (244) for Economic Families and Persons in Economic Families in Private Households, for Canada and Provinces, 1995 and 2000 - 20% Sample Data," *2001 Census*. Table 97F0020XCB2001075. Online: www.statcan.ca. ²¹ Chettleburgh, *Young Thugs*, 38.

²² Eversole, McNeish and Cimadamore, ed., *Indigenous Peoples and Poverty*, 34; Grekul and LaBoucane-Benson, "An Investigation into the Formation...", 31-42; and Wortley and Tanner, Criminal Organizations or Social Groups? No page numbers, under heading "Canadian Gang Research."

²³ Alberta, *Keeping Communities Safe: Report and Recommendations* (Alberta: Alberta's Crime Reduction and Safe Communities Task Force, 2007): 32.

²⁴ Chettleburgh, *Young Thugs*, 39, 202; and Grekul and LaBoucane-Benson, "An Investigation into the Formation...", 20-21, 33, 73-74.

²⁵ Alberta, Keeping Communities Safe, 67.

²⁶ Grekul and LaBoucane-Benson, "An Investigation into the Formation...", 11.

(or lesser) risk of recruitment into gangs. As a result, Mark was at serious and obvious risk of being recruited into gangs.

Josef and Samy

Josef and Samy's case presents a very different picture, but the overall impact of their situation is much the same – a lack of connectedness to mainstream Canadian society and considerable risk of being recruited into a gang.

In their case, family problems were externally imposed. Situations beyond their control, the volatility of life in the refugee camps, the family's escape to Uganda, and then their immigration to Canada, created a very unstable childhood for Josef and Samy, which is associated with the risk of being recruited into a gang. ²⁷ Finally, because Josef and Samy's father, Isak, works long hours to support his family and often spends his free time off work studying English, he has limited opportunities to interact with his children. Unfortunately for Josef and Samy, this deprives them of his positive influence and increases their level of risk.²⁸

In addition, no appropriate support system to help Josef and Samy adapt and bond to their new environment existed at their school. Language barriers and the absence of a program to ease the boys' transition into school life in English are the most obvious example. However, the punishment of one of the boys who could not sit still for the duration of class because he had never previously sat through an entire school day also shows a lack of support, and highlights the cultural barriers that Josef and Samy faced in integrating at school. The result was a lack of connectedness to their school environment, which put them at a heightened risk of recruitment into street gang activities.²⁹

Refugees face other unique barriers as well, especially when considering bonding with the community. Ehntholt and Yule (2006) identify two main risk factors for the mental health of refugee families in their post-migration environment: low levels of social support and postmigration stresses, which include the process of asylum seeking itself, financial hardship,

²⁷ Ibid, 32. ²⁸ Ibid, 39, 74.

²⁹ Ibid, 39, 76.

language problems, social isolation, new culture, and discrimination.³⁰ All of these factors appear in Josef and Samy's case. While many of these conditions are risk factors themselves, the mental health problems they can create are yet another risk factor.³¹ Moreover, refugees in particular are left feeling like they are even more disconnected from their new communities because of their exposure to traumatic events, which can leave them feeling more alienated from a lack of shared experience.³² Again, while a feeling of alienation is a risk factor in and of itself, Thornberry et al. found that experiencing 'negative life events' could triple the probability of joining a gang.³³ Finally, young refugees who have lost friends or family members to war or violence in their country of origin, in the same way Josef and Samy had lost their uncle, may be unwilling to commit to new relationships.³⁴ All of these factors contribute to problems of identity and a failure to bond to the community, which deprives Josef and Samy of role models and a source of support and healthy bonding opportunities and further contributes to their risk of gang recruitment.³⁵

Finally, Josef and Samy also had to contend with demographics. Refugee and immigrant populations in Canada are also severely marginalized groups. According to Statistics Canada, in 2000, both Black and immigrant populations showed a significantly higher incidence of low income (31.6 and 18.1 percent, respectively) compared to non-immigrant or minority populations (10.9 and 10.9 percent, respectively). In fact, the Canadian Council of Social Development found that half of immigrants who arrived after 1991 live in poverty. Unfortunately, the trend does not seem to be abating; a report on the economic experiences of refugees in Canada published by the Institute for the Study of Labor (IZA) found that "lower average wage earnings are consigning ever-greater proportions of refugees to the poverty ranks of Canadian society." Evidence from the 2006 Canadian Census supports this statement: while in 1980 immigrant men

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³⁰ Kimberly A. Ehntholt and William Yule, "Practitioner Review: Assessment and treatment of refugee children and adolescents who have experienced war-related trauma," *Journal of Child Psychology & Psychiatry* 47 no. 12 (Dec. 2006): 1201.

³¹ Chettleburg, *Young Thugs*, 202; Wortley and Tanner, Criminal Organizations or Social Groups? no page numbers, under heading "Canadian Gang Research"; and Grekul and LaBoucane-Benson, "An Investigation into the Formation…", 20-21, 32-33, 40.

³² Ibid; and Rowena Fong, "Immigrant and Refugee Youth: Migration Journeys and Cultural Values," *Prevention Researcher* 14 no. 4 (Nov. 2007): 5.

³³ Terence Thornberry et al., *Gangs and Delinquency*, 59, 64, 66-67.

³⁴ Lynne Lamberg, "Mental Health Experts Work to Help Youth Recover From War's Psychic Toll," Journal of the American Medical Association 298 no. 5 (2007): 501-503.

³⁵ Grekul and LaBoucane-Benson, "An Investigation into the Formation...", 28-30, 32-33, 39, 73, 75.

³⁶ Statistics Canada, "Income Status (4A)...".

³⁷ Chettleburgh, Young Thugs, 33.

³⁸ Don Devortez, Sergiy Pivnenko, and Morton Beiser, *The Economic Experience of Refugees in Canada* (Germany: Institute for the Study of Labor, 2004): 30.

were earning 85 cents for every dollar earned by a Canadian man, by 2005, they were earning only 63 cents for every dollar. ³⁹ Moreover, immigrants are also more likely to be unemployed, despite higher levels of education, and their employment levels are declining while the level of employment for Canadians overall is rising. ⁴⁰ Both poverty and unemployment are risk factors for gang involvement. ⁴¹

Again, for those within this demographic, the result of this disadvantage is an increased exposure to risk factors (both unemployment and poverty are risk factors) that, in turn, lead to an increased and disproportionate involvement with delinquency and gangs. ⁴² As a result, just as with Aboriginal people, there are a disproportionate number of refugees and immigrants involved with gangs. ⁴³ One illustration of this is that African/Black Canadians form a larger proportion of youth gang members than any other group in Canada at (25%). ⁴⁴

In conclusion the narrative shows that Josef and Samy's were also exposed to many of the risk factors and were without many of the protective factors associated with gang recruitment, and, therefore, were also at serious and obvious risk of being recruited into gangs.

Assumption Two: Because these youth are involved in a community soccer program, the effects of the program mitigate their risk factors and are not recruited into a gang. Had they not joined a community soccer program, their risk factors would not have been mitigated and they would have been recruited. Gang membership is associated with a higher level of delinquency.

The next assumption is that, by involving themselves in community soccer, these youth are mitigating some of their risk factors while being exposed to a greater number of protective ones. Had they failed to do so, we assume that they would have been recruited into gangs, as per their heightened statistical probability, and, as such, would have committed either minor or more serious offences. The following will provide a review of the research that supports the assumptions that 1) recreational and community programs are capable of mitigating risk factors and introducing protective ones associated with gang recruitment, and 2) that gang membership is associated with higher levels of delinquency and crime.

³⁹ Statistics Canada, "2006 Census: Earnings, income and shelter costs." *The Daily*. May 1, 2008. www.statcan.ca (accessed May 15, 2008).

⁴⁰ Chettleburgh, Young Thugs, 32-3, 36.

⁴¹ Chettleburgh, *Young Thugs*, 202; and Grekul and LaBoucane-Benson, "An Investigation into the Formation...", 20-21, 33.

⁴² Ibid.

⁴³ Ibid.

⁴⁴ Grekul and LaBoucane-Benson, "An Investigation into the Formation...", 11.

Sub-Assumption A: Recreational and community programs keep kids out of gangs.

It is widely accepted that recreational and community programs are effective means of creating the conditions at-risk youth need to keep from joining gangs. These conditions include: a more connected community, an opportunity to engage with positive role models, and opportunities for positive development. Because these conditions are protective factors, they will mitigate the youth's risk factors and decrease their likelihood of being recruited into gangs.

To illustrate, the report by Grekul & LaBoucane-Benson (2006) notes that one key method for preventing gang recruitment is "developing initiatives that build and strengthen the community," and goes on to suggest recreational programs specifically as being "critical to gang prevention" in this sense. ⁴⁵ A connected community is potentially a very significant protective factor for keeping kids out of gangs, and is one that a soccer program could offer. ⁴⁶

In addition, much of the protective power that community and recreational programs offer to youth is a result of the opportunity they present for forming positive social connections, which has been previously demonstrated to be a significant protective factor for making youth more resistant to gang recruitment.⁴⁷ This is supported by a report on The Community Solution to Gang Violence initiative in Edmonton, Alberta that asserts, "Involvement in community activities will help children and young people develop positive relationships with adults and others that will help them avoid risky behaviour."

Moreover, the same report on finds that "there is considerable evidence that the most effective approach for preventing young people from becoming involved with gangs is to... promote positive, healthy, development." According to the 40 Developmental Assets developed by the Search Institute, sport, recreational programs, and community involvement are

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⁴⁵ Jana Grekul and Patti LaBoucane-Benson, "An Investigation into the Formation and Recruitment Processes of Aboriginal Gangs in Western Canada," part of the *Aboriginal Peoples Collection*. (Ottawa: Aboriginal Corrections Policy Unit/Public Safety Canada and Native Counselling Services of Alberta, 2006): 45. Available online: www.ps-sp.gc.ca.

⁴⁶ Ibid, 75; and Michael C. Chettleburgh, *Young Thugs: Inside the Dangerous World of Canadian Street Gangs* (Toronto: Harper Collins Publishers Ltd., 2007), 202.

⁴⁷ Grekul and LaBoucane-Benson, "An Investigation into the Formation...", 39, 73, 75; and Chettleburg, *Young Thugs*, 202.

⁴⁸ Karen Erickson, Patti LaBoucane-Benson, and Jana Grekul, "The Community Solution to Gang Violence: A Collaborative Community Process and Evaluation Framework," part of the *Aboriginal Peoples Collection*. (Ottawa: Aboriginal Corrections Policy Unit/Public Safety Canada and Native Counselling Services of Alberta, 2006): 29. Available online: www.ps-sp.gc.ca. ⁴⁹ Ibid, 51.

all assets for positive development.⁵⁰ In addition, for refugee youth in particular, Ehntholt and Yule write that "extracurricular and social activities" are an important part of the reintegration process to society, which is an essential part of bonding to their new community.⁵¹ A strong sense of connectedness to the community is also a strong protective factor for at-risk youth.⁵²

Finally, that a youth "does not participate in creative activities, sports, clubs or organizations in school, place of worship or community" is listed as a risk factor in and of itself in the Grekul & LaBoucane-Benson (2006) report. ⁵³ Additionally, both this report and *Young Thugs: Inside the Dangerous World of Canadian Street Gangs* list involvement in sports and recreation programs as protective assets against gang recruitment. ⁵⁴

Finally, the results are beginning to appear statistically. A report by the Canadian Research Institute for Law and the Family on the characteristics of youth offenders in Calgary, Alberta found that 0.0 percent of 'serious habitual offenders', and only 9.8 percent of 'chronic offenders', were involved in adult-coached sports.

In conclusion, this report is left with two probable conclusions. 1) By joining the community soccer league, Mark, Josef and Samy significantly reduced their risk of joining gangs. 2) If Mark, Josef and Samy were not involved in the community soccer program, and as such were not mitigating their risk factors or shielding themselves with protective factors, they would remain at serious risk of being recruited into gangs.

From here, in order to allow for a cost-benefit analysis to be conducted, this report makes two assumptions. 1) We will assume that these youth either join a soccer program, mitigate their

⁵⁰ Search Institute, "What are Developmental Assets?" *Developmental Assets*, 2007. http://www.search-institute.org/assets/(accessed June 5, 2008).

⁵¹ Kimberly A. Ehntholt and William Yule, "Practitioner Review: Assessment and treatment of refugee children and adolescents who have experienced war-related trauma," *Journal of Child Psychology & Psychiatry* 47 no. 12 (Dec. 2006): 1203.

⁵² Grekul and LaBoucane-Benson, "An Investigation into the Formation...", 29-30, 75; and Chettleburg, Young Thugs, 202.

⁵³ Grekul and LaBoucane-Benson, "An Investigation into the Formation...", 73.

⁵⁴ Ibid, 73; and Chettleburg, Young Thugs, 202.

⁵⁵ Serious Habitual Offender is a designation by the Alberta Solicitor General by recommendation of the Calgary Police Service and the Multi-Disciplinary Resource Team.

⁵⁶ Chronic Offenders were youths with five or more convictions, not including Serious Habitual Offenders.

⁵⁷ Unfortunately, as this study only surveyed youth offenders, these numbers cannot be compared to those of non-offenders. Canadian Research Institute for Law the Family, "A Profile of Youth Offenders in Calgary: A Study of Youth Offending Patterns, Serious Habitual Offenders and System Response," from *Highlights from the Interim Report – March 2008*. (Calgary: Canadian Research Institute for Law and the Family, 2008). Available online: www.ucalgary.ca/~crilf/sub/research.html.

risk factors (which is supported by the aforementioned probable conclusion) and decrease their likelihood of being recruited to avoid becoming gang members, OR 2) these youth do not join a soccer program, which leaves them at risk of recruitment (which is supported by the aforementioned probable conclusion), and their augmented statistical probability of being recruited leads the youth in question join gangs. If they become gang members, they are significantly more likely to become involved with juvenile crime and delinquency.

Sub-Assumption B: Gang membership leads to delinquency and criminal activity.

It is not difficult to find an association between gangs and crime, as it has been consistently established that youth involved with gangs are more prone to participation in criminal and delinquent acts. Thornberry et al. (2003) note that numerous studies, including their own, confirm "the observation that gang members, as compared with other youths, are more extensively involved in delinquency – especially serious and violent delinquency – is perhaps the most robust and consistent observation in criminological research," one that holds true "across time, geographical and national boundaries, and methods of data collection." The Grekul & LaBoucane-Benson (2006) report similarly states that youth recruited into a gang lifestyle increase their risk of "victimization, criminal records and prison time, serious injury, and death." Thornberry et al. (2003) add an increased probability of arrests, violence, and drug use and sales to this list. 60

Numerically, the differences in delinquency rates between gang members and non-gang members are staggering. Thornberry et al. (2003) found that for males, involvement in general delinquency jumps from 68.4 percent to 98.1 with gang involvement, and from 46.4 to 90.6 for violent delinquency. For drug use, the numbers go from 23.3 from non-members to 65.1 for gang members, and for drug sales from 9.5 to 39.5 with gang affiliation. Arrests increase from 31.0 to 54.6 for members. Their results for females are very similar. ⁶¹

In Canada, the results of a study of youth gang members in Toronto found a similar correlation between gangs and delinquency and crime. For example, 62.0 percent of youth who

⁵⁸ Terence Thornberry et al., *Gangs and Delinquency in Developmental Perspective* (New York: Cambridge University Press, 2003), 1, see also 42-55.

⁵⁹ Grekul and LaBoucane-Benson, "An Investigation into the Formation...", 9.

⁶⁰ Thornberry et al., Gangs and Delinquency, 182.

⁶¹ Ibid, 43.

were currently criminal gang members said that they had committed an act of vandalism in the past year, whereas only 18.0 percent of youth interviewed who had never been in a gang said they had. In addition, while 67.6 percent of current criminal gang members said they had sold drugs in the past year, only 7.2 percent of the youth who had never been in gang said they had. Furthermore, 69.5 percent of current gang members had committed a minor theft (under \$50), while only 17.8 percent of those who had never been involved in a gang had. Finally, 43.0 percent of current gang members had committed extortion or robbery in the last year, compared to only 5.6 percent of youth who had never been involved with a gang. 62

The disparity in the level of violent acts is equally alarming. 68.3 percent of current gang members said they carried a knife or gun, compared to only 11.2 percent of non-members. 79.6 percent of members reported that they had been in a gang (group) fight, compared to 12.7 percent of non-members, while 57.7 percent of members admitted to "attacking to seriously harm" someone, compared to 7.4 of non-members. 90.8 percent of members had been involved in a physical fight, compared to 26.5 percent of non-members, and 11.3 percent of members had sexually assaulted someone, compared to 0.3 percent of non-members. ⁶³

Another sign that gang membership is strongly correlated to crime and delinquency is that the share of crime committed by gang members is disproportionate as well. For example, Fagan found that for high school students and dropouts in San Diego, Los Angeles and Chicago, while gang members were 23 percent of their sample, they committed 67 percent of the felony assaults, 65 percent of the minor assaults, 66 percent of the robberies, 72 percent of the felony thefts, and 56 percent of the minor thefts in those areas. Another study, which was part of the Denver Youth Survey, found that gang members only accounted for 14 percent of their sample, but that this percentage had been responsible for 79 percent of the offences that involved serious violence, 71 percent of the serious property offences, and 89 percent of the drug sales.

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⁶² Scot Wortley and Julian Tanner, "Table 4: Percent of High School Students Who Have Engaged in Various Criminal Activities Over the Past Twelve Months, by Type of Gang Affiliation," from *Criminal Organizations or Social Groups? An Exploration of the Myths and Realities of Youth Gangs in Toronto*. First Draft. (University of Toronto, 2007), no page numbers.

⁶⁴ Thornberry et al., *Gangs and Delinquency*, 48.

⁶⁵ Ibid.

In conclusion, the consensus of the research is that youth involved with gangs are significantly more likely to become engaged in all types of criminal and delinquent behaviour – from minor transgressions to serious and violent offences.

Summary of Assumption Two and Corresponding Probable Scenarios

In conclusion, this report is left with two probable scenarios to consider:

- 1. Youth are involved with the community soccer program, which mitigates some of their risk factors and builds up protective factors. As a result, it is expected that they are not recruited into gangs and do not become involved in criminal and delinquent activities.
- 2. Youth are not involved with the community soccer program, so they do not mitigate their risk factors or build up protective ones they remain at-risk. As a result, it is expected that they are recruited into gangs and become involved in both minor (for example, property offences) and serious (such as offences against the person) criminal and delinquent acts.

Assumption Three: There is a probable pattern of delinquency and consequent involvement with the legal system that the youth involved with a gang will follow.

Using the research we have uncovered as well extensive interviews of both judicial and police personnel, this report identifies a probable pattern of delinquency and consequent involvement with the legal system that the youth recruited into a gang will follow. This is, of course, a purely hypothetical scenario, but it is supported by the research and the experience of the aforementioned officials.

The assumed scenario is as follows:

Because of the high correlation between gang involvement and property offences, ⁶⁶ as well as the research and interviews we have conducted, ⁶⁷ we assume that the youth's first act of

⁶⁶ See Sub-Assumption B.

⁶⁷ Sandy Prokopiw (in charge of overseeing Extrajudicial Sanctions Program), interview by Fiona Hossack. Edmonton, Alberta. May 12, 2008; Bob Marr (Crown Prosecutor for the Yellowhead region, Alberta), interview by Fiona Hossack. Edmonton,

May 12, 2008; Bob Marr (Crown Prosecutor for the Yellowhead region, Alberta), interview by Fiona Hossack. Edmonton, Alberta. June 9, 2008; Mike Bradshaw (former Deputy Chief of Police for the Edmonton Police Service), interview by Fiona Hossack. Edmonton, Alberta. May 1, 2008; Joel Whittaker (Staff Sergeant with the Edmonton Police Service Downtown Division), interview by Fiona Hossack. Edmonton, Alberta, June 9, 2008; Nading Calliboo (former Country of the Police Service), interview by

delinquency is a property offence, resulting in referral by the police service to the Extrajudicial Sanctions Program. (This is the mostly likely outcome for a first and minor offence.)⁶⁸ This entails actions from:

Police Personnel: The time for the police service to respond to the scene, handle the youth perpetrator (take them home, talk to parents etc.), and perform an investigation is estimated to be a minimum of three hours. This is added to the one hour it takes an officer to write a report and refer the youth to the Extrajudicial Sanctions Program, ⁶⁹ which brings the total time for the officer involved to a minimum of four hours; ⁷⁰ and

Volunteers of the Extrajudicial Sanctions Program: The volunteers' time on a typical case is spent as follows: three volunteers spend one hour with a youth in a preliminary meeting and negotiation (three man-hours), then one volunteer may supervise the youth performing acts of community service (five man-hours), ⁷¹ then one or more volunteers spend a total of an hour following-up with the youth throughout the three month period (one man-hour), and finally there is a last meeting at the end of the program where the youth proves that the consequences have been completed and the case is concluded (one man-hour). This process is completed over a maximum of three months; ⁷²

Fiona Hossack. Edmonton, Alberta, June 10, 2008; Jim Cook (Director, Division Support Services Branch, Correctional Services Division, Solicitor General & Public Security), "RE: Cost-Benefit for Community Solution to Gang Violence - Native Counselling Services of Alberta," email to the Fiona Hossack. June 12, 2008; and Anne Wall (Head of Taxation for Legal Aid Alberta), interview by Fiona Hossack. Edmonton, Alberta. June 11, 2008.

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⁶⁸ The Extrajudicial Sanctions Program is an alternative justice measure for youth provided by the Solicitor General of Alberta by provision of the Youth Criminal Justice Act. Its aim is to "reduce the number of young people appearing before the court when their first conflict with the law involves a low risk offence." Once referred to the program (a referral can be made either directly by the police service or through the court system), a youth will negotiate consequences to complete within three months. Typical consequences include community service, writing letters of apology or essays, and attending Alberta Alcohol and Drug Abuse Commission (AADAC) meetings or other counseling sessions. Alberta, "Youth Programs." Programs and Services (Edmonton: Solicitor General and Public Security, 2008).

http://www.solgps.alberta.ca/programs_and_services/correctional_services/community_corrections/Pages/youth_programs.aspx# sanctions (accessed June 20, 2008); Sandy Prokopiw, May 12, 2008; and Mike Bradshaw, May 1, 2008.

⁶⁹ The referral can either be made directly through the police service, or the police can press charges and the case will end up in the court system, which would mean an officer would be required to write a lengthy report for court (another 2 hours) and then possibly attend court for a day. Mike Bradshaw (former Deputy Chief of Police for the Edmonton Police Service), interview by Fiona Hossack. Edmonton, Alberta. May 1, 2008; and Joel Whittaker (Staff Sergeant with the Edmonton Police Service Downtown Division), interview by Fiona Hossack. Edmonton, Alberta. June 9, 2008.

⁷⁰ This excludes the possibility the file gets bounced back from the Extrajudicial Sanctions Program to the police (possibly because the youth fails to show for negotiation), in which case the police then need to track the kid down (they might spend a full day on 10 different such files doing so), and then refer the youth through the court system (see the previous note on what happens then). Bradshaw, May 1, 2008; and Joel Whittaker (Staff Sergeant with the Edmonton Police Service Downtown Division), interview by Fiona Hossack. Edmonton, Alberta. June 9, 2008.

⁷¹ This is the very minimum number of community hours prescribed. It is common to have at least ten hours of service agreed upon. Prokopiw, May 12, 2008.

⁷² Prokopiw, May 12, 2008.

Subsequently, after the youth has completed the consequences as negotiated with the Extrajudicial Sanctions Program's supervisors, we assume that the youth continues his/her gang affiliation and, as a result, commits a more serious offence. Because of the high correlation between gang membership and assaults, ⁷³ as well as the research and interviews we have conducted, ⁷⁴ we assume that this serious offence is an assault causing bodily harm, resulting in an arrest, appearances in provincial court and Court of Queen's Bench as detailed below, and, finally, a conviction carrying a two-year young offender prison sentence and a two-year probationary period. ⁷⁵ This entails actions from:

Police Personnel: The time for police officers to respond to the scene, perform an investigation and complete paperwork is estimated to be five hours. The court time that would directly involve police officers is estimated as a minimum of two officers appearing as witnesses for a full day for both the trail and preliminary hearing. ⁷⁶ To this total, we add an hour of the supervisor's time spent being briefed and giving direction to get a preliminary total of hours for the police service dealing with an assault. In addition, if the offence is connected to the activities of a criminal gang, the police service will then attempt to identify patterns to prevent further gang-related crimes. This involves a team of three analysts examining patterns of criminal activity in relation to the most recent offence for approximately six hours at a minimum, for a total of 18 man-hours. After this analysis is completed, a two-hour-long meeting will be held with six members of the service in attendance, including a Staff Sergeant ⁷⁷;

The Court System: Given the serious nature of the youth's second offence, as per the Youth Criminal Justice Act, this report assume that the youth is tried and sentenced as an adult. The court process is split into nine steps, which can be found in detail in the *Explanation of Costs/Benefits and Calculations* section of this report. In total, the court process, as identified in this report, lasts for a period of ten months beginning with the youth's apprehension. It will involves the following parties in differing capacities: a

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⁷³ See Sub-Assumption B.

⁷⁴ See note 67.

⁷⁵ This hypothetical involvement with the legal system follows the typical pattern for someone caught committing an assault causing bodily harm. Nadine Callihoo, June 10, 2008; Anne Wall, June 11, 2008; and Bradshaw, May 1, 2008.

 $^{^{76}}$ A full day is considered to be 7.5 hours – (9:30 – 5:00, which corresponds to court hours). Whittaker, June 9, 2008.

⁷⁷ Whittaker, June 9, 2008; and Bradshaw, May 1, 2008.

⁷⁸ Department of Justice, "Canada's System of Justice." December 12, 2008. http://www.justice.gc.ca/eng/dept-min/pub/just/08.html (accessed February 4, 2009).

crown prosecutor, a defence counsel, 12 jurors, a provincial court judge, a justice of Court of Queen's Bench, two court clerks in both courts, a duty counsel, a victim services advocate, civilian witnesses, the victim's family, and the youth's (defendant's) family⁷⁹; and

The Young Offender System: In this report, the trial ends in a conviction that carries a two-year prison sentence in a provincial Young Offender facility (as the youth is under 18 years of age for the entire length of his/her sentence, and must serve time in an age-appropriate facility) and a two year probation period. To ensure under rather than inflated estimates, we assume that the time remanded in the Edmonton Young Offender Centre during trial is applied to the sentence length, leaving him/her with only 14 months imprisonment. Afterwards, the estimated time spent by a probation officer on a case such as the one laid out in Alternative 2 is five to ten hours a month. This time is spent first in two monthly meetings with the probationer (about half an hour each time), but also on follow-up phone calls and meetings with counsellors and employers, and writing reports/keeping the file updated. 80

Finally, we need to establish a timeline through which to calculate costs. Given the above scenario, a reasonable timeline for this report would include the estimated time that would elapse from when the youth commits the property offence to the end of their probationary period. Because here we propose that the time spent going through the Extrajudicial Sanctions Program is three months, the trial process is ten months, incarceration is fourteen months, and probation is two years, the minimum length for the timeline is restricted to four years and three months. However, to allow time for the at-risk youth to be first recruited into a gang, and then to allow time between offences, we conclude that six years is a reasonable timeline.

As this report only considers young offenders (under 18 years of age, as per the Youth Criminal Justice Act), this timeline corresponds to the time between beginning of the youth's twelfth and eighteenth years of age. As such, the following is a summary of the timeline for youth's probable pattern of delinquency and consequent involvement with the legal system:

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⁷⁹ Callihoo, June 10, 2008.

⁸⁰ Ibid.

Sometime in his/her 12th and 13th years: The youth is recruited into a gang and commits a minor property offence, resulting in a three months spent completing consequences as negotiated with the Extrajudicial Sanctions Program. The youth continues with his/her gang attachments after completing these consequences.

At the beginning of his/her 14th year: The youth commits a serious offence, is apprehended and is held at the Edmonton young Offender Centre for the duration of the ten month trial.

Ten months into his/her 14th year: The youth serves the remaining 14 months of his/her prison sentence at the Edmonton Young Offender Centre facility.

From the beginning of his/her 16th year until the beginning of his/her 18th year: The youth is on probation.

Assumption Four: There are costs and benefits associated with the two probable scenarios.

This report identifies two alternatives (generated from the two probable scenarios developed in the three previous assumptions), to which costs and benefits will be assessed:

Alternative 1: A soccer program exists. The youth are involved in the program, and, as a result, will be at a much decreased risk of being recruited into gangs. They do not join gangs, and, therefore, do not commit any crimes.

Alternative 2: No soccer program exists. The youth are not involved in any program, and, as a result, remain at a much increased risk of being recruited into gangs. They are recruited, join, and commit both minor and serious offences as a result. As per Assumption 3, we assume the minor offence is a property offence, resulting in referral by the police service to the Extrajudicial Sanctions Program⁸¹ and the

⁸¹ The Extrajudicial Sanctions Program is an alternative justice measure for youth provided by the Solicitor General of Alberta by provision of the Youth Criminal Justice Act. Its aim is to "reduce the number of young people appearing before the court when their first conflict with the law involves a low risk offence." Once referred to the program (a referral can be made either directly by the police service or through the court system), a youth will negotiate consequences to complete within three months. Typical consequences include community service, writing letters of apology or essays, and attending Alberta Alcohol and Drug Abuse Commission (AADAC) meetings or other counseling sessions. Alberta, "Youth Programs." Programs and Services (Edmonton: Solicitor General and Public Security, 2008).

http://www.solgps.alberta.ca/programs_and_services/correctional_services/community_corrections/Pages/youth_programs.aspx# sanctions (accessed June 20, 2008); Sandy Prokopiw (in charge of overseeing Extrajudicial Sanctions Program), interview by

serious offence is an assault causing bodily harm, resulting in a conviction carrying a two-year prison sentence (served in a provincial facility as a Young Offender) and a two-year probationary period.⁸²

Timeline – As we established at the end of Assumption 3, we conclude that a timeline of six years is most appropriate for Alternative 2. In order for cost estimates to be comparable, the timeline should be equal in duration for each alternative. As such, each alternative will be considered over six years.

In addition, there are four viewpoints from which costs and benefits are considered in the framework of this report:

Youth: Based upon the narrative, this would be Mark, Josef or Samy. In Alternative 2, the

youth in question is also the offender/defendant.

Family: Based upon the narrative, this would be the family or foster family of Mark, Josef

or Samy. In Alternative 2, the family is also the offender/defendant's family.

Community: This is inclusive of the public at-large. The victim(s) and their families in

Alternative 2 are considered as members of the community.

Government: This includes of all levels of government: municipal, provincial and federal.

The Cost-Benefit Process

The first step of a cost-benefit analysis is to define to which alternative scenarios costs and benefits will be assigned; Based upon the preceding assumptions, the two alternatives proposed are:

1. A soccer program exists. The youth are involved in the program, and, as a result, will be at a much decreased risk of being recruited into a gang. They do not join gangs, and, therefore, do not commit any crimes.

Fiona Hossack. Edmonton, Alberta. May 12, 2008; and Mike Bradshaw (former Deputy Chief of Police for the Edmonton Police Service), interview by Fiona Hossack. Edmonton, Alberta. May 1, 2008.

⁸² This is a purely hypothetical case, but it follows the typical pattern of an offence like assault causing bodily harm. Nadine Callihoo (former Courtworker), interview by Fiona Hossack. Edmonton, Alberta, June 10, 2008; Anne Wall (Head of Taxation for Legal Aid Alberta), interview by Fiona Hossack. Edmonton, Alberta. June 11, 2008; and Bradshaw, May 1, 2008.

2. No soccer program exists. The youth are not involved in any program, and, as a result, remain at a much increased risk of being recruited into gangs. They are recruited, join, and commit both minor and serious offences as a result. We assume the minor offence is a property offence, resulting in referral by the police service to the Extrajudicial Sanctions Program, and the serious offence is an assault causing bodily harm, resulting in a conviction carrying a two-year prison sentence (served in a provincial facility as a Young Offender) and a two year probationary period. 83

The next step is to research and assign all possible costs and benefits of each alternative. In order to be comprehensive, this list must include the opportunity costs and benefits of each alternative, because if one alternative is chosen above another, the costs and benefits of the alternative that is not chosen become the opportunity costs of that decision. For example, if you choose Alternative 1 over Alternative 2, the costs of Alternative 2 then become part of the benefit to choosing Alternative 1 (you no longer have to pay for these costs), and the benefits of Alternative 2 become part of the cost to choosing Alternative 1 (you no longer receive these benefits). See below under "Explanations of Terms and Concepts" for a further explanation of opportunity cost.

Once all of the costs and benefits of each alternative have been established, the next step is to choose which costs and benefits will (or are able to) be estimated. In this report, there are both *estimated* and *notestimated* costs and benefits, which are summarized on the tables directly following this section, entitled "Summary of the Costs and Benefits (Estimated and Not Estimated) for Alternative 1 or 2". Many of the costs that are not estimated are, in fact, inestimable. For example, it is impossible to assign an appropriate dollar value to the emotional and psychological impact of the crime on a victim. Similarly it is impossible to assign an appropriate dollar value to the benefits of increase connectedness/friendships formed by youth engaged in a soccer program. Other costs are not estimated in this analysis due to the time limitations of our study, the availability of appropriate and applicable research, or the establishment of accepted measurement practices. (For example, the Treasury Board of Canada points out in its *Benefit Cost Analysis Guide* how difficult it is to measure the benefit of increased safety, and Brand and Price point out the difficulties in estimating the effect of crime

 $^{^{\}rm 83}$ For more information on these alternatives, see Assumption 4.

on property values in their research study for the British Home Office, entitled *The Economic* and Social Costs of Crime.⁸⁴)

It is important to remember that the costs and benefits that are not estimated in this report are potentially very substantial. For example, Miller, Cohen and Rossman hypothesize that for the victim alone, the loss in quality of life (which we have not estimated) is approximately three quarters of the total cost of victimization. Moreover, as a result of the significance of the costs and benefits that are not estimated, the numbers in this report will necessarily be biased by what we do and do not estimate.

The last step of the cost-benefit analysis process is to calculate values for the costs and benefits of each alternative that are to be estimated. The costs we have calculated are summarized in the tables directly following the tables of what is and is not estimated, entitled "Estimated Costs and Benefits for Alternative 1 or 2 (Per Youth)", and a thorough explanation of how each value was calculated follows the tables in the section "Explanation of Costs/Benefits and Calculations".

Finally, the following is a set of definitions and descriptions of concepts used in the following tables, calculations and analysis.

Explanations of Terms and Concepts

Sunk costs – The Treasury Board of Canada defines a sunk cost as one that has been "irretrievably made or committed." For example, in this report, the maintenance of the city fields used to play soccer is considered a sunk cost, because we assume that the fields would be maintained regardless of the existence of a soccer program. Other sunk costs include capital costs (police, court, and prison buildings and their machines/equipment), capital maintenance and utilities, and the soccer coach and referees' time/training.

⁸⁴ Treasury Board of Canada Secretariat, *Benefit Cost Analysis Guide*. (Ottawa: Government of Canada, July 1998): 26. Available online: http://www.tbs-sct.gc.ca/fin/sigs/Revolving_Funds/bcag/BCA2_E.asp; and Sam Brand and Richard Price, *The Economic and Social Costs of Crime*. Home Office Research Study 217 (London: Economics and Resource Analysis; Research, Development and Statistics Directorate, 2000): 27.

⁸⁵ Ted R. Miller, Mark A. Cohen, and Shelli B. Rossman, "Victim Costs of Violent Crime and Resulting Injuries," *Health Affairs* (Winter 1993): 194.

⁸⁶ Treasury Board of Canada Secretariat, *Benefit Cost Analysis Guide*. (Ottawa: Government of Canada, July 1998): 19. Available online: http://www.tbs-sct.gc.ca/fin/sigs/Revolving_Funds/bcag/BCA2_E.asp.

- Opportunity Costs The concept of opportunity cost is important to cost-benefit analysis because it provides the means to assign a value to costs or benefits that would be lost if one alternative is chosen over another. According to the Treasury Board of Canada, an opportunity cost is "the true value of any resource foregone."
- Revealed Preference Revealed preference is a technique that assigns quantitative value to less tangible benefits or costs by assigning value based on what people have paid for a good or service. For example, the benefit from playing soccer is measured by the fee paid to play the league's registration fee.
- Lost output In this report, lost output refers to the amount of goods and services (in dollars) that could have been produced by an individual/group if they had been working regular hours at their regular place of employment rather than dealing with the aftermath of victimization, or serving as a juror, etc. This constitutes a opportunity cost.
- 2008 dollars (denoted: 2008 \$) You could buy a lot more with a dollar in 1950 than you can with a dollar today. This is because of inflation over time, inflationary pressure drives the purchasing power (what you can buy) of the dollar down. As such, it is necessary to adjust all values we use in this report to 2008 \$ from whatever year they were measured (for example, 1993 \$) for past inflation in order to allow for a proper comparison.

Estimated Costs and Benefits for Alternative 1 (Per Youth)

Alternative 1: A soccer program exists. The youth are involved in the program, and, as a result, will be at a much decreased risk of being recruited into a gang. They do not join a gang, and, therefore, do not commit any crime.

*Note that in the opportunit	v costs table refers to	the opportunit	v costs of choosing	this alternative
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⁸⁷ Ibid.

	Alternative 1: soccer program, no cr	ime
_	Costs	Benefits
_	Estimated	Estimated
Youth	Time for one practice and one game a week	Playing soccer Opportunity cost: time associated with completing consequences as negotiated with Extrajudicial Sanctions Program, in- court and preparation for court appearances (time cost)
		Not estimated
		Improved soccer skills Improved physical health Improved academic performance Increased confidence and improved selfesteem Increased connectedness/friendships formed Positive influence of role models/positive relationships Improved behaviour Neater writing Closer relationship to parent/guardian Opportunity cost: emotional and psychological impact, decreased quality of life ¹ , effects of criminal stigmatization, value of time lost while incarcerated/remanded, loss of future life choices ² , loss of future income earning potential, lost wages while
	Estimated	Estimated
Family	Time for one practice and one game a week	Opportunity cost: lost wages to attend court dates Not estimated Increased connectedness/friendships formed Healthier/happier children Opportunity cost: loss of a(n) (potential) income earner, emotional and psychological impact, decreased quality of life, transportation to/from court
_	Estimated	Estimated
Community	Registration fees Community League membership fee Soccer equipment Time for volunteer bingo/casino Opportunity cost: hours of community service Not estimated	Opportunity cost: lost output ³ , lost wages ⁴ , hours of community service, Extrajudicial Sanctions Program volunteers' time Not estimated Healthier/happier youth and residents Increased comportedness/friendships formed
	Transportation to/from soccer Possible disruptions caused by games (traffic, noise, parking) Opportunity cost: financial restitution to	Increased connectedness/friendships formed Increased community safety Opportunity cost: emotional and psychological impact on the victim, victim's family, jurors, witnesses; physical impact on the

	Alternative 1, continued: soccer program, no crime				
	victim ⁵ , benefit from incarceration and probation ⁶	victim; decreased feelings of safety; decreased quality of life for victim, victim's family, residents; increased precautionary/defensive spending; increased insurance premiums; decreased property values; transportation to/from court for jurors, victim's family, witnesses			
		Estimated			
Government		Opportunity cost: health care to treat victim (in-hospital treatment cost only) ⁷ , police (1) and (2), remand, courts, incarceration, probation, and Extrajudicial Sanctions Program			
		Not estimated			
		Opportunity cost: financial restitution to victim, cost of lost tax revenue from lost output ⁸ , transportation to/from court for police witnesses			

¹ Decreased quality of life here excludes perceived value of time lost while incarcerated/remanded.

We have assumed that the victim would have spent \$80 and saved \$20. The saving multiplier would work on this figure much in the same fashion as the spending multiplier: the bank or investor that would have made money from these savings no longer does, the community loses next when the investor/bank owners do not spend or save the money they would have earned, etc.

Not all lost output as a result of the crime is estimated. Not estimated is the output lost by the victim of the minor crime and the victim of the serious crime. In addition, the loss to society could include time spent by the defendant on criminal activity.

² Loss of future life choices includes things such as decreased employment opportunities, not being allowed to hold a passport as a convicted felon, and probationary restrictions.

³ Lost output is a measurement of what society loses as a result of individuals not working because of the crimes. It is consistently underestimated in this report because, beyond the immediate loss to the community, lost output has a compounded effect by way of the spending and saving multipliers, which this report does not calculate. For example, if the victim loses \$100 in income, he/she will purchase, for instance, \$80 less in goods and services. This is the first multiplier effect to the community, which provides the goods and services. In addition, however, the proprietors of the business, for example, would receive \$40 of this once they pay their employees and suppliers. As this money is lost too, it also fails to be spent on goods and services. Now the full loss is \$100 + \$80 + \$40. This is an example of how the spending multiplier works: the initial loss is multiplied by a certain fraction, which is equal to the spending multiplier.

⁴ Not all lost wages as a result of the crime are estimated. Not estimated are the wages lost by the victim of the minor crime and the victim of the serious crime, nor are the wages lost to the defendants and victim's families beyond those foregone to attend court dates.

⁵ Financial restitution/benefits may be provided to victims as per Alberta's Victims of Crime Act. See www.solgps.alberta.ca for more information.

⁶ According to Witte and Witt, there are four standard, possible benefits to society from incarcerating offenders: retribution benefits, rehabilitation benefits, deterrence benefits and incapacitation benefits. *Ann Dryden Witte and Robert Witt.* "What We Spend and What We Get: Public and Private Provision of Crime Prevention and Criminal Justice" in The Economics of Public Spending. Ed. David Miles, Gareth Myles, and Ian Preston. (Oxford University Press: New York, 2003): 224. Benefits are assumed to be similar for offenders on probation.

⁷ Health care costs, aside from the in-hospital costs, that are not estimated include emergency response and all past, present, and ongoing out-of-hospital costs: consultations with doctors and specialists, etc. prescription medication costs are not estimated either, but would be borne by the victim's family and insurance companies, both of which would fall under the 'Community' viewpoint.

Estimated Costs and Benefits for Alternative 1

*Note that in the opportunity cost table refers to the opportunity costs of choosing this alternative.

	Costs		Benefits		Net Benefit (2008 \$)
Viewpoint	Description	Value (2008 \$)	Description	Value (2008 \$)	(1/
Youth	Time for one practice and one game a week	201.60	Playing soccer	1,170.00	
			Opportunity cost: time associated with completing consequences as negotiated with Extrajudicial Sanctions Program Opportunity: in-court and preparation for court	84.00 634.20	
			appearances (time cost)	-	1,686.60
Family	Time for one practice and one game a week	273.25	Opportunity: lost wages to attend court dates	825.43	
	und one game a week		attend court dates	-	552.18
Community	Registration fees	1,170.00	Opportunity: Extrajudicial Sanctions Program volunteers' time	228.26	
	Community League membership fee	150.00	Opportunity: property damaged/stolen	811.74	
	Soccer equipment	188.87	Opportunity: lost wages for jurors and prospective jurors	11,174.95	
	Time for volunteer bingos/casinos	890.21	Opportunity: lost wages for civilian witnesses	684.78	
	Opportunity: hours of community service	42.00	Opportunity: lost wages for victim's family to attend court dates	1,654.89	
			Opportunity: lost output for civilian witnesses	684.78	
			Opportunity: lost output for jurors and prospective jurors	14,174.95	
			Opportunity: lost output for victim's family to attend court dates	1,654.89	
Community, continued			Lost output for youth's (defendant's) family to attend court dates	825.43	

 $^{^{8}}$ The loss from lost tax revenue can also be passed on to the community, in the form of a reduction of possible services or transfer payments. This should be measured at the marginal cost of public funds.

				29,453.57
Government		Opportunity: Extrajudicial Sanctions Program	221.70	
		Opportunity: health care to treat victim (in-hospital treatment cost only)	9,400.00	
		Opportunity: police (1)	95.72	
		Opportunity: police (2)	1,640.11	
		Opportunity: court	26,451.87	
		Opportunity: remand & incarceration – 24 months	200,000	
		Opportunity: probation	4,169.61	
				241,979.01
TOTAL COS	ST: 2,915.94	TOTAL BENEFIT:	276,587.31	
		TOTAL NET	BENEFIT:	273,671.38

Estimated Costs and Benefits for Alternative 2 (Per Youth)

Alternative 2: No soccer program exists. The youth are not involved in any program, and, as a result, remain at a much increased risk of being recruited into gangs. They are recruited, join, and commit both minor and serious crimes as a result.

^{*}Note that in the opportunity cost table refers to the opportunity costs of choosing this alternative.

_	Costs	Benefits		
-	Estimated	Estimated		
Youth	Time associated with completing consequences as negotiated with Extrajudicial Sanctions Program In-court and preparation for court appearances (time cost) Opportunity cost: playing soccer	Opportunity cost: time for one practice and one game a week		
	Not estimated			
	Lost wages while incarcerated/remanded Loss of future income earning potential Emotional and psychological impact Decreased quality of life ¹ Effects of criminal stigmatization Value of time lost while incarcerated/remanded Loss of future life choices ² Opportunity cost: benefit of improved soccer skills, improved physical health, improved academic performance, increased confidence and improved self- esteem, increased connectedness/friendships formed, positive influence of role models/positive relationships, improved behaviour, neater writing, closer relationship to parent/guardian			
_	Estimated	Estimated		
Family	Lost wages to attend court dates Not estimated Transportation to/from court Loss of a(n) (potential) income earner Emotional and psychological impact	Opportunity cost: for one practice and one game a week		
_	Decreased quality of life Opportunity cost: benefit of increased connectedness/friendships formed, healthier/happier children			
	Estimated	Estimated		
Community	Extrajudicial Sanctions Program volunteers' time Lost output ³ Lost wages ⁴	Hours of community service Opportunity cost: registration fees, Community League membership fee, soccer equipment, time for volunteer		
	Not estimated	Not estimated		
	Emotional and psychological impact on the victim, victim's family, jurors, witnesses Physical impact on the victim	Financial restitution to victim ⁵ Benefit from incarceration and probation ⁶ Opportunity cost: possible disruptions caused by games (traffic, noise, parking),		

Alternative 2, continued: no soccer program, more serious crime

Decreased feelings of safety
Decreased quality of life for victim,
victim's family, residents⁷
Increased precautionary/defensive
spending
Property damaged/stolen
Increased insurance premiums
Decreased property values
Transportation to/from court for jurors,
victim's family, witnesses

healthier/happier youth and residents, increased connectedness/friendships formed, increased community safety transportation to/from soccer

Estimated

Government

Extrajudicial Sanctions Program

Police (1)

Health care to treat victim (in-hospital

treatment cost only)7

Opportunity cost: benefit of

Police (2)

Remand

Court

Incarceration

Probation

Not estimated

Financial restitution to victim

Lost tax revenue from lost output⁸

Transportation to/from court for police
witnesses

We have assumed that the victim would have spent \$80 and saved \$20. The saving multiplier would work on this figure much in the same fashion as the spending multiplier: the bank or investor that would have made money from these savings no longer does, the community loses next when the investor/bank owners do not spend or save the money they would have earned, etc.

Not all lost output as a result of the crime is estimated. Not estimated is the output lost by the victim of the minor crime and the victim of the serious crime. In addition, the loss to society could include time spent by the defendant on criminal activity.

¹ Decreased quality of life here excludes perceived value of time lost while incarcerated/remanded.

² Loss of future life choices includes things such as decreased employment opportunities, not being allowed to hold a passport as a convicted felon, and probationary restrictions.

³ Lost output is a measurement of what society loses as a result of individuals not working because of the crimes. It is consistently underestimated in this report because, beyond the immediate loss to the community, lost output has a compounded effect by way of the spending and saving multipliers, which this report does not calculate. For example, if the victim loses \$100 in income, he/she will purchase, for instance, \$80 less in goods and services. This is the first multiplier effect to the community, which provides the goods and services. In addition, however, the proprietors of the business, for example, would receive \$40 of this once they pay their employees and suppliers. As this money is lost too, it also fails to be spent on goods and services. Now the full loss is \$100 + \$80 + \$40. This is an example of how the spending multiplier works: the initial loss is multiplied by a certain fraction, which is equal to the spending multiplier.

⁴ Not all lost wages as a result of the crime are estimated. Not estimated are the wages lost by the victim of the minor crime and the victim of the serious crime, nor are the wages lost to the defendants and victim's families beyond those foregone to attend court dates.

Estimated Costs and Benefits for Alternative 2

*Note that in the table Opportunity costs refer to the opportunity costs of choosing this alternative.

	Costs		Benefits		Net Benefit (2008 \$)
Viewpoint	Description	Value (2008 \$)	Description	Value (2008 \$)	
Youth	In-court and preparation for court appearances (time cost)	634.20	Opportunity: time for one practice and one game a week	201.60	
	Time associated with completing consequences as negotiated with Extrajudicial Sanctions	84.00			
	Program Opportunity: playing soccer	1,170.00			
					- 1,686.60
Family	Lost wages to attend court dates	825.43	Opportunity: time for one practice and one game a week	273.25	
					- 552.18
Community	Lost wages for jurors and prospective jurors	11,174.95	Hours of community service	42.00	
	Opportunity: Extrajudicial Sanctions Program volunteers' time	228.26	Opportunity: registration fees	1,170.00	
	Opportunity: property damaged/stolen	811.74	Opportunity: Community League membership fee	150.00	
	Lost wages for civilian witnesses	684.78	Opportunity: soccer equipment	188.87	
	Lost wages for victim's family to attend court dates	1,654.89	Opportunity: time for volunteer bingos/casinos	890.21	

⁵ Financial restitution/benefits may be provided to victims as per Alberta's Victims of Crime Act. See www.solgps.alberta.ca for more information.

⁶ According to Witte and Witt, there are four standard, possible benefits to society from incarcerating offenders: retribution benefits, rehabilitation benefits, deterrence benefits and incapacitation benefits. *Ann Dryden Witte and Robert Witt.* "What We Spend and What We Get: Public and Private Provision of Crime Prevention and Criminal Justice" in The Economics of Public Spending. Ed. David Miles, Gareth Myles, and Ian Preston. (Oxford University Press: New York, 2003): 224. Benefits are assumed to be similar for offenders on probation.

⁷ Health care costs, aside from the in-hospital costs, that are not estimated include emergency response and all past, present, and ongoing out-of-hospital costs: consultations with doctors and specialists, etc. prescription medication costs are not estimated either, but would be borne by the victim's family and insurance companies, both of which would fall under the 'Community' viewpoint.

⁸ The loss from lost tax revenue can also be passed on to the community, in the form of a reduction of possible services or transfer payments. This should be measured at the marginal cost of public funds.

Community, continued	Lost output for civilian witnesses	684.78			
	Lost output for jurors and prospective jurors	14,174.95			
	Lost output for victim's family to attend court dates	1,654.89			
	Lost output for youth's (defendant's) family to attend court dates	825.43			
				_	- 29,453.57
Government	Extrajudicial Sanctions Program	221.70			
	Police (1)	95.72			
	Health care to treat victim (in-hospital treatment cost only)	9,400.00			
	Police (2)	1,640.11			
	Court	26,451.87			
	Remand & Incarceration – 24 months	200,000.00			
	Probation	4,169.61			
					- 241,979.01
	TOTAL COST:	276,587.31	TOTAL BENEFIT:	2,915.94	
			TOTAL NET B	ENEFIT:	- 273,671.38

Explanation of Costs/Benefits and Calculations

This section offers a detailed explanation of the costs assigned above for the cost-benefits analysis, grouped according to the viewpoints (Youth, Family, Community and Government). Four points should be noted for all viewpoints:

- All of the following costs are calculated in 2008 Canadian dollars and alphabetized under each viewpoint.
- All opportunity costs are equal to the costs if they are not an opportunity— i.e. the cost of registration fees is equal to the opportunity cost of registration fees.
- Please note that to play in an outdoor soccer league in Edmonton, it is required that the players (youths) pay registration fees, possess a community membership and proper

soccer equipment, and have their parents volunteer at bingos or casinos to support the team. All of these costs are included.

- The minimum wage used to calculate the opportunity cost of the youth's time is not an after-tax value. However, it is appropriate because it is unlikely the youth would be taxed significantly under the progressive system of taxation used in Canada. Otherwise, although they are not employed, after-tax figures should be used when calculating wages or salaries. This would allow for a more accurate estimate of the direct cost/benefit under each viewpoint, because income tax is paid to government (it is not a cost/benefit to the individual if tax revenue is lost/gained to the government, except via increased/decreased provision of government services, which is noted on the cost/benefit tables) and is included under the government viewpoint but is not estimated. Unfortunately, relevant after-tax figures were not available for this project.
- All figures adjusted for inflation use the CPI for month three (March) of whichever year is relevant to the calculation, because, at the time of this research, this reflected the most recent available number (March 2008). 88

Youth

In-court and preparation for court appearances (time cost) – The total number of hours the youth as the defendant will attend court is 72.5.⁸⁹ In addition to this, he will spend a minimum of three hours in consultation with his lawyer.⁹⁰ The total man-hours associated with both preparation and in-court appearances (75.5) is then multiplied by the opportunity cost of the youth's time, which is estimated by the minimum wage in Alberta (\$8.40/hour, current for 2008).⁹¹

 $75.5 \times 8.40 = 634.20 (2008 \$)$

⁸⁸ Statistics Canada, "Canada: All Items," from CPI – 2005 Basket, M6-M7, 2002 = 100, CANSIM II, series label: V41690973.

⁸⁹ See "Court" under the Government viewpoint for a breakdown of how these hours are distributed.

⁹⁰ Nadine Callihoo (former Courtworker), interview by Fiona Hossack. Edmonton, Alberta. June 10, 2008.

⁹¹ Alberta, "Alberta's Minimum Wage." *Employment Standards*. April 1, 2008. http://employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/998.html (accessed June 13, 2008).

Playing soccer – According to Revealed Preference Theory, the benefit from playing soccer is equal to the cost of the registration fees paid to play. 92 Registration fees were \$1170; see 'Registration fees' under the 'Community' viewpoint for details of this figure.

1,170.00 (2008 \$)

Time associated with completing consequences as negotiated with Extrajudicial Sanctions *Program*⁹³ – Time to complete consequences includes one hour with volunteers conducting a preliminary meeting and negotiation, typical no less than five hours of community service⁹⁴, two hours performing other duties as per negotiations (examples: writing an essay/letter of apology, creating a poster, or attending an AADAC meeting), one hour checking in with program volunteers throughout the three-month period, and one hour for a final meeting wherein the youth proves that the consequences have been completed and the case is closed. 95 This total of 10 hours is then multiplied by the opportunity cost of the youth's time, which is estimated by the minimum wage in Alberta (\$8.40/hour, current for 2008). 96

$$10 \times 8.40 = 84.00 (2008 \$)$$

Time for one practice and one game a week – Time is estimated at two hours each (one and a half hours play time and half an hour travel time) to make a total of four hours. 97 This time (four hours) is then multiplied by the opportunity cost of the youth's time, which is estimated by the minimum wage in Alberta (\$8.40/hour, current for 2008). 98 This number is multiplied by six years to ensure the timelines between alternatives are comparable.

 $4 \times 8.40 = 33.60 (2008 \$)$

 $33.60 \times 6 = 201.60 (2008 \$)$

⁹² See Assumption 4 for an explanation of Revealed Preference Theory.

⁹³ For more information on the Extrajudicial Sanctions Program, see the footnotes of Assumption 3.

⁹⁴ This is the very minimum number of community hours prescribed. It is common to have at least ten hours of service agreed

upon. Prokopiw, May 12, 2008.

95 Sandy Prokopiw (in charge of overseeing Extrajudicial Sanctions Program), interview by Fiona Hossack. Edmonton, Alberta.

⁹⁶ Alberta, "Alberta's Minimum Wage."

⁹⁷ Games are an hour and a half in length, plus an additional half hour travel to and from soccer fields. See the Edmonton Minor Soccer Association's website for regulations on game length: http://www.edmontonsoccer.com

⁹⁸ Ibid. Games are an hour and a half in length, plus an additional half hour travel to and from soccer fields. See the Edmonton Minor Soccer Association's website for regulations on game length: http://www.edmontonsoccer.com.

Family

Lost wages to attend court dates – The total time spent in court by the youth's family is 72.5 hours per individual. ⁹⁹ The opportunity cost of the family's time is estimated by the total man-hours multiplied by the average hourly wage for low-income Canadians adjusted for inflation. ¹⁰⁰

$$72.5 \times 11.39 = 825.43 (2008 \$)$$

Time for one practice and one game a week – Estimated at two hours each (one and a half hours play time and half an hour travel time) to make a four hour total. Time is then multiplied by the opportunity cost of the family member's time, which is estimated by the average hourly wage for low-income Canadians adjusted for inflation. This number is multiplied by six years to ensure the timelines between alternatives are comparable.

Community

Community League membership fee – This is priced in accordance with the Bonnie Doon Community League family membership fee for 2008. ¹⁰⁴ This number is multiplied by six years to ensure the timelines between alternatives are comparable.

⁹⁹ See "Court" under the Government viewpoint for a breakdown of how these hours are distributed. Here, we assume one parent and no siblings or extended family members attend, thereby making this almost certainly an underestimate. In addition, it is more likely underestimate the true figure because the figure calculated here does not include an estimate of the amount of hours spent by the family with Defense Counsel or traveling to/from the courthouse.

¹⁰⁰ We have used the average hourly wage for low-income Canadians because the families studied in the narrative were both low-income families. In addition, it is a reasonable assumption because this report studies at-risk youth, who are more likely to be from low-income families than not. (See the narrative for more information.) A Statistics Canada report notes that, in 2002, Maxwell defined a low paying job in Canada as one that paid less than \$10 an hour. This cut-off is simply adjusted for inflation to find the comparative cut-off in 2008.

 $^{10.00(}CPI_{M3,2008}/CPI_{M3,2002}) = 10.00(112.6/98.9) = 11.39 (2008 \$)$

Morissette, Rene and Garnett Picot. "Low-paid Work and Economically Vulnerable Families over the Last Two Decades." From the *Analytical Studies Branch Research Paper Series*. Business and Labour Market Analysis Division: Statistics Canada, 2005. Online: www.statcan.ca; and Statistics Canada, "Canada; Average Actual Hours (Worked in Reference Week); All Jobs; Both Full- and Part-Time; Both Sexes; 15 Years and Over." CANSIM II, series label: V2529271.

¹⁰¹ Games are an hour and a half in length, plus an additional half hour travel to and from soccer fields. See the Edmonton Minor Soccer Association's website for regulations on game length: http://www.edmontonsoccer.com.

¹⁰² Again, it is assumed that only one family member attends, which could be an underestimation.

¹⁰³ See note 15 for why this figure was used and how it was calculated.

¹⁰⁴ Bonnie Doon Community League, interview by Fiona Hossack. Edmonton, Alberta. May 16, 2008.

$$25.00 \times 6 = 150.00 (2008 \$)$$

Extrajudicial Sanctions Program¹⁰⁵ Volunteers' Time –The volunteers' time on a typical case is spent as follows: three volunteers spend one hour with a youth in a preliminary meeting and negotiation (three man-hours), then one volunteer may supervise the youth performing acts of community service (five man-hours), ¹⁰⁶ then one or more volunteers spend a total of an hour following-up with the youth throughout the three month period (one man-hour), and finally there is a last meeting at the end of the program where the youth proves that the consequences have been completed and the case is concluded (one man-hour). ¹⁰⁷ The total of these ten man-hours is then multiplied by the opportunity cost of the volunteers' time, which is estimated by the average hourly wage for Canadians adjusted for inflation. ¹⁰⁸

$$10 \times 22.83 = 228.26 (2008 \$)$$

Hours of community service – This is measured by taking the opportunity cost of the youth's time, which is measured by the minimum wage in Alberta (\$8.40/hour, current for 2008), and multiplying it by the numbers of hours served as prescribed by the Extrajudicial Sanctions Program. ¹⁰⁹ See the cost directly above for more information.

$$8.40 \times 5 = 42.00 (2008 \$)$$

Lost output for civilian witnesses – The opportunity cost to society of the civilian witnesses' lost output is equal to wages that they would have earned during their time attending court dates. See 'Lost wages for civilian witnesses' under this viewpoint for details of this figure.

684.78 (2008 \$)

 $^{^{105}}$ For more information on the Extrajudicial Sanctions Program, see the footnotes of Assumption 3.

¹⁰⁶ This is the very minimum number of community hours prescribed. It is common to have at least ten hours of service agreed upon. Prokopiw, May 12, 2008.

¹⁰⁷ Prokopiw, May 12, 2008.

The average hourly wage for Canadians was found by dividing the median salary for Canadians working full-time (41,348, 2005\$) by the number of weeks in a year (52). This was then further divided by the average number of hours worked weekly by Canadians (36.9). This figure was then adjusted for inflation.

^{41.348 / 52 / 36.9 = 21.55 (2006 \$)}

 $⁽CPI_{M3, \ 2008}/CPI_{M3, \ 2005}) = 21.55(112.6/106.3) = 22.83 \ (2008 \ \$)$

Grant, Tavia. "The Rich, the Poor, and the Chasm Between: Census data released Thursday show recent immigrants as victims of widening income disparity as middle class stagnates." *Globe and Mail.* May 1, 2008. Available online: www.globeandmail.com; and Statistics Canada, "Canada; Average Actual Hours..."

¹⁰⁹ Alberta, "Alberta's Minimum Wage."; and Prokopiw, May 12, 2008.

Lost output for jurors and prospective jurors – Thirty prospective jurors are summoned from the public at-large to sit for selection for a full day (7.5 hours), to make a total of 225 manhours. The opportunity cost of their time is estimated by the total man-hours multiplied by the average hourly wage for Canadians adjusted for inflation (\$22.83).

After a jury is selected, 12 jurors sit for the duration of the trial, then deliberate, then are present for sentencing. In total, the man-hours involved in these parts of the trial are 396. This total is multiplied by the opportunity cost of their time, which is estimated by the average hourly wage for Canadians adjusted for inflation (\$22.82).

Finally, these two costs are added together.

Lost output for victim's family – The opportunity cost to society of the family's lost output is equal to wages that the family would have earned during its time attending court dates. See 'Lost wages for victim's family to attend court dates' under this viewpoint for details of this figure.

Lost output for youth's (defendant's) family to attend court dates – The opportunity cost to society of the family's lost output is equal to wages that the family would have earned during its time attending court dates. See 'Lost wages to attend court dates' under the 'Family' viewpoint for details of this figure.

825.43 (2008 \$)

¹¹⁰ See "Court" under the Government viewpoint for a breakdown of the court process.

¹¹¹ See note 22 for how this figure was calculated.

¹¹² See "Court" under the Government viewpoint for a breakdown of the court process.

¹¹³ See note 22 for how this figure was calculated.

Lost wages for civilian witnesses – On average, two to four civilian witnesses are called in a trial such as the one in Alternative 2 and spend a day each (7.5 hours/day) waiting to and giving testimony at the trial and the preliminary hearing. Here, we will use the minimum of two witnesses and multiply their total time commitment (30 man-hours) by the opportunity cost of their time, which is estimated by the average hourly wage for Canadians adjusted for inflation (\$22.83). 115

$$30 \times 22.82 = 684.78 (2008 \$)$$

Lost wages for jurors and prospective jurors – 30 prospective jurors are summoned from the public at-large to sit for selection for a full day (7.5 hours), to make a total of 225 manhours. ¹¹⁶ The opportunity cost of their time is estimated by the total man-hours multiplied by the average hourly wage for Canadians adjusted for inflation (\$22.83). ¹¹⁷

After a jury is selected, 12 jurors sit for the duration of the trial, then deliberate, then are present for sentencing. In total, the man-hours involved in these parts of the trial are 396. This total is multiplied by the opportunity cost of their time, which is estimated by the average hourly wage for Canadians adjusted for inflation (\$22.83) less jury compensation (\$50 per trial day per juror as of May 2008 multiplied by the number of jurors and again by the number of trial days). 119

Finally, these two costs are added together.

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225 x 22.83 = 5,135.85 (2008 $)

50 x 3 x 12 = 3,000.00 (2008 $)

(396 x 22.83) - 3000 = 6,039.10 (2008 $)
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¹¹⁴ Callihoo, June 10, 2008.

¹¹⁵ See note 22 for how this figure was calculated.

¹¹⁶ See "Court" under the Government viewpoint for a breakdown of the court process.

¹¹⁷ See note 22 for how this figure was calculated.

¹¹⁸ See "Court" under the Government viewpoint for a breakdown of the court process.

¹¹⁹ Some employers may compensate their employees fully or partially for days spent serving jury duty, but they are not required to do so by law. See note 22 for how the figure for hourly wage was calculated. Alberta Courts, "Juror Fees and Expenses." Court Services. http://www.albertacourts.ab.ca/CourtServices/JuryDuty/FeesandExpenses/tabid/247/Default.aspx (accessed June 13, 2008); and Alberta, "Jury Duty." Justice. 2008. http://www.justice.gov.ab.ca/courts/jury_duty.aspx?id=3465 (accessed June 23, 2008).

$$5,135.85 + 6,039.10 = 11,174.95 (2008 \$)$$

Lost wages for victim's family to attend court dates – The total time spent in court by the victim's family is 72.5 hours per individual. The opportunity cost of the family's time is estimated by the total man-hours multiplied by the average hourly wage for Canadians adjusted for inflation (\$22.83). 121

$$72.5 \times 22.83 = 1,654.89 (2008 \$)$$

Property damaged/stolen – According to Juristat, the average cost of an incident of mischief was \$638 (1996 \$) in 1996. ¹²² This figure is simply adjusted for inflation.

$$638(112.6/88.5) = 811.74 (2008 \$)$$

Registration fees – This is priced for the Edmonton Southeast Soccer Association's 2008 outdoor season fees for the U14, U16, and U18 (under 14, 16, and 18 years of age, respectively) categories. There is a \$110 fee for registration in U14, in addition to a \$75 uniform deposit. For U16, the registration fee increases to \$120, and it increases again to \$130 for U18, but for all categories the uniform deposit remains at \$75. The registration fees plus the uniform deposit are multiplied by two years each to ensure the timelines between alternatives are comparable. These totals are then added.

$$(110 + 75) \times 2 = 370.00 (2008 \$)$$

 $(120 + 75) \times 2 = 390.00 (2008 \$)$
 $(130 + 75) \times 2 = 410.00 (2008 \$)$
 $370 + 390 + 410 = 1,170.00 (2008 \$)$

Soccer equipment – Edmonton Minor Soccer Association regulations, which are followed for the Edmonton Southeast Soccer Association's U14, U16, and U18 programs, require players to

¹²⁰ See "Court" under the Government viewpoint for a breakdown of how these hours are distributed. Here, we assume only one family member attends, thereby making this almost certainly an underestimate.

¹²¹ See note 22 for how this figure was calculated.

¹²² Paul Brantingham and Stephen T. Easton, "The Costs of Crime: Who Pays and How Much? 1998 Update." *Critical Issues Bulletin*. (Vancouver: Fraser Institute, 1998), 23.

¹²³ Edmonton Minor Soccer Association. Ocotober 27, 2008. http://www.edmontonsoccer.com (accessed February 2, 2009).

have proper shin guards, stockings, shorts and shoes to participate. 124 After surveying three sports stores in Edmonton, the cheapest equipment was used for this analysis: \$9.99 for shin guards, \$9.99 for stockings, \$19.99 for shorts, and \$19.99 for shoes. 125 These items were totalled and then multiplied by the applicable tax rate for Edmonton (GST=5%; there is no PST in Alberta). All prices are current and in 2008 dollars. We assume that the youth will need new equipment every two years, so we multiply the previous amount by three to ensure the timelines between alternatives are comparable.

Time for volunteer bingo/casino – The average shift length for a bingo (five hours) is added to the average shift length for a casino (eight hours) and this is divided by two to obtain the average shift length for a volunteer bingo or casino. 126 This time (6.5 hours) is then multiplied by the opportunity cost of the volunteer's time, which is estimated by the average hourly wage for Canadians adjusted for inflation. 127 This number is multiplied by six years to ensure the timelines between alternatives are comparable.

$$(5 + 8)/2 = 6.5$$

6.5 x 22.83 = 148.37 (2008 \$)
148.37 x 6 = 890.21 (2008 \$)

Government

Court – In this report, the court process is split into nine steps, with a short description, the time

¹²⁷ See note 22 for how this figure was calculated.

¹²⁴ Jerseys are also required, but we assume they are provided by the league with payment of the uniform deposit fee. See "Registration fees" under this viewpoint for more details. Edmonton Minor Soccer Association. Ocotober 27, 2008. http://www.edmontonsoccer.com (accessed February 2, 2009).

¹²⁵Sportmart. http://www.sportmart.ca/ (accessed May 16); and Edmonton Minor Soccer Association. Ocotober 27, 2008. http://www.edmontonsoccer.com (accessed February 2, 2009).

⁶ We assume that only one bingo/casino is required; there is a possibility that volunteers are required to do two. Source for this and the length of these shifts is a soccer mom who prefers to remain anonymous.

involved and who is present at each step listed in detail below. 128

- 1) First appearance in Provincial Court, at which an adjournment will be requested for the defendant to apply for Legal Aid and get a lawyer appointed. Time: full day¹²⁹. Present: Crown Prosecutor, Judge, two Court Clerks, Duty Counsel, Victim Services Advocate, victim, victim's family, defendant, defendant's family.
- 2) Second appearance in Provincial Court, at which another adjournment will be requested for the newly appointed lawyer to review the case. Time: full day. Present: same as (1), except there is no Duty Counsel present and there is defence counsel in attendance.
- 3) Third appearance in Provincial Court, at which there will be a bail hearing and at which the defence will request to have the case elected to Court of Queen's Bench¹³⁰ and have the bail hearing. Bail is denied and the defendant remains in remand for the duration of the trial. Time: Full day. Present: same as (2).
- 4) Preliminary hearing in Provincial Court, at which the Crown Prosecutor must prove that the Crown has sufficient evidence to proceed to trial. Time: full day. Present: same as (2), except add two of each civilian and police witnesses.
- 5) Arraignment in Court of Queen's Bench, at which the trial date will be set. Time: two hours. Present: same as (2), except the Judge is a Justice of Court of Queen's Bench.
- 6) Jury Selection in Court of Queen's Bench. Time: full day. Present: 30 prospective jurors (summoned civilians), Justice, Crown Prosecutor, Defence Counsel, two Court Clerks, Victim Services Advocate, victim, victim's family, defendant, defendant's family.
- 7) Trial in Court of Queen's Bench. Time: three full days. Present: same as (5), except with the addition of 12 jurors, two civilian witnesses (each for a full day), and two police witnesses (each for a full day as well).

¹²⁸ This is a purely hypothetical case, but it follows the typical pattern of an offence like assault causing bodily harm. Nadine Callihoo (former Courtworker), June 10, 2008; and Anne Wall (Head of Taxation for Legal Aid Alberta), interview by Fiona Hossack, Edmonton, Alberta, June 11, 2008.

 $^{^{129}}$ A full day is 7.5 hours long – from 9:30 – 5:00.

¹³⁰ The Court of Queen's Bench is the Superior Trial Court for the Province. Alberta Courts, "Court of Queen's Bench." http://www.albertacourts.ab.ca/CourtofQueensBench/tabid/69/Default.aspx (accessed June 23, 2008).

- 8) Deliberation in Court of Queen's Bench. Time: full day. Present: 12 jurors, Justice, Crown Prosecutor, Defence Counsel, two Court Clerks, Victim Services Advocate, victim, victim's family, defendant, defendant's family.
- 9) Sentencing in Court of Queen's Bench. Time: three hours. Present: same as (8).

The costs of the court process to all levels of government are split into the costs for the following people/groups: ¹³¹ (a) Crown Prosecutor, (b) Defence Counsel, (c) jurors, (d) Judge, (e) Court Clerks, (f) Duty Counsel, (g) Justice, (h) Victim Services Advocate. Each of their costs is detailed below.

(a) Crown Prosecutor. Court appearances (as detailed above) for the Crown Prosecutor add up to 72.5 hours. It is estimated that at least twice this amount of time is spent outside of court preparing and working on a case like this one. This brings the total time commitment to 217.5 hours. This total is then multiplied by the hourly wage of a Crown Prosecutor in Alberta, current as of May 2008 (\$36.71). 133

$$217.5 \times 36.71 = 7,985.43$$

(b) Defence Counsel. Costs for Defence Counsel on a case like this are estimated as follows:

1) interview and briefing: \$420; 2) 3 adjournments, bail hearings in both Provincial Court and Court of Queen's Bench: \$462, 3) Preliminary Hearing: \$336; 4) Pre-trial conference: \$168; and 5) Three trial days (preparation and court days), jury selection and

¹³¹ This excludes the court related costs to the following people/groups, which are included under the other viewpoints because they are not costs borne by the government. 1) The cost to the defendant/youth is under the Youth viewpoint. 2) The cost to the youth/defendant's family is under the Family viewpoint. 3) The cost to prospective jurors is under the Community viewpoint. 4) The costs to the victim and the victim's family are under the Community viewpoint. 5) The costs to civilian witnesses are under the Community viewpoint, but under the Police (2) category.

category.

132 Bob Marr (Crown Prosecutor for the Yellowhead region, Alberta), interview by Fiona Hossack. Edmonton, Alberta. June 9, 2008.

133 This represents the lowest possible salary for a Crown Prosecutor in Alberta (70,448) divided by the number of weeks in a

¹³³ This represents the lowest possible salary for a Crown Prosecutor in Alberta (70,448) divided by the number of weeks in a year (52) and then divided again by the average number of hours worked by Canadians per week. It is very likely an underestimate as a result.

^{70,448/52/36,9= 36.71}

Alberta, "Crown Prosecutor." *Government of Alberta Jobs: Legal.* 2008. http://www.chr.alberta.ca/jobs/postings/045961.htm (accessed June 16, 2008); and Statistics Canada, "Canada; Average Actual..."

sentencing: \$2,014. These figures are summed; all figures quoted are current as of May 2008. 134

$$420 + 462 + 336 + 168 + 2,014 = 3,400 (2008 \$)$$

(c) Jurors¹³⁵. Once a jury is selected, 12 jurors sit for the full duration of the trial. Jury compensation is \$50 per trial day per juror as of May 2008.¹³⁶ The number of jurors is multiplied by this daily compensation rate and again by the number of trial days (three).

$$12 \times 50 \times 3 = 1,800 (2008 \$)$$

(d) Judge. Court appearances (as detailed above) for the Judge add up to 30 hours. This total is then multiplied by the hourly wage of a Judge in Alberta, current as of 2008 (\$114.65). 137

(e) Court Clerks. Court appearances (as detailed above) for the two Court Clerks add up to 145 man-hours. This total is then multiplied by the hourly wage of a Court Clerk in Alberta, current as of May 2008 (\$18.09). 138

$$145 \times 18.09 = 2,623.42 (2008 \$)$$

(f) Duty Counsel. Court appearances (as detailed above) for the Duty Counsel add up to 7.5 hours. ¹³⁹ This total is then multiplied by the hourly wage of a Duty Counsel, which is \$84, current as of May 2008. ¹⁴⁰

¹³⁴ Anne Wall, Head of Taxation for Legal Aid Alberta, "Costing As per this morning's Telephone Conversation," email to the Fiona Hossack. June 11, 2008; and Callihoo, June 10, 2008.

¹³⁵ This only includes the cost to the government of having jurors. See the Community viewpoint for the other costs relating to jurors.

¹³⁶ Alberta Courts, "Juror Fees and Expenses."

¹³⁷ The annual salary of a judge in Alberta (220,000) is divided by the number of weeks in a year (52) and then divided again by the average number of hours worked by Canadians per week. 220,000/52/36.9 = 114.65 (2008\$)

CBC, "Alberta judges to keep \$220,000 salary for three years." June 15, 2006.

http://www.cbc.ca/canada/edmonton/story/2006/06/15/ed-judgeswages-20060615.html (accessed June 16, 2008); and Statistics Canada, "Canada; Average Actual..."

¹³⁸ This represents the lowest possible salary for a Court Clerk in Alberta (34,716) divided by the number of weeks in a year (52) and then divided again by the average number of hours worked by Canadians per week. It is very likely an underestimate as a result. 34,716/52/36.9= 18.09 (2008 \$) Alberta, "Court/Counter Clerk." Government of Alberta Jobs: Administrative. March 24, 2008. http://www.chr.alberta.ca/jobs/postings/047298.htm (accessed June 16, 2008); and Statistics Canada, "Canada; Average Actual..."

$$7.5 \times 84 = 630 (2008 \$)$$

(g) Justice. Court appearances (as detailed above) for the Justice add up to 42.5 hours. This total is then multiplied by the hourly wage of a Justice in Alberta, current as of 2008 (\$114.65).¹⁴¹

(h) Victim Services advocate. Court appearances for the Victim Services advocate add up to 72.5 hours. In addition to this time, advocates will spend additional time (estimated to be two hours) as needed with the victim preparing them for court, helping them to write a Victim Impact Statement, etc. 142 Victim Services advocates are volunteers, so the total of this time is then multiplied by the opportunity cost of the volunteer's time, which is estimated by the average hourly wage for Canadians adjusted for inflation. 143

$$74.5 \times 22.83 = 1,700.54 (2008 \$)$$

Finally, the costs for (a) through (h) are summed to find the total cost of the court process to all levels of government.

$$7,989.96 + 3,400 + 3,000 + 3,439.65 + 2,623.42 + 630 + 4,872.84 + 1,700.54 = 26,451.87$$
 (2008 \$)

Extrajudicial Sanctions Program 144 – The total budget for this program in 2007 (\$350,000) was taken and divided by the average number of youths served by the program per annum since 2001 (1600) to obtain the per-youth cost of the program. ¹⁴⁵ This figure was then converted to 2008 dollars.

$$350,000/1600 = 218.75 (2007 \$)$$

¹³⁹ Duty counsel does not spend the full 7.5 hours on one case alone; they cover several cases at once. However, because they are on-call all day to help defendants, all the time is applicable.

¹⁴⁰ Wall, June 11, 2008.

¹⁴¹ The annual salary of a justice in Alberta is assumed to be equal to that of a judge (220,000). This is divided by the number of weeks in a year (52) and then divided again by the average number of hours worked by Canadians per week. 220,000/52/36.9 = 114.65 (2008\$)CBC, "Alberta judges..."; and Statistics Canada, "Canada; Average Actual..."

¹⁴² Callihoo, June 10, 2008.

¹⁴³ See note 22 for how this figure was calculated.

¹⁴⁴ Unfortunately, the only cost estimates available are aggregate, so this figure may not reflect the cost of adding an additional youth to the program.

145 Prokopiw, May 12, 2008.

218.75(112.6/111.1) = 221.70 (2008 \$)

Health care to treat victim – In Alternative 2, the hypothetical offence is assault causing bodily harm. The health care costs to treat this victim are estimated to be the same as that of the average cost for an injury resulting in a hospital stay.¹⁴⁶

9,400.00 (2008 \$)

Incarceration – The estimated annual cost of housing a young offender in Alberta is \$100,000. 147

This figure is adjusted to reflect 24 months of imprisonment (ten months' remand and a 14month sentence, all spent at the Edmonton Young Offender Centre (see Assumption 3 for
more details).

 $(100,000 \times 2 = 200,000 (2008 \$)$

Police (1) – The time for the police service to respond to the scene, handle the youth perpetrator (take them home, talk to parents etc.), and perform an investigation is estimated to be a minimum of three hours. This is added to the one hour it takes an officer to write a report and refer the youth to the Extrajudicial Sanctions Program¹⁴⁸, which brings the total time for the officer involved to a minimum of four hours. This time is then multiplied by the hourly wage for a first-year constable of the Edmonton Police Service, current as of May 2008 (\$23.93). 150

 $4 \times 23.93 = 95.72 (2008 \$)$

¹⁴⁶ Canadian Institute for Health Information, "Average hospital stay costs nearly \$7,000 per patient in Canada." March 18, 2008. http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=media_18mar2008_e (accessed June 13, 2008).

¹⁴⁷ Unfortunately, the data for the marginal cost of adding an additional youth to the system were not available. Calgary Youth Justice Committee, "Social Return On Investment (SROI) Case Study: Calgary Youth Justice Committee Program: Investing to strengthen society," no date. http://www.calgaryyouthjustice.com/SROI2008.pdf (accessed February 7, 2009).

¹⁴⁸ The referral can either be made directly through the police service, or the police can press charges and the case will end up in the court system, which would mean an officer would be required to write a lengthy report for court (another 2 hours) and then possibly attend court for a day. Mike Bradshaw (former Deputy Chief of Police for the Edmonton Police Service), interview by Fiona Hossack. Edmonton, Alberta. May 1, 2008; and Joel Whittaker (Staff Sergeant with the Edmonton Police Service Downtown Division), interview by Fiona Hossack. Edmonton, Alberta. June 9, 2008.

¹⁴⁹ This excludes the possibility the file gets bounced back from the Extrajudicial Sanctions Program to the police (possibly because the youth fails to show for negotiation), in which case the police then need to track the kid down (they might spend a full day on 10 different such files doing so), and then refer the youth through the court system (see the previous note on what happens then). Bradshaw, May 1, 2008; and Joel Whittaker (Staff Sergeant with the Edmonton Police Service Downtown Division), interview by Fiona Hossack. Edmonton, Alberta. June 9, 2008.

¹⁵⁰ This represents the lowest possible salary in the Edmonton Police Service, and is very likely an underestimate as a result. Edmonton Police Service, "Salaries." *Benefits*. December 23, 2007. http://www.joineps.ca/benefits/salaries/ (accessed June 13, 2008).

Police (2) – The time for police officers to respond to the scene, perform an investigation and complete paperwork is estimated to be five hours. The court time that would directly involve police officers is estimated as a minimum of two officers (often as many as four for a serious trial like the one described in Alternative 2) appearing as witnesses for a full day for both the trail and preliminary hearing. 151 This time (a total of 35 man-hours) is multiplied by the hourly wage for a first-year constable of the Edmonton Police Service, current as of May 2008 (\$23.93). 152 To this total, an hour of the supervisor's time spent being briefed and giving direction at his/her hourly wage (\$38.22) is added. 153

In addition, if the offence is connected to the activities of a criminal gang, the police service will then attempt to identify patterns to prevent further gang related crimes. This involves a team of three analysts examining patterns of criminal activity in relation to the most recent offence for approximately 6 hours at a minimum, for a total of 18 man-hours. 154 Total man-hours are then multiplied by the hourly wage for a first-year constable of the Edmonton Police Service, current as of May 2008 (\$23.93). 155

After this analysis is completed, a two hour long meeting will be held with six members of the service in attendance, including a Staff Sergeant. Most likely there will be at least one more senior member in attendance, but here we will underestimate our figures by assuming that all five officers present aside from the Staff Sergeant are first-year constables. The total man-hours for the first-year constables (ten) is multiplied by their hourly wage (\$23.93) and added to the total man-hours for the Staff Sergeant (two) multiplied by his/her hourly wage(\$47.15). 156 All wages are current as of May 2008.

Finally, all of these figures were summed to find the total cost to the police service of investigating a more serious, gang related offence (in this case, an assault causing bodily harm).

¹⁵¹ A full day is considered to be 7.5 hours – (9:30 – 5:00, which corresponds to court hours). Whittaker, June 9, 2008.

¹⁵² This represents the lowest possible salary in the Edmonton Police Service, and is very likely an underestimate as a result. Edmonton Police Service, "Salaries."

153 We assume their supervisor is a Senior Constable, Level I; if the supervisor is a higher ranked officer, this figure will be an

underestimate as well. Edmonton Police Service, "Salaries."

¹⁵⁴ Whittaker, June 9, 2008.

¹⁵⁵ This represents the lowest possible salary in the Edmonton Police Service, and is very likely an underestimate as a result. Edmonton Police Service, "Salaries."

¹⁵⁶ Whittaker, June 9, 2008; and Edmonton Police Service, "Salaries."

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35 x 23.93 = 837.55 (2008 $)

1 x 38.22 = 38.22 (2008 $)

18 x 23.93 = 430.74 (2008 $)

10 x 23.93 = 239.30 (2008 $)

2 x 47.15 = 94.30 (2008 $)

837.55 + 38.22 + 430.74 + 239.30 + 94.30 = 1640.11 (2008 $)
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Probation – The estimated time spent by a probation officer on a case such as the one laid out in Alternative 2 is five to ten hours a month. This time is spent first in two monthly meetings with the probationer (about half an hour each time), but also on follow-up phone calls and meetings with counsellors and employers, and writing reports/keeping the file updated. ¹⁵⁷

An average of the time spent (7.5 hours) is taken and multiplied by the minimum hourly wage of a probation officer in Alberta as of May, 2008 (\$23.16), which is then multiplied by 24 to find the cost of continuing probation for the full two-year period. The rate of inflation is assumed to equal the rate of discount for this calculation (i.e. present figures are not discounted into future values because it is assumed that salaries would be adjusted for inflation at the same rate as the rate of discount, even without job promotion).

Other Possible Costs and Benefits

As a Youth

¹⁵⁷ Callihoo, June 10, 2008.

¹⁵⁸ This represents the lowest possible salary for a probation officer (44,448) divided by the number of weeks in a year (52) and then divided again by the average number of hours worked by Canadians per week (36.9). It is very likely an underestimate as a result.

^{44,448/52/36.9= 23.16 (2008 \$)}

Alberta, "Probation Officers." *Government of Alberta Jobs: Corrections/Enforcement/Inspection*. May 16, 2008. http://www.chr.alberta.ca/jobs/postings/048676.htm (accessed June 13, 2008); and Statistics Canada, "Canada; Average Actual Hours..."

While the following costs and benefits are difficult to include in an analysis such as this, they merit discussion, and illustrate the value-added benefits of Alternative 1.

- Victims (adolescent) will have decreased commitment to education leading to decreased educational success (Alternative 2). MacMillan (2000) found that "the most immediate consequences of violent victimization are diminished commitment to education, diminished effort in schoolwork, and poorer overall school performance and that the long-term costs of crime stem largely from disrupted processes of educational and occupational attainment." This, of course, will have serious consequences for future income earning potential. Therefore, by participating in the soccer program, which decreases the likelihood of being victimized (as established in Assumption 2); it is logical to expect that these long-term costs associated with victimization will be averted.
- Participation in street gang activity, which increases the likelihood of violent victimization, can cause decreased income for victims in the future. MacMillan (2000) states that "in general, violent victimization in adolescence diminishes annual income by almost \$6,000 (b = -5.93, p < 0.01). These effects are again independent of several control variables that are also determinants of income attainment. These variables include gender, age, first language spoken, urban residence, immigration status, and region of residence." This is because of "diminished educational attainment and occupational status" which "accounts for between 48 and 69% of the effect of violent victimization in adolescence on personal income." 160
- Involvement in gangs also increases the probability of drug use, which can create other
 major problems and considerable associated costs.¹⁶¹ These costs were not included in
 the analysis as they are difficult to estimate.
- The risk factors associated with an increased likelihood of being recruited into a gang are the same as those associated with an increased likelihood for teen pregnancy/fatherhood

¹⁵⁹ Ross Macmillan, "Adolescent Victimization and Income Deficits in Adulthood: Rethinking the Costs of Criminal Violence From a Life-Course Perspective," *Criminology* 38 no. 2 (2000): 576.
¹⁶⁰ Ibid, 567-570.

¹⁶¹ See Scot Wortley and Julian Tanner, *Criminal Organizations or Social Groups? An Exploration of the Myths and Realities of Youth Gangs in Toronto*. First Draft. (University of Toronto, 2007); and Terence Thornberry et al., *Gangs and Delinquency in Developmental Perspective* (New York: Cambridge University Press, 2003) for two good studies on the connection between gang membership and drug use.

and dropping out of high school. Therefore if the risk factors for being recruited into a gang are mitigated, it is logical to expect that the probability of these other risks decrease as well.¹⁶²

• It is likely that a youth involved in a gang will commit many other crimes, especially minor ones such as vandalism, before they are actually apprehended for committing an offence. The costs of these frequent, unsolved delinquent acts to the community are no doubt considerable.

As an Adult (with continued gang affiliation)

As this report only considers the costs and benefits to a youth between 12 and 18 years of age, it actually disregards a very substantial amount of probable costs to the youth, his/her family, the community, and the government that would be incurred after the youth turns 18. The following is a list, with some cost estimates, to illustrate just how extensive these costs might be.

• Because of his/her continued affiliation with a gang, which we have shown to be strongly associated with a higher level of criminal activity – particularly violent acts, the youth-turned-adult is almost certainly going to be involved in further criminal activity. One report on Youth Justice Committees states 28% of youth (without accounting for gang affiliation) who go through the youth court process re-offend two to four times, and a further 16% will become chronic offenders, re-offending five or more times. ¹⁶⁴ In addition, this probability is actually heightened by the fact that the youth has been put on

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¹⁶² See Lianne Woodward, David M. Fergusson and L. John Horwood, "Risk Factors and Life Processes Associated with Teenage Pregnancy: Results of a Prospective Study from Birth to 20 Years," *Journal of Marriage and the Family* 63 no. 4 (2001): 1170-1184; E. Gregory Woods, *Reducing the Dropout Rate*. School Improvement Research Series. Office of Educational Research and Improvement (OERI)/U.S. Department of Education, March 1995. Available online through NWREL: http://www.nwrel.org/scpd/sirs/9/c017.html; Scot Wortley and Julian Tanner, "Why Young People Join Gangs: Risk Factors and Beyond," from *Criminal Organizations or Social Groups? An Exploration of the Myths and Realities of Youth Gangs in Toronto*. First Draft. (University of Toronto, 2007), no page numbers; and Michael C. Chettleburgh, *Young Thugs: Inside the Dangerous World of Canadian Street Gangs* (Toronto: Harper Collins Publishers Ltd., 2007).

¹⁶³ Mike Bradshaw (former Deputy Chief of Police for the Edmonton Police Service), interview by Fiona Hossack. Edmonton, Alberta. May 1, 2008

¹⁶⁴ Calgary Youth Justice Committee, "Social Return On Investment (SROI) Case Study: Calgary Youth Justice Committee Program: Investing to strengthen society," no date. http://www.calgaryyouthjustice.com/SROI2008.pdf (accessed February 7, 2009).

trial once already. ¹⁶⁵ Future crimes imply *substantial* future costs: the costs of each criminal offence investigation will be comparable to those incurred in Alternative 2 (a conservative estimate of \$1,640.11); the costs of each criminal trial will be comparable to those incurred in Alternative 2 (\$26,451.87, again a conservative estimate); and each year in prison will cost \$121,294.00 (equivalent to \$332.31 a day). ¹⁶⁶

• There will be a future loss in income as a result of diminished educational standings. This conclusion stems from a proven correlation between gang membership and failure to graduate from high school, as well as a large body of evidence showing that the risk factors associated with gang recruitment are almost identical to the risk factors associated with not graduating high school. Therefore, for these at-risk youth, it is not an unreasonable assumption that if these risk factors are not mitigated, in addition to increasing the risk of gang recruitment, it will also increase the risk of failure to graduate from high school. ¹⁶⁷ The cost to the youth-turned adult, measured as the difference between graduating and not graduating high school, will amount to over \$221,000 (a very

¹⁶⁵ Goldblatt and Lewis write, "One rigorous, randomized exercise in the US (Gold and Williams, 1970)... in which the personal characteristics and offences of the 'charged' and 'not charged' groups were matched. Here 'charging' refers to the process of putting juveniles through the full legal process, culminating in trial. The study found that those 'charged' were more likely to reoffend. The effect was particularly strong if the processing was highly 'legalistic'. A number of less rigorous studies (Klein, 1986; Smith and Gartin, 1989; Huizinga and Esbensen, 1992) point to the same conclusion (although one study found that first offenders were less likely to reoffend if they were formally charged with their first offence, but did confirm that others were more likely to reoffend if charged than if not)." Peter Goldblatt and Chris Lewis, "Reducing offending: an assessment of research evidence on ways of dealing with offending behaviour." Directed by Christopher Nuttall. Home Office Research Study 187, A Research and Statistics Directorate Report. London: Home Office, 1998.

¹⁶⁶ This reflects the annual cost of housing a male inmate in a federal penitentiary. Unfortunately, the data for the marginal cost of adding an additional inmate to the system were unavailable. Public Safety Canada, Corrections and Conditional Release Statistical Overview, December 2008. Cat. No. PS1-3/2008E. ISBN: 978-1-100-114385.

¹⁶⁷ E. Gregory Woods, *Reducing the Dropout Rate*. School Improvement Research Series. Office of Educational Research and Improvement (OERI)/U.S. Department of Education, March 1995. Available online through NWREL: http://www.nwrel.org/scpd/sirs/9/c017.html; and Scot Wortley and Julian Tanner, "Why Young People Join Gangs: Risk Factors and Beyond," from *Criminal Organizations or Social Groups? An Exploration of the Myths and Realities of Youth Gangs in Toronto*. First Draft. (University of Toronto, 2007), no page numbers.

conservative estimate) in his/her lifetime. 168

Again, continued involvement in a gang increases the probability of drug use, which can
create other major problems and considerable associated costs.¹⁶⁹ These costs were not
included in the analysis as they are difficult to estimate.

Research limitations

- Of course, we cannot assure that the linear assumptions we have made for the costing will hold. These assumptions were made solely to allow for costing to occur; however, they do follow the probabilities established in Assumptions One, Two, and Three.
- It is impossible to determine extent to which the community/recreational soccer program is preventative.
- There are many costs that we have not estimated. Many of the costs that are not estimated, however, are, in fact, inestimable (i.e. emotional and psychological impact of the crime on the victim). Other costs are not estimated in this analysis due to the time limitations of our study, the availability of appropriate and applicable research, or the establishment of accepted measurement practices (i.e. decreased property values as a result of the crime).

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Developmental Perspective (New York: Cambridge University Press, 2003) for two good studies on the connection between gang membership and drug use.

¹⁶⁸ This can be measured by the difference in average annual income between those with a minimum level of education of high school completion (25,477 in 2000 \$) and those with a minimum level of education of less than high school completion (21,230 in 2000 \$). This difference is then adjusted for inflation and multiplied by 44 years of full-time work to calculate lifetime income losses for not completing high school. The rate of inflation is assumed to equal the rate of discount for this calculation (i.e. present figures are not discounted into future values because it is assumed that salaries would be adjusted for inflation at the same rate as the rate of discount, even without job promotion). 25,477 - 21,230 = 4,247.00 (2000 \$) 4,247(112.6/94.8) = 4,247(112.6/94.8) =5,044.43 (2008 \$) 5,044.43 x 44 = 221,955.03 (2008 \$) The above is likely an underestimate because this only measures the difference in lifetime income between completion and failure to complete high school. If, for example, the student went on to earn a trades certificate, the annual difference jumps to 11,513(112.6/94.8)= 13,674.72 (2008 \$) for a lifetime difference of 601,687.84 (2008 \$). If the student earned a college diploma, the annual difference becomes 11506(112.6/94.8)= 13,666.41 (2008 \$) for a lifetime difference of 601,322.01 (2008 \$). Finally, if the student earned a university degree, the annual difference swells to 27,418(112.6/94.8) = 32566.11 (2008 \$) for a lifetime difference of 1,432,908.64 (2008 \$). Statistics Canada, "Number and Average Employment Income (2) in Constant (2000) Dollars, Sex (3), Work Activity (3), Age Groups (7) and Historical Highest Level of Schooling (6) for Population 15 Years and Over With Employment Income, for Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations, 1995 and 2000 - 20% Sample Data." 2001 Census. Table 97F0019XCB2001002. Online: www.statcan.ca.

The above figure is multiplied by 44 based on the average age of retirement in Canada being 62 and the youth beginning full-time employment at age 18: 62-18 = 44. CBC, "Retiring Mandatory Retirement." CBC News: In Depth. February 21, 2008. http://www.cbc.ca/news/background/retirement/mandatory_retirement.html (accessed June 13, 2008).

169 See Scot Wortley and Julian Tanner, Criminal Organizations or Social Groups? An Exploration of the Myths and Realities of Youth Gangs in Toronto. First Draft. (University of Toronto, 2007); and Terence Thornberry et al., Gangs and Delinquency in

• The costs/benefits not estimated are potentially very substantial. For example, Miller, Cohen and Rossman estimate that for the victim alone, the loss in quality of life is estimated to be approximately three quarters of the total cost of victimization ¹⁷⁰; therefore our numbers will be necessarily biased by what we do and do not estimate. However, most of what we cannot estimate is the benefit of the soccer program and the cost to the victim/community of crime. Therefore, it is reasonable to assume that the net benefits calculated would only maintain their pre-existing courses (i.e. negative trends would only become increasingly negative etc.) and not reverse course (change from negative to positive, or vice versa). This would lead us to determine that in fact, the net positive benefit found in Alternative 1 and the net negative benefit found in Alternative 1 are conservative estimates, and the actual benefits and costs would in actual fact be significantly greater.

¹⁷⁰ Ted R. Miller, Mark A. Cohen, and Shelli B. Rossman, "Victim Costs of Violent Crime and Resulting Injuries," *Health Affairs* (Winter 1993): 194.

Section Three: Discussion

Monetary and Social Values

The significant positive net benefit of Alternative 1 (soccer program and no street gang/criminal activity) and the considerable negative net benefit for Alternative 2 (no soccer program and gang recruitment/criminal activity) are compelling results. Indeed, in Alternative 1, everyone wins (i.e. each viewpoint comes out with a positive net benefit) and in Alternative 2, everyone loses (all viewpoints have a negative net benefit), with very few extenuating circumstances that could negate these findings. (See research limitations section for an overview of these circumstances.) From this analysis it is clear that investment in community-based programs that enable Aboriginal and refugee children to participate in community based sport and recreation programs is indeed cost effective. Fewer public resources and money are required to prevent gang crime than are necessary to deal with its aftermath. Conventional consideration of these findings would direct policymakers and funders to ensure programs and services that support Aboriginal and refugee children are available in communities and that community-based organizations are assisted in creating inclusion-focussed programs for youth. Small emerging organizations that are lead by members of the refugee and Aboriginal communities have the understanding and connections to respond to the unique needs but need policy and funding support from government and funding bodies to expand the impact of change described in this narrative.

While the savings of public funds are important considerations, it is also important to consider the social value of the actions described in the narrative description of the events that occurred in the lives of three boys. The actions taken by the individuals and organizations to show these children that they mattered and the efforts to create opportunities for them to experience positive interactions with adults and peers cannot be discounted. The research is clear that such actions are important protective factors that help prevent youth involvement in crime and gang involvement. The importance of positive relationships and positive role models, improved confidence and self-esteem, improved behaviour and increased connectedness to the community were not given a monetary value in this analysis. Yet we know that they do have value. Monetary saving is only one measure to be considered in determining the worth of crime preventions strategies. The cost benefit analysis shows the important monetary value of

prevention but it is also critical that we consider the social value of crime prevention efforts. The social value of the actions that lead to the development of healthy children and families need to be given equal weight in making policy and funding decisions to direct effective crime prevention strategies.

Gang Crime Prevention and the Community

Gang crime prevention is a large, all encompassing descriptor that includes a variety of actions that are taken at the community, municipal, provincial and national levels. The type of actions taken and how these actions are taken are shaped by the context from which these actions occur. The narrative described in this paper is rooted in the community where personal interactions, connections and relationships were the primary drivers of change.

In the narrative, Mark and his foster mother and Josef and Samy and their parents developed positive relationship with 'soccer moms' who acted as champions to bring the issues and circumstances of these boys to the attention of others. The community league volunteers and coaches found a way to remove the financial barriers so the boys could play soccer. The coaches not only helped them develop soccer skills but ensured that they were welcomed and included by the team. The parents provided financial support by contributing money and equipment to enable the boys to play. The players on the team offered friendship and encouragement to the boys and made them a real part of the team. In turn each of the individuals involved took personal responsibility to connect these children to make playing on a soccer team a reality and to open doors of opportunity for them. They weren't preventing gang crime. They were simply supporting boys to play soccer. Yet the cost-benefit analysis shows that the outcomes of these actions do have an impact on crime prevention.

Linking Individual Action to Gang Crime Prevention

The individual actions in the narrative description made a significant difference to the lives of these three boys that is extremely important. In some ways, making a difference does take place one child at a time. However, for Pamela this was not enough. She knew that there were other children in similar circumstances who could benefit from the same type of action. She wanted to reach more children and create a level of change that was beyond her individual sphere

of influence, an impetus that lead her to contact CSGV and to see if it was possible to create change on a larger scale.

As the narrative description highlights, Pamela contacted CSGV to share her story because she thought such action might be 'part of the solution' to gang violence. After discovering that Pamela wanted to link her actions to others to have a bigger impact, the Project Manager made an effort to support her efforts and help her make linkages to others in the community who held similar interests. CSGV was able to respond to Pamela's request because it has positioned itself in to act as convener or broker that consciously works to link people to each other and actions to each other to create change. As the narrative highlights, Big Brothers Big Sisters added their support and established a further connection to the Africa Centre. The Africa Centre took on the work of bringing more people and organizations together and the result was the design and delivery of a six-week sport, recreation and culture program.

A host of organizations such as the Africa Centre, Big Brothers Big Sisters, the Fun Team Alberta, the Edmonton Public Library and Edmonton Food Bank and the City of Edmonton provided the services and support to operate the program. The Africa Centre provided the venue, directed and coordinated the program. Big Brothers and Big Sisters trained mentors and provided staff for the program. The Edmonton Public Library provided staff and program support. Fun Team Alberta provided recreational equipment and covered the costs for insurance. The Edmonton Food Bank supported the breakfast and lunch program. Finally, the City of Edmonton provided financial support through their Emerging Immigrant and Refugee Grant Program. This program provides streamlined financial support to strengthen and support immigrant and refugee communities to provide services to their own members. It is particularly adapted to new emerging groups who do not benefit from the social infrastructure support of established organizations. Additional goods and financial support were provided by the Butler Foundation and the United Way.

The organizations that contributed to the delivery of the services and the spirit of collaboration to work with others did not have to be created to make this program a reality. They already existed. What was different was how the program was created. It was not conceived, designed and delivered by one individual or organization but grew piece by piece as people came together united by their desire to make a difference in the lives of children and their families. In

the first narrative, the actions of a foster mother who lobbied for support to enable her foster son to play soccer was further strengthened by a soccer coach who created a way for the boy to develop his skills and passion for soccer through involvement in a competitive soccer league and by enrolling in a school that had a specialized soccer program. In the second narrative, the actions of one soccer mom contributed to the idea of using soccer to integrate immigrant and refugee children into the community which in turn contributed to the development of the Sport, Recreation and Culture Program. In both instances, everything that was needed for the program was embedded in the community, all that was needed was to weave these elements together and create 'joined up solutions'.

CSGV's primary contribution to this program was that of an animator and weaver. CSGV responded to the individual actions of Pamela by acknowledging the value of her individual efforts to connect children to soccer and helping her make the connections to the larger community to 'make these actions bigger'. By consciously looking for ways to unite common interests and build on individual strengths and good will CSGV helped transform individual efforts into collaborative action that was able to develop services designed for a specific group with unique needs.

As the narrative reveals, it is *individuals* in the community, whether they are acting as 'soccer moms', soccer coaches, library program staff, or executive directors of non-profit organizations, that hold the knowledge, skills and know-how to create change in the community and ultimately to prevent crime and make our communities safer and healthier for everyone. As this narrative also reveals, the power and effectiveness to create change is amplified when individuals are connected to each other around common interests and goals. CSGV helped weave the unique and separate strands of community knowledge into a tapestry that created something new out of what already existed. In addition, it was through the CSGV that this research project was first conceived and eventually completed by Native Counselling Services of Alberta. CSGV knew that this was a story that needed to be told.

Section Four: Conclusions

The community narrative describes the efforts of individuals in the community who took action to respond to needs of youth with unique needs and the corresponding cost-benefit analysis shows the net benefit of these actions for gang crime prevention. Together they demonstrate three critical points that must be considered by policy makers, government funding agencies and community service agencies in the work to prevent gang crime. First, the grassroots actions of ordinary citizens and community-based organizations can be a powerful crime prevention and anti-gang recruitment mechanism for youth who are at risk of being recruited into street gangs. They are closer to the individuals at-risk for being drawn into gangs and they hold the knowledge, skills and know-how to respond to these individuals to create opportunities and services that can prevent involvement in gangs and gang crime. Second, that the cost of these community-based actions are far less than the costs of the alternative where youth are engaged in gang criminal activity and violence In fact, the analysis demonstrates that 95 youth could play a season of outdoor soccer for the cost of one youth committing a serious crime as a member of a gang.¹⁷¹ This is corroborated by Cohen, who estimated 'the monetary value of saving an at-risk youth' as being between 1.7 and 2.3 million dollars in 1997 dollars, which would be between 2.1 and 2.9 million dollars in 2008 dollars. ¹⁷² Third, the actions of community animation and brokerage services, such as the Community Solution to Gang Violence in Edmonton, can transform individual action into services that are cost effective, and specific to youth who are at risk of being recruited into gang activity. The solutions are embedded within the community but it takes conscious and deliberate action to identify them, bring them forward and transform them into part of the 'community solution to gang violence'.

For community organizations, these points underscore the need to find new ways to work in collaboration with others that draws on individual organizational strengths to build programs and services that are integrated and connected. Community organizations need to push their individual mandates to break out of their silos and create 'joined up solutions for joined up problems'. For policy makers, these points underscore the need to develop policy that

This is simply the total cost of Alternative 2 divided by the total cost of Alternative 1. (273,671.38/2,915.94 = 94.8)

¹⁷² Mark A. Cohen, "The Monetary Value of Saving a High-Risk Youth," *Journal of Quantitative Criminology* 14 no. 1 (1998): 27. Based on projected costs of a career of criminal activity, drug use, and high school drop out status.

Calculations for 1997 figures adjusted for inflation: 1.7 million (CPI_{2008}/CPI_{1997}) = 1,700,000(112.6/90.2) = 2,122,172.95 (2008 \$) 2.3 million (CPI_{2008}/CPI_{1997}) = 2,300,000(112.6/90.2) = 2,871,175.17 (2008 \$)

acknowledges and builds upon the community's capacity to respond to the needs and issues facing children, youth and families. For government funding agencies, these points underscore the importance of directing funds towards community based efforts and services that create opportunities for children and youth that prevent gang involvement. Without clear and strong linkages between community-based action, policy and funding allocations, crime prevention efforts will be limited by fragmented responses and fragmented solutions. To be effective and to have a lasting impact on crime prevention, we must find a way to connect the efforts of individual citizens, community organizations and government into a cohesive whole. As a starting point, perhaps we could follow the lead of a few soccer moms.

References

- Alberta. "Alberta's Minimum Wage." *Employment Standards*. April 1, 2008. http://employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/998.html (accessed June 13, 2008).
- Alberta. "Court/Counter Clerk." *Government of Alberta Jobs: Administrative*. March 24, 2008. http://www.chr.alberta.ca/jobs/postings/047298.htm (accessed June 16, 2008).
- Alberta. "Crown Prosecutor." *Government of Alberta Jobs: Legal.* 2008. http://www.chr.alberta.ca/jobs/postings/045961.htm (accessed June 16, 2008).
- Alberta. "Jury Duty." *Justice*. 2008. http://www.justice.gov.ab.ca/courts/jury_duty.aspx?id=3465 (accessed June 23, 2008).
- Alberta. *Keeping Communities Safe: Report and Recommendations*. Alberta: Alberta's Crime Reduction and Safe Communities Task Force, 2007.
- Alberta. "Probation Officers." *Government of Alberta Jobs: Corrections/Enforcement/Inspec.*May 16, 2008. http://www.chr.alberta.ca/jobs/postings/048676.htm (accessed June 13, 2008)
- Alberta. "Youth Programs." *Programs and Services*. Edmonton: Solicitor General and Public Security, 2008.

 http://www.solgps.alberta.ca/programs and services/correctional services/community corrections/Pages/youth programs.aspx#sanctions (accessed June 20, 2008).
- Alberta Courts. "Court of Queen's Bench." http://www.albertacourts.ab.ca/CourtofQueensBench/tabid/69/Default.aspx (accessed June 23, 2008).
- Alberta Courts. "Juror Fees and Expenses." *Court Services*. http://www.albertacourts.ab.ca/CourtServices/JuryDuty/FeesandExpenses/tabid/247/Default.aspx (accessed June 13, 2008).
- Bonnie Doon Community League. Interview by Fiona Hossack. Edmonton, Alberta. May 16, 2008.
- Bradshaw, Mike (Former Deputy Chief of Police for the Edmonton Police Service). Interview by Fiona Hossack. Edmonton, Alberta. May 1, 2008.
- Brantingham, Paul and Stephen T. Easton. "The Costs of Crime: Who Pays and How Much? 1998 Update." *Critical Issues Bulletin*. Vancouver: Fraser Institute, 1998.

- Calgary Youth Justice Committee. "Social Return On Investment (SROI) Case Study: Calgary Youth Justice Committee Program: Investing to strengthen society." No date. http://www.calgaryyouthjustice.com/SROI2008.pdf (accessed February 7, 2009).
- Callihoo, Nadine (Former Courtworker). Interview by Fiona Hossack. Edmonton, Alberta. June 10, 2008.
- Canadian Institute for Health Information. "Average hospital stay costs nearly \$7,000 per patient in Canada." March 18, 2008.

 http://secure.cihi.ca/cihiweb/dispPage.jsp?cw page=media 18mar2008 e (accessed June 13, 2008).
- Canadian Research Institute for Law the Family. "A Profile of Youth Offenders in Calgary: A Study of Youth Offending Patterns, Serious Habitual Offenders and System Response." From *Highlights from the Interim Report March 2008*. Calgary: Canadian Research Institute for Law and the Family, 2008. Available online: www.ucalgary.ca/~crilf/sub/research.html.
- CBC. "Alberta judges to keep \$220,000 salary for three years." June 15, 2006. http://www.cbc.ca/canada/edmonton/story/2006/06/15/ed-judgeswages-20060615.html (accessed June 16, 2008).
- CBC. "Retiring Mandatory Retirement." *CBC News: In Depth.* February 21, 2008. http://www.cbc.ca/news/background/retirement/mandatory_retirement.html (accessed June 13, 2008).
- Chettleburgh, Michael C. *Young Thugs: Inside the Dangerous World of Canadian Street Gangs*. Toronto: Harper Collins Publishers Ltd., 2007.
- Cook, Jim (Director, Division Support Services Branch, Correctional Services Division, Solicitor General & Public Security). "RE: Cost-Benefit for Community Solution to Gang Violence Native Counselling Services of Alberta." Email to the Fiona Hossack. June 12, 2008.
- Department of Justice. "Canada's System of Justice." December 12, 2008. http://www.justice.gc.ca/eng/dept-min/pub/just/08.html (accessed February 4, 2009).
- Devortez, Don, Sergiy Pivnenko, and Morton Beiser. *The Economic Experience of Refugees in Canada*. Germany: Institute for the Study of Labour, 2004.
- Edmonton Minor Soccer Association. October 27, 2008. http://www.edmontonsoccer.com (accessed February 2, 2009).
- Edmonton Police Service. "Salaries." *Benefits*. December 23, 2007. http://www.joineps.ca/benefits/salaries/ (accessed June 13, 2008).

- Ehntholt, Kimberly A. and William Yule. "Practitioner Review: Assessment and treatment of refugee children and adolescents who have experienced war-related trauma." *Journal of Child Psychology & Psychiatry* 47 no. 12 (Dec. 2006): 1197-1210.
- Erickson, Karen (Project Manager for Community Solution to Gang Violence). Interview by Matthew Grunland. Edmonton, Alberta. March 7, 2008.
- Erickson, Karen, Patti LaBoucane-Benson, and Jana Grekul. "The Community Solution to Gang Violence: A Collaborative Community Process and Evaluation Framework." Part of the *Aboriginal Peoples Collection*. Ottawa: Aboriginal Corrections Policy Unit/Public Safety Canada and Native Counselling Services of Alberta, 2006. Available online: www.ps-sp.gc.ca.
- Eversole, Robyn, John-Andrew McNeish and Alberto D. Cimadamore, ed. *Indigenous Peoples and Poverty: An International Perspective*. CROP: International Studies in Poverty Research. London: Zed Books, 2005.
- Fong, Rowena. "Immigrant and Refugee Youth: Migration Journeys and Cultural Values." *Prevention Researcher* 14 no. 4 (Nov. 2007): 3-5.
- Goldblatt, Peter, and Chris Lewis. *Reducing offending: an assessment of research evidence on ways of dealing with offending behaviour.* Directed by Christopher Nuttall. Home Office Research Study 187, A Research and Statistics Directorate Report. London: Home Office, 1998.
- Grant, Tavia. "The Rich, the Poor, and the Chasm Between: Census data released Thursday show recent immigrants as victims of widening income disparity as middle class stagnates." *Globe and Mail.* May 1, 2008. Available online: www.globeandmail.com.
- Grekul, Jana, and Patti LaBoucane-Benson. "An Investigation into the Formation and Recruitment Processes of Aboriginal Gangs in Western Canada." Part of the *Aboriginal Peoples Collection*. Ottawa: Aboriginal Corrections Policy Unit/Public Safety Canada and Native Counselling Services of Alberta, 2006. Available online: www.ps-sp.gc.ca
- Lamberg, Lynne. "Mental Health Experts Work to Help Youth Recover From War's Psychic Toll." *Journal of the American Medical Association* 298 no. 5 (2007): 501-503.
- Marr, Bob (Crown Prosecutor for the Yellowhead Region, Alberta). Interview by Fiona Hossack. Edmonton, Alberta. June 9, 2008.
- Morissette, Rene and Garnett Picot. "Low-paid Work and Economically Vulnerable Families over the Last Two Decades." From the *Analytical Studies Branch Research Paper Series*. Business and Labour Market Analysis Division: Statistics Canada, 2005. Online: www.statcan.ca.

- National Crime Prevention Centre. *Policy Framework for Addressing Crime Prevention and Youth Ages 12 to 18*. NCPC: Ottawa, 2000. Available online: http://www.publicsafety.gc.ca/prg/cp/index-en.asp.
- O'Neil, Liz (Executive Director for Big Brothers Big Sisters Edmonton and Area). Interview by Matthew Granlund. Edmonton, Alberta. March 19, 2008.
- Public Safety Canada. Corrections and Conditional Release Statistical Overview. December 2008.
- Prokopiw, Sandy (In charge of overseeing Extrajudicial Sanctions Program). Interview by Fiona Hossack. Edmonton, Alberta. May 12, 2008.
- Search Institute. "What are Developmental Assets?" *Developmental Assets*. 2007. http://www.search-institute.org/assets/ (accessed June 5, 2008).
- Sportmart. http://www.sportmart.ca/ (accessed May 16).
- Statistics Canada. "2006 Census: Earnings, income and shelter costs." *The Daily*. May 1, 2008. Online: www.statcan.ca.
- Statistics Canada: "Canada; All Items," from *CPI 2005 Basket*. M6-M7, 2002 = 100. CANSIM II, series label: V41690973.
- Statistics Canada: "Canada; Average Actual Hours (Worked in Reference Week); All Jobs; Both Full- and Part-Time; Both Sexes; 15 Years and Over." CANSIM II, series label: V2529271.
- Statistics Canada: "Canada; Average Daily Inmate Cost." CANSIM II, series label: V21536991.
- Statistics Canada. "Income Status (4A) and Selected Geographic, Income, Family, Demographic, Educational, Cultural, Language and Labour Force Characteristics of Economic Families (244) for Economic Families and Persons in Economic Families in Private Households, for Canada and Provinces, 1995 and 2000 20% Sample Data." Table 97F0020XCB2001075, 2007. Online: www.statcan.ca.
- Statistics Canada. "Number and Average Employment Income (2) in Constant (2000) Dollars, Sex (3), Work Activity (3), Age Groups (7) and Historical Highest Level of Schooling (6) for Population 15 Years and Over With Employment Income, for Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations, 1995 and 2000 20% Sample Data." 2001 Census. Table 97F0019XCB2001002. Online: www.statcan.ca.
- Thornberry, Terence, Marvin D. Krohn, Alan J. Lizotte, Carolyn A. Smith, and Kimberly Tobin. *Gangs and Delinquency in Developmental Perspective*. New York: Cambridge University Press, 2003.

- Treasury Board of Canada Secretariat. *Benefit Cost Analysis Guide*. Ottawa: Government of Canada, July 1998. Available online: http://www.tbs-sct.gc.ca/fin/sigs/Revolving_Funds/bcag/BCA2_E.asp.
- Wall, Anne (Head of Taxation for Legal Aid Alberta). Interview by Fiona Hossack. June 11, 2008.
- Whittaker, Joel (Staff Sergeant with the Edmonton Police Service, Downtown Division). Interview by Fiona Hossack. Edmonton, Alberta. June 9, 2008.
- Witte, Ann Dryden and Robert Witt. "What We Spend and What We Get: Public and Private Provision of Crime Prevention and Criminal Justice." In *The Economics of Public Spending*. Edited by David Miles, Gareth Myles, and Ian Preston. Oxford University Press: New York, 2003.
- Woods, E. Gregory. *Reducing the Dropout Rate*. School Improvement Research Series. Office of Educational Research and Improvement (OERI)/U.S. Department of Education, March 1995. Available online through NWREL: http://www.nwrel.org/scpd/sirs/9/c017.html.
- Wortley, Scot and Julian Tanner. Criminal Organizations or Social Groups? An Exploration of the Myths and Realities of Youth Gangs in Toronto. First Draft. University of Toronto, 2007.