VULNERABLE YOUTH IN CALGARY: ENVIRONMENTAL SCAN

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SECTION 1. INTRODUCTION

It is widely recognized that adolescence is a period of change and challenge. The transition between childhood and adulthood can be a tumultuous time of physical change, identity development, experimentation, and emotional and personal growth, and sometimes there are a few bumps along the way. All of this is normal and to be expected, and most of Calgary's youth are successfully negotiating the trials and tribulations of the developmental process. They are healthy and happy; supported by loving families; securely housed and living in safe, stable neighbourhoods; attending school; enjoying relationships with friends; contributing to the community; and preparing for and looking forward to the challenges and responsibilities of adulthood.

However, a significant proportion of adolescents in Calgary are faring less well. In this report, these young people are referred to as "vulnerable youth." Some youth are living in less than optimal circumstances and lack the basics—from adequate food and shelter to love and guidance—that young people need to become healthy, happy, responsible adults. Some vulnerable youth are at risk of losing their way; others have already crossed the line and become involved in dangerous and potentially destructive behaviours and activities.

The United Way of Calgary and Area wants to make a difference in the lives of youth who fall within the broad spectrum of vulnerability. The United Way plans to help vulnerable youth so that, like their more fortunate counterparts, they will be ready for post-secondary education, ready for work, ready to give, and ready to live a balanced personal life in the future. In some cases, this may mean finding ways of preventing or arresting problems before they fully develop; in others, it may involve the provision of interventions and supports to help them get their lives back on track. Because the reasons for which youth are vulnerable and the ways in which this is manifested can be varied and complex, the solutions must be thoughtful, comprehensive, and the "right fit" for the youths and the circumstances in which they find themselves. To this end, as part of its Community Impact Plan for Children and Youth, the United Way is developing an investment strategy that targets vulnerable youth. This strategy is informed by up-to-date research on the circumstances of vulnerable youth in Calgary, along with the most effective ways of supporting their positive and healthy development.

This environmental scan on vulnerable youth is one component of the research informing the investment strategy. The environmental scan provides highlights from recent research on the determinants of youth health and well-being and, where available, local data on indicators of health and well-being among Calgary's youth. With a view to current and future planning for vulnerable youth, the information included in the scan provides a comprehensive picture of how Calgary's youth are faring and the developmental risks they face, now and over time.

The scan begins with a demographic snapshot of Calgary's youth population, along with a brief discussion of the issues that may arise in response to demographic changes in this population. Section 3 describes the primary determinants, or "spheres of influence" of positive youth development: income security, family life, community, and school. Section 4 provides research and data on the factors associated with positive developmental outcomes in the areas of physical health and development, social competence, emotional well-being, and cognitive development and learning achievement. It should be noted that, in many instances, a single factor or a group of factors may shape developmental outcomes in more than one area, but they have been categorized by the area in which they exert the most influence. Finally, the implications of the research findings for vulnerable youth in Calgary are discussed in Section 5.

Box 1. Information and data shortcomings

It should be noted from the outset that some kinds of data and information that would be helpful in assessing the depth and parameters of some of the risks and challenges faced by vulnerable youth and their families are not currently available at the local level. These include Calgary data on:

- Indicators of school climate and school engagement among youth;
- Number/percent of parents participating and volunteering in junior and senior high schools, and nature of parental involvement;
- Number/percent of youth participating in community-based organizations and activities, including out-of-school time and recreational programming;
- Data on indicators of parental competency, nurturing, and supervision;
- Data on indicators of hunger and household food shortages;
- Number/percent of junior and senior high school students who work during the school year and number of hours worked; and
- Data on indicators of peer connectedness and friendships.

In addition, there are no useful, local data on youth with disabilities, and data on most indicators of risk and well-being specific to immigrant and Aboriginal youth are not available or accessible at the local level, in fact, some data are not available at all. There are several reasons for these gaps and omissions, which include the following:

- On some indicators and outcomes, particularly for youth with disabilities, the data are simply not systematically collected or tracked. In some cases, this is because it would be extremely difficult, even impossible, to collect the data; in other cases, the reasons for lack of data collection are not clear.
- Risk and outcome data are often collected by way of national surveys, and response rates among immigrant and Aboriginal populations are often not high enough at the municipal level to allow for local analysis and reporting.
- Some data on immigrant and Aboriginal youth that may be of interest are deliberately not collected because they could be misinterpreted or misused. An example would be data on involvement in crime and gangs that are specific to sub-populations of youth.

The following resources are recommended to readers who seek general information about the circumstances of and risks faced by immigrant and Aboriginal youth:

Bettencourt, E. undated. *Recent Research on Newcomer Youth*. CIC Presentation to Teachers of ESL in Ontario. (Provides a brief and useful summary.) Available at http://www.teslontario.org/new/research/bettencourt.pdf.

Anisef, P.; Kilbride, K.M. 2000. *The Needs of Newcomer Youth and Emerging "Best Practices" to Meet those Needs*. (Toronto: Joint Centre of Research on Immigration and Settlement). Available at http://atwork.settlement.org/downloads/Newcomer_Youth_Best_Practices.pdf.

Kunz, J.L.; Hanvey, L. 2000. *Immigrant Youth in Canada. A Profile of Immigrant Youth.* (Ottawa: Canadian Council on Social Development). Available at http://www.ccsd.ca.

Hurlock, D.; McCullagh, K.; Schissel, C. 2004. *Conversations for Change: An Overview of Services for Immigrant Children and Youth in Calgary.* Available at www.calgaryunitedway.org/files/ServicesforImmigrantChildrenandYouth_May2004.pdf.

Turcotte, M.; Zhao, J. 2004. *Portrait of Aboriginal Children Living in Non-reserve Areas: Results from the 2001 Aboriginal Peoples Survey.* Statistics Canada Catalogue No. 89-597-XIE. (Ottawa: Minister of Industry). Available at http://www.statcan.ca/english/freepub/89-597-XIE/89-597-XIE2001001.pdf.

McPherson, C.B. 2004. "Social Determinants of Health of Aboriginal Youth in Canada." In A. Hutchinson & C. Stuart (Eds.) *In The Ryerson-Wellesley Determinants of Health Framework for Urban Youth*. (Ottawa: School of Social Work and School of Child and Youth Care, Ryerson University). Available at http://www.ryerson.ca/~sdohyout/pdfs/P6_SDOH_Aboriginal.pdf.

National Aboriginal Youth Strategy. 1999. *Aboriginal youth challenges.* (Ottawa, National Aboriginal Youth Strategy). (Provides a brief and useful summary.) Available at http://www.visions.ab.ca/content/childhealth/abyouthchal.asp.

Box 2. Terms used in this document

Youth

In this document, "youth" refers to adolescents aged 12 to 17. However, the available data sometimes extend above and below this age range.

Vulnerable youth

At one end of the continuum are youth who are becoming disengaged from school and community life, experimenting with risky behaviours, lacking supports and supervision, and/or whose basic needs are not always being met. At the other end are youth living on the margins, including young people who are incarcerated and disaffected "street youth" who survive through illicit activities such as gangs, prostitution, and drug trafficking.

Risk and protective factors

Risks are hazards in the individual or the environment that increase the likelihood of a problem occurring. The presence of a risk factor does not guarantee a negative developmental outcome, but it increases the odds of one occurring. Protective factors are safeguards in the individual or the environment that enhance an individual's ability to resist problems and deal with life's stresses. The more protective factors, the more likely a young person will be able to avoid negative outcomes.

It must be emphasized that not all youth who experience risk factors fail to thrive. A growing body of research suggests that some people are, for a variety of reasons, more resilient than others and are able to emerge psychologically intact from high-risk situations.

Resilience

Resilience is an individual's capacity for adapting to change and stressful events in healthy and flexible ways. The individual factors identified as contributing to resiliency have been identified as: sociability, self-esteem, skill-based competence,[1] sense of personal competency, ability to plan, cognitive skills, a sense of meaning, problem-solving ability, optimism, internal locus of control, skills in coping with stress, and resourcefulness in seeking support.[2] Resilience has been identified in research studies as a characteristic of youth who, when exposed to multiple risk factors, show successful responses to challenge, and use this learning to achieve successful outcomes.[3] However, the research clearly shows that the more risk factors a young person is exposed to, the greater the likelihood that he or she will develop problems in life; the more protective factors in a young person's life, the greater the chance that he or she will succeed in the face of adversity.

"It must be noted that resilience is not the same as positive behaviour. In stressful circumstances with limited resources, one individual's gain must be at the expense of someone else's loss, a zero-sum game. In such situations, resilience may take the form of antisocial behaviour, such as resources gained by criminality in inner city environments."[4]

SECTION 2. A SNAPSHOT OF CALGARY'S YOUTH POPULATION

2.1   Current and projected youth demographics

- Youth aged 12 to 18 make up roughly 10% of Calgary's population.

Although figures specific to the 12 to 17 or 18 age cohort are not currently available, we do know that youth aged 10 to 19 years currently comprise about 11.5% of Calgary's population. As shown in Table 1, over the next decade the number of youth in this age group will remain relatively constant but, as the overall population ages, the proportion of youth in the population will decline slightly. The proportion of all young people aged 0 to 24 years in Calgary will begin to decline more rapidly after 2016.[5]

- Calgary's youth population is becoming more multicultural.

At present, about 7% of children and youth aged 0 to 14 years are immigrants, and 29% are members of visible minority groups. The percentage of children who are immigrants will remain relatively constant, but the percentage of visible minority children will rise to 33% over the next ten years. Among young people aged 15 to 24 years, almost 14% are immigrants, and 23% are members of visible minority groups. These figures are expected to rise to 17% and almost 36% by 2016.

- Calgary's Aboriginal youth population will increase dramatically over the next decade.

Aboriginal children and youth are the fastest-growing segment of Calgary's child and youth population. In 2001, the most recent year for which figures are available, Aboriginal youth comprised about 3.7% of the 10 to 19 age cohort in Calgary. Alberta's Aboriginal population as a whole is projected to grow by 39% by 2017. Much of this population growth will be concentrated on reserves, however, it is conservatively estimated that Calgary's total Aboriginal population could increase by at least 7,000 from 2001 to 2017.[6] Like elsewhere in Alberta, Calgary's Aboriginal population is dominated by young people. In 2001, about half of the Aboriginal people in Calgary were aged 24 years or younger; 31% were aged 14 years or younger, compared to 35% and 19% of Calgarians as a whole. Also, the Tsuu T'ina population increased by 31% between 1996 and 2001, some of which is attributable to births.[7] Therefore, although firm projections are not available, it is expected that Calgary's Aboriginal youth population may double over the next decade.

	2006			2008	2011			2013	2016		
Age Group	**All**	**Immigrant**	**Visible minority**	**All**	**All**	**Immigrant**	**Visible minority**	**All**	**All**	**Immigrant**	**Visible minority**
0-4				66,000 (6.7%)				70,000 (6.7%)			
5-9				59,000 (6.0%)				66,000 (6.3%)			
10-14				53,000 (5.3%)				59,000 (5.6%)			
Total 0-14	173,000 (17.9%)	12,347 (7.1% of 0-14)	49,653 (28.7% of 0-14)	178,000 (18.0%)	188,000 (18.3%)	13,348 (7.1% of 0-14)	57,954 (30.8% of 0-14)	195,000 (18.6%)	201,000 (18.8%)	13,930 (6.9% of 0-14)	66,059 (32.9% of 0-14)
15-19				61,000 (6.2%)				56,000 (5.3%)			
20-24				81,000 (8.2%)				72,000 (6.9%)			
Total 15-24	145,000 (15.0%	19,661 (13.6% of 15-24)	33,113 (22.8% of 15-24)	142,000 (14.4%)	133,000 (13.0%)	22,509 (16.9% of 15-24)	38,649 (29.1% of 15-24)	128,000 (12.2%)	124,000 (11.6%)	24,607 (17.0% of 15-24)	44,054 (35.5% of 15-24)
Total Pop'n Calgary	965,000			991,000	1,026,000			1,047,000	1,070,000		

Table 1. Projected Child and Youth Population, City of Calgary[8]

2.2 Demographics: Current and emerging issues and implications

- As the population ages, seniors will exercise more political influence. The policy agenda may shift toward issues of interest and concern to seniors, and away from issues affecting children, youth, and families.

- Many Aboriginal youth are growing up in less than ideal conditions for positive development. Aboriginal youth experience higher rates of poverty, social exclusion, housing problems, family breakdown, child welfare involvement, health concerns, and involvement in risky behaviours than other youth. Although some Aboriginal youth are doing very well, many meet the conditions of vulnerability.

- Immigrant and visible minority youth sometimes face a broad range of challenges that can place them at risk of poor developmental outcomes. These include pre-migration stressors, language and cultural barriers, poverty-related problems, school challenges, and racism and inter-cultural tensions.

SECTION 3. SPHERES OF INFLUENCE

"Spheres of influence" are the broad, fundamental conditions that influence the course of youth development. The spheres of influence are economic security; stable, secure, and harmonious family life; safe and supportive communities; and positive school environments and experiences. If these conditions are fulfilled, the odds of attaining positive outcomes in adolescence and beyond are increased. If these conditions are not met, youth are at risk of poor development and negative outcomes. Together, the spheres of influence form the framework for healthy youth development.

3.1   Economic security

The issues

Extensive research has documented the negative consequences of growing up in poverty for children, especially during the early years.[9] In early childhood, the effects appear to be very significant both because the size of the association is largest at this stage *and* because problems developed early in life can "snowball" through the persistence effects noted above into larger problems later in life.[10]

With respect to adolescents, however, some research findings have been varied. A few studies have found little or no relationship between socio-economic status (SES) and adolescent well-being.[11] Most studies, however, have found significant relationships between family income and youth health and other indicators of well-being, such as life satisfaction.[12] Similar results have been reported in recent Canadian research. The 2002 Health Behaviours in School-Aged Children study (HBSC study) found clear positive associations between family affluence and important outcomes at all grade levels. As students' family affluence increased, so did the proportion of students who reported high life satisfaction. Similarly, there was a clear gradient between family affluence and excellent self-reported health.[13] Likewise, analysis of data from both the National Longitudinal Survey of Children and Youth (NLSCY) and the Youth in Transition Survey (YITS) revealed that, while the relationship between incomes and outcomes appears to "flatten" out toward the linear for older as compared to younger children, income or SES is still important for youth, particularly for outcomes in the cognitive and behavioural domains. Moreover, this research found that, contrary to expectations, there appears to be no upper income threshold at which income ceases to matter at any age: "Higher income is *almost always* associated with better outcomes for children. This is true regardless of the measure of income employed, the assumed functional form of the relationship between income and child outcomes, the age of the child, or the type of child outcome being studied."[14]

Low income is clearly related to parents' (and independent youths') ability to meet basic needs, such as food, shelter, transportation and clothing, along with recreational and other forms of programming that are important for healthy youth development.   The provision of safe, stable and secure housing is vital to all aspects of child and youth health and development. The quality, cost, tenure, and stability of housing, along with the neighbourhoods and communities in which children reside, all play a role in the achievement of desired outcomes in the areas of health, safety, education, and social engagement. For example, low-income families are forced to allocate money that would otherwise be spent on basic necessities toward rent payments that exceed their means.[15] Poor housing is usually situated in poor neighbourhoods. Risk factors associated with these neighbourhoods interact with low family socioeconomic status and contribute to unfavourable developmental outcomes. Inadequate housing, frequent relocation, and financial instability cause parental stress, which can contribute to dysfunctional family relationships. In turn, dysfunctional family relationships can result in domestic

violence, separation and divorce, all of which have been identified as among the most common reasons for frequent moves and housing disruptions. Low income is also sometimes associated with poor parenting practices which, as discussed elsewhere, are essential to positive youth development.

It should be stressed that, at all ages, positive parenting, strong and supportive inter-personal relationships, high-quality schools, and other factors can help to offset the negative consequences of low income, along with other developmental risks.

The facts

- **Poverty**

Despite Calgary's ongoing economic prosperity, a high percentage of Calgary's children and youth continue to live below Statistics Canada's Low-Income Cut-Off (LICO), sometimes referred to as the "poverty line." Although firm figures are not yet available for 2004, it appears that Calgary's child poverty rate has improved somewhat over the previous year: The percentage of children and youth living below LICO in the Calgary CMA *before tax* declined from 19.9% to 15.9% (use with caution), and those living below LICO *after tax* declined from 15.2% to 13.5% (use with caution).[16] These figures are not directly comparable to those usually cited for Calgary because they refer to the entire CMA, rather than the city of Calgary, and they do not reflect income transfers, which moderate low income and are often reflected in poverty calculations. They do indicate a decrease in child and youth poverty, however.

On the other hand, it should be noted that the child and youth poverty rate in 2003 (20.4% using conventional measures) was almost double that of 2000, and represented an estimated 43,000 children and youth living in poor households.[17] Current figures for Calgary are not yet available but, in recent years, poverty rates for Aboriginal, immigrant, visible minority children and youth and children and youth with disabilities have been more than double the average for all children and youth.[18]

Poverty rates are highest for children and youth in lone-parent families. In 2004, Calgary boasted the second highest rate of family income in Canada at $71,100 (up 2.9% from 2003). The average income of lone-parent families, however, was only half that of all families, at $35,800 (up 1.9% from 2003).[19] 2004 figures are not yet available but, in 2003, the poverty rate (using conventional measures) for lone-parent families with children was 42%, as compared to 11% for two-parent families with children.[20]

- **Income supports**

The two main forms of income supports for families and young people in Alberta are Alberta Works (until 2004, Supports for Independence (SFI), or welfare) and Assured Income for the Severely Handicapped (AISH). Up-to-date Calgary data are not available but, in 2004 in Alberta, 42% of SFI recipients were children aged 0 to 17 years. About three-quarters of the child recipients lived in lone-parent families. Less than 1% of SFI recipients in Alberta were aged 18 to 20 years.[21] SFI was not normally available to emancipated adolescents, which some have considered a factor contributing to youth homelessness. At present, older adolescents with child welfare status who are living on their own are sometimes eligible for financial support.

In Calgary in 2004, a single parent with one child received a total of $12,151 per year in SFI and related benefits,[22] an amount which equals 48% of the income required to meet LICO--the lowest

percentage in all of Canada. For a couple with two children, welfare income from all sources amounted to $19,166, or 50% of LICO.[23]

AISH is available only to adults. Children and youth with disabilities are funded through the Family Support for children with Disabilities program. About 2.5% of AISH recipients in Alberta in 2004 were aged 18 or 19 years.[24]

Table 2. Number of SFI Cases and Recipients, March 31, 1994-2004, Alberta[25]						
	1994	1996	1998	2000	2002	2004
Recipients	135,600	103,700	75,100	63,400	53,800	59,900
Cases	62,400	48,800	34,500	30,400	27,200	30,300
Children in Need (CIN) and Assured Income for the Severely Handicapped (AISH) are not included. Alberta Works (AW) replaced Supports for Independence (SFI) in May 2004.						

Table 3. Number of SFI Recipients by Family Type, March 31, 2004, Alberta[26]	
Family type	**2004**
Adults — Single	15,600 (26%)
Adults - Single parents	10,700 (18%)
Adults - Couples with dependants	5,100 (9%)
Adults - Couples, no dependants	2,800 (5%)
Total adults	**34,200 (57%)**
Children - Single parents	19,600 (32%)
Children - Couples with dependants	6,000 (10%)
Total children	**25,600 (43%)**
Total	**59,900**

Table 4. Number of AISH Recipients by Family Type, March 31, 2004, Alberta[27]	
Family Type	**2004**
Singles	29,100 (90%)
Couples with no children	1,500 (5%)
Single parents	1,100 (3%)
Couples with children	600 (2%)
Total	**32,200**

- **Food security**

In 2003, 16% of parents with children aged 10 to 17 years reported that they did not have money to buy enough food for their family all the time.[28] The Calgary Inter-faith Food Bank reports that demand for hampers has declined somewhat since 2003, although it is cautioned that this probably does not reflect an increase in food security in Calgary. Rather, the apparent decline is largely attributable to a spike in client numbers in 2001 and 2002, which coincided with an influx of new migrants to Calgary in those years. The ten-year trend reveals a steady increase in demand, with a small dip from 2003 to 2005.

The Food Bank reports that 10,766 food hampers were provided to youth aged 13 to 17 years in 2005, down from 11,125 in 2004 and 12,748 in 2003. Of the 10,766 in 2005, 166 were provided to youth (under the age of 18 years) living independently, 25 of whom had a child of their own. Because some Food Bank clients receive more than one hamper per year, the actual number of youth who used the Food Bank in 2005 is estimated to be 4,350.[29]

- **Housing and homelessness**

The incidence of "core housing need,"[30] in Calgary is high among Aboriginal, immigrant, and lone-parent households, as well as among people who live alone. In 2001, about 43% of lone-parent renter families lived in core housing need.[31] It is believed that the number of families in core housing need has grown considerably over the past five years, due to rising rent and utility costs, along with economic and population growth.

Figures specific to youth who are living independently are not available, however, research indicates that emancipated adolescents are also encountering serious housing problems in Calgary. This is partly due to soaring rents and utility costs, in conjunction with income challenges and frequent reluctance on the part of landlords to rent to young people, and manifested by increasing numbers of homeless families with children and homeless youth in the city. The most extreme consequence of housing shortages is homelessness. Calgary's 2004 biennial count of homeless persons revealed that the number of homeless families increased from 42 to 104, (an increase of 148%) between 2002 and 2004; the number of youth aged 13 to 17 increased from 56 to 73 (an increase of 30%).[32] As noted by Hulchanski, "homelessness may not *only* be a housing problem, but it is *always* a housing problem."[33]

High numbers of low-income families may increase demand for social housing which, if unmet, may contribute to other health and developmental problems and homelessness among families with children. All of these problems may become even more prevalent among Aboriginal families than they are at present.

3.2   Family life

The issues

A stable and secure family life, including positive relationships with parents, is vital to healthy youth development. Boyce explains that "families may act as a foundation for experience in the social world through providing a sense of security and by encouraging an adolescent to develop a strong sense of identity."[34] Citing Hoghughi, he stresses that parenting "is probably the most important public health issue facing our society. It is the single largest variable implicated in childhood illnesses and accidents; teenage pregnancy and substance misuse; truancy, school disruption, and underachievement; child abuse; unemployability; juvenile crime; and mental illness. These are serious in themselves but are even more important as precursors of problems in adulthood and the next generation."[35]

It is generally recognized that conflict with parents is a normal part of youth development. Adolescents' need for increased autonomy and independence can strain relationships with parents and other authority figures, and contribute to family instability.[36] However, parental support and supervision continue to be just as vital during adolescence as they are in childhood, even if they are sometimes more difficult to provide. Youth who continue to enjoy positive relationships with their parents, even if they are sometimes strained, report higher levels of life satisfaction, self-esteem, and perceived physical health.[37]

Positive relationships between parents and youth generally feature effective communication, good parental problem solving, parental monitoring of adolescent activities, and the provision of warm and nurturing support, all of which, collectively, serve as protective factors against anti-social behaviour and delinquency.[38] The HBSC survey found that Grade 10 students who had a more positive relationship with their parents were more likely to be satisfied with their lives and less likely to smoke, drink alcohol, use marijuana; less likely to have friends who were involved in risk behaviours; and somewhat less likely to engage in sexual intercourse.[39] A large body of American research supports the finding that parent-child closeness is associated with less sexual risk taking, including remaining abstinent and postponing sex.[40]

Clearly, good parenting skills are essential both to maintaining positive relationships with adolescents and to supporting healthy youth development. Extensive research has shown that an "authorative" parenting style trumps both "authoritarian" or "punitive" and "permissive" parenting. "Authoritative" parents balance encouragement of independence and sense of identity within warm and responsive relationships with high expectations about behaviour and maturity and compliance with their authority.[41] High expectations that are perceived as strict parental control enhance youths' motivation and achievement when balanced with emotional support and encouraging behaviours. "Permissive" parents may have warm and loving relationships with their children, but rules are few and expectations of children are low.[42] "Punitive" parents exert strict controls over behaviour, may use discipline inconsistently, yell at their children, and use or threaten to use physical punishment. Punitive parenting is associated with high levels of aggression and anxiety, and low levels of pro-social behaviour among both children and youth. (FN)

Determinants of parenting include (a) personal attributes of children; (b) the developmental history of parents and their own psychological make-up; and (c) the broader social context in which parents and this relationship are embedded.[43] Parenting is often a response to child behaviour: Some children are simply more difficult to parent than others, and "bad" parenting should not always be interpreted as "causing poor outcomes in a simple unidirectional sense.[44] That being said, personality characteristics shape parenting because they seem to partially influence the emotions parents experience and/or the attributions they make about the causes of child behaviour (e.g., the parent may interpret crying to be the result of tiredness or a desire to manipulate the parent).[45] Parents who are prone to negative emotional states, be it depression, irritability and/or anger, tend to behave in less sensitive, less responsive and/or harsher ways than other parents; and this appears true whether they are parenting infants/toddlers, older children, or adolescents.[46] Parents who are more cynical, vengeful and manipulative and less trusting, helpful and forgiving are more negatively controlling than other parents, particularly in disciplinary situations.[47] On the other hand, parents who experience frequent positive emotions and enjoy social engagement tend to be emotionally sensitive, responsive and stimulating in their parenting.[48] Both harsh and supportive parenting tend to be transmitted down generational lines, in the case of mothers, fathers or both.[49]

Factors that can contribute to parental stress and irritability, family instability, and poor parenting include (but are not limited to) low income, marital breakdown, parental isolation, low levels of parental education, young parenting, and lone parenting, many of which can occur together. Recent analysis of NLSCY data showed that both family dysfunction and maternal depression are linked with income but, unexpectedly, the negative effects on children in families with these three characteristics had disappeared by early adolescence. In addition, contrary to the findings of many earlier studies,[50] the data showed no relationship between low income and punitive parenting practices.[51]

Parenting can be particularly challenging in some immigrant families. The process of immigration often exacts a heavy toll on family relationships, resulting in problems such as role reversals and differential rates of acculturation and language acquisition.[52] For example, nearly all immigrant students at some point find themselves playing the role of "language broker" for their parents, regardless of how long they have been in their new country or if they have older more experienced brokers in their families. This places them in a position of power over their parents, as they control the content and timing of the information.[53] In addition, as discussed in more detail elsewhere, poverty rates and labour market exclusion are high among immigrant families.

Lone parenting is generally a more difficult situation than is that of parenting in a stable two-parent family. Recent research[54] has shown that older single mothers, for example, women in their 30s who plan a birth or adoption, tend to have a strong support network and are at low risk of poverty, and the development of their children is comparable to those in two-parent families. However, many lone parents are women living on low incomes and with little social support. More than half of single women with children come from poverty themselves. In addition, the younger that an individual becomes a parent, the more likely it is that both parent and child will always be at risk of being or becoming poor. This is because young parents are less likely to have pursued educational goals and more likely to be unemployed. Families headed by young single mothers are much more likely than other families to endure multiple moves, multiple cohabitations and dissolutions, and a cycle of inter-generational poverty, all of which carry risks for children of all ages.

All of these problems are more prevalent among the Aboriginal population. As noted by the Department of Indian and Northern Affairs, the growing number of children living in Aboriginal single parent families are likely to experience more educational and health problems than other children, and that risks are related to both income levels and parenting factors.[55]

The most extreme manifestation of bad parenting is, of course, child abuse. There exists a litany of studies documenting the profound, pervasive, and long-term effects of various forms of abuse on children and youth. Very briefly, child maltreatment can affect all aspects of a child's life and development. In addition to the physical harm caused by some forms of abuse and neglect, abused children are at much greater risk of significant emotional and adjustment problems than non-abused children. As summarized by Trocmé and Wolfe, "[m]altreated children experience ongoing, uncontrollable events that are a pervasive challenge to their successful development and adaptation and pose a threat to their core psychological well-being. They not only have to face acute and unpredictable parental outbursts or betrayal, they also have to adapt to environmental circumstances that pose developmental challenges."[56] In a study conducted by these researchers, in half of the substantiated cases of child maltreatment, the child demonstrated at least one functioning problem, including "stress-related symptoms, such as depression or anxiety, as well as behavioural problems such as negative peer involvement, irregular school attendance and violence to others."[57] Other studies have shown that abused children experience more social problems and perform less well in school than non-abused children,[58] and are at greater risk of becoming violent criminals.[59]

It has been suggested that the severity of the consequences of child maltreatment is related to the length of the abuse, the severity of the abuse, and the relationship of the child to the abuser. Some studies have shown, however, that even less serious forms of abuse, particularly if the abuse is chronic or pervasive, can have very detrimental effects and result in emotional and behavioural problems.[60]

The facts

- **Lone-parenting**

In 2001, 15% of Calgary children and youth aged 14 and under lived in lone-parent families. For Aboriginal children and youth, the figure was much higher at 32%;[61] for immigrant children and youth, the figure was much lower, at 9%.[62] Data specific to immigrant and Aboriginal adolescents are not available, but we do know that, in 2004, 22% of all Calgary youth aged 10 to 19 years lived in lone-parent families.

The proportion of children and youth living in lone parent families is expected to increase by about 1% over the next decade.[63] Most of these families will continue to be headed by mothers. This projected increase may be quite conservative, depending on birth rates and lone-parenting trends among Calgary's growing Aboriginal population.

Table 5. Youth in couple and lone-parent families 2004, Calgary CMA[64]				
Family type	**Age Group**		**Total**	
	10 - 14	**15 - 19**	**#**	**%**
Youth in couple families	54,430	52,550	106,980	77.7%
Youth in lone-parent families	14,930	15,830	30,760	22.3%
Total	**69,360**	**68,380**	**137,740**	**100.0%**

Table 6: Actual and projected families by family type, City of Calgary[65]					
Family type	**2001**	**2003**	**2006**	**2011**	**2016**
Families in private households	268,970	274,700	258,199	277,855	293,572
Husband-wife families	230,890 (85.8%)	235,010 (85.6%)	218,170 (84.5%)	233,811 (84.1%)	246,546 (84.0%)
Lone-parent families	38,080 (14.2%)	39,690 (14.4%)	40,029 (15.5%)	44,044 (15.9%)	47,026 (16.0%)

- **Dual-wage families**

The number of dual-wage families is increasing, resulting in "time crunches" which can limit parents' abilities to supervise and support their children and to be involved in their children's education. This is contributing to a need for increased out-of-school time supervision and structured activities for adolescents. The trend toward two parents working outside the home is almost certain to continue over time, placing additional pressures on schools and communities to provide supervision and guidance to students.

- **Child abuse**

In 2005, the Calgary Police Service (CPS) investigated 276 allegations of child abuse, similar to the number of investigations in 2003 and 2004. The CPS Child At Risk Response Team (CARTT) responded to 1,254 calls for service in 2005, fewer than in 2004, but an increase from 2002 and 2003. Two-thirds of these calls were generated by Child Welfare.[66]

In 2005, the Calgary Police Service responded to 11,603 calls for service for domestic-related issues, an increase of almost 500 calls in 2004. As in 2004, children were present in 42% of these cases.[67]

Over the past 30 years, child welfare caseloads have steadily increased in Canada, Alberta, and Calgary. Between 1974 and 2000 in Alberta, the child welfare caseload grew by 74%. Growth in the Calgary child welfare caseload generally mirrored the provincial trend over that 25-year period.[68] This dramatic increase may have reflected a combination of factors, including increases in child abuse and neglect, awareness about abuse and increased reporting, and changes in child welfare practices. Calgary rates have stabilized somewhat in the past few years, largely due to the implementation of the Alberta Response Model in 2002-03, in which lower-risk families are diverted to the Family Enhancement service.

Breakdowns by the age of the children involved with child welfare are not available. In previous years, the "number of youth and parent conflicts leading to a substantiated child protection concern" was provided, but this practice ended in 2002-03.

Table 7. Number of children receiving child protection services per month, Calgary and Area CFSA[69]						
	1998-99	1999-00	2000-01	2001-02	2002-03[70]	2003-04
# children receiving child protection services/month	3,052	3,140	3,340	3,723	3,415	3,258
# children receiving Family Enhancement services/month					319	800
Total children receiving child welfare services/month	3,052	3,140	3,340	3,723	3,734	4,048

Youth who have been in the care of child welfare are at risk of negative outcomes on many dimensions. As summarized in her recent report, Tweedle observes that a "review of recent international research examining outcomes for youth after they "age out" of the child welfare system paints a disturbing picture. The findings show that, compared to their peers, youth aging out of care are more likely to: leave school before completing their secondary education; become a parent at a young age; be dependent on social assistance; be unemployed or underemployed; be incarcerated/involved with the criminal justice system; experience homelessness; have mental health problems, and be at higher risk for substance abuse problems."[71]

Alberta has recently introduced a Care and Maintenance Agreement, in which services can be provided to age 20, subject to various conditions and an agreement signed with the youth.[72] Alberta has also recently implemented its *Youth in Transition* initiative, which includes an exit survey for children in care. The first stage of the planned survey will focus on children who left the child welfare system over the past three years, looking at how well prepared they were, how they are currently faring, and what could have been done to improve their transition experience. The second stage will involve a pre-exit interview with youth.[73]

3.3   Community environment

The issues

While there is no single definition of a "strong" or "good" neighbourhood, approaches to measuring neighbourhood quality of life generally centre around the following themes: (1) social inclusion, as reflected by perceptions of friendliness, safety, neighbourliness, and sense of community, and the presence of informal and formal supports and opportunities for community involvement and volunteer work; (2) housing access, affordability and quality and quality of the built and natural environment; (3) access, affordability and quality of programs and services; (4) positive community economic development.[74] Likewise, there is no agreed-upon definition of a "poor" or "poor quality" neighbourhood. In the literature, indicators of poor neighbourhood quality include high rates of concentrated poverty, unemployment, residential mobility, (sometimes) ethnic diversity, density of single-parent households, and crime.[75]

For children and youth, the importance of community can not be overstated. A wealth of research confirms that neighbourhood quality is related to child and adolescent development. Neighbourhood is less important than family and individual factors,[76] but researchers stress that "failure to acknowledge [neighbourhood] influences may mean overlooking key factors that differentiate successful and unsuccessful low-income urban children." [77]

American research has found that neighborhood SES is positively associated with various indicators of adolescents' achievement (math achievement, basic skills tests, and grade point average) and negatively associated with educational risk, particularly for male adolescents.[78] Other studies focusing on adolescents have found that residing in a low-SES neighborhood is associated with higher rates of criminal and delinquent behaviours.[79]

The potential mechanisms through which neighborhoods may influence youth development, all of which may be complementary, include

- **Institutional resources** - availability, accessibility, affordability, and quality of learning, social, and recreational activities, schools, medical facilities, and employment opportunities present in the community;
- **Relationships** - parental characteristics (mental health, irritability, coping skills, efficacy, and physical health), support networks available to parents, parental behavior (responsivity/warmth, harshness/control, and supervision/monitoring), and the quality and structure of the home environment; and
- **Norms/collective efficacy** – referring here to the extent to which community level formal and informal institutions exist to supervise and monitor the behavior of residents, particularly youths' activities and the presence of physical risk (e.g., violence and victimization and harmful substances) to residents, especially children and youth.[80]

Research shows that mixed-use neighbourhoods can foster social cohesion and directly benefit residents of all ages, particularly if amenities are within easy walking distance and include banks and grocery stores, public transit, parks and playgrounds, safe routes for cyclists and pedestrians, and schools and daycares.[81] Moreover, timely access to appropriate, high-quality educational and social supports, along with developmental and recreational programs for children, can go a long way in overcoming the long-term developmental and life course disadvantages associated with low SES.[82]

The facts

- The income gap between Calgary's richer and poorer neighbourhoods has grown over the past 15 years. This is largely because income growth in the 1990s was concentrated among high-income families[83] but economic spatial segregation, where residents "sort themselves" into "like" neighbourhoods, has also played an important role.[84] The greater the inequalities among neighbourhoods, the poorer the health and quality of life for those living at the bottom and, due to spin-off effects, the broader community.

- Calgary has 16 neighbourhoods which have been identified as "highly vulnerable" based on The City of Calgary's Indices of Community Well-Being. In addition, the most recently available census tract data show that Calgary has 13 neighbourhoods in which at least 30% of residents live below Statistics Canada's Low-Income Cut-Off (LICO), including two neighbourhoods in which at least 40% of families live below LICO.[85]

- Residents of Calgary's vulnerable neighbourhoods include high proportions of people with no market income, low educational attainment, low school enrolment among adolescents and young adults, and a high share of income from transfers. The effects of these variables are more profound when they exist in combination. In addition, many of these neighbourhoods feature high concentrations of population groups who face many social and economic barriers and are at high risk of living in poverty, including recent immigrants, Aboriginal peoples, unattached adults, and single-parent families.[86]

3.4   School life and environment

The issues

Academic success in adolescence is associated with a broad range of individual factors, such as individual cognitive abilities and physical health, previous school performance, degree of school engagement, social competence, and participation in extra-curricular activities. It is also correlated with many family factors, such as family income, parental education level, and parenting style, along with conditions at school, such as quality of instruction and curriculum, school climate, and degree of parental involvement. A comprehensive discussion of all of these variables and their inter-relationships is beyond the scope of the current discussion, but a few highlights from recent research about parental involvement, school environment, and student engagement merit mention here.

- **Parental involvement**

Briefly, when parents are effective partners in their children's education, the performance of their own children and, often, other students at their children's school, improves. Students whose parents are involved have higher test scores, attendance and rates of homework completion and exhibit more positive attitudes and decreased alcohol and drug use, violence and anti-social behaviour. Parental involvement in elementary school produces the largest effects, but benefits are also significant in later grades.[87]

Analysis of the data from the HBSC survey supports these previous research findings. As might be expected, "[s]tudents whose parents are involved in their school lives and who constantly encourage them to do well in school are more likely to succeed in their scholastic endeavours than are students whose parents are not encouraging or are indifferent."[88] The study also showed that success at school

is strongly related to students' perceived satisfaction with school, which is, in turn, related to good teacher, peer, and parent relationships, lower pressure to achieve at school, higher self-esteem, and increased student autonomy at school.[89]

- **School engagement**

Satisfaction with school generally reflects degree of school engagement. The concept of school engagement as a crucial determinant of success in school has received increased attention in the past few years. Recent research suggests that engagement in academic and school activities by both students and parents is a crucial determinant of a young person's long term academic success, and for some students, especially those with relatively low academic ability, it is the factor that distinguishes dropouts from graduates.[90] Engagement refers to the extent to which students participate in academic and non-academic school activities, and identify with and value schooling outcomes.[91] Engagement includes a behavioural component, defined in terms of participation in school activities (attendance, being prepared for class, completing homework, attending to lessons, and being involved in extra-curricular sports or hobby clubs), and a psychological component pertaining to students' identification with school and acceptance of school values (sense of belonging, social ties and bonds, relationships with teachers, feelings of safety and security at school, value placed on school success).[92]

- **School climate**

School environment, or "climate," is important to youths' satisfaction with and engagement in school. School climate "reflects the physical and psychological aspects of the school that are more susceptible to change and that provide the preconditions necessary for teaching and learning to take place. It is evident in the feelings and attitudes about a school expressed by students, teachers, staff and parents—the way students and staff 'feel' about being at school each day."[93] Research shows that family and community involvement in the schools contributes to positive school climate.[94]

Although there is no strong consensus in the literature on the components of school climate or their relative importance, most researchers include caring and safety, and some delineate a broader range of factors representing a school's physical and social environment. With a view to simplicity, these factors may be grouped into four components, all of which are inter-related: a physical environment that is welcoming and conducive to learning; a social environment that promotes communication and interaction; an affective environment that promotes a sense of belonging and self-esteem; and an academic environment that promotes learning and self-fulfillment.[95]

Research shows that schools with a positive school climate promote higher academic achievement and better social and emotional health. Specifically, a safe and caring environment is associated with higher grades, engagements, attendance, expectations and aspirations; higher self-esteem and self-concept; less anxiety, depression and loneliness; less substance abuse;[96] and higher sense of community and sense of belonging.[97] At the junior high level, research shows that students' perceptions of school climate predict emotional and psychological adjustment, even after accounting for demographic factors such as IQ, gender, race, family status, and socio-economic status.[98]

Clearly, not all adolescents are engaged in school. As discussed later in this report, many Calgary students drop out of school, and drop out rates are highest among Aboriginal and ESL students.

The facts
No relevant local data are available.

SECTION 4. DEVELOPMENTAL OUTCOMES: RISK FACTORS, PROTECTIVE FACTORS, AND THE STATUS OF CALGARY'S YOUTH

4.1 Physical health and development

4.1.1 Physical health

The issues

Proper nutrition and involvement in physical activity contribute to the physical and emotional health and wellbeing of youth. Nutrition and the growing adolescent are intricately connected as healthy eating plays a role in achieving peak growth and development. Clearly, good nutrition involves access to good healthy food sources on a regular basis. "Food insecurity" in Canada has been defined as "the inability to acquire or consume an adequate diet of quality or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so."[99] Food insecurity (mainly in the form of poor nutrition) is on the rise in Canada especially among young people.[100] Canadian research on food security revealed that 8% of Canadians reported qualitative and/or quantitative compromises in food intake.[101] Among youth, nutritionally-based disorders such as eating disorders and diabetes are known to be increasing. Reasons for such increases remain unclear, but overall incidences of such disorders will influence the longer-term health outcomes of youth.[102]

Regular physical activity promotes the achievement and maintenance of a healthy weight and skeletal health, improves sleep quality, and improves all aspects of physical health.[103] Likewise, the benefits of physical activity to the physical and psychological status of adolescents are well documented.[104] "Lack of, or limited, physical activity is a result of more time spent in passive leisure pursuits, such as watching television or playing video games. The duration and type of sedentary leisure time influences the extent of social integration and has been linked to some risk behaviours."[105] Findings from research done in the United States show that watching television may also be a cue for eating in some children and that children who watch five or more hours of television a day consume 175 calories more daily than those who watch television no more than an hour a day.[106]

Recreation and sports not only provide a means of ensuring physical health through fitness and activity, they influence social and emotional health outcomes by creating opportunities for developing friendships and personal supports and for dealing with the stresses of life. Some recreational pursuits provide creative outlets that are essential to personal expression, identity and self-esteem; others provide physical outlets that channel energy and create health enhancing endorphins.[107] As noted by Social Development Canada, "[p]hysical activity, sports and recreation programs provide considerable physical benefits for children and can also serve as tools to teach important values and life skills including self-confidence, teamwork, communication, inclusion, discipline, respect and fair play.[108]

Obesity is on the rise among children and youth throughout North America, sparking serious concern about the long-term health consequences for a growing proportion of the population in the coming years. Children and adolescents living in low-income families and in families in which parents have not completed post-secondary education are at greater risk of obesity than those from more affluent

groups. This is attributed to dietary differences, low self-esteem or lack of confidence to cope with the situation, lack of opportunities to play in a safe environment or to participate in activities out of the home, and distance from shops where fruit, vegetables and low-density foods are affordable and available.[109]

Like children and adults, adolescents' physical health is also dependent on the quality of the natural environment, including air and water quality, access to green space and parks, and exposure to environmental toxins. More research is needed to assess whether the physical environment has specific effects during adolescence, a period during which reproductive, respiratory, skeletal, immune and central nervous systems mature.[110]

Aboriginal youth are at higher risk of poor physical health than other youth, primarily due to issues relating to poverty, housing, lifestyle, and access to health care. As delineated by the Calgary Health Region, these include lifestyle issues such as: lack of exercise, poor hygiene, unsafe sex and substance abuse; coping issues such as conflict, poor anger management, and neglect; lack of effective support systems in families and/or communities to help children enhance their health and deal with physical, mental, spiritual and emotional difficulties; lack of culturally-appropriate services and financial, policy and political barriers to accessing health services; and ways in which children and youth lack a strong and positive sense of self, cultural identity and ability to enhance their own health.[111]

The facts

- **Nutrition**

Table 8. Fruit and vegetable consumption, Youth aged 12 – 19 years, Calgary Health Region, 2005[112]		
	Age Group	
	12 – 14 years	**15 – 19 years**
Consume fruits and vegetables 5 or more times per day	44.9%	42.8%
Consume fruits and vegetables less than 5 times per day	48.7%	52.5%
Fruit and vegetable consumption not stated	F	F

F = Too unreliable to be published

- **Injuries**

Table 9. Injuries sustained within the past 12 months, Youth aged 12 – 19 years, Calgary Health Region, 2005[113]		
	Age Group	
	12 – 14 years	**15 – 19 years**
Injuries within the past 12 months	27.9%[E]	28.3%
Injuries within the past 12 months, sought medical attention	18.4%[E]	17.9%[E]
No injuries within the past 12 months	71.4%	71.2%
Injuries within the past 12 months, not stated	F	F

E = Use with caution
F = Too unreliable to be published

- **Health status**

Table 10. Self-rated health,
Youth aged 12 – 19 years, Calgary Health Region, 2005[114]

	Age Group	
	12 – 14 years	15 – 19 years
Very good or excellent self-rated health	74.7%	76.1%
Good self-rated health	22.7%E	18.1%E
Fair or poor self-rated health	F	F
Self-rated health, not stated	F	F

E = Use with caution
F = Too unreliable to be published

Table 11. Asthma,
Youth aged 12 – 19 years, Calgary Health Region, 2005[115]

	Age Group	
	12 – 14 years	15 – 19 years
With asthma	15.3%	7.0%
Without asthma	84.7%	93.0%

- **Access to health care**

Table 12. Contact with medical doctor(s) in the past 12 months,
Youth aged 12 – 19 years, Calgary Health Region, 2005[116]

	Age Group	
	12 – 14 years	15 – 19 years
Contact with medical doctors in the past 12 months	79.1%	81.2%
No contact with medical doctors in the past 12 months	18.3%E	18.3%
Contact with medical doctors in the past 12 months, not stated	F	F

F = Too unreliable to be published

Table 13. Contact with dental professionals in the past 12 months,
Youth aged 12 – 19 years, Calgary Health Region, 2005[117]

	Age Group	
	12 – 14 years	15 – 19 years
Contact with dental professionals	86.7%	77.3%
No contact with dental professionals	13.3%	22.1%

E = Use with caution

Table 14. Influenza immunization,
Youth aged 12 – 19 years, Calgary Health Region, 2005[118]

	Age Group	
	12 – 14 years	15 – 19 years
Influenza immunization, less than one year ago	20.7%E	12.7%E
Influenza immunization, 1 or more years ago	23.7%E	40.9%
Never had influenza immunization	46.1%	39.0%
Influenza immunization, not stated	9.5%E	7.4%E

E = Use with caution

- **Obesity and activity levels**

Table 15. Overweight and obese youth aged 12-17 years, <u>Alberta</u>, 2004[119]								
Both sexes			**Males**			**Females**		
Neither overweight nor obese	Overweight	Obese	Neither overweight nor obese	Overweight	Obese	Neither overweight nor obese	Overweight	Obese
69.7%	20.2%	10.1%	74.3%	17.8%	F	63.9%	23.3%	12.8%

F = Too unreliable to be published

Table 16. Participation in sedentary activities, Youth aged 12-17 years, <u>Alberta</u>, 2004[120]					
	Less than 10 hours/week	10-19 hours/week	20-29 hours/week	30-39 hours/week	40 or more hours/week
Males	11.8%	31.1%	27.6%	15.5%	13.4%
Females	16.6%	29.8%	31.6%	13.7%	8.3%
Total	14.1%	30.5%	29.5%	14.6%	11.0%

Table 17. Leisure time physical activity, Youth aged 12 – 19 years, Calgary Health Region, 2005[121]		
	Age Group	
	12 – 14 years	**15 – 19 years**
Leisure-time physically active or moderately active	75.0%	67.1%
Leisure-time: physically active	58.2%	42.7%
Leisure-time: moderately physically active	16.9%[E]	24.4%
Leisure-time physically inactive	23.6%[E]	31.5%
Leisure-time physical activity, not stated	F	F

F = Too unreliable to be published

- In Alberta, 50% of youth aged 12 to 19 years are not active enough for optimal growth and development. For the purpose of these analyses, the term physically inactive is equivalent to an energy expenditure of less than three kilocalories per kilogram of body weight per day (KKD). This level of physical activity can be achieved by playing teams ports for an hour or a half and hour running, combined with an accumulated hour of walking throughout the day.[122]

- Half of Canada's children and youth are spending two to four hours per day watching television. Research findings suggest that children who watch television more than 2 hours per day are more likely to be overweight and obese.[123]

- **Natural environment**

- Calgary boasts over 7,500 hectares of open space and parkland within the city, offers the most extensive urban pathway and bikeway network in North America, and has been rated the cleanest city among 215 cities around the world.[124]

- At least twice in November 2005 Calgary's air quality hit a key pollution threshold, consistent with slow increases in air pollution over the years.[125]

- In the past few years, Calgary's Glenmore Water Treatment Plant has been experiencing increasing turbidity levels (the amount of sediment or foreign particles) which are an indication of bacteria, viruses and protozoa, although levels have remained within government standards. Both the Bearspaw and Glenmore Water Treatments Plants indicate an increasing trend of fecal bacteria levels. All of this has meant that there has been a significant increase in the amount of chlorine that needs to be added to make the water drinkable or safe.[126]

- Calgary has one of the highest levels of domestic water usage in the world at 339 litres per capita per day, compared to 195 litres per capita in Edmonton and 285 litres per capita in Alberta as a whole. Domestic water usage accounts for about two-thirds of overall water use in Calgary.[127]

- "Alberta is already experiencing water declines – river and lake levels have declined between 10% and 20% over the last century, glaciers are shrinking, 70% of natural wetlands have been lost (reducing water infiltration and groundwater recharge), groundwater aquifers are recharging lake levels at a slower rate than in the past, and – in drier times – aquifers themselves are not being recharged."[128] In addition, climate projections suggest a multi-year, possibly a decade long, drought.[129]

4.1.2 Risky lifestyle behaviours

It is well established that adolescence is a time in which individuals seek to assert their independence and to exert authority over their own lives, sometimes prematurely or inappropriately. As a result, many youth experiment with risk-taking behaviours, the most serious of which include sexual activity, substance abuse, and, in extreme cases, criminal behaviour and street involvement. In fact, these sorts of behaviours often pose a greater threat to youth health and well-being than other negative health determinants, such as poor nutrition.

Some youth are more likely than others to become involved in risk-taking behaviours. Summarizing the research, Bogenschneider identifies the key risk and protective factors as follows:[130]

- Personal characteristics: Youth who were aggressive in childhood, who feel alienated from their families, schools, or communities, and who begin to experiment with drugs or sex in early adolescence are more likely to become risk takers, as opposed to youth who have good problem-solving skills, a high sense of self-esteem and personal responsibility, and well-developed social and interpersonal skills.

- Family factors: Youth risk-taking is associated with lack of parental monitoring and supervision; overly authoritarian or permissive parenting, unclear parental expectations and rules, and low parental involvement in school and studies. In some cases, these risk factors can be offset by strong, positive relationships with other supportive adults outside the immediate family.

- Peer relationships: Youth who associate with peers who are involved in risky behaviours are more likely to become involved themselves, whereas those who have at least one close friendship with a positive peer are more likely to resist negative peer pressure from others.

- School factors: The moves from elementary to junior high school, and from junior high to high school are sometimes associated with increased risk taking, and academic achievement, extracurricular participation, and psychological well-being may decline. Poor academic performance and low commitment to school increase the risk of youth problems, just as youth problems increase the risk of school failure.

- Community factors: Youth who experience a low sense of community and low sense of belonging to community, and who live in neighbourhoods featuring high mobility, low social capital, and permissive community norms (e.g., people don't object if teens are drinking alcohol) are more likely to become involved in risky behaviours than youth who have relationships with many people in the community and feel engaged in the community.

Sexual health

The issues

The Sex Information and Education Council of Canada notes that "it is generally assumed that most teen pregnancies, particularly among younger teens, are unintended. Trends in teen pregnancy rates are, therefore, a very significant marker of female adolescent sexual and reproductive health not only because a pregnancy can have implications for a young woman's health and well-being but also because trends in teen pregnancy rates can be a fairly direct indicator of young women's opportunities and capacity to control their sexual and reproductive health."[131]

Indicators of adolescent sexual health generally include teen pregnancy rates, birth rates, abortion rates, and rates of sexually transmitted infections, particularly chlamydia. Chlamydia is the most common reportable STI, and provides the most accurate available indicator of the magnitude of STI infection in adolescents and of trends in infection rates.[132]

That being said, it should be noted that a comprehensive picture of adolescent sexual health would include positive outcomes such as non-exploitive sexual satisfaction and rewarding relationships.[133] Determinants of adolescent sexual health, particularly teen pregnancy rates, include socio-economic factors, access to user-friendly reproductive health services, access to high quality sexual health education, and use of oral contraception and condoms.[134]

Four factors have been found to reduce sexual risk taking activity among youth: (1) parental disapproval and a close relationship between the parent and the youth; (2) for girls, positive emotional development, particularly high self-esteem and "planfulness" (future orientation with realistic plan to achieve goals); (3) school attachment and success; and (4) positive peer associations.[135] As noted by Kirby, "[t]here is increasing evidence to suggest that when youth interact with peers who model positive behaviours, these relationships contribute to good outcomes.[136] For example, having friends with good grades and who engage in few risky behaviours is associated with less likelihood of teen pregnancy."[137]

The facts

- **Condom use**

	15 – 19 years
Table 18. Condom use, Youth aged 15 – 19 years, Calgary Health Region, 2000-2001[138]	
Condom use, always	56.9%
Condom use, usually	F
Condom use, occasionally	F
Condom use, never	F

F = Too unreliable to be published

- From 1995 to 2002, the teen pregnancy rate for girls aged 15 to 19 years in the Calgary Region declined from 53.3 per 1,000 population to 36.8. Likewise, the rate of live births declined from 24.3 to 13.5, and the abortion rate declined from 28.7 to 23.3.[139]

- In 2004, 22% of all STIs reported in the Calgary Region were among teens aged 15 to 19 years, and 62% were among youth aged 15 to 24.

- In 2004, 745 people aged 15 to 19 were diagnosed with an STI, up from 644 in 2000. The STIs which are on the rise include chlamydia and gonorrhea. Chlamydia is the most commonly reported STI among 15 to19 year olds.[140]

- In 2004 in Alberta as a whole, there were 20 new cases of HIV among people aged 24 years and younger (12% of all new infections).[141] Data specific to Calgary are not yet available.

Substance use and abuse

The issues

Recent research suggests that because of their unique brain development, adolescents are more vulnerable than other age groups to developing problems related to substance use. This information has implications for viewing youth addiction as a developmental disorder.

The City of Calgary reports that "[t]here is growing concern in Calgary about an increase in the use of solvents and the expectation that, over the next five years, there will be a significant growth in the use of crystal meth and the associated violence resulting from the nature of the drug as well as the need for the money to purchase it."[142]

Summarizing the research on adolescent substance abuse, the Alberta Alcohol and Drug Abuse Commission (AADAC)[143] reports that youth are most likely to begin experimenting with alcohol, tobacco, and other drugs in grades 7, 8 and 9, or between the ages of 12 and 15 years, and between the hours of 3:00 p.m. and 6:00 p.m. on school days. A second high-risk period is in late adolescence, particularly the transition year from senior high to post-secondary education or work. Data suggest that this second risk period is characterized by a sharp increase in tobacco and drug use for those adolescents who had not previously experimented with them, and in some cases, they progress to abuse or binge drinking.

AADAC explains that the earliest consistent predictors of substance use in early adolescence are gender, individual and family factors. Boys are significantly more likely than girls to use illicit drugs on a frequent basis and are at a higher risk for substance abuse in later adolescence. Youth of both sexes who are disengaged from school, or performing poorly, are at greater risk, along with youth who live in families with a history of substance abuse, smoking behaviour, family discord, or lack of parental disapproval of substance use. By high school, school factors become significant predictors of later drug use, as young people are more likely to be exposed to peers who have experimented with alcohol, tobacco, and drugs. At all stages of adolescence, parental monitoring of behaviour, good social skills, positive peer groups, good grades, and participation in constructive activities, particularly after school, are associated with avoidance of substances in adolescence.

Other research completed by AADAC found that ease of access (which was related to weekly income) had the strongest relationship to the frequency of use for most substances. Peer substance-use factors were generally second in association strength, followed by parental approval.[144]

The facts

- **Alcohol**

  - In 2002, 56% of Alberta youth in grades 7 to 12 (36% of students in grades 7 to 9 and 75% of students in grades 10 to 12 reported that they had consumed alcohol in the preceding 12 months. Among Aboriginal youth in grades 7 to 12, 65% had consumed alcohol.

  - Of the youth in grades 7 to 12 who were drinkers, about one quarter (26.5%) drank five or more drinks on one occasion less than once a month, 17.4% drank this amount about once a month, and 13.7% did so about once a week or more. The percentage of Aboriginal youth reporting signs of alcohol abuse was almost triple that of Alberta youth as a whole (34.5% compared to 12.3%).

- **Drugs**

Table 19. Substance use in the preceding 12 months, Youth grades 7 - 12, <u>Alberta,</u> 2002[145]			
	Overall	Grades 7 - 9	Grades 10 -12
Used alcohol	56.3%	35.8%	75.4%
Smoked cigarettes	16.2%	7.2%	24.6%
Used cannabis	27.6%	11.8%	41.9%
Used other drugs			
Magic mushrooms or mescaline	10.4%	5.0%	15.3%
Inhalants	5.6%	6.8%	4.6%
Club drugs (ecstasy or crystal meth)	5.3%	2.7%	7.6%
Uppers without a prescription	4.0%	2.1%	5.6%
Hallucinogens	3.9%	1.6%	6.1%
Cocaine	2.9%	0.5%	5.1%
Crack	2.8%	0.8%	4.7%
Downers without a prescription	2.3%	1.7%	2.9%
Heroin or opium	1.4%	1.1%	1.7%
Steroids	1.2%	0.7%	1.6%

According to the Alberta Alcohol and Drug Abuse Commission's (AADAC) 2002 Alberta Youth Experience Survey (TAYES):

- The most commonly-used illicit drug among Alberta youth was cannabis (between 22.8% and 32.3% of Alberta youth used cannabis in the year prior to the fall of 2002). The next most commonly-used illicit drugs were mushrooms/mescaline (7.7% to 13.1%), inhalants (4.0% to 7.3%), and club drugs (3.2% to 7.3%)**.**[146]

- About half of drug users reported using just one drug during the last 12 months. For four out of five of them (80%), the drug used was cannabis. Thirteen percent reported inhalants as the drug used.[147]

- Substances most frequently used by users of multiple drugs were cannabis, mushrooms/mescaline, club drugs, hallucinogens and uppers. [148]

- The prevalence of drug use was higher in grades 10 through 12 than in grades 7 through 9 for all illicit drugs except steroids, heroin/opium and inhalants. [149]

- The use of cannabis and mushrooms/mescaline was significantly higher among those youth of Aboriginal ethnicity than among those of non-Aboriginal ethnicity. Aboriginal youth were twice as likely (52.1%) as non-Aboriginal youth to use cannabis (26.8%), and three times as likely (30%) to use mushrooms (10%).[150]

- The use of cannabis, cocaine, hallucinogens, uppers, downers, club drugs and mushrooms/mescaline was significantly lower among youth who reported living with both natural parents than among youth who reported living in other situations.[151]

- Approximately one third (32.2%) of cannabis users used cannabis only once or twice during the last year while 28.4% used 21 times or more. For substances other than cannabis, most users used the substance only once or twice during the last year.[152]

- **Smoking**

Table 20. Smoking status, Youth aged 12 – 19 years, Calgary Health Region, 2005[153]	
	Age Group
	12 – 19 years
Current daily or occasional smoker	12.4%[E]
Daily smoker	6.9%[E]
Occasional smoker	F
Former smoker	9.4%[E]
Never smoked	78.2%
Smoking status, not stated	F

F = Too unreliable to be published

Table 21. Non-smokers exposed to second-hand smoke at home, Youth aged 12 – 19 years, Calgary Health Region, 2005[154]		
	Age Group	
	12 – 14 years	**15 – 19 years**
Exposed to second-hand smoke at home	17.5%	12.9%
Not exposed to second-hand smoke at home	81.8%	87.1%

- According to TAYES, the percentage of Aboriginal youth in Alberta in grades 7 to 12 who reported in 2002 that they had smoked tobacco in the preceding 12 months was more than double that of other youth (37% compared to 16%).[155]

Self-regulation and criminal behaviour

The issues

Self-regulation, also referred to as self-control, is vital to positive youth development. It requires adequate levels of intellectual functioning and a range of self-regulation mechanisms, including perceptions about free will and choice, ability to defer gratification, clear values and the ability to take broad perspectives, having goals and commitments, and looking forward to a future that offers promise and possibilities.[156]

Lack of self-regulation is highly correlated with anti-social and criminal behaviour among youth. Correctional Services Canada estimates that 80% of offenders exhibit one or more self-regulation

problems, including impulsivity, thrill seeking, poor conflict resolution, poor regard for others, low frustration tolerance, poor problem solving, unrealistic goal setting, and inability to generate choices. Offenders who have high problems with self-regulation are significantly more likely to re-offend than other offenders.[157] It should be noted that Attention Deficit Hyperactivity Disorder (ADHD) and Fetal Alcohol Spectrum Disorder (FASD) are both associated with inability to self-regulate. A disproportionately large number of youth with FASD appear to be coming in conflict with the law. A B.C. study reported that 47% of youth remanded to a forensic psychiatric inpatient assessment unit over a one-year period had an alcohol or FAS/FAE-related diagnosis.[158] ADHD appears to be on the rise in Canada. The number of prescriptions for Ritalin, which is commonly used to treat ADHD, increased by 108% among the prairie provinces between 1994 and 1998.[159] The prevalence of FASD is very difficult to establish, but it is estimated that nine per 1,000 children suffer from the disorder to some degree.[160] Some case studies have reported FASD rates as high as 72 per 1,000 children in some Aboriginal communities,[161] although it should be stressed that, to date, no valid comparison of the prevalence rates among Aboriginal and non-Aboriginal populations in Canada has been completed.[162]

Self-regulation problems are believed to be a necessary, although not sufficient, condition for the development of most chronic anti-social behaviour.[163] As summarized by National Crime Prevention Centre, the key risk factors for youth involvement with crime include:[164]

- inadequate living conditions, such as poor housing and unstable situations;
- family factors, such as family poverty, family size, poor or inadequate parenting, parental criminality, and parental substance abuse;
- individual personality and behavioural factors, such as "cognitive deficits" including a lack of problem-solving skills, self-control, critical reasoning, judgment and failure to consider the consequences of behaviour, low intelligence, hyperactivity, as well as the early onset of aggressive behaviour;
- peer association, such as relationships with friends who follow a delinquent or criminal lifestyle;
- school-related factors, such as poor educational achievement and truancy, as well as deficient school environments, and exclusionary policies; and
- employment opportunities, such as a lack of training and employment.

Finally, it should be noted that the majority of all criminal offences are committed by young men between the ages of 15 and 25,[165] and few young people account for most of the crimes committed by young offenders. While the proportion of young men in Calgary's population will decrease over time, the increasing prevalence of many of the risk factors experienced by youth in Calgary suggest that an increasing number of youth in this city may come into conflict with the law over time.

Aboriginal youth are particularly at risk of criminal involvement. As pointed out by LaPrairie, Aboriginal youth, on average, have lower levels of education, income, and employment, and many have grown up in the very circumstances that are associated with the onset of criminal activity in adolescence and early adulthood.[166] Such variables have contributed to the growth of Aboriginal gangs in cities such as Saskatoon and Winnipeg, and, more recently, around Calgary and Edmonton.[167] This may, unfortunately, foster discrimination against Aboriginal youth, which has the potential to escalate as the Aboriginal population grows.

Some immigrant youth may also be at higher risk of criminal and gang involvement. As discussed in the following section, ESL youth (not all immigrant youth) are at a much higher risk of school failure and school drop-out than other youth. School failure and gang membership are often connected for youth, although it is not always easy to determine which comes first.[168]

The facts

- In Calgary, about 5% of the young people aged 12 to 17 years are responsible for all youth crime.[169]

- Among youth aged 12 to 17 years, the overall number of crimes committed by youth increased marginally (0.7%) from 2004 to 2005, but the overall youth crime rate (number of crimes committed per 1,000 population) continued its steady decline (81.9 in 2001 to 67.8 in 2005).[170]

- Among youth aged 12 to 17 years, from 2004 to 2005, the number of property crimes in Calgary stayed constant but the property crime rate continued to decline (51.8 in 2001 to 42.6 in 2005). The number youth crimes against persons remained constant; the person crime rate continued to decline (16.9 in 2001 to 13.6 in 2005). The rate of "other" youth crimes has followed a similar downward trajectory.[171]

- In Calgary, Aboriginal youth are over-represented in the number of young offender cases and make up 10.2% of the total supervised probation caseload.[172]

- There were five gang-related homicides in Calgary in 2005. Between July 2005 and March 2006, the Calgary Police Service police made 117 gang-related arrests.[173] [Note: gang crime spans the age spectrum; it is not specific to youth and young adults.]

The riskiest lifestyle: Living on the street

The issues

Clearly, risky lifestyle behaviours are synonymous with living on the street. As noted in a study on youth homelessness and child welfare, youth homelessness implies the failure of key components of society – families, schools, employment, and the various safety nets that have been instituted, including child welfare.[174]

The causes of youth homelessness include family dysfunction and breakdown, including family conflict and child abuse. Most youth become homeless as a result of running away from home, being kicked out of home, or running away from, being discharged from, or aging out of the child welfare system.[175]

Homelessness has serious consequences for youth. Living in shelters or on the streets, unaccompanied homeless youth are at a higher risk for physical and sexual assault or abuse and physical illness, including HIV/AIDS. Furthermore, homeless youth are at a higher risk for anxiety disorders, depression, post-traumatic stress disorder, and suicide due to increased exposure to violence while living on their own. Homeless youth are also more likely to become involved in prostitution, to use and abuse drugs, and to engage in other dangerous and illegal behaviors.[176]

Sexual victimization has been identified as both a cause and consequence of youth homelessness. Several studies have shown that nearly 70% of homeless youth have experienced some form of sexual, physical or emotional abuse.[177] Once on the street, they are further exposed to risks including sexual assault and prostitution. American research has found that the average age of entry into prostitution is 12 to 14 years for girls and 11 to 13 years for boys.[178] Many turn to "survival sex" as a means of obtaining basic needs. Approximately one-quarter of Canadian street youth report having

traded sex at some point in their lives.[179] Older research shows that the majority of girls who resort to "survival sex" do not consider themselves to be engaging in prostitution. Most boys who engage in homosexual sex for money or a bed do define their activities as prostitution but do not consider themselves to be homosexual; it is simply a way to survive.[180] These practices lead to increased risk of HIV and other STDs, unwanted pregnancies, and other physical health issues.[181] Rates of chlamydia and gonorrhea in street youth are more than ten times those in the general youth population, and street youth do not appear to modify their sexual behaviours following the diagnosis of an STI.[182] A high proportion of street youth report not having used condoms with their regular or client partners during their most recent episode of sexual intercourse. [183]

Substance abuse is identified by all researchers as a serious problem with street youth. Canadian research indicates that between a quarter and a half of street youth report frequent heavy drinking. In terms of other drug use, the percentage using cannabis ranges from 66% to 88%, and for cocaine from 18% to 64%.[184] While drug and alcohol use often precedes leaving home, the research shows that usage increases significantly after leaving.[185] Researchers consistently note that substance abuse is often symptomatic of, and affords a means of escape from, stress associated with living on the street.[186]

Criminal involvement of homeless youth is also a prevalent problem. Although they are somewhat dated, several Canadian studies have revealed high levels of criminal activity, most frequently, shoplifting, drug dealing, break and enter, robbery, forgery and fraud, and prostitution.[187] In their seminal work on youth homelessness and crime, Hagan and McCarthy reported that hunger causes theft of food, problems of hunger and shelter lead to serious theft, and problems of shelter and unemployment produce prostitution. Many street youth move in and out of these activities to sustain their existence. In addition, while there may be a propensity among street youth towards crime from an early age, life on the street may lead to an "embeddedness in criminal networks" and an acquisition of "criminal capital."[188]

A small but thorough body of Canadian, American, and international research has demonstrated a correlation between child welfare status and youth homelessness. Youth who have been in care are over-represented among the homeless. The reasons identified include: failure by the system to help children deal with the problems that led to their removal from the family home; mistreatment during care; frequent moves among unstable, incompatible, and temporary placements; leaving care prematurely or upon reaching age 18; lack of education, life skills, and interpersonal skills; and lack of positive, supportive relationships with mature role models.[189]

Recent Canadian research confirmed a strong relationship between child welfare and youth homelessness. Youth with more positive experiences in child welfare, such as a limited number of stable placements in family homes, rather than group homes, and youth who retained their child welfare status for as long as possible, were less likely than other child welfare youth to become homeless. The study also found that, while lack of affordable housing was one issue relating to homelessness, most of the study participants faced multiple issues, such as addictions, and lack of life skills, personal competencies, and education and training to make the move out of homelessness sustainable.[190]

The facts

- According to the Calgary Biennial Homeless Count, between 2002 and 2004; the number of homeless youth aged 13 to 17 in Calgary increased from 56 to 73 (an increase of 30%).[191]

- A recent Calgary study identified 354 individuals in Calgary under the age of 18 who do not have Child Welfare status and who self-identified as homeless.[192]

The large discrepancy between these two figures is attributable to the different methodologies used in the counts. It is notoriously difficult to enumerate the homeless and, particularly homeless youth, because not all homeless people are visible and accessible to count. Many people, especially youth, "couch surf," staying for brief periods with friends, pimps or drug dealers, or even strangers, or sleep in abandoned buildings or "squats." The Biennial Homeless Count counts the number of individuals in shelters or on the street on a single night. Each biennial count is conducted in the same way on the same date of the year, and allows for accurate comparison among years. It is not intended to capture every homeless person in the city of Calgary. The second study referred to above was a one-time initiative. In this study, efforts to enumerate included focus groups and street interviews, along with agency data, over a five-month period.

4.2 Social competence

At risk of oversimplification, social competence may be defined as "the range of interpersonal skills that help youth integrate feelings, thinking, and actions in order to achieve specific social and interpersonal goals."[193] In the literature, the term "social competence" is sometimes used interchangeably with social skills, life skills, and interpersonal skills.[194] Social competence is one of the most frequently identified attributes of resilient children and youth, as well as a significant predictor of academic success and positive outcomes throughout life.[195]

Measures of social competence usually assess pro-social qualities and behaviours, such as responsiveness, flexibility, empathy and caring, communication skills, and willingness to engage in social interactions.[196] Pro-social attitudes and behaviours are believed to be essential to intellectual development, development of friendships with both peers and adults, and the ability to participate in and contribute to communities and in broader society.[197] Each of these factors is an important part of youth development and the achievement of adolescents' full potential in life. The converse of pro-social behaviour is, not surprisingly, anti-social or delinquent behaviour, which is highly correlated with poor social competence, low academic achievement, and a range of other problems. For many years, much effort has been devoted to developing programmatic interventions to promote the development of social competence and, specifically, pro-social attitudes and skills, among delinquent youth, with mixed results.[198]

4.2.1 Friendship

The issues

The establishment of friendships is fundamental to adolescent development. Having close friends is associated with positive emotional health and social adjustment. "Playing together," "hanging out," and "doing things together" are among the most important features of youth friendship.[199] "Friendships become increasingly important as young people get older, and it has been suggested that

adolescent friendships provide a space in which to develop social and emotional skills."[200] According to the HBSC survey, most adolescent girls and boys in Canada report having at least three close same-sex friendships.[201] Likewise, analysis of NLSCY data shows that among Canadian youth aged 12 to 17 years, 80% of youth aged 12 to 17 years report a high level of connectedness with their peers.[202]

Youth with close friends demonstrate better academic performance, lower rates of criminal involvement, and lower school drop-out rates, compared with those who do not have friends as sources of intimacy and social support. Young people who are not socially well-integrated or who have negative peer influences report that they are less satisfied with their lives, less happy with their home lives, less likely to enjoy school and to feel that they belong at school, and more likely to feel lonely and left out.[203]

Positive relationships with peers, along with parents and teachers, are associated with youths' enjoyment of and feelings of belonging at school. These are, in turn, related to young people's self-esteem, life satisfaction, and overall health. Consistent with a wealth of previous research,[204] the survey confirmed that being socially accepted or rejected by peers can deeply affect an adolescent's self-confidence and sense of self.[205] "There is increasing evidence to suggest that when youth interact with peers who model positive behaviours, these relationships contribute to good outcomes.[206] For example, having friends with good grades and who engage in few risky behaviours is associated with less likelihood of teen pregnancy,"[207] and abstinence from using tobacco, drugs or alcohol.[208]

The facts

- **Social support**

Table 22. Social support, Youth aged 12 – 19 years, Calgary Health Region, 2005[209]		
	Age Group	
	12 – 14 years	**15 – 19 years**
Low social support	F	F
Medium social support	10.3%[E]	8.9%[E]
High social support	76.6%	81.6%
Social support, not stated	12.7%[E]	7.9%[E]

E = Use with caution
F = Too unreliable to be published

- **Sense of belonging to community**

Table 23. Sense of belonging to local community, Youth aged 12 – 19 years, Calgary Health Region, 2005[210]		
	Age Group	
	12 – 14 years	**15 – 19 years**
Very strong or somewhat strong sense of belonging to local community	77.8%	57.4%
Very strong sense of belonging to local community	21.5%[E]	10.8%[E]
Somewhat strong sense of belonging to local community	56.3%	46.6%
Somewhat weak sense of belonging to local community	14.2%[E]	25.0%

E = Use with caution

4.2.2 Civic engagement

The issues

Civic engagement, as manifested by volunteerism and public service; engagement and involvement in community, school, or politics; and participation in extra-curricular activities, can be both a cause and a consequence of pro-social attitudes and behaviours.

Community engagement and feelings of community belonging are facilitated through opportunities for youth to participate outside of school in clubs, sports, music, the arts, fundraising, volunteer activities and other community organizations and activities."[211] Participation in extra-curricular activities and community youth organizations is associated with better self-reported health, higher perceived self-esteem and feelings of control.[212] Canadian youth in low-income families, lone-parent families, and families in which parents have less than high-school education have lower rates of participation in organized activities than their higher-income counterparts.[213]

The opportunity to participate in decision-making and to develop the capacity to influence their environments is itself essential to positive youth development. Participation affords young people the opportunity to develop problem-solving skills and meaningful inter-personal relationships.[214] And, as noted by Checkoway and Richards-Schuster, by allowing young people to participate "in decision-making, they become part of the solution, and democracy and social robustness is strengthened."[215]

According to the Canadian Institute for Health Information, "youth who volunteer are less likely to report using tobacco and marijuana and more likely to report high self-worth and excellent or very good self-rated health. Non-volunteers, on the other hand, report lower levels of anxiety. This finding is in line with current research that shows that while adolescents' participation in physically active leisure, sports and activities increased from the early 1990s to the late 1990s, so did their reported levels of feeling rushed and time-stressed."[216] Some studies have also found that adolescents who become involved in volunteer activities have higher educational plans and aspirations, higher grade point averages, higher academic self-esteem, and higher intrinsic motivation toward school work,[217] and one small study found that youth who participated in volunteer community service projects showed modest but enduring improvements on measures of social responsibility.[218] Research also shows that antecedents of volunteering and civic involvement in late adolescence and early adulthood include high cognitive ability, along with strong interpersonal relationships, family coherence, religious participation, involvement in extra-curricular activities, and membership in a pro-social organization (such as Scouts) in childhood and early adolescence.[219] In addition, studies have shown that adolescents who have role models of service and community connection are more likely to contribute service,[220] and that children and adolescents whose parents are involved in volunteering and youth who are strong in their religious attachments are more likely to be involved in service activities.[221] Finally, the research shows that many young people have an interest in helping others and report a desire to do something about causes that are important to them, but they must be invited and provided with an opportunity to participate.[222]

According to the Canada Survey of Giving and Volunteering, youth are motivated to volunteer to improve their job opportunities (65% of 15 to 19 year olds agreed); to explore their own strengths (65% of 15 to 19 year olds agreed), and because their friends volunteer (54% of 15 to 19 year olds agreed).[223]

It has been suggested that one of the key benefits for youth of volunteering is the ways in which it encourages young people to look beyond themselves. As defined by the Centre of Excellence for Youth Engagement, "engagement" is "the meaningful participation and sustained involvement of a young person in an activity that has a focus outside himself or herself. This can mean participation in almost any kind of activity such as school, music, politics, the arts or community work, so long as the activity is felt to be meaningful, significant and structured (that is, it is performed with a specific purpose in mind)."[224]

The facts

- In 2000, voluntarism was higher among youth in Alberta (82%) than among youth in any other province and in Canada as a whole (73%)."[225]

4.3 Emotional well-being

The issues

Emotional well-being in adolescence is intrinsically tied to positive self-concept, a strong and well-developed sense of identity, sense of belonging, and high levels of moral reasoning and self-regulation.

Self-concept reflects self-esteem and sense of mastery or efficacy, the extent to which one feels in control of important aspects of one's life. Having a positive self-concept in adolescence is associated with happiness,[226] avoidance of risky sexual behaviours,[227] less substance use, fewer experiences with bullying,[228] self-perceived health, involvement in activities, and success in school.[229] In short, positive self-concept is a strong protective factor against a broad range of stressors that often occur in adolescence and beyond, especially among girls. Statistics Canada reports that, according to the National Population Health Survey, a weak self-concept in adolescence tended to put girls at risk of depression, poor self-perceived health and obesity in young adulthood. Also, self-concept appears to be lower among girls in lower-income households.[230] For boys, a weak self-concept was associated with subsequent obesity and becoming inactive. These negative effects, specifically on health behaviour, may persist beyond young adulthood into later life when individuals are more prone to chronic illness. Thus, for both genders, the impact of adolescent self-concept has the potential to be felt well beyond adolescence.[231]

Related to self-concept is sense of identity. In essence, "the development of identity in adolescence can be viewed in terms of the process through which an individual establishes a balance between individual and social identity."[232] "Critical factors in identity formation in teens include preparing for a future career, reevaluating ethical standards, and adopting a set of social roles.[233]

Positive identity in adolescence is defined to include, at minimum, the following components: high self-esteem, a sense of self-efficacy (or personal power to effect change); a sense of purpose; and a positive view of one's personal future (or optimism).[234] Adolescents with a sense of positive identity move forward to integrate this sense of identity with their understanding of society and, consequently, to develop a sense of belonging and feelings of connectedness with the larger culture.[235] A strong sense of identity is associated with positive interpersonal relationships, psychological and behavioural stability, and productive adulthood.[236] Sense of identity is also linked to sense of purpose or meaning in life, which is related to thinking about the future. These inter-related assets are correlated with increased self-esteem, decreased emotional and behavioural problems, and reduced propensity toward violence.[237]

Developing a positive self-concept and sense of identity can be more challenging for immigrant and Aboriginal youth than for other Canadian youth. Discrimination has been identified as a serious obstacle in the process of adjustment and sense of belonging among immigrant and Aboriginal youth. Research shows that perceived discrimination clearly and systematically increases acculturative stress and behavioral symptoms, and decreases self-esteem and life satisfaction.[238] The more discrimination the adolescent perceives, the lower their self-esteem and the more stress experienced. Moreover, perceived discrimination also seems to decrease the degree of the adolescents' identification with their heritage culture (i.e., their ethnic identity).[239] Research suggests that an identity based, in part at least, on the culture of origin may help foster personal resilience: "[M]inority youth do better in school when they feel strongly anchored in the identities of their families, communities and peers, and when they feel supported in pursuing a strategy of selective or additive acculturation."[240]

In addition, some immigrant youth have suffered a range of pre-migration stressors, such as the violence and trauma often experienced by refugees, which can directly their emotional well-being.[241] Additional pre-migration stressors can include disrupted or lack of prior schooling, disrupted family support, long duration at refugee camps, and poor health.[242]

Likewise, some Aboriginal youth have experienced many economic, family, and other stressors which can place them at emotional risk, as manifested by rates of self-injury and suicide which are dramatically higher among Aboriginal youth than among other youth.

The facts

- **Inter-cultural tensions**

Canadian research confirms the experience of ethnically-based bullying and harassment among immigrant and ethnic minority youth in late elementary and early high school.[243] Local research reveals that these problems may be occurring in Calgary. A 2002 report by The City of Calgary that focused on racism among youth in Calgary, found that very few study participants had not seen or personally experienced discrimination and could describe incidents of racial discrimination they have experienced. This report also noted inter-cultural tensions among youth.[244] Similarly, in a 2004 survey of youth in East Calgary, racism was identified as an important issue facing youth by roughly 15% of respondents; while roughly 10% of respondents identified it as an obstacle to participation in activities.[245]

- **Mental health**

Table 24. Self-rated mental health, Youth aged 12-19 years, 2005, Calgary Health Region[246]	
	Age Group
	12 – 19 years
Excellent	36.9%
Very good	42.0%
Good	17.1%
Fair or poor	F

F = Too unreliable to be published

- **Life stress**

Table 25. Life stress, Youth aged 18 - 24 years, Calgary Health Region, 2005[247]	
	Age Group
	18 - 24 years
Life stress, not at all	6.9%[E]
Life stress, some	70.5%
Life stress, quite a lot	22.7%
Life stress, not stated	F

F = Too unreliable to be published

Table 26. Probability of depression, Youth 12-19 years, 2003, Calgary Health Region[248]		
	Age Group	
	12 – 14 years	**15 – 19 years**
Probability of depression, less that 0.9	96.9%	86.3%
Probability of depression, 0.9 or greater	F	11.2%[E]

E = Use with caution
F = Too unreliable to be published

4.4   Cognitive development and learning achievement

The issues

Increasing educational requirements

Literacy and a high school diploma are minimal educational requirements for access to the labour market, and even those young people with a diploma and no post-secondary education face a difficult transition from school to work. It is anticipated that, over the next four to five years, between 60%[249] and 79%[250] of jobs in Alberta will require post-secondary education. In addition, adult and life-long learning have assumed increased importance in recent years, and this is expected to continue indefinitely, contributing to growing demand for post-secondary education among eligible adults of all ages. The demand for highly educated workers in particular will likely continue beyond 2015,

because the age cohort moving to retirement after this time is more educated than previous cohorts of retirees. One implication of these combined demographic and education changes is that post-secondary education participation of younger persons will need to continue to rise, both to continue to meet the demands of an evolving knowledge-based economy, and also to replace a large and educated group of retiring workers.[251]

Opportunities to pursue post-secondary education may be increasingly limited by economic status. Statistics Canada has demonstrated that family income is a major determinant of participation in university education. In 2001, about 40% of 18 to 21-year-olds from the highest-income families in Canada had ever attended university compared to 16% of those from the lowest-income families, although a similar proportion (about 28%) of youth from all income groups attend college.[252] Post-secondary fees have escalated over the past two decades, and are expected to continue to rise, further limiting the ability of lower-income youth to further their education.

Education, skill proficiencies, and earnings

As explained by the Canadian Education Statistics Council, "[e]ducational attainment has a strong impact on earnings. For individuals, the expectation of higher incomes is an incentive to invest in further education. In 2001, mean earnings (before taxes) were 77% higher for university graduates and 15% higher for college or trade graduates than for individuals with high school diplomas. Those who did not complete high school earned 21% less than those who did."[253] Moreover, in 2004, unemployment rates for people with less than high school education were at least double those of university graduates in all provinces except for Ontario, and in half of them, they were more than three times higher.[254]

In addition to lower earnings and rates of employment, youth without post-secondary education face a lifetime of labour market and economic exclusion. Because they are much more likely than educated youth to secure jobs that require little use of skills, and they less likely to be offered opportunities to participate in further education and learning opportunities throughout life, the skills they do have can deteriorate over time.[255]

High school drop out

Among adolescents as a whole, it is clear that dropping out of high school is a process that occurs over time.[256] Analysis of the data from the most recent cycle of Statistics Canada's Youth in Transition Survey reveals a number of factors that are correlated with dropping out of high school by age 17. These include:[257]

- Family circumstances: living with a single parent, living in a low- or modest-income household (the average was $51,000 among dropouts compared to $69,000 among school continuers and graduates); and having parents who had not completed some form of post-secondary education;
- Significantly lower reading proficiency scores and much lower grades (although not necessarily failing grades) at age 15;
- Lower scores on tests measuring self-esteem, self-efficacy, and self-mastery at age 15;
- Lower educational aspirations (although over half of dropouts aspired to college or university), and less confident in their ability to succeed in post-secondary education;
- Less importance placed on the value of education in meeting their career goals, less likely to agree that it is "okay" to work hard at school;

- More likely to have skipped classes, to have been expelled, to have seen the principal for causing trouble at school, to have stayed out late or stayed out all night without parental permission, to have friends who had skipped class, dropped out, or had a reputation for causing trouble;
- More likely to believe that discipline was not handled fairly at their school, that people did not respect one another and were not accepted, and that their school was not a friendly place;
- Less likely to be engaged in school, as measured in terms of academic engagement (for example, the number of hours spent on homework, completion of school assignments, and feelings about the value of education) and social engagement (for example, feelings of belonging, having friends for support, and making friends easily) at age 15;
- Less likely than others to participate in school-based and non-school-based activities, such as sports, arts, drama or music lessons, clubs, and volunteering at the age of 15; and
- Working more than 20 hours per week.

High school drop-out rates are much higher among Aboriginal students and, at least in Calgary, among ESL students. At risk of gross oversimplification, along with social, economic, and family factors, the reasons behind the high drop-out rates among Aboriginal students have been identified to include "large schools, uncaring and untrained teachers, passive teaching methods, inappropriate curriculum and inappropriate testing/student retention, tracked classes, and lack of parent involvement."[258] In addition, the role of direct and institutional discrimination can not be overstated.[259]

Many of these factors also influence ESL drop-out rates although, for ESL students, language barriers are among the key problems. In Alberta, there is a five-year per capita funding cap on ESL instruction. Research shows that it typically takes immigrant children two years to learn functional English and as many as seven years to be literate enough in English to adequately catch up in academic performance.[260] The time required to achieve English language proficiency varies with age at arrival and child's degree of proficiency in his or her mother tongue.[261] To eventually close the achievement gap, they must maintain an accelerated progress rate for several years.[262]

On a positive note, research using data from the NLSCY on the success of immigrant children and youth in the school system shows that, overall, this group performs as well as their Canadian-born counterparts and is equally likely to complete high school.[263] Other research shows that the school performance of the children of immigrants, who may or may not have been born in Canada, generally meets or exceeds that of the children of Canadian-born parents by age 13.[264]

The facts

- Only 71.5% of students in Calgary's public school system graduate from high school within four years of starting grade 10, although additional students do complete high school by their mid-20s.[265]

- Although they are somewhat dated, Calgary statistics reveal high school drop-out rates between 60% and 75% among ESL (not all immigrant) students,[266] as compared with 34% among all students across the province.[267]

- At present, about 18,000 school-aged young people in Calgary were born in countries other than Canada. In 2002, 79% of children aged 11 years and under and 62% of those aged 12 to 17 years spoke neither English nor French.[268]

- In 2005, there were 17,673 English as a Second Language students enrolled in Calgary Board of Education schools alone. Half of these students were born in Canada.[269] This figure represents 18% of all public school students and an approximately 400% increase in ESL enrolment over the past decade.[270]

- Aboriginal youth in Calgary experience lower levels of educational attainment than non-Aboriginal youth, but there have been improvements over time. In 2001, 32% of Aboriginal males (down from 53% in 1981) and 31% of Aboriginal females (down from 41% in 1981) between the ages of 20 and 24 had not completed high school and were not attending school, compared to 16% of non-Aboriginal males and 10% of non-Aboriginal females.[271]

SECTION 5.   IMPLICATIONS

The environmental scan on Calgary's vulnerable youth indicates that a significant proportion of adolescents in the city are subject to risk factors which, collectively, may jeopardize their chances of optimal physical, social, emotional, and cognitive development, and diminish their life chances now and in the future. Many youth have already made the transition to homelessness and involvement in crime and multiple risk behaviours which collectively threaten their own well-being and the health of the broader community.

As discussed in this report, many risk factors occur in clusters. There are few young people who experience only one or two risk factors. For instance, youth are often simultaneously living in lone-parent families, in low-income, in poor housing, and in poor neighbourhoods. Parents who are raising children on their own and who are living on low incomes often face many time, work, and life stresses, which can limit their availability to nurture and supervise their children, and this can, in turn, lead to lower academic achievement and negative peer connections. Low-income youth have fewer opportunities than their higher-income counterparts to participate in constructive activities that build skills, confidence, and positive inter-personal relationships, particularly during the after-school hours when teenagers are most likely to become involved in risky activities and behaviours. In other words, the youth who would most benefit from participation in sports, the arts, and youth development activities are the least likely to become involved.

As a second example, youth who feel disengaged from school or the community due to discrimination, language or cultural barriers, poverty-related isolation, or repeated school failure are at high risk of problems on all dimensions of development. These circumstances and feelings of disengagement and exclusion may be common among Aboriginal youth and some immigrant youth. As the numbers of Aboriginal and immigrant youth rise in the coming years, the problems they both encounter and engender may escalate. We need only look to other Canadian cities, such as Winnipeg, Saskatoon, Montreal, and Toronto, to see how problems can evolve when youth are unable to participate in, contribute to, and benefit from all that their cities have to offer.

Broader social and economic trends suggest that the number of vulnerable youth in Calgary may increase over the next decade and, possibly, beyond. Although child and youth poverty rates may have declined slightly from 2003 to 2004, it is clear that families with children are increasingly encountering difficulties in meeting basic needs in the areas of housing, food, and other necessities. Moreover, a growing schism is emerging between high-skill, well-paid jobs and low-skill, poorly-paid, precarious jobs which, in conjunction with other trends, suggests increasing income disparity and, for many, decreasing income security, over time. These changes may increase the depth of poverty experienced by some lower-income segments of society, including young people who live in lone-parent households and lack post-secondary education, resulting in widespread social exclusion among a growing proportion of Calgary youth. Such problems may be compounded by population growth and changing demography.

However, this gloomy scenario is not inevitable. There are no shortages of ways in which the challenges encountered by youth who fall within the vulnerability spectrum can be prevented or corrected through policy changes and comprehensive programming. The cost of such programs would be more than offset by the multitude of longer-term benefits to both vulnerable youth and Calgarians as a whole.

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