

AN URBAN ABORIGINAL LIFE

The 2005 Indicators Report on the Quality of Life of Aboriginal People in the Greater Vancouver Region

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An Urban Aboriginal Life:

The 2005 Indicators Report on the Quality of Life
Of Aboriginal People in the Greater Vancouver Area

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Executive Summary

While the majority of Canadians enjoy one of the highest levels of quality of life in the world, the situation is radically different for its Aboriginal population.

In order to document the social, economic, and environmental conditions of Aboriginal people living in the Greater Vancouver Regional District (GVRD), a series of indicators relevant to the Aboriginal community were developed and evaluated. While there is a significant trend in the migration of Aboriginal people to urban areas, with over 57% of all Aboriginal people now living in urban areas (Statistics Canada, 2001 Census), there is a paucity of information available regarding this segment of the Aboriginal population. This report attempts to counteract this gap in analysis by providing a comprehensive assessment of the quality of life of the Greater Vancouver's urban Aboriginal population. This report:

- documents the present social, economic, and environmental condition of Aboriginal people living in the GVRD;
- acts as a benchmark for future studies;
- highlight gaps in data; and
- provides recommendations regarding future data gathering, research, and policy developments.

A suite of indicators were chosen to provide a comprehensive snapshot of the present social, economic, and environmental conditions of Aboriginal people living in the GVRD, as well as highlighting gaps in available data and providing recommendations for future research and policy development. The medicine wheel, a holistic expression of the Aboriginal worldview, was used as a framework to determine categories and indicators for each of the 4 traditional directions: north, south, east, and west. At the core of the framework are both the elements and goals of a sustainable city: healthy people (society), healthy nation (economy), and healthy land (environment). Categories and indicators were selected based on advice from discussions with Aboriginal community members and professionals, as well as a comprehensive literature review. The scope of the report is limited to the Aboriginal (First Nation, Metis, and Inuit) population within the jurisdictional boundaries of the GVRD. In total, 33 different indicators were selected in 12 different categories in the 4 traditional directions.

Data was gathered and standardized as much as possible for each indicator to allow comparisons on various levels:

- comparisons over time,
- comparisons between the Aboriginal and non-Aboriginal populations in the GVRD, and
- comparisons between the Aboriginal population in the GVRD, and the total Aboriginal population of BC.

Indicators were analyzed and rated according to one of four categories: strong, improving/fair, deteriorating/weak, or poor.

In summary, indicators revealed poor social conditions among the Aboriginal community in the GVRD, with significant disparities between the Aboriginal and non-Aboriginal population. Health conditions for Aboriginal people lagged behind the non-Aboriginal community. Cultural activities and languages were weak or deteriorating, and conditions for the Aboriginal family were also weak. Incarceration rates for Aboriginal people revealed discouraging levels of overrepresentation of Aboriginal offenders. However, such dark clouds have a silver lining: education rates are improving in the region, and there are positive signs of language rejuvenation among Aboriginal children.

Economic conditions revealed present levels of inequality between the Aboriginal and non-Aboriginal population in the GVRD, but showed signs of improvement. While employment rates were weak, there were positive developments in the proportion of Aboriginal people holding management-level positions and in self-employment. There was also a noticeable improvement in the level of youth involvement in the local economy. Education proved to be an important factor in economic involvement, with the employment rate of Aboriginal people with at least a high school diploma to be almost equal to that of their non-Aboriginal peers.

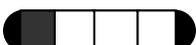
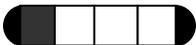
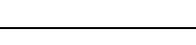
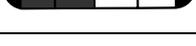
In contrast, present environmental conditions proved to be stable, but with signs of significant deterioration in the near future. The amount of green space and protected areas were fair for an urban area, but there is concern because of pressure placed on these areas by a growing population. Forecasting of air emissions shows that emission levels of greenhouse gases will increase well above the targets set by the Kyoto Accord. Similarly, there were causes of concern regarding our interior environment; Aboriginal people are significantly overrepresented among the region's homeless, and the rate of Aboriginal households requiring major repairs is one of the worst for large cities in Canada.

There were significant data gaps for various indicators. For many of the statistics, especially vital statistics, data was available for only one segment of the Aboriginal population (e.g. Status Indians); conversely, data was also aggregated to provide a general statistic for all Aboriginal people, and did not differentiate between the various Aboriginal groups. There were also issues regarding differing spatial coverage and a subsequent lack of regionally-specific data, as well as issues regarding a lack of past data. In addition, there was often a general lack of data on issues important for Aboriginal people, such as diabetes rates.

Key recommendations

- Improve the gathering of vital statistics data regarding Aboriginal people to include all Aboriginal people, not just Status Indians. Lack of information regarding other portions of the Aboriginal population inhibits a full picture of the condition of health in the Aboriginal community from appearing.
- Available data should be disaggregated into the various Aboriginal groups (i.e. First Nation, Metis, and Inuit) to highlight trends and conditions regarding these equally important Aboriginal groups.
- Conduct further research into what constitutes a “traditional” activity.
- Undertake further research regarding both diabetes and cancer rates in the urban Aboriginal community. Rates for both diseases have significantly increased over the past 50 years, and urban Aboriginal populations may be influenced by characteristics that are unique compared to the rural population.
- A comprehensive study regarding Aboriginal involvement in the local urban economy is needed to examine the changing level of involvement, especially among youth.
- Develop a comprehensive approach to documenting homelessness in the Aboriginal community. Periodic 24-hour counts, while extremely useful, only provide a glimpse of the issue.
- Policy needs to be developed which targets the basic socioeconomic conditions of urban Aboriginal people in the region. Issues of cultural loss, housing and homelessness, education, and employment are key to improving many of the issues affecting Aboriginal people, such as health, crime and safety, and even salmon escapement.

Summary of Indicators and their ratings

Direction	Category	Indicator	Rationale	Rating
East (Cultural)	Culture and Family	Percentage of Aboriginal people in the GVRD speaking traditional languages	Traditional languages and culture are inseparable; protecting languages helps to protect cultural heritage	DETERIORATING 
		Percentage of Aboriginal people in the GVRD participating in traditional activities	Represent ceremonial and spiritually significant pursuits of Aboriginal people. Trad. activities help sustain a connection to and knowledge of the Land	WEAK 
		Percentage of Aboriginal children in care in the GVRD	Issue of child care is significant in the Aboriginal community, and children in care are overrepresented	WEAK 
		Percentage of Aboriginal lone parents in the GVRD	May indicate a deterioration or improvement in the social cohesion of the Aboriginal community, or that a portion of Aboriginal people may require additional government and community supports	WEAK 
		Childcare access for Aboriginal families in the GVRD	Access to employment and education are contingent on getting quality childcare	FAIR 
South (Social)	Health	Aboriginal Infant mortality rate for regions in the GVRD	It is one of the most common indicators used. Infant mortality has a terrific impact on families, and speaks to the social conditions and overall health of a community	WEAK 
		Aboriginal life expectancy for regions in the GVRD	Another common indicator that is a good reflection of the overall health of people in a community, which is affected by its social conditions	POOR 
		Rate of diabetes among Aboriginal people in the GVRD	Diabetes is a huge concern among the entire Aboriginal population, and has repercussions for individuals and the community	POOR 
		Rate of cancer among Aboriginal people in the GVRD	Similar to diabetes, cancer is a growing concern in the Aboriginal community	DETERIORATING 
		Rate of HIV/AIDS among Aboriginal people in the GVRD	HIV/AIDS is one of the most devastating modern diseases, and is a concern among Aboriginal people	POOR 
	Education	High school graduation rates for Aboriginal people in the GVRD	Education is vital to improve the social and economic status of the Aboriginal community	IMPROVING 
		Number of Aboriginal people in the GVRD graduating from regional post-secondary programs	Aboriginal people graduating from post-secondary represents capacity building among the Aboriginal community	FAIR 
		Percentage of Aboriginal students in special needs/alternative programs	A child may demonstrate behaviour or learning problems in response to unsettling situations	DETERIORATING 
	Crime and Safety	Incarceration rates of Aboriginal people in the GVRD	Aboriginal people have historically been over represented in the judicial system; it is important to document this trend, and speaks to the overall justice of Aboriginal people	WEAK 
		Rates of violent crime committed by and on Aboriginal people in the GVRD	Violent crime provides and indication both to the safety of Aboriginal people, and the social and economic conditions of the community	POOR 

Direction	Category	Indicator	Rationale	Analysis
West (Economic)	Employment	Employment rates among Aboriginal people in the GVRD	Employment and unemployment levels act as an indicator of the general Aboriginal involvement in the local economy	WEAK 
		Percentage of the Aboriginal workforce with management positions in the GVRD	Similar to full-time positions, management-level positions provide an indication of the meaningful involvement of Aboriginal people in the local economy	IMPROVING 
	Income	Percentage of the Aboriginal people in the GVRD living below the poverty line	Poverty makes people particularly vulnerable to poor housing, disability, violence and lack of privacy.	DETERIORATING 
		Average household incomes and shelter cost-to-income ratios of Aboriginal households in the GVRD	Shelter cost-to-income ratios (STIR) measures can help to define what is a good living wage in a particular region.	IMPROVING 
		Social assistance rates for Aboriginal people in the GVRD	Reductions in social assistance rates among Aboriginal people in the GVRD might represent a decrease in financial dependence. However, provincial Liberal cuts to social assistance programs might mean that social assistance rates have decreased due to insufficient levels of social supports for financially vulnerable Aboriginal households.	FAIR 
	Entrepreneurship	Percentage of the Aboriginal workforce that is self-employed in the GVRD	Indicates to what extent Aboriginal people are involved in business management and their economic future	IMPROVING 
	Youth	Unemployment rates and level of income for Aboriginal youth in the GVRD	Youth are often left out of the economic picture. This indicator highlights the involvement of Aboriginal youth in the local economy	FAIR 

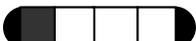
Direction	Category	Indicator	Rationale	Analysis
North (Environment)	Resources & Land	Amount of green space in the GVRD	Green space is an indicator both of urban environmental health and individual health; it is also important from a spiritual standpoint	FAIR 
		Amount of protected areas in the GVRD	Protected areas are important for the long-term survival of biodiversity, as well as our future generations	FAIR 
		Aboriginal salmon harvest in the lower Fraser River	Acts as an indicator of Aboriginal access to resources	DETERIORATING 
	Air	Air quality for certain pollutants in the GVRD	Air pollutants are linked to many chronic illnesses, and act as an indicator of overall air quality	FAIR 
		Air emissions for certain pollutants in the GVRD	Speaks to the amount of pollutants from our region, and to smog and climate change. Highlights potential impacts of future air quality	DETERIORATING 
	Rivers & Oceans	Water quality for certain water bodies in the GVRD	Clean water is important both for the health of the environment, and the health of all people	WEAK 
		Number of water bodies in the GVRD recording salmon escapement	Salmon are a traditional source of food and culture, and levels of salmon escapement is also an indication of the health of local rivers and water bodies	UNKNOWN 
	Homes	Percentage of Aboriginal households in the GVRD in housing units requiring major repairs	How suitably Aboriginal people are housed in the GVRD depends greatly on whether their accommodations are healthful and well maintained	WEAK 
		Average number of persons per room in Aboriginal households in the GVRD	A healthy home is part of a healthy environment. Overcrowding can impair a families' health, and social and economic status	FAIR 
		Number of Aboriginal low-income housing units in the GVRD	Access to social housing is an important aspect of ensuring that Aboriginal households are able to live in quality housing that is affordable, suitable, and adequate	DETERIORATING 
		Number of Aboriginal homeless people in the GVRD	Aboriginal people – particularly those with a history of abuse and family breakdown, and people with disabilities or addictions – are particularly at risk of homelessness. The magnitude of Aboriginal homelessness needs to be closely monitored	POOR 

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1. Introduction

While Canada may rank among the top ten countries in the world in terms of the quality of life of its citizens, the situation is drastically different for Aboriginal people living in Canada. In 2003, Canada ranked 8th on the United Nations Human Development Index – a standardized index of the quality of life for a country's citizens – this ranking would drop to 48th if it were recalculated solely for Canada's Status Indian population (Commission on Human Rights 2004). While there are differences between various groups, all Aboriginal people – be they First Nation, Metis, or Inuit – are all likewise afflicted by generally poorer socioeconomic conditions than the general Canadian public.

A bevy of documented and anecdotal evidence points to lower life expectancy, higher rates of disease, poor drinking water quality, and lower graduation rates among Aboriginal people in Canada. This reality runs contradictory to the general international image of the North American Indian, a stoic, wizened old man, replete with his feathered headdress. And the traditional image of the Native home is also changing. No longer is it the tee pee, longhouse, or even reserve. There is a rapid change occurring among the urban/rural Aboriginal dynamic. 57% of all Aboriginal people in Canada now live off reserve (Statistics Canada 2005a), and 28% live in major metropolitan areas like Vancouver (Siggner and Costa 2005). Even in light of these trends, the general image of the wise, On Reserve Indian still exists, while the urban Aboriginal Indian continues to suffer chronic levels of unemployment, homelessness, and health complications.

At the root of this unawareness of urban Aboriginal issues is the federal government's fiduciary obligation towards Aboriginal people in Canada. In light of jurisdictional issues, lower levels of government often wait for federal intervention, rather than working to alleviate poor conditions. In the meanwhile, all levels of government (federal, provincial, and municipal) continue to focus much of their efforts on Land Claims and Treaty negotiations. While critically important issues, such a strong focus allows the social, economic, and environmental issues affecting the complex mix of urban Aboriginal people – Status and non-Status First Nations, Metis, and Inuit – to fall through the cracks. Such a focus on Status Indians and

Land Claims issues has also meant that little emphasis has been placed on the research, and consequently, understanding of urban Aboriginal issues. And in order to progress towards a more sustainable future, it is important to know where and how improvements in various aspects of quality of life have been achieved and where gaps continue to exist. There is a current lack of methods or policies which provide a comprehensive assessment of the condition of urban Aboriginal people in Canada. An organized, comprehensive approach is needed in order to monitor the conditions of urban Aboriginal societies and communities.

In all societies, and at all levels, it is important to measure and monitor the economic, social, and environmental conditions of their inhabitants in order to determine their current condition. Highlighting the present health of a society's inhabitants assists in providing direction for future policy and research in order to manage, maintain and improve their quality of life and highlight gaps that need to be addressed. Because it is extremely difficult, if not impossible, to measure the systems of our society, economy, and environment in their entirety, we measure *indicators*, single aspects or characteristics that act as indexes representative of the larger social, economic, or environmental system and are responsive to change in proportion to change in the larger system. Indicators themselves are often critiqued because, for analytical purposes, they fragment out in abstract ways the integrated and interrelated lived experiences. Yet, this fault can be partially overcome by analyzing the indicator in light of a comprehensive set of holistic and linking indicators. Indicators allow us to see the larger picture by only measuring a small part of it, and "help to simplify a complex array of information... [and] provide a "synthesis" view of existing conditions and trends" (Schirnding 2002, p.59). Indicators are "tools that provide some insight on certain trends and help identify areas where progress is being made or where more change is required; they are not decisive measurements or tools in and of themselves" (FBC 2003, p.3). They are "indexes of... conditions and changes therein over time for various segments of a population" (Land 1983, p.6). It is assumed that indicators generally reflect major societal concerns.

Indicators can act as indexes of the social, economic, and environmental conditions and progress in a region; in this respect, an indicator's purpose is towards "public enlightenment and the formation of general as opposed to operational policy" (Land 1983, p.1). Such indicators improve our understanding of the main features of a region and/or population's society, economy, and environment. Because they act as an index of present conditions, indicators can help gauge the success or failure of various management regimes and policies (Lane 1989; Carley 1981). Subsequently, information gathered from indicators can influence and inform future planning, policy, and research (UNESCO 1984). A series of indicators that focus on the status of urban Aboriginals will not only highlight the condition of urban Aboriginal people, but also raise the level of public consciousness of Aboriginal people. Public awareness of urban conditions faced by Aboriginal people is low; Ponting (2000) noted a general decline in the awareness of Aboriginal conditions between 1976 and 1998. A system of aboriginal indicators developed for the Greater Vancouver area will help to (FBC 2000; Vancouver/Richmond Health Board 1999; Shulman and Bond 1978):

- monitor the present social, economic, and environmental conditions of Aboriginal people;
- increase public awareness about the condition of Aboriginal people;
- inform and influence regional, provincial, and federal policy development and management;
- improve Aboriginal involvement in the decision-making process; and
- identify gaps in information and future research priorities.

The importance of indicators in monitoring the condition of Aboriginal people in Canada has been acknowledged by Indian and Northern Affairs Canada (DIPSC 1991), especially in recent work regarding the Human Development Index for Registered Indians (Cooke et al. 2004).

Indicators can monitor changes in conditions over time, but may need to be modified or even replaced in order to reflect current needs and conditions. Indicators can provide a temporal legacy by evaluating conditions over time, and highlighting trends and progress towards goals or objectives. However, it is likely that the indicators themselves, and the methods used to measure them, will change over time, as our understanding of the indicators improves, and as the needs and conditions of the Aboriginal society change over time (Land 1983; Sheldon 1971). New indicators may need to be created while older ones will be abandoned or downgraded. Indicators need to be contemporary in order to remain relevant and useful; hence, indicators should evolve as the Aboriginal community evolves.

1.1. The importance of Aboriginal and urban indicators

Since the arrival of non-Aboriginal people to North America, many of the traditional Aboriginal political, economic, and cultural systems have been degraded and oppressed to the point where many are in danger of being lost (RCAP 1996). In order to revitalize Aboriginal culture and society, contemporary systems must return a sense of ownership and represent the values of Aboriginal peoples. Modern-day systems, and the indicators used to measure these systems, reflect the norms of an industrial society, and do not reflect the values and conditions of Aboriginal peoples (Gadacz 1991). The contemporary industrialized system often denies the space for Aboriginal peoples' unique and creative articulations regarding labour, work, land-based economies, and traditional/modern cultural systems. Indicators created without the input of Aboriginal peoples are often culturally biased, and are limited in providing information regarding social, economic, and environmental aspects of Aboriginal communities (Nazarea et al. 1998; Gadacz 1991). Therefore, indicators need to be culturally and community relevant, and responsive to local communities (Nazarea et al. 1998). Hence, regional indicators need to incorporate Aboriginal perspectives and needs. Such community-driven indicators need to be responsive in order to respect, recognize, and support the diversity that exists within communities. Externally superimposed indicator frameworks will be of little utility.

In the greater Vancouver area, it is important that indicators be responsive to not only Aboriginal people but also urban characteristics. Aboriginal people are rapidly forming an increasingly greater proportion of urban communities (Graham and Peters 2002; Newhouse and Peters 2003). Approximately half of all Aboriginal people in Canada live in urban areas (Statistics Canada 2005a). Furthermore, 28% of all Aboriginal people lived in large metropolitan areas (Census Metropolitan Areas) (Siggner and Costa 2005). The conditions experienced in an urban context are significantly different than those on Reserve (LaPrairie 1995); therefore, indicators identified to examine the condition of Aboriginal people in the Vancouver region must also respect the diversity of the urban community. It is important to develop urban-focused indicators that can provide basic information about the conditions in urban areas, and identify those characteristics of an urban society that are both beneficial and problematic for Aboriginal people (Shulman and Bond 1978).

An Aboriginal indicator system was developed by the Centre for Native Policy and Research (CNPR) and Emilie Adin of Adin Research & Planning which could document the social, economic, and environmental conditions of Aboriginal people in the Vancouver region. There are currently no sources that gather a comprehensive suite of information on urban Aboriginal people in Vancouver. Such a system is designed to provide a comprehensive snapshot of the contemporary condition of Aboriginal people, which can be used by researchers, governments, academics, Aboriginal service providers, and the Aboriginal community to inform future policy and research. Through their analysis, this suite of indicators will not only highlight areas of significant concern as well as areas of strength, but will also emphasize existing data gaps, provide recommendations regarding further research, and provide recommendations regarding policy development.

This report is intended to:

- provide a snapshot of the present social, economic, and environmental condition of Aboriginal people living in the greater Vancouver region;
- act as a benchmark for future studies and indicator reports;
- highlight gaps in available information; and
- provide recommendations regarding future research and policy development to improve and enhance the present condition of present and future Aboriginal people living in the greater Vancouver region.

1.2 Snapshot: Greater Vancouver's urban Aboriginal population

The Aboriginal population in Vancouver is significantly large, growing, and relatively young. Over 36,000 Aboriginal people lived in the Greater Vancouver Regional District (GVRD) in 2001, accounting for over 20% of all Aboriginal people in BC. This represents an 18% increase in the Aboriginal population in the GVRD since 1996, compared to a 5% increase in the non-Aboriginal population over the same time. However, it is likely that a portion of this reported increase in population growth can be attributed to a growing awareness of Aboriginal identity, in addition to an increase in actual growth rates (Statistics Canada 2005c). The high level of growth of the Aboriginal population cannot be completely explained by “the usual demographic factors, namely fertility, mortality, and new migration” (Siggner and Costa 2005, p.11); other legislative and social factors, such as Bill C31 which returned Aboriginal status to Indian women who had lost their status after marrying a man without legal Indian Status, underlie the Aboriginal population growth rate. Of the national 22% increase in Aboriginal Identity between 1996 and 2001, 10% is attributed to natural increase, and 12% to a change in how people described themselves (Siggner and Costa 2005). However, even after accounting for this change in identity, the Aboriginal population in Vancouver is likely increasing at twice the rate of the non-Aboriginal population.

The population of Canada's Aboriginal Peoples is projected to continue its fast growth well into the future. By 2017, Aboriginal people will make up 4.1% of Canada's population, up from 3.4% in 2001, with an average annual rate of increase almost triple the rate projected for the total population of Canada (Statistics Canada 2005c). The average age of the Aboriginal population is expected to increase as well, from 24.7 years in 2001 to 27.8 in 2017 (Stats Can 2005c). Although there will be significant increases in both the urban and rural Aboriginal populations, it is likely that On Reserve populations will experience a greater increase. The proportion of the Aboriginal population living in urban areas is expected to decrease from 48% in 2001 to 44% in 2017, while the proportion of Aboriginal people living On Reserve is expected to increase from 33% to 40%, mainly due to migration of First Nations and Inuit from rural to On Reserve areas (Stats Can 2005c).

In Vancouver, this growing Aboriginal population has both a significant regional and generational distribution. In 2001, 36,855 Aboriginal people lived in the GVRD, making up approximately 1.85% of the total population of the region. The City of Vancouver has the largest population of Aboriginal people in the GVRD, followed by Surrey and then Burnaby. Over one-third of the Aboriginal people living in Vancouver live in or near the Downtown East Side. Besides being concentrated regionally, the Aboriginal population is heavily weighted towards the youth, with a substantial increase in the number of Aboriginal youth in urban areas: “the absolute numbers of Aboriginal children have increased several fold in most CMAs [census metropolitan areas]” (Siggner and Costa 2005, p.16). The majority of the regional Aboriginal population is young; over 40% are under the age of 25, and 25% are under the age of 15 (Statistics Canada 2005a). These proportions are similar to those at the national level, where 50.5% of all Aboriginal people in Canada in 2001 were under the age of 25 (Siggner and Costa 2005). This growth in the number of children serves as an important consideration in the planning and coordination of services for Aboriginal youth in urban areas.

There are a number of First Nations in the region whose traditional territories make up what is now known as the GVRD. There are 10 different First Nations groups in the area which occupy 22 different reserves within the GVRD, the largest groups being Squamish, Musqueam, and Tsleil-Waututh. Roughly two-thirds of the Aboriginal people in the region are First Nations, and the majority of the rest are Metis. But compared to the overall number of Aboriginal people that live in the GVRD, only a small portion live on reserve. Of the 36,000 Aboriginal people living in the GVRD, only 5% live on Indian Reserves. There are approximately 22,000 First Nations people living in the GVRD, only 17,000 of whom are registered Indians, implying that there are approximately 5,000 without any status.

The following section outlines the methodology used to develop the Aboriginal indicator system.

2. Methods

Developing a fully-functional set of responsive indicators that are supported by the community is a complex and ongoing task. Indicators need to be reviewed and their data updated regularly in order to document progress, as well as be responsive to changes within the Aboriginal community over time. Broad categories that are relevant to and valued by the Aboriginal community need to be identified. Indicators need to be developed which will measure progress in these categories. In order to ensure that these indicators are both useful to and supported by the Aboriginal community, they need to be validated by the communities. There are four main stages in creating a system of indicators which will represent the concerns and values of the Aboriginal community in a responsible and community-based approach:

1. Define the scope of the research. Determine which populations and communities will be the focus of the research in order to define the extent of data collection, and ultimately the relevancy of the indicator system.
2. Identify and generate a set of Aboriginal value-based categories and related indicators that provide a holistic picture of the social, economic, and environmental conditions of Aboriginal peoples. These indicators will provide information on the relative health of Aboriginal communities defined in the scoping section.
3. Evaluate each indicator by gathering and analyzing relevant data to provide a conclusion regarding their condition. Report the findings in a rough draft describing the indicators and the results.
4. Validate indicators through discussions with the community. In order to ensure that these indicators are relevant and important to the community and accurately reflect their values, there needs to be community input and advice regarding the indicator system.

2.1. Scope of indicators

In order to highlight the existing conditions, needs, and gaps in research and services that exist for urban Aboriginal communities, and given the paucity of information regarding the urban Aboriginal community, the scope of the indicators will be limited to the Greater Vancouver Regional District (GVRD) (see Figure 1). The GVRD is made up of over 20 municipalities and 10 Indian reserves (see Table 1). According to Statistics Canada's 2001 Census, roughly one-fifth of all Aboriginal people in BC live in the GVRD, and approximately half of the Aboriginal people living in the GVRD are Status Indian. Hence, the area is very important to the overall Aboriginal population of BC, and serves as a case study for other large, urban Canadian

Figure 1. Map of the boundaries and communities of the GVRD



centres.

The term “community” is often a nebulous term and is difficult to define. The boundaries of a community, and the groups identified that make up a community often depend upon the perspectives of the very groups themselves. For this study, the community is defined geographically as those municipalities contained within the GVRD. All Aboriginal people – First Nation (both Status and non-Status), Metis, and Inuit – that live within the study area are included. In addition, specific groups within the Aboriginal community, such as women or youth, are highlighted for certain indicators when identified as important by the community or by important trends in the data. It is hoped that as this report is developed over the coming years that such focus groups will be further defined by the Aboriginal community itself through future discussions.

The intent of the Aboriginal indicator system is to go beyond an index of conditions within the Greater Vancouver area to allow comparisons within this area. Where possible, indicators are further refined to highlight individual communities within the GVRD, such as the city of Vancouver. However, such refinement depends on the availability of data. Furthermore, issues of overlapping jurisdictions and different spatial regions of analysis, and a lack of disaggregated data may make comparisons between various communities within the region difficult for certain indicators. Because of such issues, data for some indicators exists only at the broader level of the entire GVRD, while other indicators provide data at a community level. Such “deficiencies and gaps in coverage are as important as the indicators themselves” (Shulman and Bond 1978), since highlighting gaps in information will promote the development of more appropriate indicators for later reports and spur research and data collection among other organizations and various levels of government.

Table 1. Municipalities and Indian Reserves in the GVRD

Municipalities				
Anmore	Delta	New Westminster	Port Coquitlam	Vancouver
Belcarra	Langley (City)	North Vancouver (City)	Port Moody	West Vancouver
Bowen Island	Langley (Township)	North Vancouver (District)	Richmond	White Rock
Burnaby	Lions Bay	Pitt Meadows	Surrey	Electoral Area “A”
Coquitlam	Maple Ridge			
Indian Reserves				
Barnston Island 3	Capilano 5	Matsqui 4	Musqueam 2	Seymour Creek 2
Burrard Inlet 3	Katzie 1	McMillan Island 6	Semiahmoo	Tsawwassen

Source: GVRD. 2003d. A profile of Aboriginal people, First Nations, and Indian Reserves in Greater Vancouver

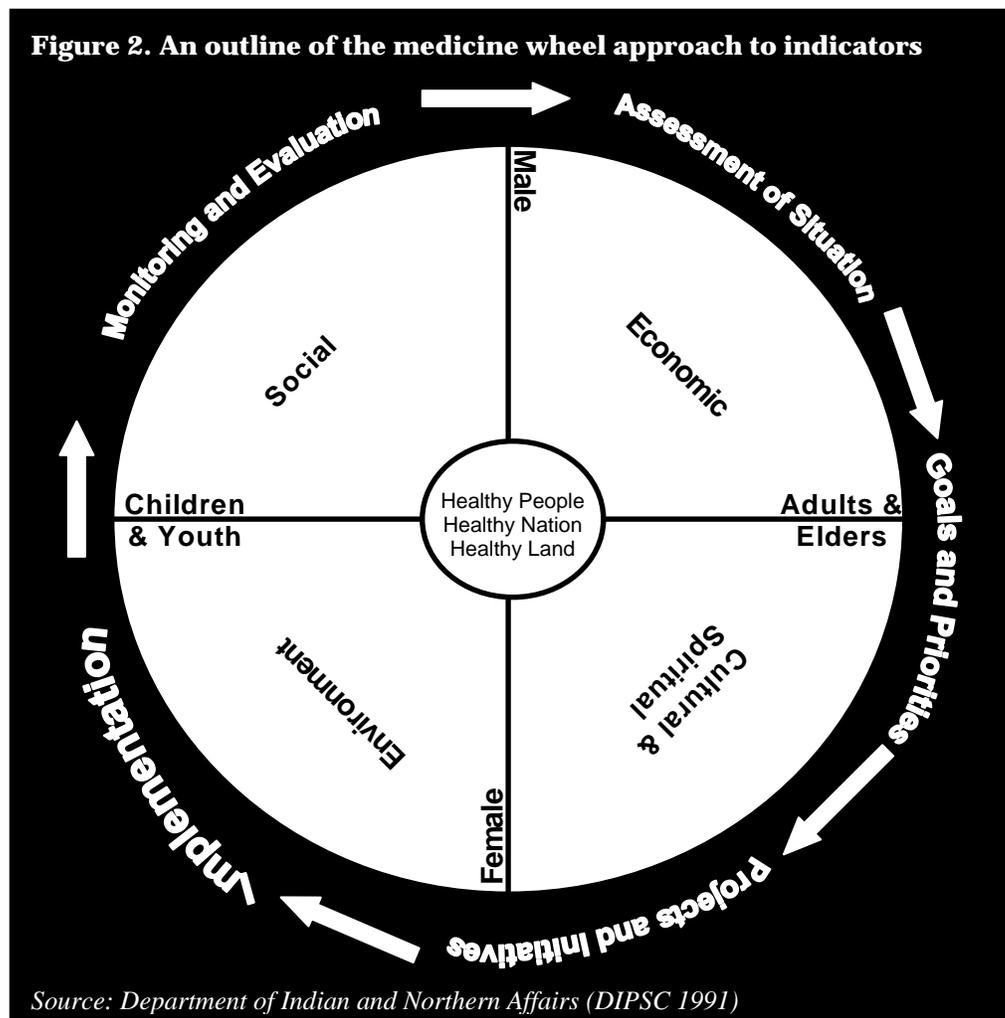
2.2. Identify and generate a list of Aboriginal indicators

One method of developing an indicator system is using the “goal-to-indicator” system (UNESCO 1984; Carley 1981), whereby general community goals and objectives are identified, refined to more specific categories or objectives, and then eventually indicators are developed for each objective. Therefore, the first step to developing a suite of indicators is to identify certain aspects of social, environmental, and economic conditions that are relevant to Aboriginal people in the GVRD – the aspect that an indicator is designed to measure. This general approach was adapted to develop a series of categories and indicators relevant for the Aboriginal community in Vancouver. In addition, the approach was modified to incorporate traditional Aboriginal beliefs, teachings, and concepts into a framework which could identify categories and indicators relevant to the local Aboriginal community.

The medicine wheel, a holistic expression of the Aboriginal worldview, was used as a framework to identify those categories important to Aboriginal people (see Figure 2). Such an approach utilizes a traditional holistic Aboriginal view and hence incorporates traditional Aboriginal beliefs. The medicine wheel is an important Aboriginal tool for teaching and learning, and encompasses the holistic aspects

and relationships critical to overcome the traditional “fragmenting” of conventional indicators. The traditional medicine wheel identifies four elements and directions of personal and community life: mental/political (North), spiritual/cultural (East), emotional/social (South), and physical/economic (West). It incorporates elements of traditional Aboriginal thought important for creating indicators that are culturally relevant. Subsequently, this model was used to identify indicators. The medicine wheel framework used for developing urban Aboriginal indicators is adapted from the development indicators project conducted through the Department of Indian and Northern Affairs Canada (DIPSC 1991).

At the center of the medicine wheel framework are both the ultimate goals and the foundations of a healthy, respectful, and sustainable community, and form the basis for the modern-day concept of sustainability: healthy people (society), healthy nation (economy), and healthy land (environment). Surrounding the core foundations are the four elements that support it. Our framework identifies three of the same elements as the traditional medicine wheel (spiritual/cultural, emotional/social, and physical/economic), but replaces the mental/political (North) element with the environment element. The northern direction represents a place of wisdom, and the surrounding environment, which also includes our immediate environment (the home), is a source of wisdom.



Each element is bordered by other elements which both support and strain concepts and ideas central to each element, thereby creating a flowing, holistic process. Only with the proper balance of these four elements can the centre goal be achieved. The four elements are crosscut by various segments of Aboriginal society which influence, and are in turn influenced by each of the elements. These four segments represent different groups and viewpoints in Aboriginal society: male, female, children & youth, and adults & elders. Each of these four segments is critical to forming the context for measuring the overall well-being of the Aboriginal community.

Surrounding the medicine wheel is a development planning process, designed to guide the development and maintenance of the framework and its subsequent categories and indicators. There are five different planning stages:

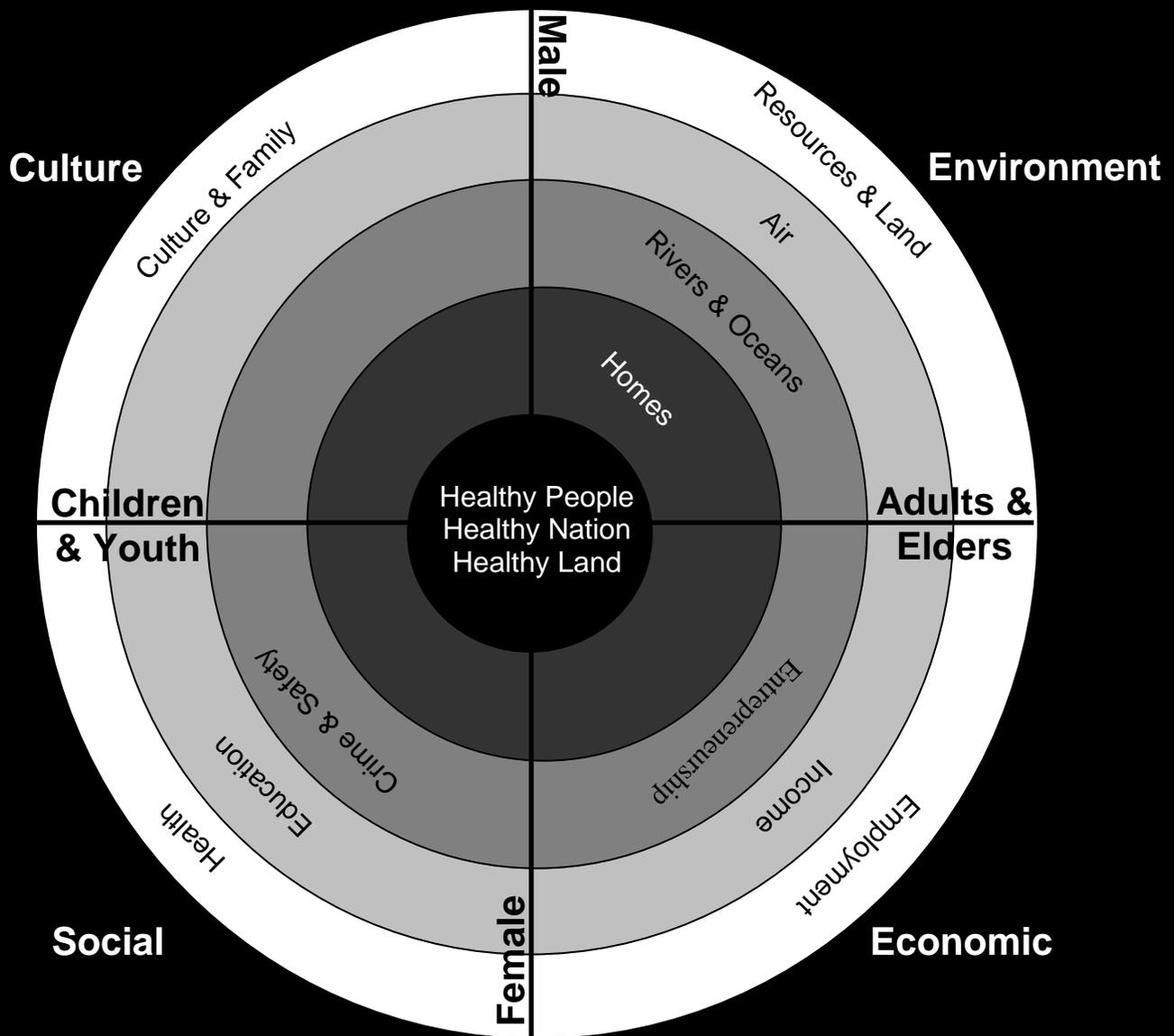
- Goals and priorities;
- Projects and initiatives;
- Implementation;

- Monitoring and evaluation; and
- Assessment of situation.

The planning process is cyclical, and each stage of the process influences and informs the next, allowing for the framework to be continually evaluated and updated over time. The subsequent categories and their representative indicators create layers within each element which complete the framework. As the world changes, the framework can expand and adapt, adding, changing, or deleting new categories and/or indicators as the perspectives of the Aboriginal community shift over time.

To develop a series of indicators relevant to Aboriginal peoples, the CNPR worked with Adin Research & Planning to highlight areas of concern important to the Aboriginal community. Through personal knowledge and experience, a basic literature review, and discussions with members of the local Aboriginal community, a series of categories were developed which reflected those issues and values important to the urban Aboriginal community in Vancouver. Once these categories were determined, lists of draft indicators were developed for each category and incorporated into the medicine wheel framework (see Figure 3). Indicators were then selected for each of these categories. Indicators were chosen to

Figure 3. Medicine wheel figures with proposed categories



both reflect the overall category (e.g. infant mortality rate for Health) and highlight those issues considered important by Aboriginal people (e.g. diabetes). Similar to the categories, indicators were also identified through personal knowledge and experience, a comprehensive literature review, and discussions with community members.

A number of other concepts also guided the identification and selection of appropriate indicators. It is important that all chosen indicators be relevant to the Aboriginal community in the Greater Vancouver region. Relatedly, indicators should be easily understood by a wide audience, including non-technical audiences (FBC 2000). In addition, indicators should be capable of highlighting trends over time, thereby being able to measure changes in Aboriginal society over time. Indicators also need to be credible and defensible, supported by valid, reliable data. Indicators should use common measurements to allow for comparisons among communities with the region.

2.3. Evaluate indicators

Once the framework and subsequent indicators and categories had been identified, data for each indicator needed to be gathered and analyzed in order to evaluate its status. However, an indicator is only as accurate as the data used to measure it. An indicator is affected by the methods used to gather the data and the methods used to compile and analyze it. For certain indicators, data may be unavailable for certain regions, or administrative boundaries may be different than the ones used for this report, or prevent comparison with information from other jurisdictions or indicators. Still, indicators still need to be analyzed to provide useful information. When gathering data, we tried to ensure that the most up-to-date and exact data sources were used and referenced in order to provide the most accurate portrayal of the condition of each indicator.

To evaluate the indicators, available data was gathered and subsequently for each indicator by utilizing various sources of information. Sources of data included various government ministries databases and reports, information from various non-governmental organizations, as well as provincial and federal statistics organizations (e.g. BC Statistics, Statistics Canada). Once all data had been gathered, each indicator was analyzed in order to develop conclusions in the context of Aboriginal people in the GVRD. In order to provide some context and comparison, data for the Aboriginal population in the GVRD was, where available, compared to: the non-Aboriginal population of the GVRD, the Aboriginal population of BC, and/or the non-Aboriginal population of BC. In addition, data was compared over time to provide trends in information. When available, data was also standardized to express fractions and percentages to allow for a more accurate platform for comparison and evaluation.

Figure 4. Evaluation tools used to rate each indicator



Once data for each indicator were analyzed, each indicator was given a simple overall rating which provides a straightforward, graphic summary of the indicator (see Figure 4). This will allow a simple comparison over time as subsequent indicator reports are developed. Indicators were ranked according to the following criteria:

- Strong – data for the indicator show that the condition for the Aboriginal people in the GVRD region is better than or equal to the condition for the non-Aboriginal population in the region and the Aboriginal population of BC, or that data shows that the indicator more than exceeds set standards;
- Improving – trends in time for the data show that the condition for Aboriginal people is improving
- Fair - data for the indicator show that the condition for the Aboriginal people in the GVRD region is not equal to the condition for the non-Aboriginal population in the region, but is better than that

of the Aboriginal population of BC, or that data shows that the indicator on occasion does not meet its standards;

- Deteriorating – trends in time for the data show that the condition for Aboriginal people is worsening;
- Weak – data for the indicator show that the condition for the Aboriginal people in the GVRD region is worse than the condition for the non-Aboriginal population and the Aboriginal population of BC, or that data shows that the indicator regularly does not meet its standards.
- Poor – data for the indicator show that the condition for the Aboriginal people in the GVRD is much worse than the condition for the non-Aboriginal population in BC or the Aboriginal population in BC, or that trends in time show a rapid deterioration in the condition of Aboriginal people, or that the indicator rarely meets its standards.

2.4. Validate indicators

Indicators need to be responsive to the Aboriginal community and incorporate their principles and values. In order to do this, it is important to have the communities' input into the development of the final suite of indicators. An outline of the indicators was presented at the CNPR's Aboriginal Community Forum on March 29, 2005. Feedback from the participants at that session is included in this report. Once a draft report had been prepared, it was then circulated and reviewed by members of the Aboriginal community. Community reviewers were asked to provide comment on the report, and specifically the make-up of the indicators to determine if they were relevant to the community. Their comments were then included in the report. Later stages may involve further community review, as well as involvement from auxiliary experts regarding data concerns such as biases, inaccuracies, and gaps in knowing.

3. Limitations of data

Because data for the indicators has been garnered from various sources, the described findings and recommendations are only immediately applicable to the regions and populations identified for each indicator. For some indicators, findings are applicable only to certain segments of the Aboriginal population, such as Status Indians, or for certain regions, such as the Vancouver Health Service Delivery Area. Therefore, results from the analyses of the indicators are, in some cases, not broadly applicable to the entire Aboriginal population of the GVRD, or applicable to other urban Aboriginal communities in other regions of the country. However, statistics and results are still relevant because they represent findings for a portion of the Aboriginal population in the GVRD, and it is likely that such findings reflect similar concerns and trends for other portions of the Aboriginal community as well as other regions.

In addition, statistics used for each indicator are subject to their own biases and inaccuracies that result from how they were gathered and grouped. It also must be remembered that statistics present a series of “moments in time” and does not identify whether a person living in one region or belonging to one statistic is still classified as such during the next data collection series. This is an important consideration in an urban context where people move spatially and socially through such factors as extended family relations, education, and employment.

The following sections describe the evaluation of each of the 33 indicators. Evaluation of each indicator is divided into four parts. The *Rationale* section provides reasoning why the indicator is important. The *Data* section summarizes the available information regarding the indicator. The *Analysis* section briefly examines the data for trends and comparisons to other populations. The *Rating* section summarizes the condition of the indicator and provides a simple rating of each indicator. Evaluation starts in the East, and describes the five cultural indicators analyzed as part of the Aboriginal indicators system. The subsequent sections then follow the directions of the medicine wheel, going from East to South, then West, and finally finishing in the North.

4. EAST – Cultural

Category	Indicator
Culture & Family	Percentage of Aboriginal people in the GVRD speaking traditional languages
	Percentage of Aboriginal people in the GVRD participating in traditional activities
	Percentage of Aboriginal children in care in the GVRD
	Percentage of Aboriginal lone parents in the GVRD
	Childcare access for Aboriginal families in the GVRD

EAST: Culture – Culture & Family

Indicator:

4.1. Percentage of Aboriginal people in the GRVD speaking traditional languages

Rationale:

Traditional language and culture are considered inseparable, in that native languages breathe life into the distinctive viewpoints and value systems of Aboriginal wisdom and culture. As Svenson and Lafontaine (1999, 190) note, “the fundamental teachings are preserved in sacred stories, ceremonies and symbols,” which are “the symbols of the ideas, concepts, and beliefs of a society which has an oral tradition.” Many different Aboriginal languages exist in Canada and can often be radically different from each other; for example, Cree is as different from Mohawk in its sound system, grammar, and vocabulary as Japanese is from English (Task Force on Aboriginal Language and Culture 2005). Halq'eméylem is the language of the traditional people of the Vancouver region, and belongs to the Salishan language family (Central Coast Salish Branch) (First Voices 2003). Halq'eméylem is spoken along the Fraser from approximately Yale (Sawmill Creek) downriver to Vancouver. There are over 17 different dialects which fall into three major groups: Upriver dialects, Downriver dialects, and Island dialects.

Many Aboriginal organizations emphasize the need to maintain and enhance Aboriginal languages in order to protect the unique oral heritage of the Aboriginal peoples. Understanding one's language aids in ensuring that traditional cultural practices and beliefs are transmitted from one generation to the next (Turcotte and Zhao 2004).

Data:

Baseline information for this indicator is available from the 2001 Census from Statistics Canada. Online data from earlier Census surveys are not available to show the percentage of Aboriginal people in the GRVD speaking traditional languages in former years. Therefore, it is not possible at this stage to determine whether knowledge of traditional Aboriginal languages is improving over time among the general Aboriginal identity population of the GRVD.

For the purposes of the 2001 Census, Statistics Canada defines children as those aged 0 – 14 years old.

Table 2. Knowledge of Aboriginal languages among the Aboriginal identity population, 2001

Characteristics	GRVD			British Columbia		
	Total	Male	Female	Total	Male	Female
Total – Aboriginal identity population	36,885	17,545	19,315	170,025	83,220	86,805
Knowledge of Aboriginal Language(s)	1,995	840	1,155	16,605	7,905	8,705
% of Aboriginal Pop. with Aboriginal language(s) first learned and still Understood	4.5%	3.9%	5.0%	7.4%	7.0%	7.8%
% of Aboriginal Pop. with Aboriginal Language(s) spoken at home	1.7%	1.8%	1.6%	4.5%	4.6%	4.4%
% of Aboriginal Pop. with knowledge of Aboriginal language(s)	5.4%	4.8%	6.0%	9.8%	9.5%	10.0%

Source: Statistics Canada, 2001 Census

Table 3. Aboriginal language statistics for the Vancouver CMA, 2001

Characteristics	Vancouver CMA		British Columbia	
	Children	Adult	Children	Adult
% who can speak or understand an Aboriginal language	14%	17%	16%	22%
% who understand their primary Aboriginal language:				
Very well or relatively well	1.8%	6.1%	2.1%	8.1%
With effort or a few words	12.0%	10.7%	13.9%	13.0%
% who can speak their primary Aboriginal language:				
Very well or relatively well	1.1%	4.3%	1.4%	(suppressed for confidentiality)
With effort or a few words	12.9%	12.4%	14.4%	(suppressed for confidentiality)

Source: Statistics Canada, 2001 Aboriginal Peoples Survey

Analysis:

While many Aboriginal parents consider it important that their children speak and understand a traditional language, there is a marked decrease in the proportion of children speaking or understanding a traditional language compared to the proportion of adults. While 67% of First Nations parents and 50% of Metis parents in non-reserve areas in Canada (Turcotte and Zhao 2004) consider it important that their children speak and understand a language, only 1.8% of Aboriginal children in the Vancouver CMA understood an Aboriginal language well while only 1.1% could speak one well (see Table 3). Conversely, a comparatively larger proportion of adults could speak or understand their traditional language (see Tables 2 and 3). In general, a larger proportion of female adults understood and had knowledge of an Aboriginal language.

Like many non-reserve areas, a lesser percentage of children and adults living in the Vancouver region spoke or understood an Aboriginal language compared to their peers living throughout BC. According to the 2001 Census, 4.5% of Aboriginal people in the GVRD still understood a traditional language compared to 7.4% of the total Aboriginal population for BC (see Table 2). Similarly, 5.4% of Aboriginal people in the GVRD had knowledge of an Aboriginal language compared to 9.8% of the Aboriginal people in BC. According to the Aboriginal Peoples Survey (see Table 3), the differences were not as dramatic, but still present. Similar results have been reported for non-reserve areas Canada-wide. Norris and Jantzen (2003) reported that the percentage of Aboriginal people in non-reserve areas who speak a First Nation language well enough to conduct a conversation fell from 20% in 1996 to 16% in 2001. The proportion of Aboriginal children in non-reserve areas under age 14 who could carry out a conversation in a First Nations language declined from 12% in 1996 to 9% in 2001 (Norris and Jantzen 2003).

The average age of speakers of traditional languages also indicate the endangerment of languages. For example, the average age among mother tongue speakers of the Salish Language Nuu-chah-nulth is 50 (Task Force on Aboriginal Language and Culture 2005). In BC, a language needs assessment conducted by the First Peoples' Heritage Language and Culture Council (2003) report that there is a lack of intergenerational language transmission (see Table 4). The increase among those who can speak or understand some is an indication that people may be learning language at school, but this has yet to transition into fluency or speaking language consistently at home. This is a similar situation for Aboriginal children in the GVRD. While few children in the region could speak or understand a language well, there was a significant improvement in the percentage who could speak or understand some words, or with difficulty (Table 3). Such an increase indicates that children are still learning some traditional language, likely at home and/or in school, but that this has yet to translate into fluency.

Table 4. Number of people per age group speaking traditional languages

Age group	Fluent	Speak/understand some
< 5	0	163
6-15	2	748
16-29	16	969
30-45	153	1,146
46-65	1,631	1,100
> 65	1,675	407

Source: First Peoples' Heritage Language and Culture Council 2003



Although traditional Aboriginal languages are considered important by many people, fewer children today are speaking or understanding their traditional languages well. This highlights a significant community concern that traditional languages are being lost, becoming eclipsed by more dominant languages such as English and French. Although there is an improvement in the portion of children who can speak or understand some, this has yet to translate into full understanding.

As the Royal Commission on Aboriginal Peoples (1996) noted, many factors such as an active assimilation policy and the Residential School System disrupted the generational transmission of languages. Furthermore, it is likely that geographic location influences the number of people who speak or understand their traditional languages. Non-reserve areas such as the City of Vancouver lack the traditional community structures, traditional language classes, and band schools that exist on many Indian Reserves which aid in retaining languages. As Turcotte and Zhao (2004, p.19) note, “Aboriginal languages are more likely to be spoken in First Nation communities than in non-reserve areas.”

It would be important to document the number of Aboriginal language programs and courses available for Aboriginal people in Vancouver in order to determine the availability of such programs for Aboriginal people in an urban setting. Such information help to determine the opportunities that urban Aboriginal people have to learn about traditional languages. Teaching traditional languages also presents an interesting challenge in an urban context because of the mix of various Aboriginal groups that exist within Vancouver. Unfortunately, this information has not yet been gathered.

EAST: Culture – Culture & Family

Indicator:

4.2. Percentage of the GVRD's Aboriginal population participating in traditional activities

Rationale:

Traditional activities represent ceremonial and spiritually-significant pursuits of Aboriginal families. Pursuit of traditional activities such as hunting, fishing, gathering and trapping, help to sustain a connection to the Land, as well as a steady access to traditional foods. Traditional knowledge of the Land is also maintained by pursuing these activities. Other traditional activities, such as Aboriginal ceremonies, dances, potlatches, and healing circles, help to maintain and generate culture in the community and its subsequent generations.

Data:

Data is available from Statistics Canada's 2001 Aboriginal Peoples Survey regarding the rate at which the Aboriginal Identity population of the GVRD has participated in some traditional activities, as well as the participation rate for the Aboriginal population of British Columbia as a whole. Census surveys are not available from Statistics Canada, so it is not possible at this time to compare over time. Free online data on the percentage of Aboriginal adults participating in traditional activities in earlier Statistics Canada limits "traditional activities" to hunting, fishing, the gathering of wild plants, and trapping. Unfortunately, data regarding participation in other traditional activities are not gathered systematically.

Table 5. Percentage of Aboriginal adults in the GVRD who participated in traditional activities over 12-month period, 2001

Traditional Activity	GVRD	British Columbia
Hunting	3%	13%
% of those who hunted for food	95%	93%
Fishing	25%	35%
% of those who fished for food	50%	66%
Gathering wild plants (berries, sweet grass, etc.)	22%	29%
% of those who gathered for food	69%	78%
Trapping	Nil	1%

Source: Statistics Canada, 2001 Aboriginal Peoples Survey

Analysis:

There is a wide gap between the percentage of Aboriginal adults from the GVRD who are hunting compared to percentage of Aboriginal adults across BC who are hunting (see Table 5); 3% of Aboriginal people in the GVRD hunt, compared to 13% the Aboriginal population of BC. However, the gaps in relation to fishing (25% versus 35%) and gathering (22% versus 29%) are much slimmer. It is interesting to note that the percentage of Aboriginal people in the GVRD who are hunting for food is roughly equivalent when compared to BC as a whole, whereas the percentage of the Aboriginal population in the GVRD fishing for food is significantly less than it is BC-wide.



While certain traditional activities are often documented, many are not, which makes an overall evaluation of “traditional activities” difficult and complex. There is a whole suite of other traditional activities, such as storytelling, cultural games and activities, and healing ceremonies (e.g. sweats, drumming circles), which are not usually considered “traditional” in a western economic perspective. Hence, while these activities are considered traditional from an Aboriginal perspective, such information is not collected by western industrialized data-gathering institutions like Statistics Canada. Furthermore, the majority of traditional activities for which data are tracked are largely male pursuits. Many of the other activities involved in these traditional pursuits are conducted by women but are also not measured as “traditional activities”; the storing and preparation of hunted, fished, and gathered food, the skinning and tanning of hides, the creation of clothing, and the preparation and administration of medicines are all important, related activities that are not documented. Also, the sharing and circulation of food and gift-giving, which also could be considered “traditional activities” are not included, even though such acts are as important in community-building and the continuation of culture. Therefore, a reexamination of the term and improved quantitative and qualitative strategies are required to more accurately portray Aboriginal people’s involvement in “traditional activities”.

In light of the above-mentioned criticisms, it is still valuable to examine Aboriginal involvement in traditional activities as currently defined by Statistics Canada. It is not possible to compare the rates of participation in traditional activities over time. However, in comparison to the Aboriginal population of BC, the percentage of Aboriginal adults in the GVRD participating in traditional activities is relatively low. It is likely that a number of cultural and systematical reasons impact these rates. First and foremost, there is likely less opportunity for hunting in the Vancouver region as compared to other rural areas of the province, which likely contributes to the significant difference. Alternatively, there is a greater opportunity to fish and gather wild plants in the region, hence there is less of a disparity in these categories. Furthermore, while there is less opportunity, there is also likely less capacity both in terms of knowledge and equipment for urban Aboriginal people to take part in traditional hunting, fishing, and gathering activities. Economic factors also influence the proportion of people who can participate in such activities. People often have to contribute financially to these traditional activities – the cost of boats, guns, gas – and can be prohibitive and limits who can and cannot participate in such activities.

EAST: Culture – Culture & Family

Indicator:

4.3. Percentage of Aboriginal children in care in the GVRD

Rationale:

The issue of children in care is significant to the Aboriginal community. Only 8% of children in BC are Aboriginal, yet they account for 40% of all children in the care of the Ministry for Children and Family Development (MCFD). Furthermore, the number of Aboriginal children in care has increased nearly 70% over the last decade – from 6,000 to 10,000 children.

Data:

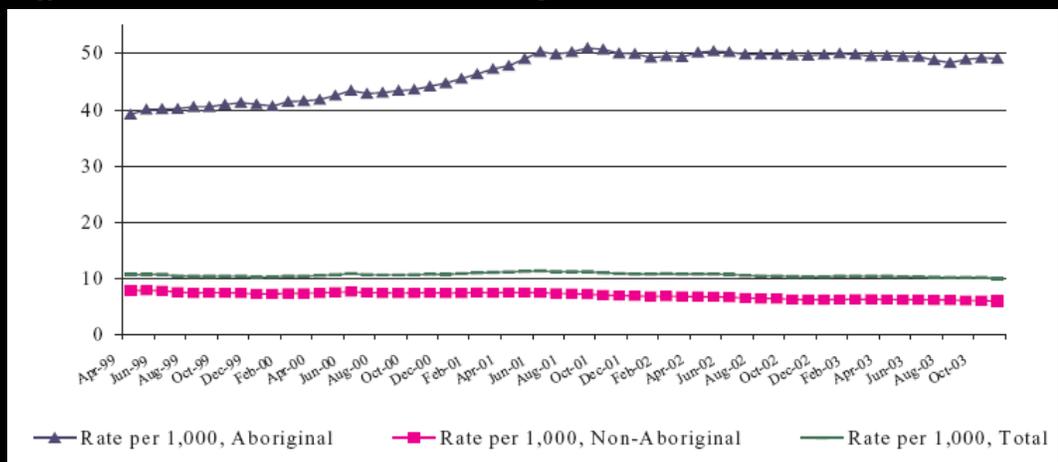
On average in 2004, 4.9% of all Aboriginal children in the GVRD were considered to be “children in care” (CIC). These “CIC Counts,” as they are referred to by the BC MCFD, are being offered as a calendar year average from January 2004 to December 2004. MCFD defines children as all minors, from 0 – 18 years of age.

In 2004, the Aboriginal children in care made up 31.1% of the total CIC caseloads for the GVRD. As of March 2005, 48% of all children in care in BC were Aboriginal (MCFD 2005)

Analysis:

Aboriginal children are grossly overrepresented in the CIC caseload for the GVRD. While the Aboriginal children population (0 – 19 years old) only makes up 2.7% of all children aged 0-19 within the GVRD, the Aboriginal children represent 31.1% of the total CIC caseload within the region. Furthermore, an average of 4.9% of the entire Aboriginal child population was in care at any given time in 2004. Provincially, approximately 1 in 20 Aboriginal children are in care, compared to 1 in 167 for non-Aboriginal children (see Figure 5).

Figure 5. Children in care rate in BC, April 1999 – October 2003



Source: MCFD 2004



While it is impossible at this time to compare statistics for Aboriginal CIC rates over time, it is evident by examining the high percentage of caseload files devoted to Aboriginal children that there is a dire situation in respect to Aboriginal child safety and/or child apprehension rates in the GVRD. Aboriginal children are significantly overrepresented in the proportion of children in care in the region.

This is one of the clearest examples of the ways in which other policies (e.g. income assistance, housing, and transportation) impact on the health and well-being of Aboriginal families. Many Aboriginal child advocates argue that greater attention has to be put on preventative measures and in supporting children's birth families. Child protection measures also need to put greater focus on keeping at-risk children in the care of their extended family, cultural family or community. The MCFD is working to ensure that Aboriginal children in care remain with Aboriginal families, although this does not reduce the overall number of Aboriginal children in care.

EAST: Culture – Culture & Family

Indicator:

4.4. Percentage of Aboriginal lone parents in the GVRD

Rationale:

Wellbeing of the family is a critical component to the wellbeing of any society. Single parenthood does not necessarily mean an unhealthy family life for the parents or for the child(ren); however, different familial structures can have different socioeconomic conditions. Lone parents often face additional financial challenges and lack of support in parenting. Furthermore, lone parents are often women, hence they are overrepresented among lone parents and carry the majority of responsibilities for child raising. Changes over time to the number of Aboriginal lone parents may indicate a deterioration or improvement in the social cohesion of the GVRD's Aboriginal community. In addition, an increase in the number of Aboriginal lone parents in the region likely indicates an increase in the need for additional government and community supports that are culturally relevant.

Data:

The following data from Statistics Canada's 2001 Census excludes information from the following municipalities, on which there was no data available online: Anmore, Belcarra, Bowen Island, Electoral Area A, Lions Bay, West Vancouver and White Rock.

Table 6. Percentage of Aboriginal lone parents in the GVRD			
Municipality	# of Lone Parents	# of People of Aboriginal Identity	% of Lone Parents
Burnaby	300	3,140	9.6%
Coquitlam	105	1,485	7.1%
Delta	125	1,500	8.3%
Langley (City)	70	740	9.5%
Langley (Township)	90	1,945	4.6%
Maple Ridge	70	1,555	4.5%
New Westminister	105	1,595	6.6%
North Van. (City)	90	1,010	8.9%
North Van. (District)	70	830	8.4%
Pitt Meadows	20	305	6.6%
Port Coquitlam	90	1,030	8.7%
Port Moody	35	480	7.3%
Richmond	85	1,165	7.3%
Surrey	700	6,890	10.2%
Vancouver	985	10,425	9.4%
TOTAL	2,940	34,095	8.6%

Source: Statistics Canada, 2001 Census

Analysis:

Free online data on the percentage of Aboriginal lone parents in earlier Census surveys are not presently available, so it is not possible at this time to compare over time.

Data regarding the number and type of family households for Aboriginal people are unavailable; therefore, the number of lone parents can only be compared to the total number of Aboriginal people, rather than comparing the number of lone-parent households to the number of Aboriginal households

with children. 8.6% of the total Aboriginal identity population (all ages) in the GVRD are lone parents (see Table 6). Furthermore, according to Statistics Canada's 2001 census, 9.4% of the City of Vancouver's Aboriginal population are lone parents, compared to 4.1% of the non-Aboriginal population.

Some data are currently available regarding the proportion of Aboriginal lone-parent households for certain census metropolitan areas (CMA) in Canada. In 2001, approximately 18% of all Aboriginal one-family households in the Vancouver CMA were lone-parent families, compared to approximately 8% for non-Aboriginal families (Siggner and Costa 2005). Nationally, approximately 20% of all Aboriginal households were lone parent families.

Rating: Weak



It is not possible at this time to compare rates of Aboriginal lone parenthood in the GVRD over time. However, the proportion of Aboriginal lone parents and lone parent families within the Vancouver region is over twice as high as their non-Aboriginal counterparts. This would indicate a relatively high degree of social and financial challenges being experienced by Aboriginal families in the region. Such different rates could be attributed partially to differences in rates of single parenthood, as well as differences in the demographics of the Aboriginal and non-Aboriginal communities, since the Aboriginal population tends to be younger and to have higher rates of fertility. However, it is important to note that among the Aboriginal people found at risk of homelessness within the GVRD, 40% lived in female-headed lone parent households (Woodward et al. 2002). In light of generally lower income levels for non-Aboriginal people, a high rate of Aboriginal lone parents in the region implies that there are significant associated socioeconomic concerns, such as the risk of homelessness. Hence, culturally relevant associated services which can help alleviate the risks associated with being a lone parent are quite important for the Aboriginal community.

EAST: Culture – Culture & Family

Indicator:

4.5. Childcare access for Aboriginal families in the GVRD

Rationale:

Access to employment and education are contingent on access to affordable quality childcare. Since the Aboriginal population tends to have lower income and greater “fertility rates”, access to quality childcare is even more important in the Aboriginal community. Furthermore, because the percentage of lone parent families is higher in the Aboriginal community, childcare access has additional significance for Aboriginal households as there tend to be fewer economic resources with which to access childcare opportunities.

Data:

Free online data on childcare issues within Census surveys prior to the 2001 Census is not presently available, so it is not yet possible to compare childcare access for the GVRD’s Aboriginal population over time. Furthermore, Statistics Canada has not made publicly available any data on childcare arrangements among the non-Aboriginal population, therefore a comparison between Aboriginal and non-Aboriginal communities is not possible at this time.

A comparison of the rate at which Aboriginal people use childcare arrangements can be made between the GVRD and British Columbia as a whole.

Table 7. Aboriginal Childcare Arrangement Statistics for the GVRD, 2001

Characteristics	GVRD	British Columbia
% of people using childcare while at work or studying	37%	32%

Source: Statistics Canada, 2001 Aboriginal Peoples Survey

Statistics Canada’s definition of childcare includes access to any daycare, or the care of any babysitter, relative or caregiver.

Analysis:

The federal government does not currently keep any statistics specific to Aboriginal access to quality childcare services by trained professionals. The Ministry of Children and Family Development (MCFD) also does not currently keep any statistics on quality daycare access for Aboriginal families, although there is consideration to monitor this information in the future.

Rating: Fair



While it is not possible at this time to compare childcare access over time, it is significant to see that the Aboriginal community in the region has a more substantial childcare support system than the Aboriginal communities province-wide. More information is needed to provide a more complete analysis of this indicator, including information regarding non-Aboriginal use of childcare. It would be valuable to note the preponderance of formal versus informal childcare, and the availability and cost of regulated childcare.

5.SOUTH – Social

Category	Indicator
Health	Aboriginal infant mortality rate for regions in the GVRD
	Aboriginal life expectancy for regions in the GVRD
	Rate of diabetes among Aboriginal people in the GVRD
	Rate of cancer among Aboriginal people in the GVRD
	Rate of HIV/AIDS among Aboriginal people in the GVRD
Education	High school graduation rates for Aboriginal people in the GVRD
	Number of Aboriginal people in the GVRD graduating from regional post-secondary programs
	Percentage of Aboriginal students in the GVRD in special needs/alternative programs
Crime & Safety	Incarceration rates of Aboriginal people in the GVRD
	Rates of violent crime committed by and on Aboriginal people in the GVRD

SOUTH: Social – Health

Indicator:

5.1. Aboriginal Infant mortality rate for regions in the GVRD

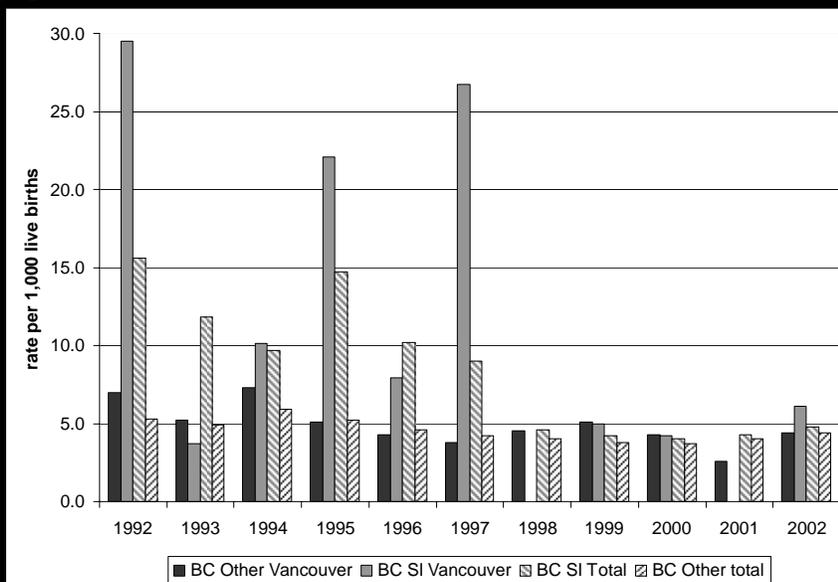
Rationale:

Infant mortality rate is a well-established indicator of the level of health and social conditions within a community (Reidpath and Allotey 2003; Martens and Derksen 2002; Health Canada 2000b; Gortmaker and Wise 1997), and has long been used as a key indicator by such groups as the World Health Organization (WHO 2004). Furthermore, neonatal mortality (mortality occurring among infants younger than 29 days old) and post-neonatal mortality (mortality occurring among infants older than 29 days and younger than 365 days) reflect the medical care and socioeconomic conditions of the infant (BC Vital Statistics Agency 2003; Martens and Derksen 2002). Infant mortality also reflects the conditions of the mother and the availability and quality of pre- and post-natal care services. The infant mortality rate is considered “a sensitive indicator of the impact of socioeconomic disparities on the health of populations, due in large part to the special vulnerability of the newborn to poverty and substandard living conditions” (Gortmaker and Wise 1997, p.148). Since the infant mortality rate can act as a reflection of the socioeconomic conditions of a community, it is of particular concern to the Aboriginal community, since poorer neighbourhoods often have a higher proportion of Aboriginal people (BC Provincial Health Officer 2003).

Data:

Data is currently only available for the Status Indian population in BC, organized by health service delivery areas (HSDA – see Appendix 1 for a description of HSDAs in the GVRD region). The major source of information regarding infant mortality rates is from the BC Vital Statistics Agency’s statistical database. Registrations of birth include a Status Indian “flag” based on parent information, but no such flags exist for other Aboriginal groups. For the 5 HSDAs examined, the proportion of the Status Indian population as a proportion of the total Aboriginal Identity population varied from a low of 0.34 (Fraser South) to a high of 0.78 (North Shore/Coast Garibaldi).

Figure 6. Infant mortality rates for Status Indians and Other populations in Vancouver HSDA and BC



Source: BC Vital Statistics Agency and First Nations and Inuit Health Branch 2004

Table 8. Infant mortality rates for Status Indians and Other populations for local Health Service Delivery Areas (HSDA)

HSDA	1999	2000	2001	2002	1992-2002 Total
Status Indian - Fraser North HSDA	-	5.3	5.3	-	7.1
Other - Fraser North HSDA	3.1	2.4	3.8	3.3	4.2
Status Indian - Fraser South HSDA	6.5	3.9	-	4.8	5.8
Other - Fraser South HSDA	3.6	4.7	4.3	4.9	4.7
Status Indian – Richmond HSDA	-	-	-	-	12.6
Other – Richmond HSDA	2.7	5.8	3.8	3.8	4.3
Status Indian – Vancouver HSDA	5.0	4.2	-	6.1	11.2
Other – Vancouver HSDA	5.1	4.3	2.6	4.4	4.9
Status Indian - North Shore/Coast Garibaldi HSDA	4.9	4.9	5.8	10.1	7.5
Other - North Shore/Coast Garibaldi HSDA	1.3	2.6	6.0	1.9	3.5
Status Indian – BC total	4.2	4.0	4.3	4.8	8.5
Other – BC Total	3.8	3.7	4.0	4.4	4.6

Source: BC Vital Statistics Agency and First Nations and Inuit Health Branch 2004. Regional Analysis of Health Statistics for Status Indians in British Columbia, 1992-2002

Analysis:

Status Indian infant mortality rates are following a similar trend as global infant mortality rates in that they are decreasing over time, largely through improvements in nutrition and infant and maternal care (Health Canada 2000b). However, despite a general increase in the economic wealth of Canada, an increase in dollars spent on health care, and an improvement in health services technology, significantly high rates of infant mortality still exist among the Aboriginal population (see Table 8; Figure 6). Large disparities still exist between the Status Indian population and Other residents in the Vancouver region. In general, infant mortality rates among the Status Indian population are 1.5 to 3 times the rate of that for the rest of the population. Between 1992 and 2002, nearly one out of every ten infant deaths in the Vancouver HSDA was a Status Indian baby, even though only one out of every 80 people in the Vancouver HSDA is a Status Indian (BC Vital Statistics and FNIHB 2004).

The major difference in infant mortality is expressed through the rate of post-neonatal deaths which are significantly higher for the Status Indian population. Post-neonatal mortality is more related to “medical care and the socioeconomic conditions of the infant” (Martens and Dirksen 2002, p.S2). Those regions with the highest levels of infant mortality for Status Indians also generally had lower income levels (see Table 9). This is similar to studies conducted by the BC Vital Statistics Agency

Table 9. Aboriginal income compared to level of infant mortality

Region	Infant mortality Quintile (5 = high) ¹	Average Income for Aboriginal Identity Population, 2001 ²
Fraser South	1	18,501
Fraser North	3	17,555
North Shore/ C. Garibaldi	3	13,709
Vancouver	4	11,518

¹ BC Vital Statistics Agency and First Nations and Inuit Health Branch 2004. Regional Analysis of Health Statistics for Status Indians in British Columbia, 1992-2002

² Statistics Canada. 2001. Aboriginal population profile

(2003) for BC populations, and for Manitoba populations in a study conducted by Martens and Derksen (2002). Similar to Aboriginal people in BC, studies regarding infant mortality rates among African Americans in the U.S., who are often similarly marginalized socially and economically, reveal consistently higher rates when compared to the non-African American population (Gortmaker and Wise 1997). Because of this associated link between infant mortality rates and socioeconomic conditions, infant

mortality is “not a health problem”, but rather it is a “social problem with health consequences” (Wagner 1988, p.481).

Rating: Weak



Although infant mortality rates among the Status Indian population have been decreasing over time, there is still a large disparity between Status Indians and Other residents. Because of the strong association between infant mortality rate and socioeconomic conditions, the large disparity between the Status Indian population and Other residents reveals a glaring difference between the socioeconomic conditions of the two populations. Although these statistics are only for the Status Indian population, it is likely that other segments of the Aboriginal community experience similar rates. Rather than documenting quality and access to health care and calling for an improvement in infant care, infant mortality rates call for an improvement in the socioeconomic conditions of the Aboriginal community.

In addition, there is a significant lack of data regarding the rest of the Aboriginal population. “Status Indians” make up only a portion of the total population who identify themselves as Aboriginal; for example, for urban centres such as Vancouver and Richmond, Status Indians make up approximately 60% of the total Aboriginal population. There should be methods in place to gather vital statistics data for all people who identify as Aboriginal in BC, not just those with designated status.

SOUTH: Social – Health

Indicator:

5.2. Aboriginal life expectancy for regions in the GVRD

Rationale:

Life expectancy is a well-established indicator of the quality of life of individuals and the social conditions of a community (Gulis 2000; Newbold 1998). Like infant mortality rates, it is also used as a health indicator by the World Health Organization (WHO 2004). Life expectancy speaks to the overall quality of life and lifestyle of an individual (Maxim et al. 2003), which is significantly impacted by the social and economic conditions of their community. Various studies have linked life expectancy to a population's social and economic environments (Gulis 2000; Barlow and Vissandjee 1999); specifically, it is strongly associated with relative poverty and income inequality (Regidor et al. 2003; Lynch and Kaplan 1997). A key study in the UK which uses information dating back to the beginning of 1900 shows an obvious inverse relationship between socioeconomic class and mortality across the entire population (Hertzman et al. 1990). Thus, documenting the life expectancy of Aboriginal people in the Vancouver region will provide insight into the socioeconomic conditions of the Aboriginal community.

Data:

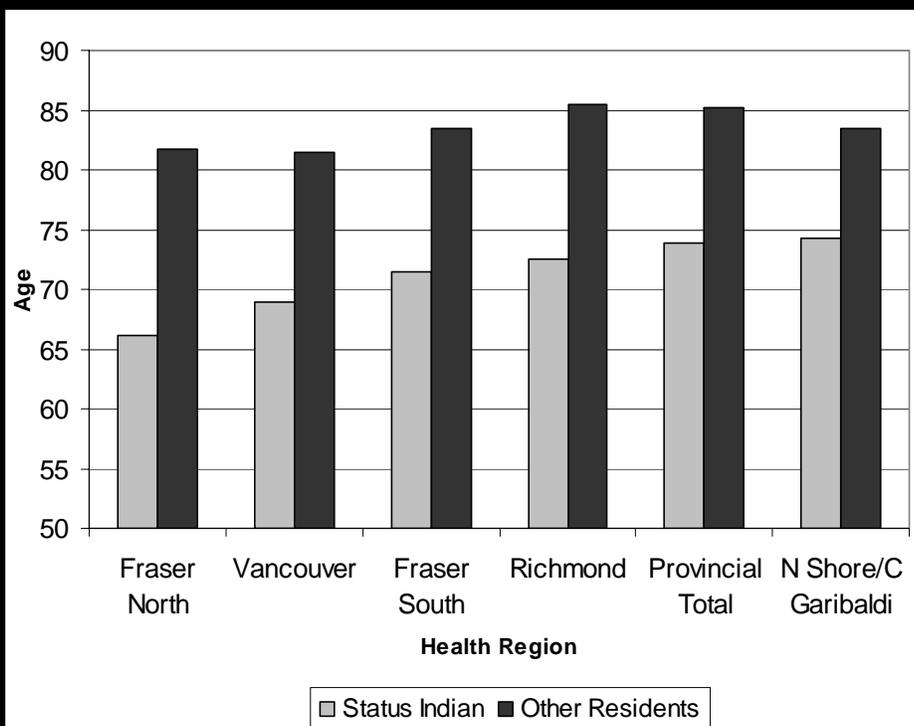
Similar to infant mortality, data is currently only available for the Status Indian population in BC, organized by health service delivery areas.

Table 10. Life expectancy for Status Indian and Other Residents for HSDAs in BC, 1992-2002

HSDA	Gender	Life Expectancy		Difference
		Status Indian	Other Residents	
Fraser North	Male	64.2	78.7	14.5
	Female	67.4	84.5	17.1
	Total	66.1	81.7	15.6
Fraser South	Male	71.5	80.4	8.9
	Female	72.1	86.4	14.3
	Total	71.5	83.4	11.9
Richmond	Male	72.7	82.6	9.9
	Female	74.3	87.9	13.6
	Total	72.6	85.4	12.8
Vancouver	Male	66.1	77.8	11.7
	Female	71.8	85.1	13.3
	Total	68.9	81.4	12.5
North Shore/ Coast Garibaldi	Male	69.9	81.2	11.3
	Female	80.1	85.4	5.3
	Total	74.3	83.4	9.1
BC Total	Male	71.3	79.2	7.9
	Female	76.6	85.2	8.6
	Total	73.9	82.2	11.3

Source: BC Vital Statistics Agency and First Nations and Inuit Health Branch 2004

Figure 7. Life Expectancy for Status Indian and Other residents in BC, Average 1992-2002



Source: BC Vital Statistics Agency and First Nations and Inuit Health Branch 2004.

Analysis

Life expectancy for Status Indians is lower than that for Other residents for all HSDAs in the Greater Vancouver region (see Table 10; figure 7). In addition, life expectancy for the majority of Status Indian people in the region (other than the North Shore/Coast Garibaldi) is lower than the average life expectancy for BC's entire Status Indian population.

In general, this lower life expectancy reflects the poor social conditions for the region's Aboriginal community. Local Aboriginal people face higher rates of unemployment, lower income rates, and lower levels of education than the non-Aboriginal population (see later sections of this report for further information). All these factors significantly influence the health, and consequently, life expectancy of Aboriginal people (Frank and Mustard 1994). Studies in Alberta (Alberta Health 1996) show that as one's level of education rises, so does their self-reported health status, and other research has shown that mortality rates will rise as the unemployment rates rise (Brenner 1979). Low life expectancy among the Status Indian population is likely affected by the significantly high rates of unemployment and lower education attainment among the Aboriginal population. Therefore, the large disparity in life expectancy between Status Indian and Other residents indicates poorer socioeconomic conditions for the urban Aboriginal community in Vancouver.

Rating: Poor



Life expectancy for Vancouver's Status Indian population is well below the average life expectancy for the region's Other residents, indicating poorer socioeconomic conditions. Furthermore, Status Indians in many of Vancouver's HSDAs have a lower life expectancy than the Status Indian average for the Province, indicating poorer socioeconomic conditions for Vancouver's Aboriginal community than for other Aboriginal communities in the province. Although the above information is only for Status Indians in

the region, it is likely that other segments of the Aboriginal population experience similar life expectancies.

In addition, there is a lack of data regarding the rest of the Aboriginal population for Vancouver and BC. Data is currently only gathered for the Status Indian population, although they only make up a portion of the entire Aboriginal population. This provides only a portion of the picture; although it provides an indication as to the overall health of the Aboriginal population, more data is needed to provide a full picture to help inform the local community, health professionals, and policy makers. To provide more complete data regarding the Aboriginal community, data should be gathered in a manner that encompasses the entire Aboriginal population, not just one segment.

Although not included in this indicator, it is also important to consider when, how, and why people die; such measurements can provide much information regarding the quality of life of Aboriginal people. Such characteristics often come to light when analyzing other indicators (e.g. rates of violent crime, rates of cancer).

SOUTH: Social – Health

Indicator:

5.3. Rate of diabetes among Aboriginal people in the GVRD

Rationale:

Virtually unknown among Aboriginal people fifty years ago, diabetes has now reached epidemic proportions in the Aboriginal community (Health Canada 2000a), and is a major source of mortality. Over 8% of non-reserve First Nation's people over the age of 15 have been diagnosed with diabetes (O'Donnell and Tait 2003). Diabetes was the fourth-highest cause of death for First Nations aged 45 to 64 in Canada in 1999 (FNIHB 2003). A tuberculosis study involving more than 1,500 clinical examinations in the 1930s failed to detect any cases of diabetes (Chase 1937); however, numerous studies since the 1960s have noted an increase in the incidence of diabetes in various Indigenous groups throughout the world, including Australian Aborigines and Canadian Aboriginal peoples (Szathmary 1994). Not only a major cause of death, diabetes is a chronic and crippling disease, leading to heart and kidney disease, stroke, eye disease, and lower limb amputations. Aboriginal people are also at risk of earlier onset of diabetes, high rates of complications, and a lack of accessible services (Health Canada 2000a). In fact, being of Aboriginal ancestry is now considered a risk factor for diabetes (Young et al. 1990); therefore diabetes is a major concern for all Aboriginal people.

Data:

Table 11. Rates of diabetes among Aboriginal people in Vancouver and BC

	Vancouver CMA	BC
% Aboriginal people with diabetes, aged 15 and over	7.4 ¹	6.5 ¹
% Total population with diabetes, aged 12 and over	3.6 ²	3.9 ²

¹ Statistics Canada. 2001. *Aboriginal Peoples Survey Community Profiles*.

² Statistics Canada. 2001. *2000-2001 Canadian Community Health Survey*

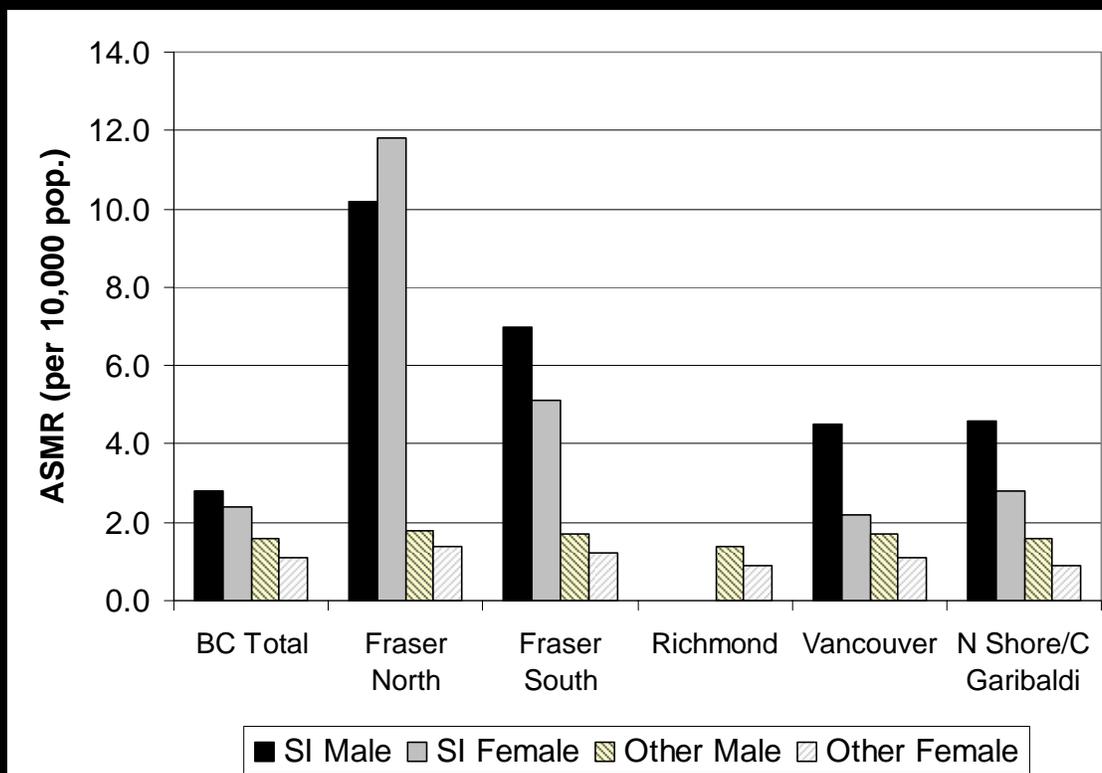
Table 12. Age standardized mortality rates (ASMR) for diabetes by Health Service Delivery Areas (HSDA) and gender, 1992-2002

HSDA	Status Indian			Other Residents		
	Male ASMR	Female ASMR	Total ASMR	Male ASMR	Female ASMR	Total ASMR
BC Total	2.8	2.4	2.6	1.6	1.1	1.4
Fraser North	10.2	11.8	11.3	1.8	1.4	1.5
Fraser South	7.0	5.1	5.8	1.7	1.2	1.4
Richmond	-	-	-	1.4	0.9	1.1
Vancouver	4.5	2.2	3.0	1.7	1.1	1.4
N Shore/C	4.6	2.8	3.8	1.6	0.9	1.2
Garibaldi						

(Rate is per 10,000 standard population)

Source: BC Vital Statistics Agency and First Nations and Inuit Health Branch 2004.

Figure 8. ASMR for diabetes by HSDA and gender, 1992-2002



Source: BC Vital Statistics Agency and First Nations and Inuit Health Branch 2004

Analysis:

Among the Aboriginal community in Vancouver, diabetes is a crippling and lethal disease. Diabetes affects Aboriginal people in the Vancouver census metropolitan area (CMA) at a rate greater than that for Aboriginal people in BC, and at a rate twice that for the total population in Vancouver (see Table 11). Furthermore, because of the methodology of the Aboriginal Peoples Survey (from which the statistics are taken), it is assumed that the actual number of people with diabetes is two to three times higher than actually stated because of the large number of Aboriginal respondents with diabetes who are undiagnosed (Young 1994; Young et al. 1992). Status Indians in HSDAs in the Vancouver region also die from diabetes at much greater rates than other residents (see Table 12; Figure 8). Status Indians in the Fraser North HSDA have an age standardized mortality rate (ASMR) that is 7.5 times greater than the rate for Other residents in the area.

Not isolated to Vancouver, diabetes has become a huge concern among Aboriginal people in Canada. A study in Haida Gwaii documented that nearly two-fifths of adults 35 and over had type 2 diabetes (Grams et al. 1996). Diabetes is of special concern among Aboriginal women and children. In Canada, women compose roughly two-thirds of First Nations people diagnosed with diabetes (Bobet 1997). A study in Ontario shows the number of Aboriginal children diagnosed with diabetes to be growing at a rapid rate (Harris et al. 1996). Additionally, while children in the general population are diagnosed predominantly with type 1 diabetes, Aboriginal children are usually diagnosed with type 2 diabetes (previously called adult onset diabetes).

Diabetes can lead to significant health risks among Aboriginal people. Studies show that Aboriginal people with diabetes suffer from higher rates of hypertension (Bobet 1997), strokes and heart disease (Macaulay et al. 1988), and kidney complications (Whiteside 1994). Only one study in Canada has data on lower limb amputations among Aboriginal People, but this study showed that First Nations people with diabetes composed 91% of all lower limb amputations among a study of Manitoba First Nations

(Manitoba Health 1999); in addition, individuals with diabetes who have undergone amputation have an increased risk of morbidity and mortality (Health Canada 2000a). Health issues surrounding diabetes are further exacerbated by cultural and physical barriers to health services, and by a lack of knowledge regarding diabetes (Health Canada 2000a).

While diabetes is a rising epidemic among the Aboriginal community, there is scant statistical information regarding diabetes rates within the Aboriginal community. The data gathered for this report comes from the Aboriginal Peoples Survey, which is conducted every four years and requires respondents in the study to self-report any illnesses. Provincial data, where available, is lacking because it encompasses only the Status Indian population. The majority of data is aggregated to a provincial or national level, or pertains to on-reserve First Nations, and therefore provides little useful information for urban Aboriginal communities. Such limitations in data gathering underscore the seriousness of diabetes among Aboriginal people, and lead to a further lack of education among the urban Aboriginal community regarding diabetes.

Rating: Poor



Virtually unheard of fifty years ago, diabetes is a spreading concern among the Aboriginal community. Available information shows that Aboriginal people in the Vancouver region suffer from rates of diabetes that are at least twice that of the general population. Furthermore, Aboriginal people are dying at much greater rates from diabetes than the rest of the general population. Rates of diabetes are increasing among young Aboriginal people, which indicate that the concern for diabetes will only rise. Yet this huge concern lacks significant data to provide people with accurate information regarding the disease. This hampers the diagnosing and prevention of diabetes within the Aboriginal community. More data needs to be gathered regarding this critical disease in a consistent and systematic manner for all Aboriginal groups across the province.

SOUTH: Social – Health

Indicator:

5.4. Rate of cancer among Aboriginal people in the GVRD

Rationale:

Cancer is a major health concern for both Aboriginal and non-Aboriginal communities, and various types of cancer are some of the leading causes of death amongst both groups (BC Vital Stats Agency and FNIHB 2004). Cancer is “the second leading cause of death among American Indians and is the leading cause of death among Alaska Natives” (Espey et al. 2005, p.1045). Yet cancer was virtually unknown among American Indians at the turn of the century (Hrdlicka 1908), and has become a major health concern for Aboriginal people. Furthermore, cancer not only impacts the quantity of life, but also the quality. A study in Saskatchewan revealed that survival of First Nations cancer patients is lower than compared to the province as a whole (Gillis et al. 1991). Similarly, American Indians and Alaska Natives, once they are diagnosed with cancer, have less favourable prospects when compared to the general US population (Lanier et al. 2001; Horm and Burhansstipanov 1992). High rates of smoking among Aboriginal people and a change in lifestyle and diet are two important risk factors regarding the causation of cancer among the Aboriginal community (FNIRHS National Steering Committee 1999).

Data

Table 13. Percent of Aboriginal population diagnosed with cancer by a professional, 2001

Percentage of population with cancer	Vancouver CMA	BC
Aboriginal population	2.8	2.5

Source: Statistics Canada. 2001. Aboriginal Peoples Survey

Table 14. Age-standardized mortality rate for cancer for certain HSDA regions in BC, 1992-2002

HSDA	Status Indian	Other Residents
N. Shore/Coast Garibaldi	17.2	15.9
Vancouver	22.3	15.7
Richmond	38.1	14.5
Fraser South	42.2	16.2
Fraser North	67.2	17.2

Provincial Total 18.6 16.6
(Rate is per 10,000 standard population)

Source: BC Vital Statistics Agency and First Nations and Inuit Health Branch 2004

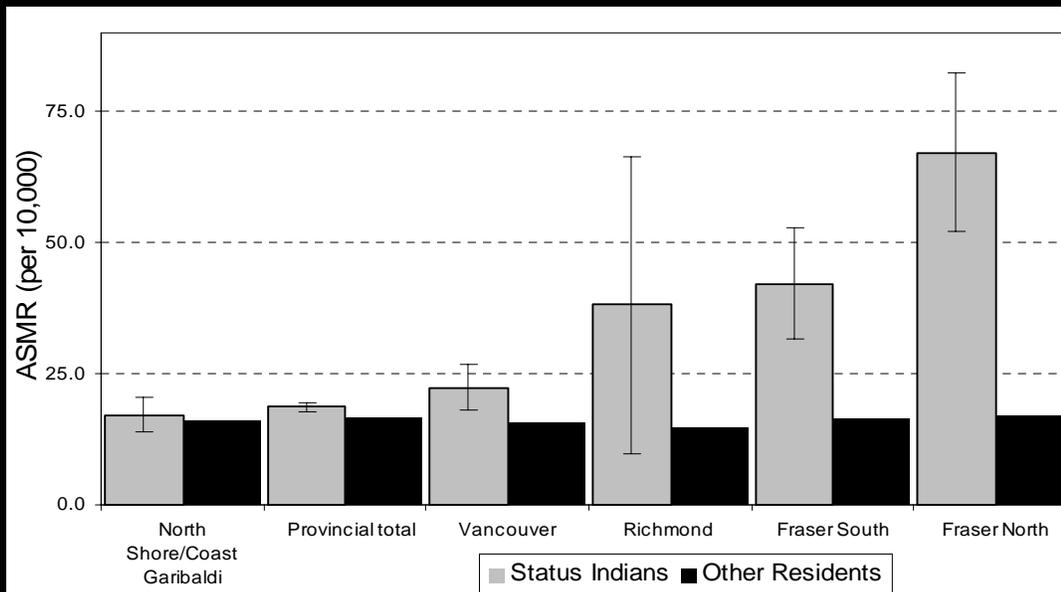
Table 15. Age Standardized mortality rate for BC populations, 1953-1978

Site	First Nation Males	Other Resident Males
Lung	12.9	39.2
Stomach	10.7	15.8
Prostrate	9.0	14.9
Colon	6.7	12.9
Rectum	5.1	7.7

All sites 83.3 151.8
(Rate is per 10,000 standard population)

Source: Hislop and Band 1996

Figure 9. ASMR with standard deviation for cancer for certain HSDA regions in BC, 1992-2002



Source: BC Vital Statistics Agency and First Nations and Inuit Health Branch 2004

Analysis:

In general, some past studies have shown that Aboriginal people generally have lower incidences of cancer when compared to the non-Aboriginal population (see Table 15); however, contemporary studies show a marked increase in cancer deaths, with some regional Aboriginal populations experiencing higher rates of cancer than the non-Aboriginal population (Espey et al. 2005). Age standardized mortality rates (ASMR) for the Status Indian population in the Vancouver, Fraser South, and Fraser North health service delivery areas (HSDA) are all significantly greater than those for Other residents (see table 14; figure 9). In addition, the rates for these regions are greater than the provincial average for Status Indians. Therefore, when compared over time with past studies, there appears to be an increasing trend in the incidence of cancer among Aboriginal people, especially for urban populations in the Vancouver region. These growing rates indicate a mounting concern regarding cancer rates among the urban Aboriginal population. Even among Aboriginal people, those Aboriginal people living in Vancouver reported a higher rate of cancer than compared to the Aboriginal population of BC (see Table 13).

Rating: Deteriorating



Cancers have progressed from being virtually unknown among Aboriginal people to being major causes of death. While this likely also reflects improvement in the identification of cancer in general, and among Aboriginal people specifically, it still likely reflects an overall increase in the rate of cancer among Aboriginal people. Studies regarding the BC Status Indian population from 1953-1978 show ASMRs for cancer that are significantly lower than those for Other residents (Hislop and Band 1996; Threlfall et al. 1986). However, contemporary ASMRs for Status Indians in regional HSDAs show rates that are significantly higher than rates for Other residents of the same regions. In comparison, recent studies regarding cancer mortality among American Indians and Alaska Natives indicate relatively low rates compared to the general US population (Espey et al. 2005). However, when broken down, certain regions showed rates higher than those for the general US population. In BC, since a large majority of the Aboriginal population now lives in urban centres, it is possible that the accompanied change in

lifestyle, diet, and environment could contribute to changes in cancer patterns over time (Mahoney and Michalek 1998).

Another issue concerning cancer is the lack of statistical data regarding incidences among the Aboriginal community. The majority of current data is only available for the Status Indian population, and there is little time trend data available. The BC Cancer Agency does not provide statistics for the Aboriginal population of BC. If there is an increasing concern regarding cancer among the Aboriginal population, especially for urban populations, there needs to be proper statistical data to help evaluate and document it. Data should be gathered for all Aboriginal identities, and should highlight data for urban areas such as Vancouver, where Aboriginal people often experience the greatest shift in their quality of life.

SOUTH: Social – Health

Indicator:

5.5. Rate of HIV/AIDS among Aboriginal people in the GVRD

Rationale:

Over the past 30 years, HIV/AIDS has become a major global health and social concern, and has become an increasing concern among the Aboriginal community. In 2003, 38 million people were living with HIV/AIDS (25 million of them in sub-Saharan Africa), an increase of nearly nine percent from 2001 (PRB 2004). In North America, approximately 1 million people are living with HIV/AIDS (PRB 2004). Although HIV/AIDS is a growing concern, there is scant data available regarding HIV/AIDS among Aboriginal people (CIDPC 2004). The Centre for Infectious Disease Control has only been gathering ethnicity data for positive HIV cases since 1998, and between 1998 and 2003, only 29.4% of positive HIV tests contained information on ethnicity (CDIPC 2004). Yet, because of the significant links between poverty and the risk of HIV infection, there has been concern that HIV/AIDS will increasingly affect Aboriginal people (Craib et al. 2003).

HIV/AIDS has become a serious concern for urban Aboriginal communities – the majority of Aboriginal people living with HIV/AIDS are found in urban centres such as Vancouver (Special Working Group on Aboriginal Issues 2001). The Downtown East Side, home to over one-third of Vancouver's Aboriginal population and the lowest income level of the city's six regions, has experienced explosive rates of HIV in the past (VCH 2005; CHASE 2003). Because of the debilitating and life-threatening effects of HIV and AIDS, and the social impact it has on the Aboriginal community, monitoring and documenting the spread of HIV/AIDS is critically important to the Aboriginal population of the Vancouver region.

Data:

Table 16. New HIV and AIDS Cases by Aboriginal Status for Vancouver HSDA and Vancouver Coast Health Authority, 1995 - 2004

New HIV and AIDS Cases by Aboriginal Status for Vancouver HSDA											
Aboriginal Status	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Total
Aboriginal	18	18	17	22	16	34	38	29	38	25	304
Non-Aboriginal	179	137	71	79	61	205	208	219	184	183	2848
Unknown	11	14	4	5	9	17	11	20	37	18	356
Total - Vancouver	208	169	92	106	86	256	257	268	259	226	3508
# New HIV and AIDS Cases by Aboriginal Status for Vancouver Coastal Health Authority (VCHA)											
Aboriginal Status	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Total
Aboriginal	21	18	17	23	16	36	43	30	38	29	322
Non-Aboriginal	198	146	77	85	70	232	228	241	209	201	3112
Unknown	15	18	4	7	9	19	12	22	40	22	389
Total - VCHA	234	182	98	115	95	287	283	293	287	252	3823

Source: British Columbia Centre for Disease Control

Table 17. HIV and AIDS cases reported among Aboriginal people in the Vancouver HSDA, 2001

Health Service Delivery Area	New HIV and AIDS cases	As a proportion of the population
Vancouver HSDA		
Aboriginal Population	38	0.342%
Non-Aboriginal population	208	0.039%
Vancouver Coastal Health Authority		
Aboriginal Population	43	0.189%
Non-Aboriginal population	228	0.024%

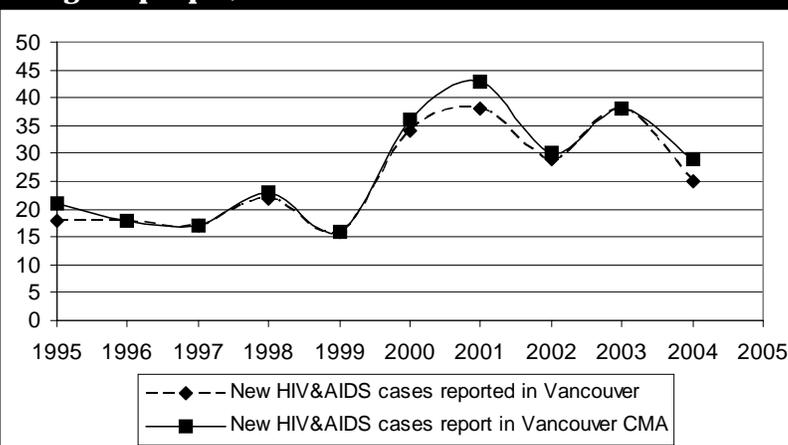
Source: British Columbia Centre for Disease Control

Table 18. Percent increase in the number of new HIV and AIDS cases, 1996 to 2001

Vancouver HSDA	
Aboriginal	111%
Non-aboriginal	52%
Vancouver Coastal Health	
Aboriginal	139%

Source: British Columbia Centre for Disease Control

Figure 10. New HIV and AIDS cases reported among Aboriginal people, 1995-2004



Source: British Columbia Centre for Disease Control

Analysis:

Aboriginal people are disproportionately affected by HIV/AIDS (see Table 17). Available data shows that new cases of HIV/AIDS among Aboriginal people living in the Vancouver region have increased dramatically since 1996 (see Table 18), but have decreased in recent years (see Table 16; Figure 10). Furthermore, Aboriginal people are disproportionately affected by HIV/AIDS (see Table 11). HIV and AIDS cases in the Vancouver HSDA compose the majority of cases in the Vancouver region. It is likely that many of these Aboriginal people live in the Downtown East Side (DTES), which has a high population of Aboriginal people, extremely low socioeconomic levels, and has experienced extremely high rates of HIV infection. Nationally, Aboriginal people composed 1% of all reported AIDS cases in 1990, but by 1999 this percentage had increased to 10.8%, even though Aboriginal people compose roughly 3% of the Canadian population (CIDPC 2004). Although more than half of the known cases of AIDS among Aboriginal people are among bi-sexual or homosexual (“two-spirited”) people, there is growing concern for other groups within the Aboriginal community. Furthermore, HIV/AIDS is growing at an extremely fast rate compared to the non-Aboriginal population (see Table 18). While there was an increase of 50% in the number of new HIV and AIDS cases among the non-Aboriginal population between 1996 and 2001, there was an increase of over 100% among the Aboriginal population.

Other studies have shown that Aboriginal intravenous drug users (IDU), youth, and women are of particular concern for contracting HIV (CIDPC 2004; Craib et al. 2003). Intravenous drug use is now the main risk factor for 60% of new HIV infections among Aboriginal people (compared to 30% for all Canadians), shifting away from two-spirited men (CIDPC 2004; Special Working Group on Aboriginal Issues 2001; BC Aboriginal HIV/AIDS Task Force 1999). A study of IDUs in Vancouver revealed that the rate of HIV infection among Aboriginal participants was twice the rate of non-Aboriginal participants

(Craib et al. 2003), raising further concern for the Aboriginal peoples living in the DTES. In addition, about 25% of the IDUs were Aboriginal whereas they consist of less than 3% of the total population of Vancouver, indicating an overrepresentation of Aboriginal people among IDUs.

HIV/AIDS is having a more pronounced affect on Aboriginal women and youth. 40% of all new Aboriginal HIV infections are women, whereas non-Aboriginal women make up only 17% of new non-Aboriginal HIV infections (CIDPC 2004). Prior to 1992, Aboriginal females made up 13.8% of all Canadian reported AIDS cases, but in 2002, the proportion had increased to 25.8% (CIDPC 2004). HIV/AIDS is affecting a younger segment of the Aboriginal population than compared to the non-Aboriginal population (CIDPC 2004; BC Aboriginal HIV/AIDS Task Force 1999): 50% of all “newly diagnosed HIV infections between 1995 and 1997 were found in the 30 to 39 year range” (BC Aboriginal HIV/AIDS Task Force 1999, p.iii). Intravenous drug use is also a serious concern among young Aboriginal people; one study in Vancouver revealed that intravenous drug use was the main risk factor for 56% of the Aboriginal participants (Craib et al. 2003).

Rating: Poor



Aboriginal people are infected by HIV/AIDS at levels disproportionate to their population, and rates of infection have been increasing over the past twenty years. Although infections have leveled off in recent years after experiencing an explosive rise during the mid-1990s, giving some optimism regarding a decrease in rates, it is still a major cause for concern. Intravenous drug use has now become the major risk factor among Aboriginal people, making it a serious concern for urban areas like the DTES that have low socioeconomic levels and high Aboriginal populations. Injected drug use is believed to be one way that Aboriginal people deal with the effects of poverty and other cultural legacies of colonization such as residential schools (Hill 2003; BC Aboriginal HIV/AIDS Task Force 1999), indicating a need for a holistic approach to prevention and treatment of HIV/AIDS. Women and youth are of special concern, becoming infected at rates well above those compared to their non-Aboriginal counterparts.

The growing concern regarding HIV/AIDS in Vancouver's urban Aboriginal population is further confounded by a lack of data. Although BC is among the leaders in Canada for collecting ethnicity data regarding HIV/AIDS, this data has only been gathered since 1988 (BC Aboriginal HIV/AIDS Task Force 1999). Data needs to be gathered along with specific Aboriginal identity and location to determine trends for each Aboriginal group and region. 97% of all Aboriginal HIV tests in BC are conducted in Vancouver (CIDPC 2004); it is unlikely that all these tests are being performed on people living in Vancouver. Significant socioeconomic factors, such as education, access to culturally-appropriate health services, drug use, and low income levels, all act as barriers to curbing the HIV/AIDS epidemic affecting the local Aboriginal community.

SOUTH: Social – Education

Indicator:

5.6. High school graduation rates for Aboriginal people in the GVRD

Rationale:

Although education is critical for Aboriginal people's success in the labour market, Canada's Royal Commission on Aboriginal Peoples (1996) identified a number of serious problems regarding the education of Aboriginal people. Achievement levels and graduation rates for Aboriginal students are significantly lower than those of non-Aboriginal students. A significant portion of Aboriginal youth do not complete high school, leave the school system without skills for employment, are without adequate language and cultural knowledge of their own people, and feel that schooling experiences erode their identity and self-worth. There is evidence that the lack of high school graduation is correlated to lower levels of employment and income, poverty, ill health, educational failure, family violence and other problems often reinforce one another (RCAP 1996).

Data:

Table 19. Dogwood completion rates in GVRD school districts, 1999/00 – 2003/04

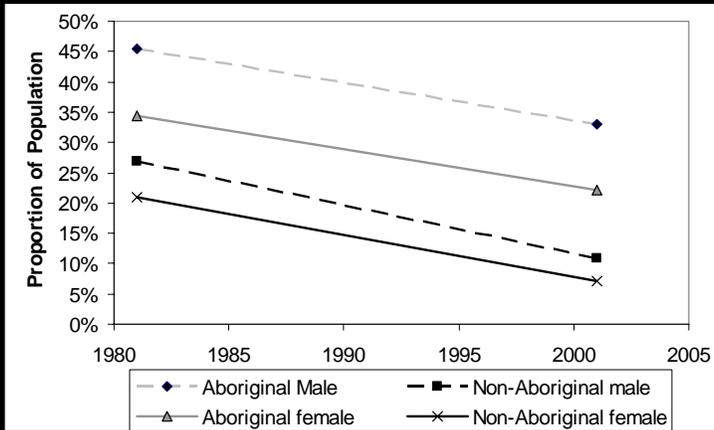
School District	Aboriginal students			Non-Aboriginal students		
	1999/00	2003/04	% Change	1999/00	2003/04	% Change
35 (Langley)	36%	66%	+30%	73%	77%	+4%
36 (Surrey/White Rock)	44%	39%	-5%	77%	83%	+6%
37 (Delta)	45%	56%	+11%	86%	86%	0%
38 (Richmond)	38%	32%	-6%	85%	90%	+5%
39 (Vancouver)	22%	14%	-8%	79%	82%	+3%
40 (New West.)	27%	17%	-10%	61%	74%	+13%
41 (Burnaby)	29%	37%	+8%	79%	85%	+6%
42 (Maple Ridge/Pitt Meadows)	54%	63%	+9%	75%	80%	+5%
43 (Coquitlam/Anmore/Port Coquitlam/Port Moody)	47%	65%	+18%	80%	85%	+5%
44 (North Vancouver/Lions Bay)	36%	28%	-8%	81%	81%	0%
British Columbia	39%	46%	+7%	74	78	+4%

Source: Ministry of Education, 2004 District Reports for Districts 35 to 44

No data on Aboriginal completion rates are available for School District #45 (Bowen Island, West Vancouver).

The *Dogwood Diploma* is awarded to those students who successfully complete all provincial graduation requirements, and are then eligible to take post-secondary programs.

Figure 11. Proportion of Vancouver population aged 20-24 not attending school and who have less than a high school education, 1981 and 2001.



Source: Siggner and Costa, 2005

Analysis:

BC is the only Canadian province that measures how well Aboriginal students are doing within the school system, and creates accountability contracts and enhancement agreements with provincial school districts. Aboriginal dogwood completion rates are significantly lower than their non-Aboriginal counterparts, but Dogwood completion rates have risen by 7% across the province between 1999/00 and 2003/04 for Aboriginal students, compared to 4% for non-Aboriginal students (see Table 18). However, in the two school districts with the highest concentrations of Aboriginal populations (Vancouver and Surrey), the Dogwood completion rates have dropped by 8% and 5% respectively, over the same four-year time period. Furthermore, all data collected refers specifically to the completion rates of students who have successfully entered Grade 8. There is no data made available on Aboriginal drop-out rates prior to Grade 8, but this early drop-out rate is of particular concern to Aboriginal communities. Finally, the minimum requirements for graduation have changed over time, so that it is easier to gain a Dogwood diploma. As a result, higher graduation rates do not necessarily mean higher educational attainment over the long term.

The number and percentage of Aboriginal students graduating yearly from high school are climbing quite rapidly across the province, but there is still a significant gap between the completion rates of Aboriginal and non-Aboriginal students. For example, 46% of Aboriginal students in BC graduated in 2002/03, compared to 42% in 2001/02. That is a 4% climb in completion rates, as compared to a 2% climb in the same time period among non-Aboriginal students. However the completion rate in 2002/03 among non-Aboriginal students was 81%, almost twice the rate among Aboriginal students, at 46%.

The proportion of the Aboriginal population in the Vancouver census metropolitan area with less than a high school education has decreased since 1981 (see Figure 11). There was a decline in the proportion of Aboriginal males without a high school diploma, but this change is less than the change for their non-Aboriginal peers. There was a smaller proportion of Aboriginal females than Aboriginal males without a high school diploma, but this also decreased at a lesser rate than their non-Aboriginal peers. Therefore, the gap between Aboriginal and non-Aboriginal youth without high school diplomas actually worsened.

Rating: Improving



Although Aboriginal Dogwood graduation rates have declined in some key municipalities of the GVRD, and there are some concerns with the current reporting methods on graduation rates, there is certainly a trend in the GVRD – as across the province – for higher rates of Aboriginal graduation. However, there is still a significant gap in high school attainment rates between the Aboriginal and non-Aboriginal populations, and this gap appears to be increasing slightly (although a portion of this may be attributed to the increase in the proportion of young Aboriginal people, in comparison to their non-Aboriginal peers). Regardless, the increase of Aboriginal people graduating from high school is positive, and subsequently is a significant gain in terms of wrestling with cycles of poverty and unemployment that occur within Aboriginal communities.

SOUTH: Social – Education

Indicator:

5.7. Number of Aboriginal people in GVRD graduating from regional post-secondary programs

Rationale:

Aboriginal students often feel marginalized in the post-secondary system. An increase in the participation and success rates of Aboriginal people in post-secondary education and training would represent considerable capacity-building among Aboriginal individuals and communities within the GVRD. The level of education attained by an individual has a significant effect on their employment. Recent data from the BC Labour Force Survey shows that the employment levels of Aboriginal people who have a high school diploma and a post-secondary credential is virtually equal to non-Aboriginal people with the same level of credentials (BC Stats 2005). Furthermore, those people with post-secondary credentials also had higher hourly wages than those with only high school credentials (BC Stats 2005). Creating supportive environments and programs for Aboriginal students can also help to increase post-secondary participation and graduation rates.

Data:

GVRD's two universities (the University of British Columbia and Simon Fraser University) do not keep track of this data themselves, nor does the University Presidents Council of British Columbia. However, from the outcomes of annual student surveys (which are entirely voluntary, and whose statistics are based upon self-identification for ethnicity and race), it has been estimated that there are roughly 138 Aboriginal students in total graduating from UBC and SFU per year. This works out to 1.54% of the graduates from UBC per year, and 2.25% of the graduates from SFU.

Data on Aboriginal graduation rates is collected by the Ministry of Advanced Education for all public colleges, university colleges and institutes across British Columbia.

Table 20. Number of Aboriginal students graduating from public colleges and institutes in the GVRD, 2001/02 – 2003/04

Public colleges, university colleges and institutes	2001/02	2002/03	2003/04
Associate degree (Provincial Standards)	4	2	5
Bachelor's Degree	6	6	4
Certificate	84	74	77
Citation	0	1	6
Diploma	26	22	28
TOTAL	120	106	120

Source: Ministry of Advanced Education, Central Data Warehouse

In the 2001 Census, it was found that 10.4% of GVRD's Aboriginal population 25 years and over had earned a high school graduation certificate, while 36.5% of this group had received a college certificate or diploma and 7.7% had received a university degree.

Analysis:

The BC Ministry of Advanced Education has not been gathering data on post-secondary graduation rates long enough to determine whether there have been any significant improvements. Data regarding graduation rates for the past three years indicate a relatively stable level of enrollment (see Table 20). It is likely that these figures are an underestimate because of the voluntary methods used to gather the data. A comparable measure for analyzing graduation rates is the number and percentage of Aboriginal adults (25 years and over) who have gained post-secondary diplomas or degrees; however, data is only currently available from the 2001 Census. Of the 10.4% of Aboriginal people in the GVRD reporting having a high school diploma, only a third of them had gone on to receive a college certificate, and less than one-in-ten had received a university degree.

Rating: Fair



All measures that show the graduation rates over the course of the past few years, from both the Province and from the two GVRD universities, demonstrate that the post-secondary graduation rates have remained quite steady in the past few years. While a marked improvement in graduation rates is not evident, nor is any deterioration in the graduation rates.

In light of increasing tuition costs at BC post-secondary institutions in recent years after the former government's tuition freeze, it will be of particular interest to monitor the Aboriginal post-secondary rates. Rising tuition costs and the decrease in provincial grants for student loans may have an impact on the accessibility of post-secondary education for many Aboriginal students who already experience economic pressure.

SOUTH: Social – Education

Indicator:

5.8. Percentage of Aboriginal students in special needs/alternative programs

Rationale:

All children can experience challenges and difficulties at various times in their school careers. A child may demonstrate behaviour or learning problems in response to unsettling situations they experience in their home life or school environment (Kavanagh 1998). However, many observers are concerned that Aboriginal students are “over-diagnosed” with behavioural difficulties in the public school system and are thereby over-represented in the special needs programs. The Province of BC has recognized that there is an over-representation in the number of Aboriginal students classified as “severe behavioural” in districts across the province (McBride 2001).

Data:

British Columbia’s Ministry of Education has collected data on children in special needs programs for all districts. The Ministry has set a province-wide goal of reducing the number of Aboriginal students being sent to special needs educational programs for diagnosis of behavioural difficulties. The data shown below in Table 21 shows the changes to Aboriginal student percentages identified with “severe behaviour” over the five-year period of 1999/00 to 2004/05.

Table 21. Percentage of Aboriginal students with “severe behaviour” in GVRD school districts, 1999/00 – 2004/05

School District	1999/2000	2004/2005	% Change
35 (Langley)	2.6%	2.9%	+0.3%
36 (Surrey/White Rock)	1.5%	7.5%	+6.0%
37 (Delta)	4.3%	8.7%	+4.4%
38 (Richmond)	5.6%	5.5%	-0.1%
39 (Vancouver)	9.2%	10.0%	+0.8%
40 (New Westminster)	5.0%	9.3%	+4.3%
41 (Burnaby)	7.1%	7.5%	+0.4%
42 (Maple Ridge/Pitt Meadows)	2.2%	2.7%	+0.5%
43 (Coquitlam/Anmore/Port Coquitlam/Port Moody)	4.5%	5.9%	+1.4%
44 (North Vancouver/Lions Bay)	7.1%	6.6%	-0.5%
45 (West Vancouver/Bowen Isl.)	14.3%	3.7%	-10.6%

Source: Ministry of Education, 2004 District Reports

Analysis:

Province-wide, the percentage of Aboriginal students in special education due to “behavioural disabilities” has dropped 2% from 1999/00 to 2003/04 (from 10% to 8%) (BC Ministry of Education 2004). The Province’s goal to significantly reduce the Aboriginal students in special education due to behavioural issues has not been met in the Greater Vancouver Regional District (GVRD), except in the Districts of West Vancouver/Bowen Island and North Vancouver/Lions Bay (see Table 21). Quite the

opposite has occurred for most school districts. In comparison, the percentage of non-Aboriginal students in special education due to behavioural disabilities dropped from 3% in 1999/2000 to 2% in 2003/2004. This percentage for non-Aboriginal students is four times lower than the rate for Aboriginal students. Furthermore, significantly more Aboriginal students are in intensive behaviour interventions/serious mental illness (3.6% in 2003/04) than non-Aboriginal students (0.9%) (BC Ministry of Education 2004) The percentage of Aboriginal students labeled “severe behavioural” has actually climbed in most school districts, increasing by as much as 6% in certain school districts.

Rating: Deteriorating



While the rates of Aboriginal students identified with “severe behaviour” are not climbing dramatically, it is significant that they continue to rise within most GVRD school districts, even as these districts receive pressure to help meet the Ministry’s provincial goals.

There needs to be clarification regarding the increase in Aboriginal students being identified with “severe behaviour” in the GVRD. It will be important to distinguish what impacts, if any, changes in definitions of terminology or improvements in documenting such behavioural conditions have attributed to such noted increases. Furthermore, it will be important to explore the psychological and societal reasons for the increase.

SOUTH: Social – Crime and Safety

Indicator:

5.9. Incarceration rates of Aboriginal People in the GVRD

Rationale:

Aboriginal people have long been overrepresented in Canadian correctional facilities (Bienvenue and Latif 1974; Hagan 1974), but only in recent years has there been more investigation and enquiries into this issue (Royal Commission on Aboriginal Peoples 1996; Law Reform Commission of Canada 1991). As Menno Boldt (1991, p.13) sums up, “official statistics, which show Indians to be grossly overrepresented among those arrested, convicted, and imprisoned, lend support to Indian grievances that racism in the Canadian justice system is pervasive and runs deep. Indians have experienced it and proclaimed it for years, but, except for the recent provincial inquiries, the justice system has denied the validity of such grievances”. Many factors are involved regarding Aboriginal overrepresentation in the justice system, including a racial bias in the justice system, overpolicing, cultural and legal factors, and the socioeconomic conditions of Aboriginal peoples (Smandych et al. 1993). Aboriginal incarceration affects the entire community, highlights the level of the equality of justice, and comments on the ability of western forms of justice to meld with traditional forms of Aboriginal justice. Monitoring such rates helps to document whether such conditions are changing for Aboriginal people.

Data:

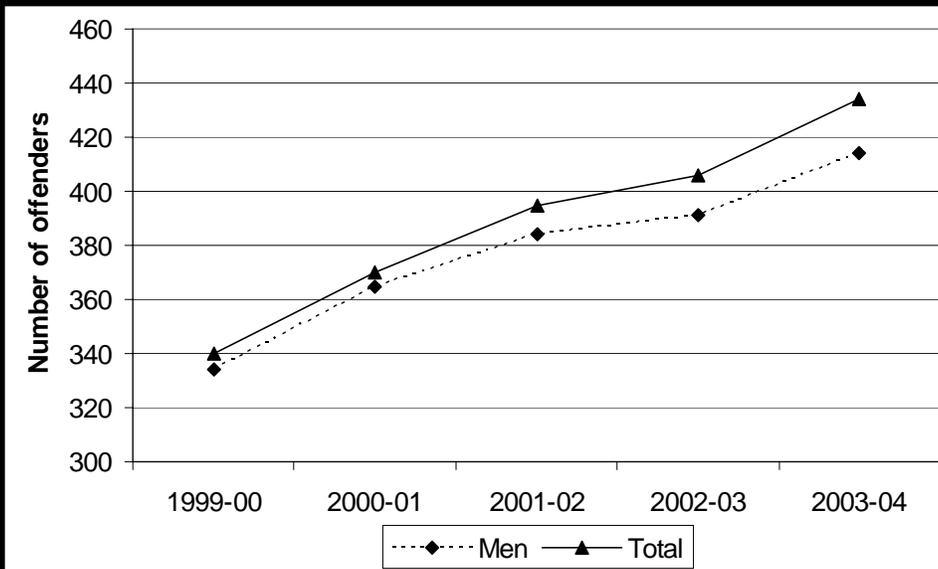
Federal corrections data is gathered by region, rather than by municipal districts like the GVRD. Furthermore, statistics show where people are incarcerated rather than the origin of their crime. The Pacific region includes Aboriginal people in BC and the Yukon. It is difficult, given the statistics, to determine the portion of urban vs. rural offenders.

Table 22. Aboriginal offenders in federal correction facilities, compared to the total population of the Pacific region

Pacific Region correctional statistics	Total	As a portion of total
Aboriginal people in correctional facilities, 2005	670	21.08%
Non-Aboriginal people in correctional facilities, 2005	2,508	78.92%
Total in federal correction facilities, 2005	3,178	100.00%
Total Aboriginal population age 20 and above, 2001	105,715	3.63%
Total non-Aboriginal population age 20 and above, 2001	2,805,210	96.37%
Total population for the Pacific Region, 2001	2,910,925	100.00%

Source: Aboriginal Initiatives Branch, Correctional Services Canada, 2005

Figure 12. Total number of Aboriginal federal offenders in the Pacific region, 2000-2004



Source: Public Safety and Emergency Preparedness Canada, 2004

Analysis:

Much of the available contemporary data still show a high overrepresentation of Aboriginal people in the justice system, and reflects the historical patterns of increasing overrepresentation rates among Aboriginal people (see Table 22). While Aboriginal people represent less than 4% of the total population of BC and the Yukon, they account for over 20% of the federally-incarcerated population for the region. Nationally, Aboriginal offenders account for 18.5% of the federally-incarcerated population and 12.9% of the community population, but account for only 2.7% of the Canadian adult population (Public Safety and Emergency preparedness 2004). In addition, the number of Aboriginal people in federal correction facilities in the Pacific region is also increasing (see Figure 12). Nationally, there was an increase of 21.7% in the Aboriginal population under federal jurisdiction from 1996-97 to 2003-04 (Public Safety and Emergency Preparedness 2004). Furthermore, recent Canada-wide statistics highlight a disturbing trend: the average age of admission is lower for Aboriginal offenders than for non-Aboriginal offenders – the median age of Aboriginal offenders is 29 compared to 33 for non-Aboriginal offenders (Public Safety and Emergency preparedness 2004). In 2003/04, 51.5% of Aboriginal offenders admitted to federal institutions were under the age of 30, compared to 38.4% of non-Aboriginal offenders (Public Safety and Emergency preparedness 2004).

Rating: Weak



Statistics from the Pacific region, along with other recent reports all reveal a number of disturbing trends regarding incarceration rates of Aboriginal people: Aboriginal people are still overrepresented among the incarcerated population, the number of incarcerated Aboriginal people is increasing, and the average age of the incarcerated population is lower than that for the non-Aboriginal population (Table 22; Figure 12; Public Safety and Emergency Preparedness 2004; Moore 2003).

Prior studies also highlight a number of common socioeconomic characteristics among the Aboriginal incarcerated population. In general, Aboriginal offenders have prior involvement in the criminal justice system, have violent offence backgrounds, and have a greater need for specialized programs once incarcerated (Moore 2003). Large proportions of incarcerated First Nations are rated as having “some” or

“considerable” need regarding substance abuse (94%), employment (70%), and personal/emotional orientation (96%) (Moore 2003).

It is argued that poor socioeconomic conditions are one of the main reasons why Aboriginal people are overrepresented in the incarcerated population (Royal Commission on Aboriginal Peoples 1996). Aboriginal offenders often have significantly lower education levels (Bonta et al. 1997), are more frequently unemployed (Trevathan et al. 2000), and are more likely to experience alcohol and substance abuse (Trevathan et al. 2000). Some research has shown that Aboriginal people living off-reserve are younger, less educated, and more prone to unemployment than the general population (McDonald 1991), and gravitate to inner city cores, areas which can promote criminal activities. In fact, as La Prairie (1990, p.430) points out, “if one follows the theoretical approach of the critical criminologists and uses class (based on socioeconomic level) as the standard and predictor of who goes to jail, aboriginal people may well be statistically underrepresented” in correctional facilities. As Moore (2003, p.35) concludes, “addressing the social ills which contribute to criminal behaviour may be key to lowering Aboriginal rates of incarceration.”

From the statistics it is difficult to determine the proportion of offenders who are from urban centres. It is likely the increase in urban Aboriginal populations, combined with significantly lower socioeconomic conditions, does result in a greater proportion of Aboriginal offenders coming from urban areas. A study by McCaskill (1985) revealed that 67% of federal and provincial prisoners from Manitoba were living in urban areas at the time of their offence. It is estimated that 70% of all Aboriginal people sentenced to a penitentiary were from urban communities, or had committed their offense while in an urban setting (Aboriginal Initiatives Branch 2005). La Prairie's (1995) study of inner city Aboriginal people found that nearly four-fifths had been charged with a criminal offence at some point in their lives. She also highlighted the fact that Aboriginal involvement in the justice system is not a function of race, but rather class: specifically, those people who experience greater poverty and social issues are more likely to be involved in the justice system. Although the urban Aboriginal population is growing, there has been little research regarding urban Aboriginal people in the criminal justice system. Some studies have highlighted different needs among urban and rural Aboriginal offenders (La Prairie 1995; Nuffield 1998), and more research is needed regarding the urban Aboriginal offender population.

Another important factor to consider is that, although the number of Aboriginal offenders is increasing, and the average age is decreasing, the Aboriginal population is also growing rapidly, with the largest increases occurring in the youngest age categories. Therefore, increases in offender statistics and a decrease in the average age may be offset by a younger, larger Aboriginal age cohort. More research should be conducted to compare the ages and rates of increase among Aboriginal offenders with the average age and growth of the Aboriginal population in the region.

It is important to note that these findings do not indicate that Aboriginal overrepresentation in correctional facilities is an “Aboriginal problem”; rather, it implicates that the Canadian justice system, a wholly western system of judgment, has not been responsive or accountable to Aboriginal people or culture. As the Commission on First Nations and Metis Peoples and Justice Reform of Saskatchewan (2004, p.1) noted, “the issues facing First Nations and Metis People – and the reasons they come into conflict with the justice system – are rooted in failures in the areas of education, health, and economic development”. Indeed, there has been progress towards developing traditional justice models (Achtenburg – nd), and developing culturally-relevant programs, such as traditional sweat lodges, for the Aboriginal incarcerated populations (Johnston 1997). In addition, there is much attention and study regarding Aboriginal justice, which will help to improve understanding about the situation, and will hopefully ultimately result in a decrease of incarceration rates. But while these concerns and programs will help to alleviate some of the concerns regarding an inappropriate justice system, Aboriginal involvement in the justice system will likely not decrease substantially until socioeconomic conditions improve.

SOUTH: Social – Crime and Safety

Indicator:

5.10. Rates of violent crime committed by and on Aboriginal People in the GVRD

Rationale:

Monitoring rates of violent crime has become a common quality of life indicator for Canadian municipalities. It is used as an indicator by the Federation of Canadian Municipalities to document safety in municipalities (FCM 2005). Violent crime received the highest weighting among a series of quality of life indicators as chosen by people living across Scotland (Rogerson 1989). Looking at rates of victimization due to violent crime provides an indication of the level of personal and public safety. Such safety and security of Aboriginal communities is fundamental to the enjoyment of a high quality of life. In addition, examining violent crime rates committed by Aboriginal people acts as a measure of the level of socioeconomic disadvantage (Lee et al. 2003).

Data:

Table 23. Homicide Deaths among Status Indians (SI) and Other Residents by Health Service Delivery Area and Age Group, 1992-2002

HSDA	Age Group (in years)										Total	
	<1	1-4	5-9	10-14	15-19	20-24	25-44	45-64	65-74	75+	Number	ASMR
SI - Fraser North	1	-	-	-	2	1	-	-	-	-	4	0.7
Other - Fraser North	-	2	-	2	9	21	64	9	4	7	118	0.2
SI - Fraser South	-	-	-	-	1	-	4	-	-	-	5	1.1
Other - Fraser South	3	2	2	2	13	14	56	17	4	3	116	0.2
SI - Vancouver	-	-	-	-	1	3	13	5	-	-	22	1.5
Other - Vancouver	2	1	2	-	12	25	102	33	4	11	192	0.3
SI - NS/Coast Garibaldi	-	-	-	-	1	2	3	2	-	-	8	0.7
Other - NS/Coast Garibaldi	-	-	-	1	1	3	13	6	-	3	27	0.1
SI – British Columbia	1	5	1	-	12	24	67	23	4	-	137	1.0
Other – British Columbia	15	15	13	14	65	102	414	168	28	41	875	0.2

(ASMR is per 10,000 standard population)

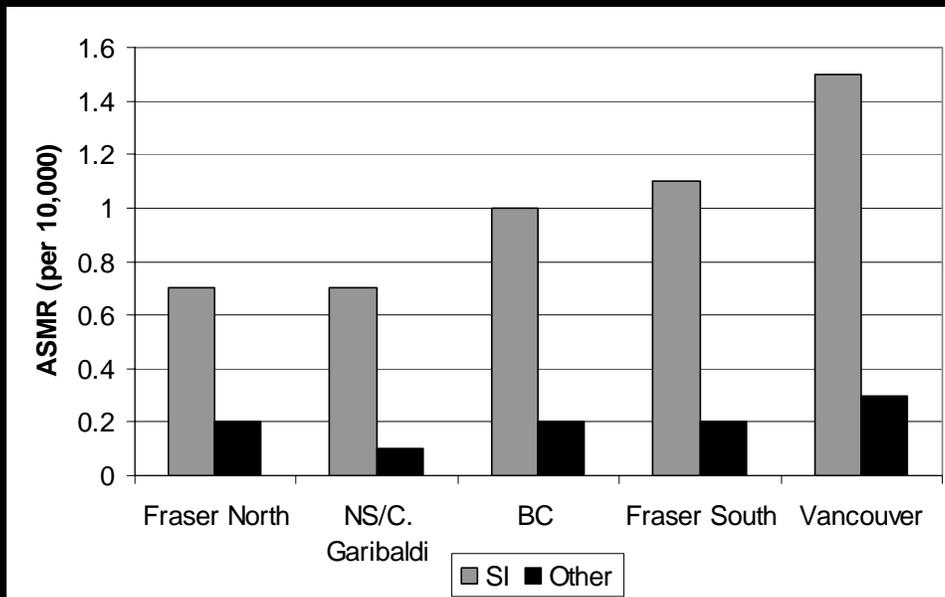
Source: BC Vital Statistics Agency and First Nations and Inuit Health Branch 2004.

Table 24. Aboriginal offenders in federal correction facilities for schedule 1 offences, compared to the total population of the Pacific region

Pacific Region correctional statistics	Total	As a portion of total
Aboriginal people in correctional facilities for schedule 1 offences, 2005	367	24.35%
Non-Aboriginal people in correctional facilities for schedule 1 offences, 2005	1,140	75.65%
Total in federal correction facilities for schedule 1 offences	1,507	100.00%
Total Aboriginal population age 20 and above, 2001	105,715	3.63%
Total non-Aboriginal population age 20 and above, 2001	2,805,210	96.37%
Total population for Pacific region, 2001	2,910,925	100.00%

Source: Aboriginal Initiatives Branch, Correctional Services Canada, 2005

Figure 13. Homicide deaths among Status Indians and Other Residents, 1992-2002



Source: BC Vital Stats and FNIHB 2004

Analysis:

Aboriginal people are victims of homicide at rates well above those for the non-Aboriginal population. As an example of the entire Aboriginal population, ASMRs for homicide among Status Indians are significantly higher than that for Other residents (see Table 23; Figure 13). For the Vancouver HSDA, the ASMR for homicide among Status Indians was five times the rate for other residents. Among all age groups in BC, homicide is the 24th leading cause of death for Status Indians, and the 26th leading cause of death for Other residents (BC Vital Stats and FNIHB 2004). When examined by age, the majority of homicides among Status Indians occurred in the 20-24 and 25-44 year age categories. Homicide is the 4th leading cause of death for First Nations aged 20-44 nationally (FNIHB 2003).

Aboriginal people who have committed violent crimes are disproportionately represented in federal corrections facilities. Aboriginal people in the Pacific Region incarcerated in federal institutions for schedule 1 offences (e.g. homicide, manslaughter, sexual assault) make up nearly 25% of the incarcerated population, but only 4% of the population (see Table 24). A study of federal offenders revealed that there are proportionately more homicide offenders among Aboriginal offenders (Motiuk and Vuong 2004)

Rating: Poor

Aboriginal people are both disproportionately affected by violent crime, and disproportionately commit violent crime. ASMRs for homicide among Status Indians are 3 to 7 times the rate for other residents in the same regions. A study of homicide rates among Aboriginal people in Canada between 1962 and 1984 also show that they are at greater risk of homicide than the non-Aboriginal population (Moyer 1992). This would likely indicate a lower level of safety among the Aboriginal community, which is probably related to socioeconomic conditions, since people of lower socioeconomic conditions are more likely to be victims of crime (Lee et al. 2003). Similarly, Aboriginal people are more likely to be incarcerated for violent crimes such as homicide than non-Aboriginal offenders. A nation-wide study by Moore (2003) revealed that, in general, a relatively large proportion of First Nations offenders are incarcerated for violent offences such as homicide.

A major issue surrounding the statistics regarding rates of violent crime among Aboriginal people is the lack of information in an urban context. Although there is information available for various regions, little data is readily available regarding urban populations. Little research is available regarding Aboriginal victims of crime in urban, and even rural, settings. More research is needed to look at the relationship between urban Aboriginal people and rates of victimization, as well as relationships between Aboriginal people who have committed violent crimes and socioeconomic factors. Aboriginal justice statistics need to start providing data on where violent crimes take place, and compare these trends to the issues of Aboriginal migration to urban centres. Furthermore, although there seems to be a growing realization regarding overrepresentation of Aboriginal people in the justice system and a desire to affect change, there is less attention given to the rates of violent crime among Aboriginal people.

6. WEST – Economic

Category	Indicator
Employment	Employment rates among Aboriginal people in the GVRD Percentage of the Aboriginal workforce with management positions in the GVRD
Income	Percentage of Aboriginal people in the GVRD living below the poverty line Average household incomes and shelter cost-to-income ratios of Aboriginal households in the GVRD Social assistance rates for Aboriginal people in the GVRD
Entrepreneurship	Percentage of the Aboriginal workforce that is self-employed in the GVRD
Youth Involvement	Unemployment rates and level of income for Aboriginal youth in the GVRD

WEST: Economic – Employment

Indicator:

6.1. Employment rates among Aboriginal people in the GVRD

Rationale:

Employment is vital to the social and economic fabric of the Aboriginal community. The income that is derived from employment can provide access to supportive social networks, improved quality of housing, reduced stress, and improved health (Seccombe and Amey 1995; Williams 1990). Those people who seek employment may be more likely to maintain their health, and less likely to undertake risky behaviour, or be mentally or physically ill compared to those who are unemployed (Mulatu and Schooler 2002; Williams 1990; Monson 1986). Employment is also a predictor of lower mortality rates among all age groups (Krueger et al. 2003). Employment also has significant benefits for the local community and local businesses. Aboriginal people in Canada have historically suffered from high rates of unemployment, especially on reserves. Employment is often cited as a reason why Aboriginal people migrate to urban areas (Norris and Clatworthy 2003); hence, documenting the involvement of Aboriginal people in the economy by examining employment rates is important from a number of standpoints.

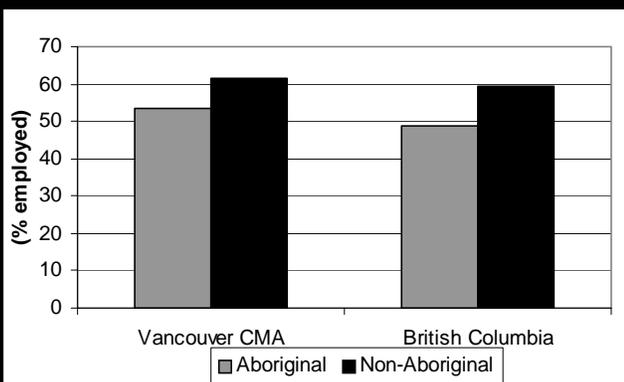
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Table 25. Employment and unemployment rates among Aboriginal and non-Aboriginal population aged 15 and over in the Vancouver CMA and BC, 2001

Characteristics	Vancouver						British Columbia					
	Aboriginal			Non-Aboriginal			Aboriginal			Non-Aboriginal		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Participation Rate	69.0	58.2	63.2	71.6	61.1	66.2	68.8	57.5	62.9	70.7	59.9	65.2
Employment Rate	57.0	50.5	53.5	66.4	56.7	61.4	51.1	46.6	48.7	64.3	55.1	59.6
Unemployment Rate	17.4	13.1	15.3	7.3	7.2	7.2	25.8	19.0	22.5	9.0	8.0	8.5

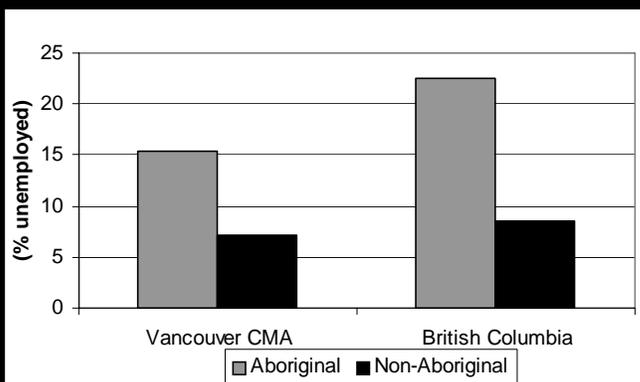
Source: Statistics Canada, 2001. Aboriginal Community Population Profile.

Figure 14. Employment rates (aged 15 and over) in the Vancouver CMA and BC, 2001



Source: Statistics Canada, 2001. Aboriginal Community Population Profile

Figure 15. Unemployment (aged 15 and over) in the Vancouver CMA and BC, 2001



Source: Statistics Canada, 2001. Aboriginal Community Population Profile

Figure 16. Proportion of population (aged 15-64) in BC with a job, 2004-2005

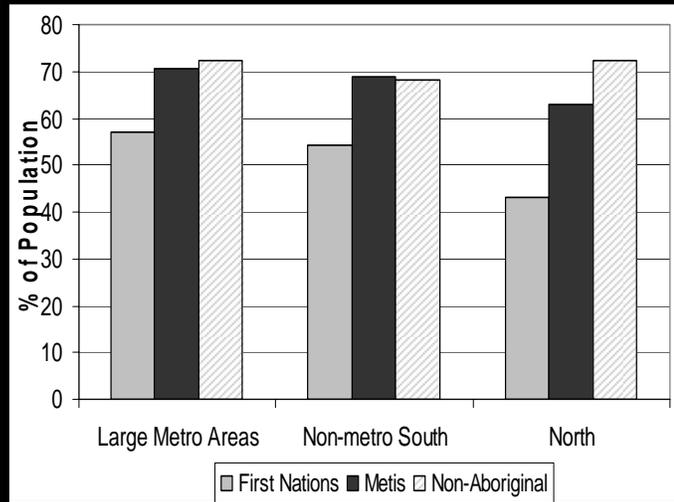
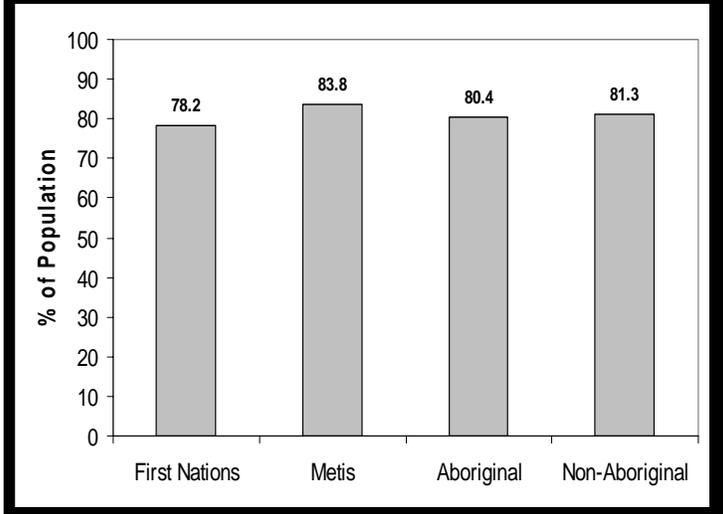


Figure 17. Proportion of population (aged 15-64) in BC with a job who have a high school diploma and a post-secondary credential, 2004-2005



Analysis:

The employment and participation rates for Aboriginal people in the Vancouver census metropolitan area (CMA) are greater than the rates compared to the entire Aboriginal population of BC, but lower than the rates for non-Aboriginal people in Vancouver (See Table 25; Figure 14). The employment rate is defined as the number of people employed during the week as a percentage of the total population aged 15 and over. However, the unemployment rate (the unemployed as a percentage of the labour force in the week) among Aboriginal people in the Vancouver CMA in 2001 was over twice as high than that for non-Aboriginal people (see Figure 15). Yet, when compared to the total Aboriginal population for BC, the unemployment rate for Aboriginal people in the Vancouver CMA was much lower. On a national level, employment rates for Aboriginal people in the Vancouver CMA has increased very little (by 0.2%) since 1981, while employment rates for Aboriginal people in other CMAs have increased anywhere from 2% to 8.6% (Siggner and Costa 2005).

In the 2001 census, the unemployment rate for Aboriginal women in both Vancouver and BC is lower than the rate for Aboriginal men. However, recent BC-wide data for 2004-2005 reports the opposite: the unemployment rate for First Nations in BC was 24.2% for women and 17.6% for men (BC Stats 2005).

In 2005, First Nations in BC had a higher level of unemployment (20.9%) than compared to Metis (12.2%) (BC Stats 2005). Both groups had a significantly higher unemployment rate than the non-Aboriginal population (6.6%). There was less of a disparity among employment rates for Aboriginal people living in large metropolitan areas in the southern portion of BC (i.e. Victoria, Vancouver, Abbotsford, Kelowna) than compared to northern portions of the province (see Figure 16).

Education proved to be a strong factor in the level of employment for Aboriginal people. The employment rates of Aboriginal people in BC who have completed a high school diploma and a post-secondary certificate or diploma was virtually equal to that of their non-Aboriginal peers (See Figure 17). 80.4% of Aboriginal people with some sort of post-secondary credentials were employed, compared to 81.3% of the non-Aboriginal population.

Rating: Weak

Unemployment rates among Aboriginal people in the Vancouver CMA lag significantly behind the rate for the non-Aboriginal population. 15% of the Aboriginal labour force in Vancouver is unemployed compared to 7% for the non-Aboriginal population. This high rate of unemployment is a reflection of the general lower economic status of Aboriginal people, and has implications for personal and community health.

However, this rate is lower than the provincial unemployment rate for Aboriginal people; furthermore, the employment rate is higher, meaning that there is a greater proportion of Aboriginal people finding work in Vancouver when compared to the Aboriginal population of BC. Unemployment rates need to be decreased among Aboriginal people, which will ultimately improve people's personal health, and invigorate the entire Aboriginal community. A positive sign is that employment rates for Aboriginal people increase with educational attainment (Siggner and Cost 2005). With an increase in the proportion of Aboriginal people completing high school and/or university, employment rates should also increase.

WEST: Economic – Employment

Indicator:

6.2. Percentage of the Aboriginal workforce with management positions in the GVRD

Rationale:

Aboriginal involvement in management-level employment is a signal of equal opportunity for the urban Aboriginal workforce, and provides an indication of the growing Aboriginal middle class (Wotherspoon 2003; DiTomaso and Thompson 1988). It also documents the advancement of the Aboriginal community from a wage economy to a knowledge-based economy. Although some people argue that class distinction is irrelevant in the Aboriginal community, class indicators such as management-level employment “point to the degrees of inequality that mark life conditions and chances both among groups (such as Aboriginal people relative to non-Aboriginal people) and within groups” (Wotherspoon 2003, p.149). Urban centres such as Vancouver also offer better social attributes such as education and housing, and a greater degree of labour positions, and hence will likely provide greater opportunities for managerial positions (La Prairie 1995). As Wotherspoon (2003, p.155) states, “the concentration and proximity of larger cohorts of professional and managerial colleagues of Aboriginal ancestry within an urban context creates possibilities for interaction and network-building that are less likely to exist in smaller communities.” Involvement in management-level positions provides Aboriginal people and communities with greater economic resources to mobilize development of Aboriginal communities, and can provide the community with the capacity to influence decision-making relevant to the Aboriginal community (Wotherspoon 2003).

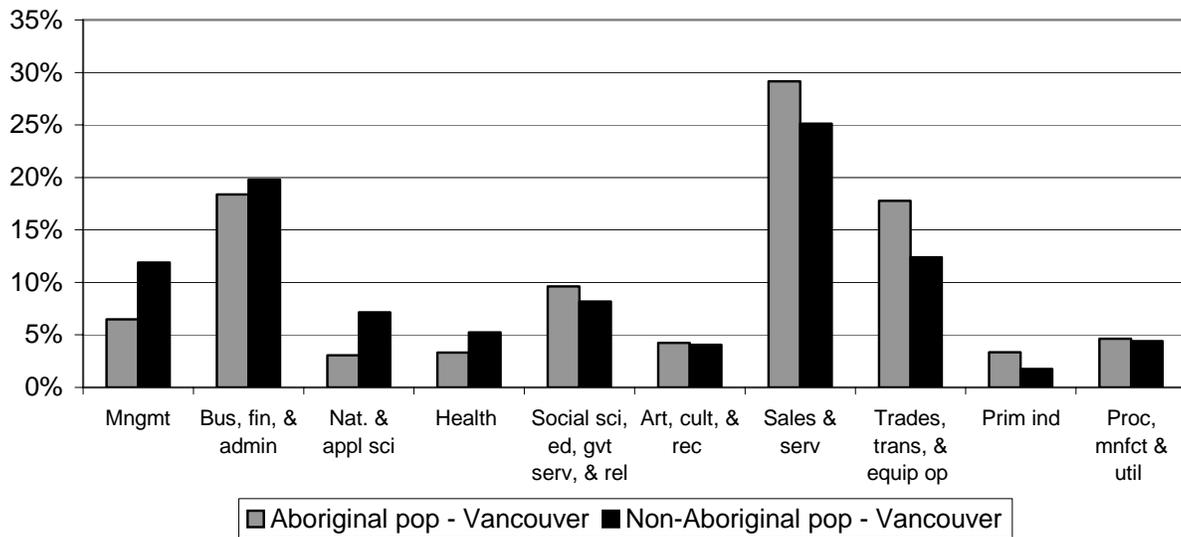
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Table 26. Labour force occupations as a percent of total experience labour force for Aboriginal and non-Aboriginal populations aged 15 and over for the Vancouver CMA and BC, 2001

Labour Force Occupations	Aboriginal		Non-Aboriginal	
	Vancouver	BC	Vancouver	BC
Total - Experienced labour force	100%	100%	100%	100%
Management occupations	6%	7%	12%	11%
Business, finance and administration occupations	18%	13%	20%	18%
Natural and applied sciences and related occupations	3%	3%	7%	6%
Health occupations	3%	3%	5%	5%
Social science, education, government service and religion	10%	9%	8%	8%
Art, culture, recreation and sport	4%	3%	4%	3%
Sales and service occupations	29%	28%	25%	26%
Trades, transport and equipment operators and related occupations	18%	17%	12%	14%
Occupations unique to primary industry	3%	10%	2%	4%
Occupations unique to processing, manufacturing and utilities	5%	7%	4%	5%

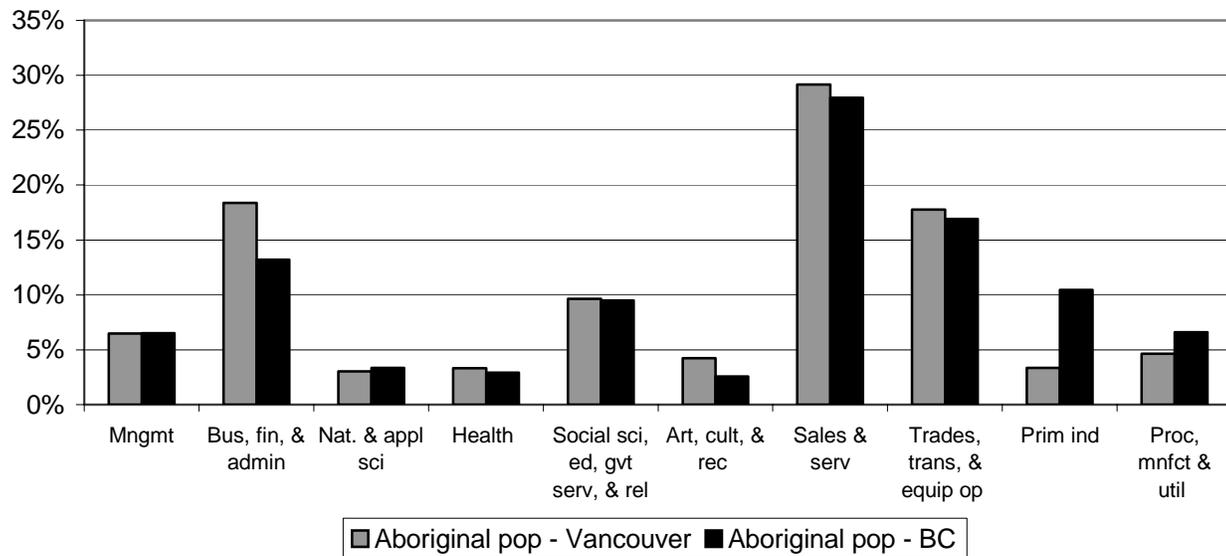
Source: Statistics Canada, 2001. Aboriginal Population profiles; Community Population profiles

Figure 18. Labour force occupations as a percent of total experience labour force for Aboriginal and non-Aboriginal populations aged 15 and over for the Vancouver CMA,



Source: Statistics Canada. 2001. Aboriginal Population profiles; Community Population profiles

Figure 19. Labour force occupations as a percent of total experience labour force for Aboriginal populations aged 15 and over for the Vancouver CMA and BC, 2001



Source: Statistics Canada. 2001. Aboriginal Population profiles; Community Population profiles

Figure 20. Distribution of the workforce in BC, 2004-2005



Source: BC Stats. 2005. Aboriginal Labour Force Survey

Analysis:

Just over 1 in 20 Aboriginal people in Vancouver's experienced labour force held a management-level position, half the rate of the non-Aboriginal population in Vancouver (see Table 26; Figure 18). The rate for Aboriginal people in Vancouver was nearly equivalent to the rate for the entire Aboriginal population of BC (see Table 26; Figure 19). Aboriginal people comparatively held more sales and trades jobs than the non-Aboriginal population. Compared to the Aboriginal population of BC, Aboriginal people in Vancouver held more business positions, and fewer primary industry and processing positions, occupations commonly associated with resource development. Similarly, recent data from the BC Labour force survey shows that Aboriginal people in BC are under-represented in management and professional level occupations (see Figure 20).

The proportion of Aboriginal people employed in professional and managerial positions grew from 21.4% to 21.5% between 1986 and 1996, slightly below the levels of growth of 26.9 to 28.5% for the general population (Statistics Canada 2000; 1989). Among people with some post-secondary education, one-fifth of Aboriginal workers were involved in management level position, compared to one-third for non-Aboriginal workers (Hull 2000).

Rating: Improving



While Aboriginal people did not hold as many management-level positions as the non-Aboriginal population, there is a noticeable difference between the Aboriginal economies for BC and the rest of the province, and a positive move towards a growing middle class in the Aboriginal community. Aboriginal people held fewer management-level positions when compared to the non-Aboriginal population, and similar rates to the Aboriginal population of BC. One interesting difference is that Aboriginal people in Vancouver held proportionately more occupations associated with the middle class (business, finance and administration; social science, education, government services, and religion), than compared to the Aboriginal population of BC, and fewer occupations associated with resource development (primary industry; processing, manufacturing, and utilities). This provides an indication that urban environments offer Aboriginal people a greater opportunity to develop a knowledge-based economy. This can also be documented by the increase in professional and managerial positions among Aboriginal people with some post-secondary education. Furthermore, changes in the labour market, increasing educational attainment, and the desire for Aboriginal people in management-level positions are creating a growing need for educated, experience Aboriginal professionals.

WEST: Economic – Income

Indicator:

6.3. Percentage of the Aboriginal people in the GVRD living below the poverty line

Rationale:

Evidence from the 1996 Census data showed that Aboriginal people in urban areas were more than twice as likely to live in poverty as non-Aboriginal people (Anderson 2003). Poverty makes people particularly vulnerable to poor housing, disability, violence and lack of privacy. Anti-poverty activists are leading efforts both nation-wide and locally to ward off the rise of high-poverty urban Aboriginal communities. This has proven to be a difficult battle: the Vancouver Aboriginal Child and Family Services Society (VACFSS 2005) currently estimates that 80% of the Aboriginal children in Vancouver and Richmond live in poverty. Because of the inherit tie between poverty and health and housing conditions (Seccombe and Amey 1995; Williams 1990), monitoring the amount of Aboriginal people living below the poverty line is important for documenting the condition of Aboriginal people in Vancouver.

Data:

In the 2001 Census, the median pre-tax income of all persons indicating Aboriginal identity across Canada was \$13,526, only 61% of the median income for all Canadians (\$22,120).

Low-Income Cutoffs (LICO) are used by the federal government as the measure of “the poverty line.” In 2000, Statistics Canada reported that the average LICO for a Vancouver household income was \$32,900. Unfortunately, the federal government does not publish any information publicly on household Aboriginal income levels, nor does publicly available Census data provide information on the numbers of households who fall below the poverty line. The only public information from Statistics Canada on Aboriginal incomes in the GVRD is the median total income of Aboriginal persons 15 years of age and over – \$15,160 – as compared to the median of \$23,237 among all youth and adults living in the GVRD.

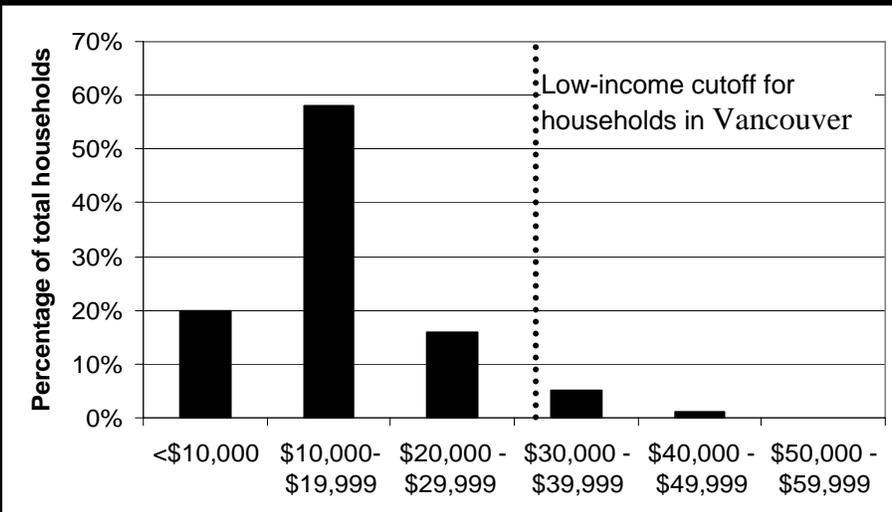
A 2002 GVRD report on homelessness examined household incomes among all at-risk Aboriginal people in the GVRD.

Table 27. Household Income of At-Risk Aboriginal People in the GVRD

Household Income	Total Number	Percentage
Less than \$10,000	1,405	20%
\$10,000 - \$19,999	4,060	58%
\$20,000 - \$29,999	1,130	16%
\$30,000 - \$39,999	340	5%
\$40,000 - \$49,999	55	1%
\$50,000 - \$59,999	0	0%

Source: GVRD, Research Project on Homelessness in Greater Vancouver, 2002

Figure 21. Household Income of At-Risk Aboriginal People in the GVRD



Source: GVRD, Research Project on Homelessness in Greater Vancouver, 2002

Households were considered to be at-risk by the GVRD analysts (Woodward 2002) if they are in core housing need and pay more than 50% of their income on housing. These statistics on household income exclude households earning \$0 or negative income.

Analysis:

The prevalence of Aboriginal families living below the poverty line in the GVRD is closely correlated to other social, economic and even environmental indicators reviewed in this study. For example, while having a large family will not automatically lead to poverty, an increase in family size will compound the need for affordable housing and support services when the family is also faced with a low income, hence increasing their risk of poverty.

High poverty rates have also been linked to higher rates of chronic illness (Ross 2004, Ambert 1998; Holosko and Feit 1997), lower graduation rates (Malatest 2004), and higher rates of incarceration (CCJA 2000). Single parenthood and childcare access would obviously become more critical issues in the lives of Aboriginal families who are living below the poverty line. For these reasons, an assessment of the number of Aboriginal people living below the poverty line within the GVRD may represent a key indication of the social, economic, and environmental conditions of Aboriginal people in the region. For this reason, it is particularly unfortunate that information is not readily available regarding the number of Aboriginal families falling below the present LICO rates.

Rating: Poor



While there is a lack of publicly available data that specifies the number of Aboriginal people, children or households living below the poverty line in the GVRD, there seems to be ample evidence of deterioration in affordability and quality of life among low-income Aboriginal families. As long as statistical data shows that Aboriginal families are twice as likely to be living below the poverty line as non-Aboriginal families, there will be commensurate negative effects on many of other facets of the quality of life for Aboriginal people.

WEST: Economic – Income

Indicator:

6.4. Average household incomes and shelter cost-to-income Ratios of Aboriginal households in the GVRD

Rationale:

Compared to the non-Aboriginal population in Canada, Aboriginal people have long been economically disadvantaged (George, Kuhn, and Sweetman, 1996; Frideres 1998; Maxim et. al., 2001), and have in fact been designated as such a group in Canada's *Employment Equity Act* (1995). *Shelter cost-to-income ratio* (STIR) measures can help to define what a good living wage in a particular region is. Income levels alone are often insufficient to determine whether a family or an individual can afford to maintain their household, since the cost of living can differ significantly from one region to another. Hence, it is advantageous to look at average household incomes and STIRs in tandem.

Data:

Table 28. Comparative Average Household Income and STIRs of Aboriginal People in the GVRD

	Average Income		STIRs	
	1996	2001	1996	2001
Total Households – GVRD	\$42,074	\$50,813	33%	30%
Total Households – Canada	\$39,915	\$49,123	24%	26%
Households in Core Need – GVRD	\$16,616	\$18,252	51%	50%
Households in Core Need – Canada	\$15,819	\$17,712	45%	46%

Source: Canada Mortgage and Housing Corporation, Online Data Tables

STIRs of 30% or lower are considered to demonstrate housing affordability within the housing stock.

Analysis:

The average income for Aboriginal households in the GVRD was \$50,813, which suggests a significant spread between the richest and poorest Aboriginal families (see Table 28). Interestingly, income levels among all Aboriginal households in the GVRD tend to be higher than those for Aboriginal households across Canada; however, the STIRs are significantly higher in the GVRD. Therefore, while Aboriginal households in the GVRD may be earning more, proportionately more of their income is going towards housing costs because the cost of living in the GVRD is significantly higher than the majority of communities in Canada.

Aboriginal households in the GVRD dropped to a 30% of Shelter cost-To-Income-Ratio average in 2001, and housing affordability is therefore considered to be marginally affordable in the region. There still remains a significant gap (4% in 2001) between STIRs of Aboriginal households in the GVRD and Aboriginal households across Canada, likely due to the higher cost of living in Vancouver.

Rating: Improving



While housing affordability is evidently a greater issue among Aboriginal households in the GVRD than in other Canadian regions, the regional statistics suggest that housing affordability is slowly on the increase. STIRs for the GVRD have decreased since 1996, while they have increased for Canada as a whole. However, it will be important to update this indicator with more recent data, in light of the dramatic increases in housing costs in the region.

WEST: Economic – Income

Indicator:

6.5. Social assistance rates for Aboriginal people in the GVRD

Rationale:

The Income Security Reform initiatives across Canada, which arose from findings by the Royal Commission on Aboriginal Peoples, have sought to reduce the dependency of Aboriginal peoples on social assistance programs. Reductions in social assistance rates among Aboriginal people in the GVRD might represent a decrease in financial dependence. However, provincial Liberal cuts to social assistance programs might mean that social assistance rates have decreased due to insufficient levels of social supports for financially vulnerable Aboriginal households. Hence, this indicator is difficult to analyze in isolation from contextual discussions with Aboriginal individuals and organizations.

Data:

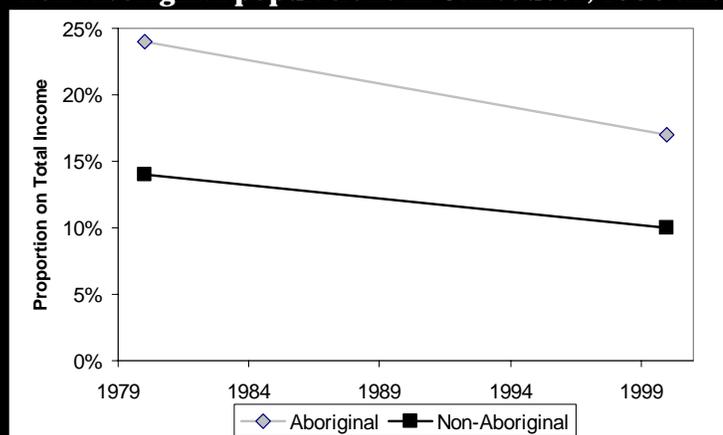
BC Stats and the BC Ministry of Human Resources do not collect data on the number of Aboriginal clients on social assistance. The only publicly available data regarding social assistance rates among the Aboriginal population are from Statistics Canada's 2001 Census, which is expressed as a composition of total income. Income from government transfer sources includes social assistance payments, employment insurance, government pensions, child tax credits and income from other government sources.

Table 29. Composition of total income among Aboriginal persons (15 years and over) in the GVRD, 2001

Source of Income	Aboriginal		Total Population	
	GVRD	BC	GVRD	BC
Earnings	78.4%	74.9%	78.7%	75.8%
Government Transfer	16.8%	20.6%	9.6%	11.8%
Other Sources	4.8%	4.5%	11.7%	12.4%

Source: Statistics Canada, 2001 Census

Figure 22. Proportion of total income derived from government transfer payments for the Aboriginal and non-Aboriginal populations in Vancouver, 1980 and 2000.



Source: Siggner and Costa, 2005.

Analysis:

A much higher percentage of an Aboriginal person's income comes from government transfer than compared to the total population (see Table 29), although Aboriginal people in the GVRD receive less income from government transfer than compared to the entire Aboriginal population of BC. Income from earnings is relatively even among Aboriginal and non-Aboriginal communities, although it is slightly higher for Aboriginal people in the GVRD.

There has been a decrease in the percentage of total income derived from government transfer payments among Aboriginal people in the Vancouver census metropolitan area (CMA) since 2000 (see Figure 22). This percentage has decreased 7% for the Aboriginal population, compared to 14% for the non-Aboriginal population. This significant decrease may indicate the growth of an Aboriginal middle class in Vancouver, or a significant reduction in the amount of social assistance made available to Aboriginal people living in the region.

Rating: Improving



The data available publicly through the 2001 Census does not clearly show the social assistance rates for Aboriginal families in the GVRD or across the province. As shown in above, there is data that demonstrate average sources of income among households in the region and the province, albeit at a broad and general scale. Aboriginal and non-Aboriginal households seem to have equitable sources of income from earnings; however, the differences in earnings, for example, from "other sources" may point to a greater discrepancy between Aboriginal and non-Aboriginal families in terms of income from investments and savings. While this indicator may not show a dire need for immediate action in terms of policy reform, this indicator will be important to monitor, especially when data can be cross-tabulated with demographic information about the regional Aboriginal population to further explain the statistics.

WEST: Economic – Entrepreneurship

Indicator:

6.6. Percentage of the Aboriginal workforce that is self-employed in the GVRD

Rationale:

Self-employment among Aboriginal people is an indicator of economic self-control and self-determination. Similar to general employment, self-employment provides a number of advantages including improved health, access to better housing, and access to supportive social networks (Krueger et al. 2003). While there is a wide range of self-employed workers, from professionals to unskilled labourers, self-employment provides Aboriginal people the opportunity to determine their own economic future.

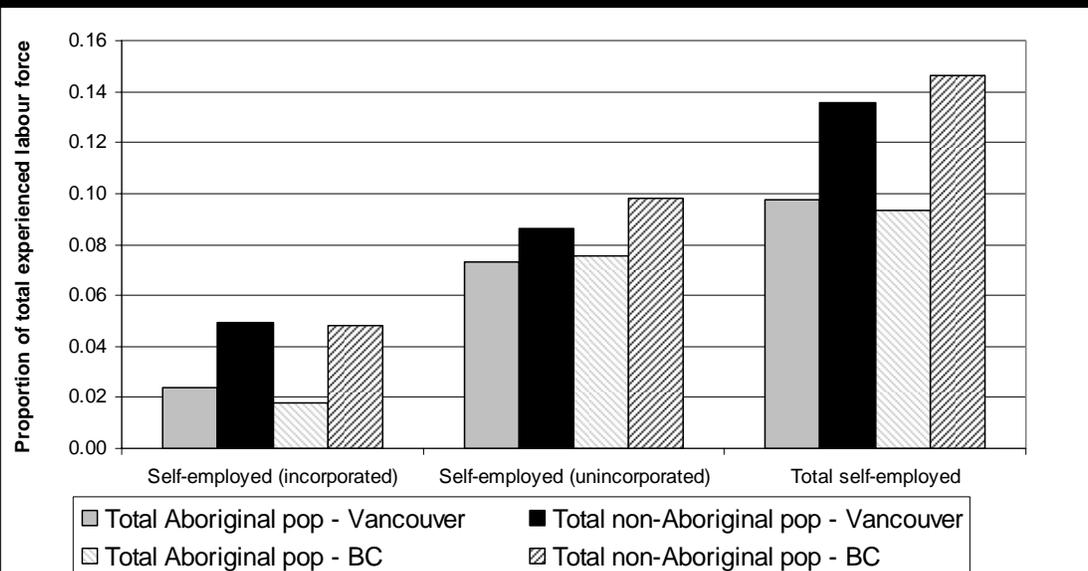
Data:

Table 30. The number of self-employed workers by Aboriginal identity for the population aged 15 and over in the Vancouver CMA, 2001

TITLE	Total Aboriginal & non-Aboriginal pop.	Total Aboriginal identity pop.	North American Indian	Métis	Inuit	Total non-Aboriginal pop.
Total experienced labour force 15 years and over by class of worker	1,049,910	16,245	9,410	6,240	80	1,033,665
Paid workers	956,215	15,005	8,715	5,725	80	941,205
Employees	904,740	14,615	8,565	5,520	80	890,125
Self-employed (incorporated)	51,475	390	150	205	0	51,085
Self-employed (unincorporated)	90,455	1,190	665	495	0	89,265

Source: Selected Labour Force Characteristics, Aboriginal Identity, Age Groups (5A) and Sex (3) for Population 15 Years and Over, for Canada, Provinces, Territories and Census Metropolitan Areas¹, 2001 Census - 20% Sample Data

Figure 23. Proportion of self-employed workers as a proportion of the total experienced labour force for the Vancouver CMA, and BC, 2001



Source: Selected Labour Force Characteristics, Aboriginal Identity, Age Groups (5A) and Sex (3) for Population 15 Years and Over, for Canada, Provinces, Territories and Census Metropolitan Areas, 2001 Census - 20% Sample Data

Analysis:

Approximately one in ten Aboriginal people in Vancouver in the experienced labour force are self-employed, compared to one in eight for the non-Aboriginal population (see Table 30; Figure 23). These rates are slightly higher than compared to the total Aboriginal population of BC (see Figure 23). Data from Industry Canada (1998) shows similar results: 3.9% of Aboriginal people in Canada owned a business, compared to 7.9% for other Canadians. Self-employment and small-business ownership among Aboriginal people in Canada has increased by 170% between 1981 and 1996, and over half of the self-employed Aboriginal people lived in urban centres. While many self-employed businesses are often not very profitable and prone to failure, there has been growth in the number of self-employed Aboriginal people among urban centres.

Rating: Improving



Self-employment among Aboriginal people, while lagging behind the non-Aboriginal population, is growing at an increasing rate. Aboriginal self-employment and business ownership only make up a small proportion of the total experienced labour force, but there is indication that this rate is growing. It is likely that urban centres such as Vancouver offer better social attributes such as education and housing, and a greater degree of labour positions for local labourers. Coupled with the fact that the Aboriginal population is one of the fastest-growing segments of Canadian society, this creates positive conditions for economic promise among local Aboriginal youth.

WEST: Economic – Youth involvement

Indicator:

6.7. Unemployment rates and level of income for Aboriginal youth in the GVRD

Rationale:

Involvement of youth in the local and international economy is critical for building capacity, and for sustaining and improving the socioeconomic conditions of the Aboriginal community. Youth are the future of the Aboriginal community and provide the foundation for future Aboriginal communities. In addition, as with adults, employment income can provide access to supportive social networks, improved quality of housing, and reduced stress (Seccombe and Amey 1995; Williams 1990). Studies throughout the world show that extended unemployment is a factor in behavioural and health problems (Winefield et al. 1993). Furthermore, specific to youth, a large study among youth in the European Union (Kisselbach 2003, p.74) highlighted that

Unemployment threatens the overall integration of young people into society. The most important vulnerability factors that contribute to an increase of the risk of social exclusion for young unemployed people in the long-term are in low qualification, passivity in the labor market, a precarious financial situation, low or missing social support, and insufficient or nonexistent institutional support. The most important protective factor for unemployed youth is social support.

Hence, not only is youth involvement in economy important for the development of the future of the Aboriginal community, but it provides a reflection of the supportive social and institutional networks that exist to involve youth in the local economy.

Data:

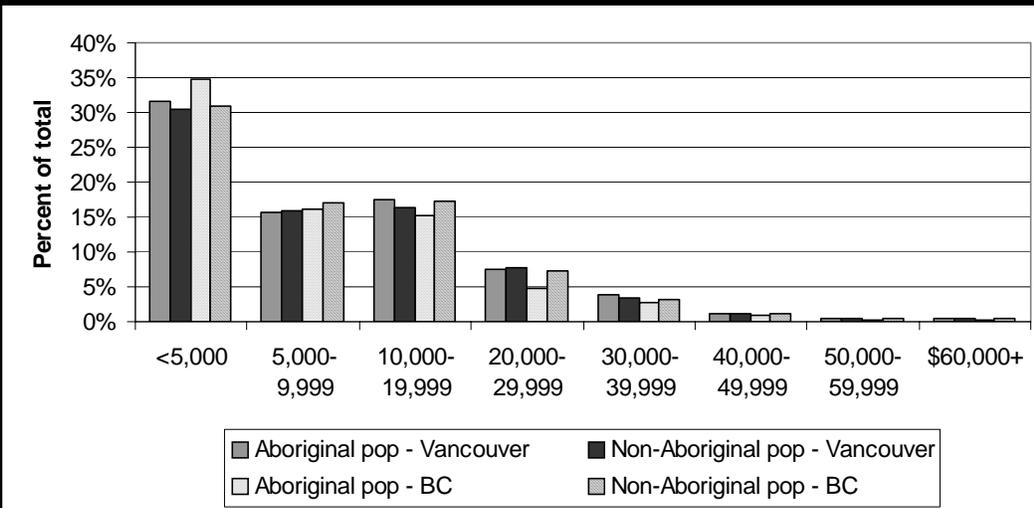
Table 31. Employment and Labour Force characteristics for Aboriginal and non-Aboriginal populations aged 15-24 in the Vancouver CMA and BC, 2001

	Vancouver		BC Total	
	Total Aboriginal origins population	Total non-Aboriginal population	Total Aboriginal origins population	Total non-Aboriginal population
Participation rate	59.4	59.2	55	62.5
Employment rate	48.8	51.1	41	53
Unemployment rate	17.9	13.7	25.4	15.2
Average income \$	10,716	10,455	9,043	10,260
Median income \$	6,998	6,978	5,603	6,942

Source: Selected Income Characteristics, Aboriginal Origin, Age Groups and Sex for Population, for Canada, Provinces, Territories and Census Metropolitan Areas, 2001 Census - 20% Sample Data

Source: Selected Labour Force Characteristics, Aboriginal Origin, Age Groups and Sex for Population 15 Years and Over, for Canada, Provinces, Territories and Census Metropolitan Areas, 2001 Census - 20% Sample Data

Figure 24. Income categories for Aboriginal and non-Aboriginal populations aged 15-24 as a proportion of total population aged 15-24, 2001



Source: *Selected Income Characteristics, Aboriginal Origin, Age Groups and Sex for Population, for Canada, Provinces, Territories and Census Metropolitan Areas, 2001 Census - 20% Sample Data*

Analysis:

Aboriginal youth are active participants among the employed labour force in the Vancouver census metropolitan area (CMA), with a participation rate greater than the local non-Aboriginal population. Employment rates for Aboriginal youth are slightly less than for the non-Aboriginal population of Vancouver, and unemployment rates are slightly higher (see Table 31). Average and median income levels among Aboriginal youth are equivalent to the non-Aboriginal population, and the proportions of people in each income category are roughly equivalent for the two populations (see Table 31; Figure 24). Compared to the Aboriginal population in BC, the local Aboriginal population has higher participation and employment rates, lower unemployment rates, and higher average and median income levels (see Table 31).

Rating: Fair



Aboriginal youth in Vancouver are faring well in the local economy. Employment and unemployment rates are only slightly below those for the non-Aboriginal population, and income rates are equivalent, and even slightly higher. Local Aboriginal youth are faring better in every indicator when compared to the Aboriginal population of BC.

7.NORTH – Environment

Category	Indicator
Resources & Land	Portion of green space in the GVRD
	Portion of protected land in the GVRD
	Aboriginal salmon harvest in the GVRD
Air	Air quality for certain pollutants in the GVRD
	Level of emissions for certain pollutants in the GVRD
Rivers & Oceans	Water quality for certain water bodies in the GVRD
	Number of water bodies recording salmon escapement in the GVRD
Homes	Percentage of Aboriginal households in the GVRD in housing units requiring major repairs
	Rates of overcrowding among Aboriginal people in the GVRD
	Number of Aboriginal low-income housing units in the GVRD
	Number of Aboriginal homelessness people in the GVRD

NORTH: Environment – Resources and Land

Indicator:

7.1. Portion of green space in the GVRD

Rationale:

Cities inevitably alter the natural landscapes that they are built upon – forests, fields, and flood plains become replaced with buildings, roads, and parks. Ultimately, this process of urbanization leads to a number of significant effects on the surrounding environment. Cities become warmer than their surroundings due to the heat produced by buildings and cars, resulting in a “heat island” (Oke 1982). This can result in health impacts for the inhabitants, and can alter the climate of neighbouring regions. Replacing natural vegetation with more impermeable structures such as roads and buildings significantly impacts the hydrology of an area, and can leave areas prone to flooding and erosion (Whitford et al. 2001). The loss of vegetation and the increase in use of energy for heat, electricity, and transportation reduces the amount of carbon that can be sequestered in the region (Jo and McPherson 1995), which in due course enhances global warming. Lastly, reduction in green space significantly alters the local biodiversity that exists within and between habitats (Forman 1995). Green space is vitally important to the performance of these natural and essential ecological functions. A study among urban areas in the UK (Whitford et al. 2001) showed that the percentage of green space in a region had the greatest influence on ecological performance. In addition, access to green space is valued by everyone – high prices for properties flanking water or forests speak for themselves. Wildlife and the environment play a key part in the traditional value systems of Aboriginal people who have cultures, beliefs, and resource management systems that are based on an intimate relationship with the surrounding environment (Notzke 1994). Hence, the surrounding green space is critical to the continued health of the surrounding environment, and is important to the social, cultural, and economic lives of Aboriginal people.

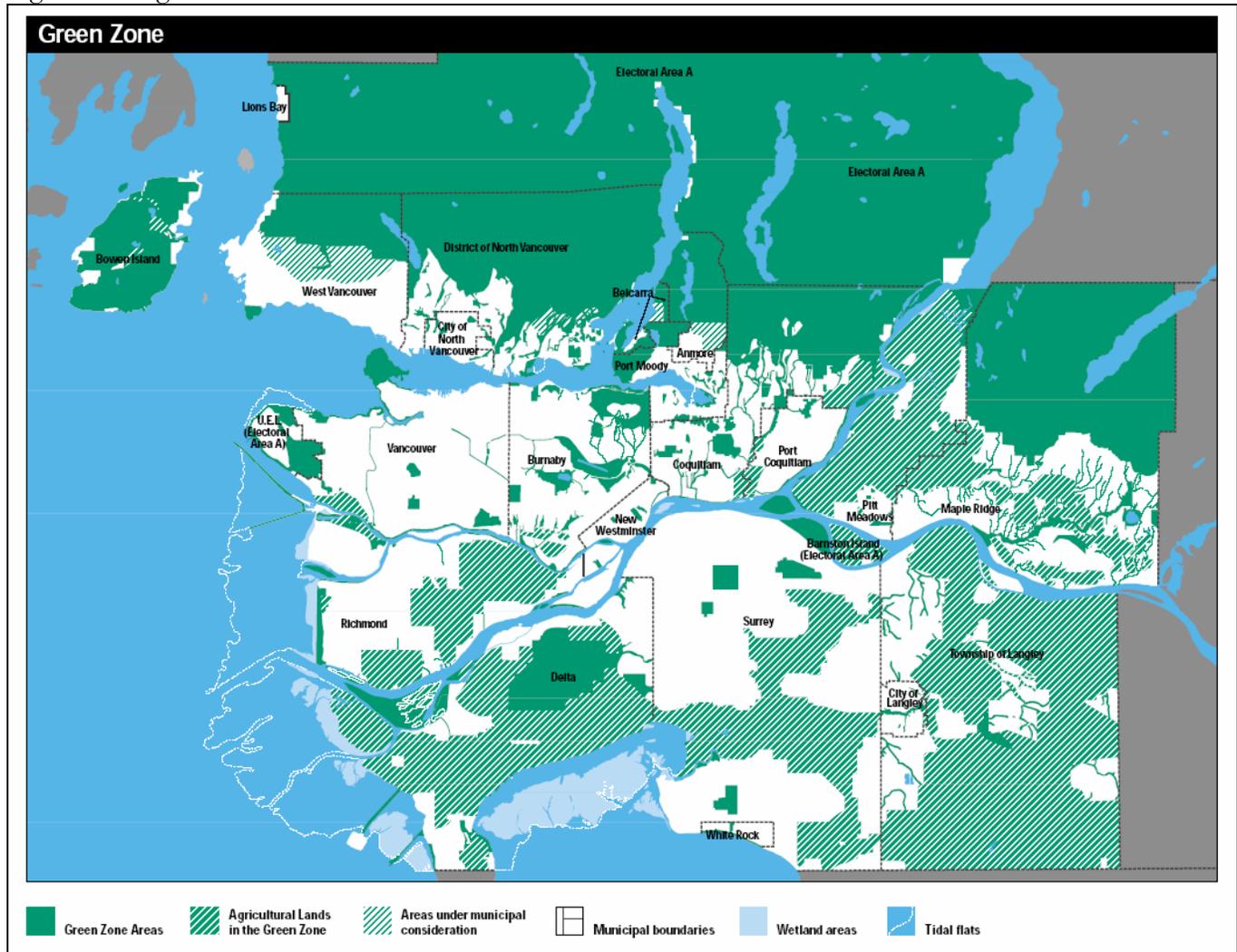
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Table 32. Breakdown of land in the GVRD’s Green zone, March 31, 2004

GVRD Land Use	Hectares	As a proportion of total area
Total Urban Area	86,365	30%
Total Green Zone Area	200,897	70%
Agricultural Lands in the Green Zone	60,433	21%
Other Green Zone areas	138,040	48%
Areas under Municipal Consideration	2,425	1%
Total Area	287,262	100%
GVRD Green Zone	Hectares	As a proportion of total green zone
Total Green Zone area	200,897	100%
Total ALR in Green Zone	58,967	29%
Total protected lands in green zone	85,345	42%

Source: GVRD Policy and Planning Department

Figure 25. Regional distribution of the GVRD's Green Zone



Source: GVRD Livable Region Strategic Plan, 2003. <<http://www.gvrd.bc.ca/publications/file.asp?ID=367>>

Analysis:

The Greater Vancouver Regional District's (GVRD) "Green Zone" is described as "lands where no intensive urban development is to occur" (GVRD 2004a, p.3). 70% of the land use area of the GVRD is within the Green Zone, and the remaining 30% is dedicated as urban area (see Table 32). 42% of the lands within the Green Zone are designated as "protected", although no definition is provided regarding what level of protection this actually entails. The Green Zone also includes agricultural land, which can provide some of the functions of true green space.

In 2003, 22.9ha. (0.01% of the Green Zone) were added to the Green Zone to support development of the Pitt River Greenway, but 75ha. (0.04% of the Green Zone) were "excluded", or removed, from the Agricultural Land Reserve (ALR), which makes up 30% of all land in the Green Zone (GVRD 2004a). Furthermore, agricultural land in the GVRD has been decreasing steadily since the early 1970's. From 1974 to 2003, over 5,000ha. were removed from the ALR in the GVRD alone, which amounts to 2.5% of the present Green Zone (Provincial ALC 2003).

Green zone land is distributed rather unevenly throughout the GVRD (see Figure 25). The majority of land within the Green Zone occurs in North and West Vancouver, Port Coquitlam, and Maple Ridge – the GVRD's watersheds - and the largely agricultural areas in Delta, Richmond, Surrey, and Langley.



The Green Zone makes up the majority of the land (70%) in the GVRD, providing a variety of green spaces that help maintain the overall ecological conditions of the GVRD. This large area helps to maintain the environmental functions that sustain the GVRD. However, while there were some additions to the Green Zone, there was still an overall net reduction in 2003. There have been significant reductions in the ALR in the GVRD since 1973, implying concurrent reductions in the GVRD's Green Zone, although this may have been lessened by increases in other areas described within the Green Zone. As the GVRD continues to grow, it is important that the total area of the Green Zone is not compromised as it is vital in maintaining the ecological functions and services that maintain the overall health of the inhabitants in the GVRD.

Another concern is the geographic distribution of green space within the GVRD. Because of the large size of the GVRD and regional distribution of Green Zone areas (see Figure 25), not all areas within the GVRD benefit equally from green space. Whitford et al. (2001, p.57) revealed that "affluent areas ha[ve] lower temperatures, less run-off, more stored carbon, and higher diversity, largely because they had more open area and woodland", implying that more affluent regions of a region like the GVRD have more green space and therefore receive greater benefits than compared to poorer regions. The majority of Aboriginal people in the GVRD live in lower economic areas in Vancouver, many of them in the Downtown East Side, an area with few parks and green space. This implies that, relatively speaking, the majority of Aboriginal people living in the GVRD do not benefit as much ecologically from the green space in the GVRD as other residents. Further research should investigate the link between health, the amount of green space, and the regional distribution of Aboriginal people in the GVRD.

NORTH: Environment – Resources and Land

Indicator:

7.2. Portion of protected areas in the GVRD

Rationale:

The creation and maintenance of protected areas is vital to the conservation of biodiversity (Noss and Cooperrider 1994). A major goal of protected areas is to conserve biodiversity, which encompasses not only species such as plants and animals, but also their physical surroundings, and the relationships among them all (Soule and Terborgh 1999). One of the main reasons for the reduction of biodiversity is loss of habitat; for growing urban centres such as Vancouver, habitat loss is of special concern as natural landscapes are converted into urban ones. Land conversion and habitat loss are two principal causes of the present extinction crisis among modern-day species (Pimm and Brooks 2000; Pimm et al. 1995). Protected areas are also important refuges for species at risk. In 2000, there were 56 endangered or threatened vertebrate animal species that were found in GVRD parks (GVRD 2004a). Creating and maintaining protected areas ensures that not only are species conserved, but the important ecological processes that are provided by these ecosystems that our society depends on, such as carbon sequestration and temperature regulation, are also conserved. Protected areas in urban settings are especially important because they also provide important educational opportunities for local inhabitants, which can help people realize the importance of protected areas (Ruliffson et al. 2002). Protected areas help to conserve the numerous plants and animals that are culturally important to Aboriginal people, such as eagles, edible berries, and cedar forests. Designating an area as “protected” helps to preserve lands in their natural state, thereby helping to maintain the area’s integrity and biodiversity.

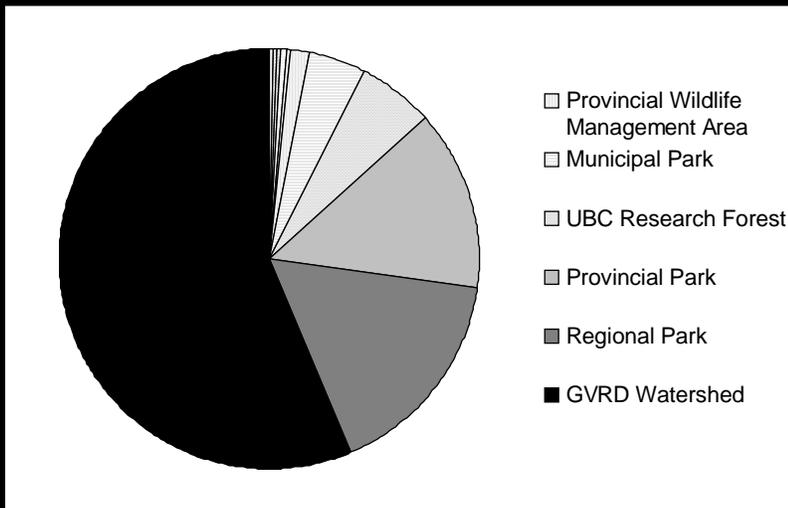
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Table 33. Total protected area in the GVRD’s Green Zone, 2004

Total Protected Area in Green Zone	Area (ha)	As a proportion of total protected area
Crown land secured for Environmental Mgt	165	0.2%
Ecological research - Provincial	386	0.5%
Federal Wildlife Preserve	344	0.4%
Municipal Conservation Area	339	0.4%
Municipal Nature Reserve	37	0.0%
Municipal Park	3,624	4.3%
Pending Federal Wildlife Reserves	154	0.2%
Provincial Marine Park	3	0.0%
Provincial Park	11,519	13.8%
Provincial Wildlife Management Area	1,116	1.3%
Regional Park	13,676	16.4%
UBC Research Forest	4,847	5.8%
GVRD Watershed	46,884	56.1%
Urban Forest	66	0.1%
Total Protected Lands in the Green Zone	83,545	

Source: GVRD Policy and Planning Department

Figure 26. Proportion of total protected area in the GVRD's Green Zone, 2004



Source: GVRD Policy and Planning Department

Analysis:

The Greater Vancouver Regional District's (GVRD) watersheds, the source of water for the population of Vancouver, makes up 56% of all the protected areas in the region (see Table 33). Provincial, municipal, and regional parks make up another 35%, and the UBC Research Forest adds another 6%. The rest of the protected areas, such as wildlife preserves and nature preserves make up the remaining 3%.

Rating: Fair



Protected areas form a significant portion of the GVRD's Green Zone, making up just over 40% of the Green Zone's total area, and the GVRD watersheds form the majority of the total protected area in the region (See Figure 26). While protecting biodiversity is not their main purpose, these areas still provide a significant protection over a wide elevational range, which is important for protecting species by providing various habitats. The GVRD attempts to minimize human disturbance in these watersheds, yet some portions, such as the Lower Seymour Conservation Reserve, are multi-use sites, and dams in many of the watersheds have altered the hydrological cycles of the area, which significantly affect the freshwater ecosystem. It is critical that these watersheds are managed carefully in order to ensure a delicate balance between conservation, water use, and recreation and education opportunities.

Only a small portion of the protected areas in the Green Zone is dedicated to the conservation and protection of nature and wildlife. Aside from the protected watersheds, the other significant portion of protected areas consists of regional, provincial, and municipal parks, and the UBC research forest, which are all multi-use sites. While some may argue that the agricultural lands protect biodiversity, much of the ALR provides marginal habitat at best, and are increasingly covered over with greenhouses, effectively removing any habitat that was previously available for wildlife. While these parks do provide important habitat and some protection to the biodiversity within them, they are increasingly affected by increased public usage and urban growth. Only 3% of the protected areas in the Green Zone are dedicated to nature conservation. In addition, much of the protected areas in the GVRD are becoming increasingly isolated from each other, and are lacking important corridors and buffer zones, which reconnect

fragmented landscapes and help maintain a balance between wilderness and education and economic uses (Dobson et al. 1999; Groom et al. 1999).

The GVRD is currently developing a biodiversity conservation strategy (GVRD 2003a) and a regional parks and greenways plan (GVRD 2005), which will provide critical and much-needed oversight to the long-term maintenance and conservation of the region's protected areas and biodiversity. These plans include identifying core habitat areas and corridors, identifying important ecological areas that do not have protection, and developing monitoring plans. These plans will help to protect regional landscapes and biodiversity, while still providing recreation and education opportunities, and economic development. The key to these plans are to find delicate ways to maintain and improve biodiversity, while not succumbing to economic pressures and urban growth. The GVRD should focus on maintaining the integrity of current protected areas while developing corridors between these areas, developing buffer areas, and raising awareness of the importance of local protected areas to the conservation of biodiversity for the region.

In addition, the provincial government and the GVRD should work collaboratively with Aboriginal people to develop, preserve, and enhance parks in the region. In light of local land claims and treaty negotiations, it is important that the issue of protected areas be discussed in these deliberations. Besides the fact that there are legal obligations regarding Aboriginal Peoples and protected areas, Aboriginal people have existed in the region for thousands of years, and have much experience, and wisdom regarding local wildlife and ecosystems. There is little or no mention of Aboriginal people or issues included in GVRD parks planning documents, and it would be important to begin to develop dialogue with Aboriginal people regarding strategic parks planning for the region.

NORTH: Environment – Resources and Land

Indicator:

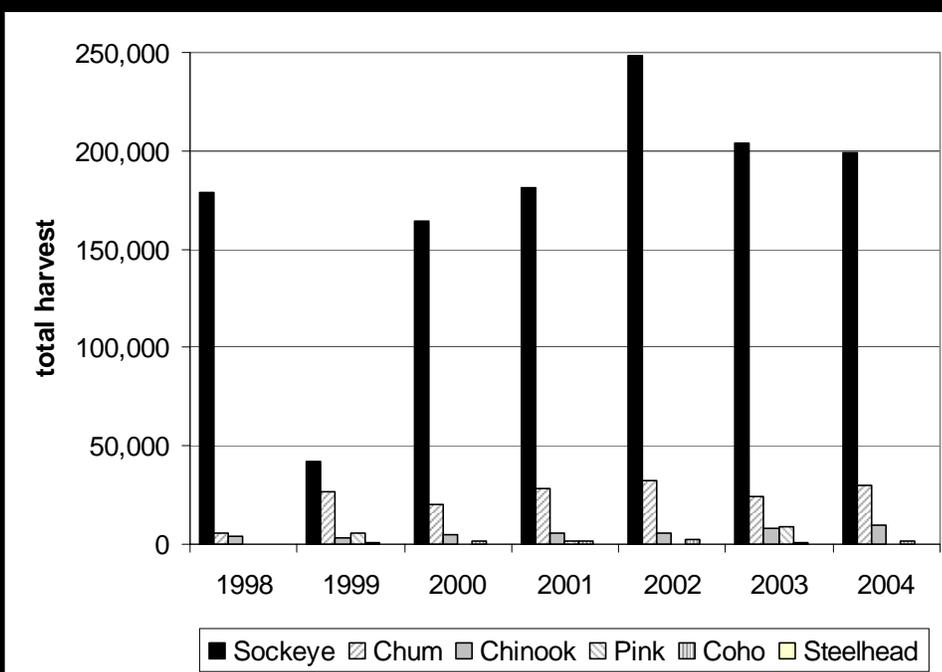
7.3. Aboriginal salmon harvest in the lower Fraser River

Rationale:

Salmon are vital to both the local Aboriginal people and the local environment. Salmon are considered a keystone species because of their vital role in the ecosystem, and are “the principle mechanism for the transport of nutrients such as nitrogen and phosphorous from marine to freshwater and terrestrial ecosystems” (COSEWIC 2003, p.38). Salmon carcasses provide nutrients for a great number of species, and are important contributors of nitrogen to local riparian vegetation (Wilson and Halupka 1995). They are critically important to the society, culture, and economy of local Aboriginal groups. *Sockeye*, perhaps the most important of the 5 salmon species, is a take on the Coast Salish word *sukkai* (Hart 1973). The Fraser River supports one of the largest sockeye salmon runs in the world (Northcote and Larkin 1989), and forms the majority of the salmon caught by Aboriginal groups. Salmon have sustained local Aboriginal groups for thousands of years, and is of high cultural and spiritual importance as demonstrated by the numerous artwork, stories, and dances associated with salmon. The annual harvests of salmon by local Aboriginal people, a process that has been occurring for thousands of years, show the continued importance of salmon as a traditional food for many local Aboriginal groups. According to the policies of the Department of Fisheries and Oceans, only conservation concerns take precedence over Aboriginal fisheries. Therefore, the local Aboriginal harvest of salmon provides an indication of the overall health of salmon, and the availability of salmon to Aboriginal groups.

Data:

Figure 27. Aboriginal salmon harvest below Mission, 2000-2004



Source: Final Lower Fraser River First Nation Salmon Fisheries Report for 1998 through 2004

Table 34. Aboriginal harvest and catch per unit effort (CPUE) for all salmon species, 2000-2004

Year	Total Catch			Total CPUE		
	Below Port Mann Bridge	Port Mann - Mission	Total	Below Port Mann Bridge	Port Mann - Mission	Total
2004	140,389	99,766	240,155	201.4	133.0	166.0
2003	141,959	103,255	245,214	226.4	142.2	181.2
2002	161,203	128,050	289,253	229.0	146.8	183.5
2001	132,672	84,938	217,610	206.7	138.8	173.5
2000	125,169	65,317	190,486	129.6	58.1	91.1
1999	56,770	22,472	79,242	99.8	35.6	66.0
1998	123,477	65,856	189,333	192.6	94.1	141.2

Source: Final Lower Fraser River First Nation Salmon Fisheries Report for 1998 through 2004

Analysis:

Sockeye salmon make up the majority (83-86%) of the total salmon harvested annually by Aboriginal groups on the lower Fraser River (see Figure 27). Total catch per unit effort (CPUE) has roughly increased over the past six years (see Table 34) meaning that the amount of salmon caught per unit of effort has improved. However, since sockeye salmon make up the majority of the salmon harvested, and since sockeye exhibit a persistent 4-year life cycle, data should be compared on 4-year cycles (i.e. compare 1998 to 2002, 1999 to 2003, and 2000 to 2004). Compared on 4-year cycles, both CPUE and total harvests for Aboriginal groups show increases.

Rating: Deteriorating



Data regarding Aboriginal harvest of salmon in the lower Fraser River for the past 6 years show that Aboriginal people in the region are becoming more involved in the local fishery. Increases in both CPUE and overall harvest reveal that local Aboriginal groups are catching more fish, an important traditional food and source of culture. Although Aboriginal harvest of salmon has been increasing in recent years, severe and immediate conservation concerns indicate that the overall health of salmon stocks, and hence Aboriginal harvest, is and will be decreasing.

A number of severe conservation concerns in recent years which have raised concern over the future of Fraser salmon, sockeye in particular. Since 1996, a major group of sockeye, the late-run sockeye, has experienced extremely high rates of prespawning mortality; in some cases, up to 90% of a sockeye run died before being able to spawn (PSC 2004). While much research has gone into exploring the causes of this change in behaviour and mortality levels, results are still inconclusive. This has led to a number of serious conservation concerns including two late-run stocks, Cultus Lake sockeye and Sackinaw sockeye which were listed as endangered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) in 2003. In addition, a recently-released report by the Standing Committee on Fisheries and Oceans (Wappel 2005) documents a major collapse in the 2004 cycle of sockeye salmon. This collapse is so severe that there will not likely be any fishing for Fraser sockeye in 2008, and "run sizes for this cycle are unlikely to return to 2004 levels until at least 2020 (Wappel 2005, p.1). Therefore, while Aboriginal involvement in fisheries in the lower Fraser may be improving, stock health seems to be worsening, which will have deleterious impacts on Aboriginal fisheries.

NORTH: Environment – Air

Indicator:

7.4. Air quality for certain pollutants in the GVRD

Rationale:

Poor air quality has significant impacts for both human and environmental health. While general levels of air pollutants have decreased since the 1950s and 1970s, they still continue to cause short and long-term effects, from coughing and wheezing to asthma and even premature death (Health Canada 2003). While the majority of people only experience subtle effects, many people, especially the young, the elderly, and those with lung and heart disease, are more severely affected (BC Provincial Health Officer 2000). Studies among cities in the US have indicated a link between living in a polluted city for a prolonged period and premature death (Pope et al. 1995; Dockery et al. 1993). Aside from human health, air pollutants lead to significant environmental concerns, such as smog and climate change. Climate change is perhaps the most pressing environmental concern to date: rising sea levels will remove productive coastal ecosystems, terrestrial ecosystems will undergo rapid transformation, aspects of which are unlikely to survive, and precipitation patterns will be dramatically altered (UNEP and UNFCCC 2002). Therefore, monitoring levels of air pollution is important to our entire society, including the local Aboriginal population.

Five different pollutants were examined: sulphur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), particulate matter (PM₁₀), and ozone (O₃). SO₂ reacts in the atmosphere to form other compounds which are major contributors to acid rain. Exposure to SO₂ “can cause plant injury, and irritate the upper respiratory tract and aggravate existing cardiac and respiratory disease in humans. Long-term exposure may increase the risk of developing chronic respiratory disease” (GVRD 2004b, p.15). NO₂ is also critical in the formation of acid rain, and may cause acute and chronic respiratory disease. CO is the most common occurring air pollutant, and chronic exposure to CO can lead to adverse effects for those with cardiovascular disease. PM₁₀ refers to particulates with a diameter of 10micrometres or less, which, because of their small size, can be lodged in the lungs. A 1995 study prepared for the BC Ministry of Environment, Lands, and Parks revealed that exposure to fine particulates is associated with an increased risk of dying (Vedal 1995). Exposure to PM₁₀ can aggravate present pulmonary and cardiovascular disease, and can lead to increased asthma symptoms and mortality. Ground-level ozone is a major health and environmental concern, and can lead to respiratory disease and is one of the most harmful air pollutants to vegetation, damaging crop yields (BC MWLAP). Ozone can damage lung tissue, and studies have shown that the risk of population health effects from ozone increases as the level of ozone increases (CEPA 1999).

Data:

Data on air quality for the Greater Vancouver Regional District (GVRD) is currently readily available for 2003. Data on air quality is gathered by monitoring equipment located in various stations throughout the municipalities that make up the GVRD.

Figure 28. SO₂ air quality data for the GVRD region, 2003

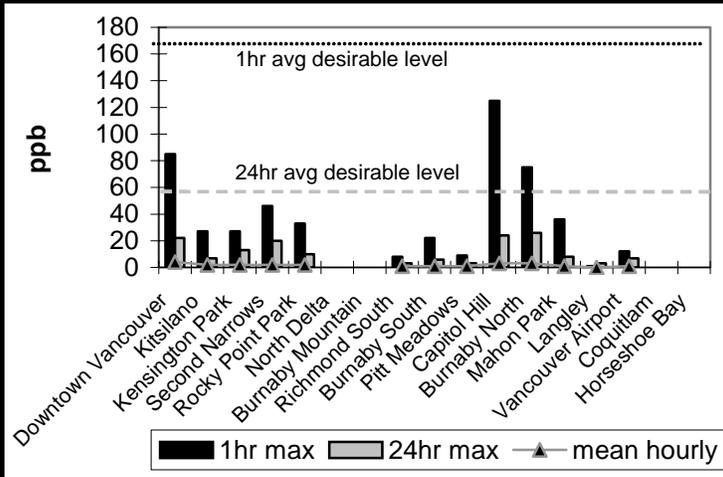


Figure 29. NO₂ air quality data for the GVRD region, 2003

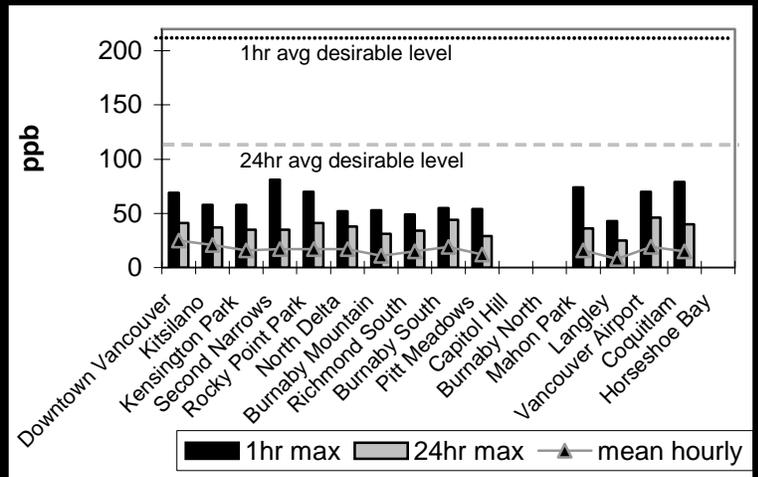


Figure 30. CO air quality data for the GVRD region, 2003

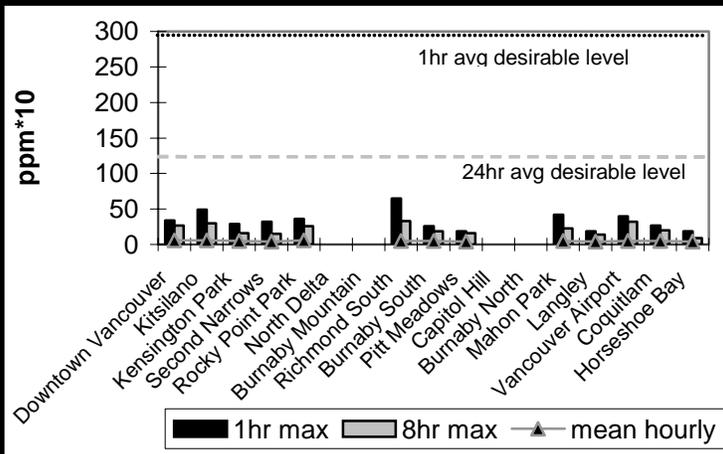


Figure 31. PM₁₀ air quality data for the GVRD region, 2003

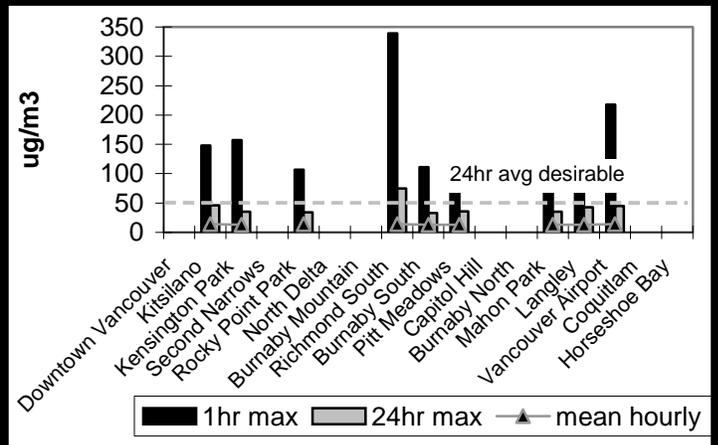
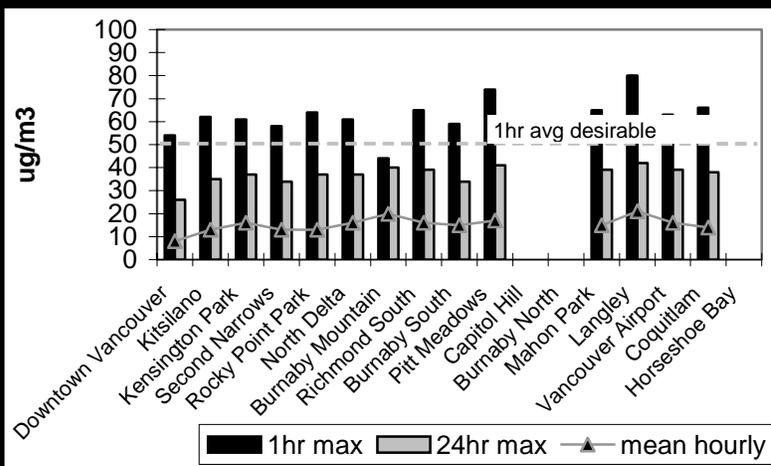


Figure 32. O₃ air quality data for the GVRD region, 2003



Source: Greater Vancouver Regional District, Regional Development, Policy and Planning Department 2004. Technical appendix air quality data 2003.

Analysis:

SO₂

Mean hourly levels are well below the desired level for all air quality stations in the GVRD. Furthermore, no station reported 1-hour or 24-hour maximum concentrations above the 1-hour or 24-hour desirable objectives (Figure 28). Highest concentration levels were reported in the downtown core and along Burrard Inlet, areas close to sulphur dioxide emission sources. Data for SO₂ emissions from 1993 and 2003, reveal a decreasing trend in the concentration of SO₂ (GVRD 2004b).

NO₂

Similar to SO₂, levels of NO₂ are well below desired levels (see Figure 29). Higher levels of NO₂ were recorded in highly urban areas, such as downtown Vancouver. Between 1993 and 2003, levels of NO₂ have decreased over time, but appear to have leveled off.

CO

Levels of CO were well below the desirable objective, and both the 1-hour or 24-hour maximum concentrations were well below their respective 1-hour or 24-hour desirable objectives (see Figure 30). Highest mean levels were recorded near major roads during peak traffic periods. Between 1993 and 2003, average and maximum levels of CO decreased more than 30% (GVRD 2004b).

PM₁₀

While the average concentration of PM₁₀ was quite low, the 24-hour objective was exceeded in one region in Richmond (see Figure 31). However, this objective was not infrequently exceeded, and usually influenced by local conditions (GVRD 2004b). Maximum and average levels of PM₁₀ have decreased since 1993, but have shown an increase in more recent years (GVRD 2004b).

O₃

While average concentrations of O₃ were well below the 1-hour desirable objective, 1-hour maximum concentrations did exceed this level for the majority of stations (see Figure 32). From 1993 to 2003, average levels of O₃ have increased slightly (GVRD 2004b).

Rating: Fair



In the Vancouver region, average concentrations of all 5 examined air pollutants were well-below desirable levels. In certain cases, maximum levels exceeded the desirable averages level. Levels of PM₁₀, the pollutant which has the largest direct impact on people's health, has decreased since 1993, although recent increases may be a cause for concern. In addition, levels of ozone, a major contributor to smog, have also increased in recent years, and should also be monitored closely. However, the Greater Vancouver is a major source of emissions, and it is likely that rates will increase in the near future as the region grows. Although much of this pollution does not directly impact the local region, these pollutants make their way into the rest of the globe, most especially the Fraser Valley; consequently, air pollution created in the GVRD contributes to pollution elsewhere in the world.

NORTH: Environment – Air

Indicator:

7.5. Air emissions for certain pollutants in the GVRD

Rationale:

Monitoring emissions is invaluable for developing long-term air quality management plans, which themselves are important for improving regional air quality (GVRD 2003b), and consequently, the health of people in the region. Monitoring air emissions provides information on the mixture of pollutants, their location, and the amount emitted. Monitoring emissions provides information which can be used to show past trends in emissions over time, and which can also be used to forecast trends and provide management and policy advice regarding air quality. An important aspect of an emissions monitoring program is tracking the emissions of greenhouse gases (mainly carbon dioxide, methane, and nitrous oxide), which cause global warming and climate change. It is predicted that by the end of the century, climate change will likely be the dominant cause of global biodiversity loss and ecosystem change (Millennium Ecosystem Assessment 2005). Canada's recent ratification of the Kyoto Accord means emissions of greenhouse gases need to be tracked in order to develop justifiable management plans to curb their emissions. Monitoring air emissions helps to manage and regulate air emissions, and consequently the health of all the inhabitants of the GVRD, including the Aboriginal community.

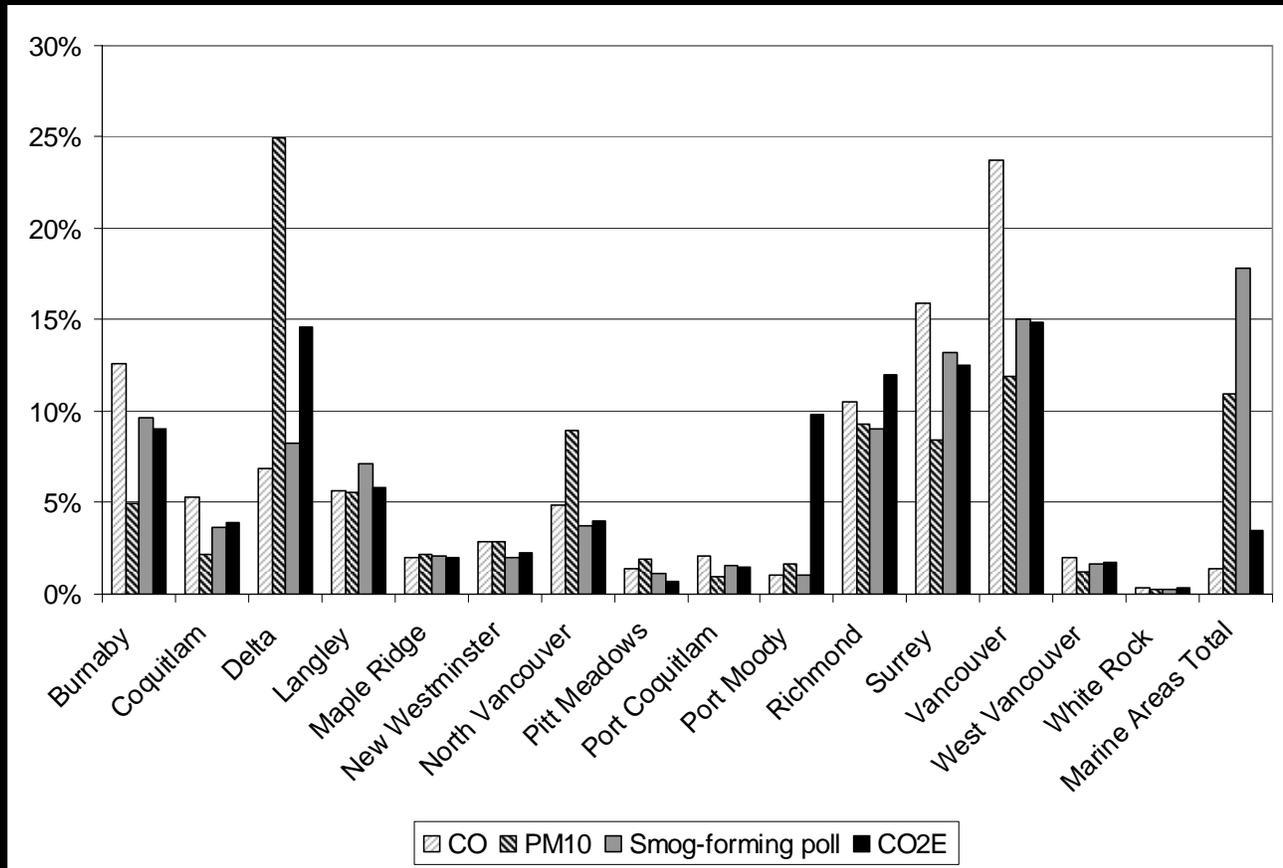
Data:

Information for 2000 is the most recent source of publicly available air emissions data for the Greater Vancouver Regional District (GVRD).

Table 35. Location of emissions for selected pollutants in the GVRD region, 2000						
GVRD Municipality	CO	NO_x	PM₁₀	SO_x	Smog-forming pollutants	CO₂-equivalents
Burnaby	41,046	5,833	403	1,498	13,925	1,573,442
Coquitlam	17,312	2,400	177	77	5,251	681,586
Delta	22,335	6,776	2,040	319	11,897	2,533,418
Langley	18,468	4,126	452	130	10,228	1,006,754
Maple Ridge	6,509	1,212	178	42	3,055	343,955
New Westminster	9,299	1,244	232	41	2,830	399,343
North Vancouver	15,850	2,175	729	93	5,380	690,213
Pitt Meadows	4,501	602	158	18	1,596	124,998
Port Coquitlam	6,766	996	81	31	2,262	252,097
Port Moody	3,315	673	132	40	1,523	1,715,017
Richmond	34,197	6,383	762	192	12,975	2,087,334
Surrey	51,975	8,820	690	283	19,020	2,181,079
Vancouver	77,262	9,281	975	314	21,702	2,580,923
West Vancouver	6,655	1,169	97	36	2,433	303,659
White Rock	1,038	151	20	5	390	56,396
Marine Areas	4,446	18,049	897	5,139	25,657	601,628
Other areas	5,082	964	156	126	3,953	254,881
GVRD Total	326,056	70,854	8,179	8,384	144,077	17,386,723

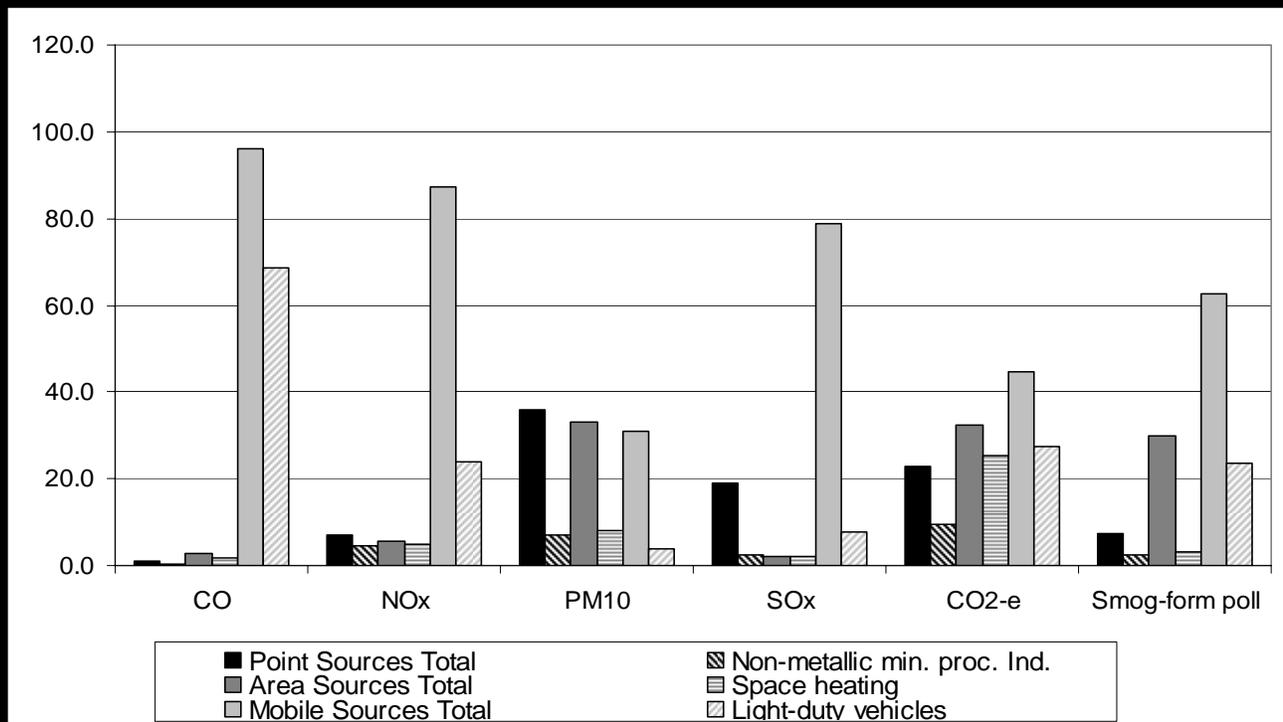
Source: GVRD. 2003c. 2000 Emission inventory for the lower Fraser Valley Airshed

Figure 33. Proportion of emissions produced by major municipalities in the GVRD, 2000



Source: GVRD. 2003c. 2000 Emission inventory for the lower Fraser Valley Airshed

Figure 34. Proportion of emissions produced by each source, 2000



Source: GVRD. 2003c. 2000 Emission inventory for the lower Fraser Valley Airshed

Table 36. Sources of emissions for selected pollutants in the GVRD region, 2000

	CO	NO _x	PM10	SO _x	Smog-forming pollutants	CO ₂ -equivalents
Point Sources						
Bulk Shipping terminals	0	0	1,568	0	441	734
Electric Power Gen	123	235	99	26	436	1,570,986
Non-metallic mineral processing industries	1,271	3,757	728	206	4,344	1,892,359
Petroleum products	216	375	136	1,279	2,330	286,274
Other	2,324	1,480	1,088	136	6,093	738,490
Total point sources	3,934	5,847	3,619	1,647	13,644	4,488,843
Area Sources						
Agricultural	0	0	1,082	0	13,285	435,531
Burning	2,866	132	539	12	1,315	117,086
Landfills	0	0	47	0	317	870,618
Space heating	7,019	4,014	818	183	6,108	4,961,706
Other	129	537	840	0	33,814	820
Total area sources	10,014	4,683	3,326	195	54,839	6,385,761
Mobile Source						
Light-duty vehicles	252,060	19,892	381	666	43,466	5,372,898
Heavy-duty vehicles	5,419	13,006	323	280	14,222	984,246
Marine	4,807	18,197	906	5,143	25,945	608,955
Other	91,037	20,875	1,509	775	30,943	1,867,514
Total mobile sources	353,323	71,970	3,119	6,864	114,576	8,833,613
GVRD Total	367,271	82,500	10,064	8,706	183,059	19,708,217

Source: GVRD. 2003c. 2000 Emission inventory for the lower Fraser Valley Airshed

Smog-forming pollutants and CO₂-equivalents

Smog-forming pollutants consist of the major pollutants which contribute to smog: nitrous oxide (NO_x), volatile organic compounds (VOC), sulphur oxides (SO_x), particulate matter smaller than 2.5µg/m³ (PM_{2.5}), and ammonia (NH₃). CO₂-equivalents is a summary measure of the global warming potential (GWP) assigned to the major greenhouse gases methane, nitrous oxide, and carbon dioxide. Each gas varies in its potential to cause global warming (e.g. methane has a global warming potential of 21 compared to carbon dioxide), so each gas is multiplied by its GWP, and then added together to determine the total CO₂-equivalents.

Emission sources

There are 3 main sources of emissions: point, area, and mobile sources. Point sources are large, stationary sources that are licensed to operate under a permit to discharge pollutants. Only those sources that emit more than a specified amount are included in this category, although all stationary emitters are actually "point sources". Area sources are "smaller, broadly distributed light industrial, commercial, institutional, residential, agricultural, and naturally occurring sources that normally do not require an air discharge permit" (GVRD 2003c, p.5). Mobile sources are grouped moving sources that emit pollutants, such cars, SUVs, and marine vessels.

Analysis:

CO

Vancouver, Richmond, Surrey, and Burnaby emit the highest levels of CO (see Table 35; Figure 33), largely due to the large volume of light-duty vehicles in these areas. Mobile sources produce over 90% of all CO, and the majority of that is produced by light-duty vehicles such as cars and light trucks (see Table 36; Figure 34). Light-duty vehicles produce almost 70% of the entire CO emissions in the GVRD.

NO_x

Similar to CO, Vancouver, Surrey, Burnaby and Richmond are major emitters of NO_x. Again, the majority of NO_x is produced by mobile sources (87%), and light-duty vehicles produce nearly 25% of all NO_x. Delta is also a major emitter of NO_x because of a local cement plant, which is a major contributor to NO_x in addition to vehicles. Marine areas are the largest emitter of NO_x after light duty vehicles due to ocean-going vessels. Marine sources account for 22% of all NO_x produced.

SO_x

Marine areas are the main emitter of SO_x. Burnaby is the next major emitter of SO_x, largely due to a local petroleum refinery. Mobile sources are the primary source of SO_x, with marine vessels producing over 50% of the total SO_x in the region.

PM₁₀

Delta, Surrey, Richmond, Vancouver, and North Vancouver are the main emitters of PM₁₀. This is a result of local industry influences – point and area sources which emit particulate matter. Also, marine areas are a significant contributor of PM₁₀. Roughly all three sources (point, area, and mobile) produce one-third of PM₁₀, with bulk shipping terminals, agriculture, and marine vessels all being major contributors.

CO₂-equivalents

Vancouver, Surrey, Richmond, Delta, Port Moody, and Burnaby emit the highest levels of greenhouse gases. In Richmond, Surrey, and Vancouver, this is due mainly to light-duty vehicle sources and space heating: mobile and area sources contribute the majority of CO₂-equivalent emissions. Together, space heating and light duty vehicles contribute over 50% of these emissions. In Delta, Port Moody, and Burnaby, emissions are high because of additional point sources such as a cement plant and a petroleum refinery.

Smog-forming pollutants

Levels of smog-forming pollutants are highest in Vancouver, Richmond, Surrey, and Burnaby largely due to mobile sources. Mobile sources contributed the majority of smog-forming pollutants, with light-duty vehicles producing nearly one-quarter of all smog-forming pollutants emitted. Marine areas also emit significantly high levels of these pollutants.

Forecasting

According to the GVRD's (2003b) forecast and backcast of the 2000 emission inventory, CO emissions will decline until 2005, due mainly to the AirCare program, as light-duty vehicles are the main source of CO emissions. Emissions are anticipated to increase slightly in 2010 due to the expiration of the AirCare program. NO_x emissions are expected to decline until 2020, then start increasing due to an anticipated increase in marine vessel traffic and the projected growth of the shipping industry (GVRD 2003b). Unlike light-duty vehicles, there is little in the way of emissions reduction plans for the marine realm. Although Transport Canada stated that the federal government would ratify an international agreement which would limit airborne emissions from marine vessels (International Maritime Organization/Marpol 73/78, Annex VI) by 2003, it has yet to do so. Similarly, SO_x emissions are expected to significantly increase after 2000 because of increased emissions from marine vessels. PM₁₀ levels are expected to increase after 2000 because of marine vessels, space heating, and certain point sources such as bulk shipping terminals. Emissions of smog-forming pollutants are expected to decrease until 2015, and then begin to increase. Again, marine vessels are expected to be the main contributor of these emissions, and a

reduction in smog-forming pollutant emissions from other sources will be overtaken by increases in emissions from marine vessels. Emissions of greenhouse gases are also expected to increase into the future in the GVRD as a result of population growth. Levels of CO₂, the main greenhouse gas contributor, will dramatically increase mainly due to light-duty vehicles (cars and light trucks), as well as space heating and electric power generation. Although the Kyoto Protocol calls for a 6% reduction in 1990 greenhouse gas emissions by 2008-2012, greenhouse gas levels in 2010 are projected to be 41% *above* 1990 levels (GVRD 2003b).

Rating: Deteriorating



Vancouver, Surrey, and Richmond are the major emitters of airborne pollutants in the GVRD. This is mainly due to larger populations, and a high level of vehicle use. But rather than decrease, emissions are expected to rise, largely due to a rise in marine traffic and population growth resulting in more vehicles on the road. Trends in greenhouse gas production show that the GVRD will be nowhere close to Canada's commitments to the Kyoto Protocol; rather than decreasing by 10% as outlined in the protocol, emissions are expected to increase by 40%. This will have disastrous consequences, considering global warming is perhaps the single largest environmental concern affecting the Earth today. In addition, data shows that emissions reduction policies are desperately needed to limit emissions of airborne pollutants by marine vessels, since they will be a significant contributor to emissions in the future.

NORTH: Environment – Rivers & Oceans

Indicator:

7.6. Water quality for certain water bodies in the GVRD

Rationale:

Clean water is essential for continued life on Earth. It is vital for agriculture, recreation, tourism, industry, and the health of the environment and human health. While humans can survive without food for more than a month, we cannot survive more than a week without water. The tragic outbreak of waterborne illness that resulted in the deaths of seven people in Walkerton, Ontario reveals the serious importance of clean water. Our surrounding ecosystems also depend on clean water. In order to ensure clean drinking water, the large watersheds that supply water to the GVRD are protected, and other important freshwater and riparian areas are highlighted for protection by the GVRD in their Regional Parks and Greenways plan (GVRD 2005). Monitoring water quality for water bodies in the GVRD helps to document the level of water quality in the region. Monitoring water quality ensures that water in BC is properly managed in order to maintain the health of the surrounding ecosystems and ourselves.

Data:

Table 37. Number and percentage of water bodies ranked Excellent, Good, Fair, Borderline, and Poor in the GVRD Region, 1998-2002

Rating	1998	Percentage of total	2000	Percentage of Total	2002	Percentage of total
Excellent	1	3.6%	1	7.1%	2	33.3%
Good	7	25.0%	1	7.1%	1	16.7%
Fair	19	67.9%	12	85.7%	3	50.0%
Borderline	1	3.6%	0	0.0%	0	0.0%
Poor	0	0.0%	0	0.0%	0	0.0%
Total	28		14		6	

Source: BC Ministry of Water, Land, and Air Protection. 2002b. Surface water quality in BC

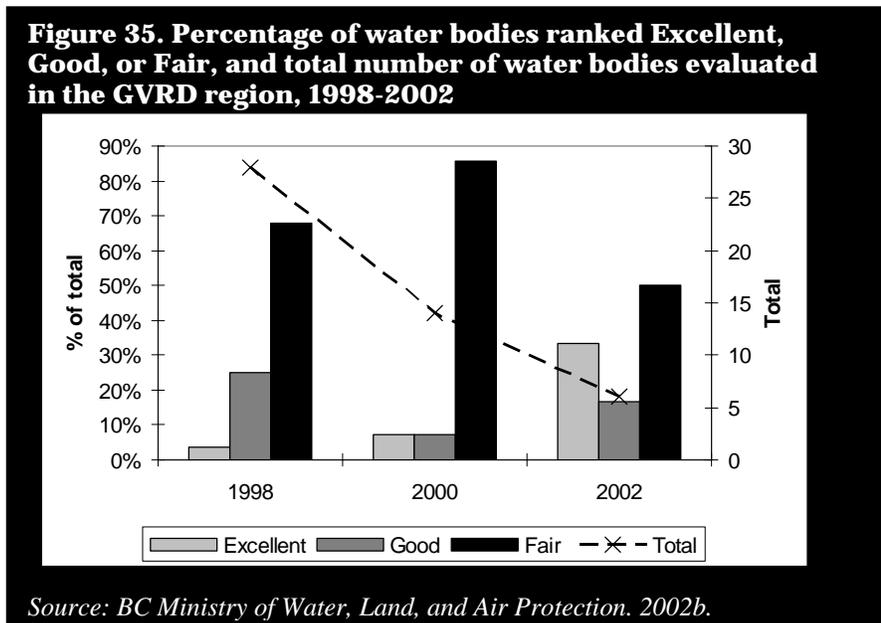


Table 38. Water quality index for water bodies in the GVRD, 1998-2002

Water Quality Index	Environmental Trends Rating		
	1998	2000	2002
Fraser River - Kanaka Ck to Mouth			
Main Stem	Good	Fair	N/A
Main Arm	Fair	Fair	Excellent
North Arm	Fair	Fair	N/A
Middle Arm	Good	Good	N/A
Sturgeon Bank (Iona Beach)	N/A	Excellent	Excellent
Boundary Bay			
Little Campbell River	Fair	N/A	N/A
Mahood Creek	Fair	N/A	Fair
Murray Creek	Fair	N/A	N/A
Latimer Creek	Fair	N/A	N/A
Serpentine River	Fair	N/A	Fair
Nicomekl River	Fair	N/A	Fair
Anderson Creek	Good	N/A	N/A
Hyland Creek	Fair	N/A	N/A
Burrard Inlet			
Port Moody Arm	Fair	Fair	N/A
Indian Arm	Fair	Fair	N/A
False Creek	Borderline	Fair	N/A
Second Narrows to Roche Point	Fair	Fair	N/A
First to Second Narrows	Fair	Fair	N/A
Outer Burrard Inlet	Fair	Fair	Good
Burrard Inlet Tributaries			
School House Brooks	Fair	Fair	N/A
Lynn Creek	Good	Fair	N/A
Capilano River	Good	Fair	N/A
North Shore Lower Fraser Tributaries			
Kanaka Creek	Fair	N/A	N/A
Pitt River	Good	N/A	N/A
Alouette River	Fair	N/A	N/A
North Alouette River	Fair	N/A	N/A
Alouette Lake	Excellent	N/A	N/A
Coquitlam River	Fair	N/A	N/A
Brunette River	Good	N/A	N/A

Source: BC Ministry of Water, Land, and Air Protection. 2002b

Legend

1998 Rating – based on at least 3 years of data collected between 1985 and 1995

2000 Rating – based on at least 3 years of data collected between 1992 and 1997

2002 Rating – based on at 2 years of data in 1999 and 2000

Excellent – all uses of water are protected and none are threatened or impaired

Good – all uses of water are protected with only a minor degree of threat or impairment

Fair – most uses of water are protected, but a few are threatened or impaired

Borderline – several uses of water are threatened or impaired

Analysis:

The provincial government has gathered significant amounts of data regarding water quality for many of BC's rivers and streams. The water quality index (WQI) is a compilation of a number of complex factors that provides a simple yet effective analysis of water quality. The index "takes into account the number of objectives not met, the frequency with which they are not met, and the amount by which they are not met" (BC Ministry of Water, Land, and Air Protection 2001).

The proportion of water bodies rated as excellent increased between 1998 and 2002 from 3% to over 30% (see Table 37; Figure 35). While there was an increase in the percentage of water bodies rated good in 2002, the level did not equal the percentage of water bodies ranked good in 1998. The proportion of water bodies ranked fair make up the majority of water bodies for each year, from a low of 50% in 2002 to a high of 86% in 2000.

The total number of water bodies evaluated decreased by over half each year, from 28 in 1998 to 6 in 2002 (see Figure 35).

Rating: Weak



The majority of water bodies in the GVRD region ranked in the fair category. While there was an increase in the number of water bodies ranked excellent, there was a significant decrease in the total number of water bodies evaluated. This decrease prevents individual trends to appear, and provides more incomplete data in the face of increasing demand for water. Areas like the Fraser River and Burrard Inlet should be continuously monitored because of the significant demand placed on these important waterways, from marine vessel traffic to fish migration; yet, the majority of these water bodies received no WQI rating in 2002. Furthermore, the ratings of each year are already dated, considering that the ratings for each year are based on an amalgamation of previous years' data.

NORTH: Environment – Rivers & Oceans

Indicator:

7.7. Number of water bodies recording salmon escapement in the GVRD

Rationale:

Both from a cultural and biological standpoint, salmon are extremely important species. For Aboriginal groups on the West Coast, salmon form a key part of their culture, playing a central role in traditional stories. Local Aboriginal groups have fished for salmon for thousands of years, making them vital to a healthy life as well as a healthy economy, with salmon being sold and traded to various other groups, including the Hudsons Bay Company, throughout the region. Similarly, salmon play a key role in the ecosystems in which they exist, being a key food source for many predators, including grizzly and black bears (Reimchen 2001). Recent observations in BC have also revealed that salmon is an important seasonal food source for wolves (Darimont et al. 2003). Other recent work has also revealed that salmon play important roles in providing nutrients to the surrounding forests (Reimchen 2001). Therefore, the continued return of salmon to water bodies in the Greater Vancouver Regional District (GVRD) is important for maintaining healthy ecosystems and both plants and predators. The number of water bodies recording salmon escapement can be viewed as a general indicator of the overall health of riparian ecosystems in the GVRD.

Data:

The following data is summarized from Fisheries and Oceans Canada's (FOC) online GIS database, Mapster 2.0, which is obtained from the nuSEDS V2.0 database owned by FOC. According to a disclaimer associated with the program (FOC 2004):

It should be noted that in recent years there have been major variations in coverage and in systematic retrieval of observations from surveys for many streams in British Columbia and the Yukon. Thus missing records may signify either that no data exist, or that none have been received. Further, current efforts to retrieve additional observations from recent year surveys are likely to result in updates, so a portion of the data provided herein (especially post 1996) will be regarded as subject to revision

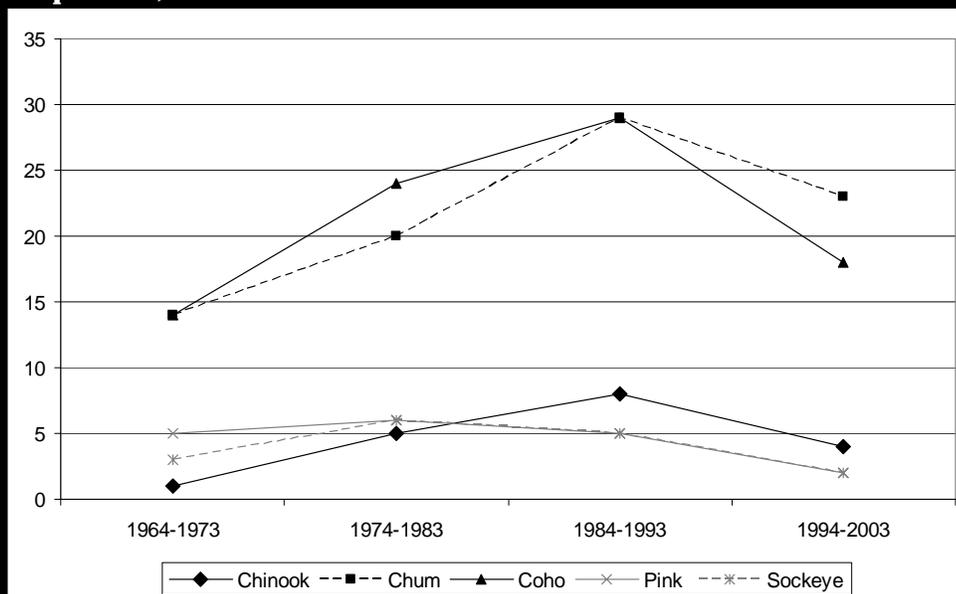
Hence, present (post 1996) data is likely not a true reflection of current situations and can be considered an underestimate.

Table 39. Number of water bodies recording salmon escapement data for rivers and creeks in the GVRD, 1964-2003

Year	Chinook	Chum	Coho	Pink	Sockeye
1994-2003	4	23	18	2	2
1984-1993	8	29	29	5	5
1974-1983	5	20	24	6	6
1964-1973	1	14	14	5	3

Source: Fisheries and Oceans Canada's Mapster 2.0 fish database

Figure 36. Trends in the number of water bodies recording salmon escapement, 1964-2003



Source: Fisheries and Oceans Canada's Mapster 2.0 fish database

Analysis:

The number of water bodies in the GVRD recording salmon escapement shows an increasing trend from 1964 until 1993 for all species, and then decrease after 1993 (see Table 39; Figure 36). However, these trends may be inaccurate due to incomplete data collection for both past and recent years. Past escapements with blanks or zeros, common in older records, represent a problem because in many cases their true meaning has been lost. Therefore, prior years may actually have more streams with salmon escapement, making past records an underestimate. In addition, data for recent years (post 1996) is likely incomplete, and could also represent an underestimation of water bodies.

Rating: Unknown

The lack of complete or reliable data prevents a proper analysis of trends in the number of water bodies recording salmon escapement in the GVRD. What data is available can be taken as an underestimate of the actual number, but the level of underestimation cannot be determined due to incomplete records. While little can be done regarding historical data due to a loss of actual records, FOC should work on updating the most recent records, and developing an active assessment plan, in conjunction with the GVRD, to ensure accurate recording.

NORTH: Environment – Homes

Indicator:

7.8. Percentage of Aboriginal households in the GVRD in housing units requiring major repairs

Rationale:

How suitably Aboriginal people are housed in the Greater Vancouver Regional District (GVRD) depends greatly on whether their accommodations are healthy and well-maintained (CMHC 2004). The condition of these housing units can be measured – at least in large part – by the number of accommodations that require major housing repairs. Families that live in poorly-maintained accommodations also tend to live in housing that is not affordable and/or is not suitable (i.e. too small to accommodate the size of their families.) Federal standards indicate that “acceptable housing” refers to housing that is affordable, is in adequate condition, and is of suitable size.

Data:

Table 40. Number and percentage of Aboriginal household dwellings in the GVRD that require major repairs

	City of Vancouver	GVRD	BC
Number of dwellings	1,145	3,065	13,925
Percentage of dwellings	18.1%	16.1%	18.4%

Source: Statistics Canada, 2001 Census

Analysis:

While data is readily available from the 2001 Census, free online data from earlier Census surveys is not available. Therefore, it is not possible to examine trends over time in Aboriginal household dwellings requiring major repairs.

Canada-wide, 6.8% of off-Reserve Aboriginal households live in housing that is not in adequate condition, while 22.5% of on-Reserve Aboriginal households live in inadequate housing (CMHC 2004). In contrast, 18.1% of the dwellings for the City of Vancouver’s urban Aboriginal population are in need of major repairs, and 35.5% of the dwellings on the Musqueam reserve are in need of major repairs (Statistics Canada, 2001 Census). However, housing adequacy for Aboriginal households in the GVRD is marginally better than compared to the province of British Columbia (see Table 40). In comparison, 8% of the total population in Vancouver lives in housing requiring major repairs (O’Donnell and Tait 2003).

Vancouver performs poorly on a national level when compared to other large cities. Along with Regina, Vancouver has the highest rate of Aboriginal houses requiring major repairs (O’Donnell and Tait 2003).

The GVRD’s Homelessness Project (Woodward 2002) has found that Aboriginal persons at risk of homelessness in the region (i.e. who are found to be in core need of housing, and are paying 50% or more of their income on housing) tend to reside in sub-standard accommodation. About one-fifth of their dwellings require major repairs.

Rating: Weak



The record on maintenance of Aboriginal households in the GVRD is quite poor in relation to national statistics, and is only marginally better when compared to the province. In comparison to provincial statistics on housing in adequate condition, the GVRD's maintenance rates for Aboriginal dwellings are marginally better than the average.

NORTH: Environment – Homes

Indicator:

7.9. Average number of persons per room in Aboriginal households in the GVRD

Rationale:

Safe and comfortable housing is a required element in having a respectable quality of life. Overcrowding can impact a child's learning through a lack of space to do homework. Overcrowding has been linked to impacts on the health of both children and adults, and overcrowding during childhood can have impacts on aspects of adult health. Overcrowding has been linked to respiratory diseases in children (Baker et al. 1999) and adults (Mann et al. 1992) and tuberculosis (Cantwell et al. 1998; Drucker et al. 1994).

Overcrowding in relation to housing accommodations is one of several key elements that help to define which households are in "core need" of housing. Overcrowding is often tied to a series of other complex socioeconomic issues such as employment, mental health, housing quality, and affordability. Because Aboriginal people are often experience poorer socioeconomic conditions, overcrowding is an important issue for the local Aboriginal community, especially so in the local area where housing prices are on the rise.

Data:

Statistics Canada's publicly-available Census data do not track the portion of households that meet National Occupancy Standards. The Canadian Mortgage and Housing Corporation (CMHC) analyses Aboriginal rates of overcrowding (in relation to National Occupancy Standards) among households in core housing need, but only provides information for a national and provincial level. Statistics Canada tracks the percentage of dwellings, including Aboriginal households, with more than one person per room, and the average number of persons per room.

Table 41. "Overcrowding" Indicators for Aboriginal Households in the GVRD

	City of Vancouver	GVRD	BC
% of dwellings with more than one person/room	3.9%	2.6%	2.9%
Average # of persons per room	0.5	0.5	0.5

Source: Statistics Canada, 2001 Census

Analysis:

According to the National Occupancy Standard (CMHC 1991) "enough bedrooms" connotes one bedroom for each of the following:

- each cohabiting adult couple;
- each unattached household member 18 years of age and over;
- each same-sex pair of children under age 18; and
- each additional boy or girl in the family, unless there are two opposite sex siblings under 5 years of age, in which case they are expected to share a bedroom.

Unfortunately, it is difficult to assess housing suitability using Statistics Canada data (see Table 4). However, Canada-wide statistics for the 2001 Census (CMHC 2004) show that only a marginal percentage (1.4%) of non-Aboriginal households lived in housing that fail to meet suitability standards, while a significantly higher percentage (4.9%) of Aboriginal households occupy housing that is considered to be crowded. These statistics, generated by the CMHC, are based upon National Occupancy Standard requirements, rather than on Statistics Canada's data which shows the average number of persons per room.

Aboriginal households living in large urban centres across Canada (census metropolitan areas) were 50% more likely to be in core housing need than the average household in the same regions (25.5% vs. 16.6%) (Engeland et al. 2005) (core housing need refers to households that are unable to pay the median rent for housing that meets all standards without spending 30% or more of before-tax household income). However, this is an improvement from 1996, where the Aboriginal households were 80% more likely to be in core housing need. Nearly 40% of all Aboriginal renter households in urban centres across Canada were in housing need (Engeland et al. 2005). In Vancouver, 42.3% of all Aboriginal renters were in core housing need (Engeland et al. 2005). One of the major reasons why Aboriginal households were in core housing need was because of generally lower income levels.

Free data on "overcrowding" indicators from earlier Census surveys is not available, so it is not possible at this time to compare average number of persons per room over time. However, it is evident that Aboriginal households in the Greater Vancouver Regional District (GVRD) do not face as significant challenges in overcrowding as experienced by many rural and northern Aboriginal communities. It has been found, for example, that among Inuit households in northern Canada, overcrowding is the most prevalent housing problem with 16.1% of the population living in crowded conditions.

Rating: Fair



An important issue to raise is the actual definition of "overcrowding" and the traditional Aboriginal view of family households. The current definition of "overcrowding" is largely a Western societal definition based on a nuclear family model, and does not incorporate Aboriginal views on housing. The current definition denies the importance of the Aboriginal extended family and important traditions regarding hospitality and visiting. Therefore, some Aboriginal households which are classified as overcrowded may not actually be so from an Aboriginal view; consequently, such households may not be suffering the same effects as one which is truly overcrowded. Future evaluations of overcrowding need to incorporate cultural views of housing in order to provide a more accurate depiction of housing needs and issues.

In light of available data, overcrowding is more of an issue within Aboriginal households than in non-Aboriginal households, regionally, provincially and nationally. However, this indicator is faring much better than other standards for housing acceptability, such as affordability and maintenance of dwelling units, particularly as they relate to the GVRD. The proportion of Aboriginal households in core housing need, although still higher than the non-Aboriginal population, has decreased since 2001, and the core housing needs of Aboriginal people in Vancouver is most similar to that of non-Aboriginal households in the same region when compared to other census metropolitan areas across Canada (Engeland et al. 2005).

NORTH: Environment – Homes

Indicator:

7.10. Number of low-income Aboriginal housing units in GVRD

Rationale:

Access to social housing is an important aspect of ensuring that Aboriginal households are able to live in quality housing that is affordable, suitable and adequate (Carter 2004). Many housing activists have argued that affordable housing for Aboriginal people should be managed by Aboriginal organizations, not by the government or by non-Aboriginal groups. This is the strategic importance of affordable housing units geared exclusively to Aboriginal tenants, managed by native organizations, and administered throughout British Columbia by the Aboriginal Housing Management Association.

Data:

Table 42. Aboriginal housing units in the GVRD		
Sponsor	Project Name	Units
Vancouver Native Housing Society	East Broadway Seniors Bldg	35
Helping Spirit Lodge Society	Helping Spirit Lodge	10
Vancouver Native Housing Society	J.C.Leman Building	98
Vancouver Native Health Society	Satellite 1993	25
United Native Nations Society	Swiw'Lus Lam'chit	10
Lu'ma Native BCH Housing Society	Marge White Building	18
Kiwassa Housing Society	Norah Davis Gardens	33
Kiwassa Housing Society	May MacLean Place	23
Helping Spirit Lodge Society	Spirit Way	14
Healing Our Spirit BC Aboriginal	Satellite 1992	10
Lu'ma Native Housing Society		22
TOTAL BC-Housing Funded Units in GVRD		298
Other housing Units		
Kekinow Native Housing Society		199
Lu'Ma Native Housing (additional units)		200
Synala Housing Cooperative		21
Helping Spirit Lodge Society (additional units)		4
GRAND TOTAL		722

Source: BC Housing

Analysis:

There are a significant number of Aboriginal housing units available in the Greater Vancouver Regional District (GVRD). These units have been built almost exclusively within the City of Vancouver and, to a lesser extent, within the City of Surrey. However, for several years the Provincial Government of BC has not invested in any new construction of Aboriginal housing units, nor any sort of new social housing units,

save supportive housing for seniors. The federally-run housing organization, Canada Mortgage and Housing Corporation, is also currently putting few dollars into new unit construction of urban Aboriginal housing.

Rating: Deteriorating



It is important to continue to expand the ratio of social housing units for Aboriginal households in the GVRD. Due in part to the provincial and federal drop-off in spending on social housing units, there is a growing affordability gap between the supply and the demand for non-profit housing that works to empower the local Aboriginal community. This is particularly significant once the high rate of growth within the regional Aboriginal population – resulting from both “natural” growth and from urban migration – is taken into consideration.

NORTH: Environment – Homes

Indicator:

7.11. Number of Aboriginal homeless people in the GVRD

Rationale:

Aboriginal people, particularly those with a history of abuse and family breakdown and those dealing with disabilities or addictions, are predominantly at risk of homelessness (Woodward 2002). Homelessness is also generated by uncoordinated services, lack of affordable housing, and cuts to welfare rates (Carter and Polevychok 2004). While there are many similarities in the issues faced by Aboriginal and non-Aboriginal homeless people, there are special needs among the Aboriginal homeless that need to be met in order to help alleviate the effects of this pandemic. Included among these special services are traditional healing techniques and culturally appropriate assistance (Beavis et al 1997). Similar to the non-Aboriginal population, there are also important gender and age-specific issues are also important considerations regarding Aboriginal homelessness.

Data:

There is some regional data that has been generated from a 24-hour homelessness snapshot survey of the Greater Vancouver Regional District (GVRD), conducted in 2002 and 2005.

Table 43. Number of Aboriginal Homeless People in the GVRD, 2002 and 2005

	2002			2005		
	Sheltered Homeless	Street Homeless	Total Homeless	Sheltered Homeless	Street Homeless	Total homeless
Aboriginal	70 (12%)	70 (27%)	140 (17%)	158 (23%)	357 (34%)	515 (30%)
Non-Aboriginal	490 (88%)	189 (73%)	679 (83%)	520 (77%)	685 (66%)	1,205 (70%)
Total	560 (100%)	259 (100%)	819 (100%)	678 (100%)	1,042 (100%)	1,720 (100%)

*Source: GVRD, Research Project on Homelessness in Greater Vancouver, 2002
Goldberg et al. 2005*

Data for 2002 does not include 232 homeless people who refused to state their ethnicity (the total number of homeless people found in the 24-hour homeless snapshot survey of 2002 was actually 1,051, not the 819 shown).

Analysis:

Both the 2002 and 2005 24-hour homelessness snapshot documented homeless people in virtually every municipality of the GVRD (Woodward 2002). Aboriginal people are significantly overrepresented among the region's homeless (see Table 43), accounting for 17% of the homeless in 2002 and 30% in 2005. Aboriginal people account for less than 2% of the overall population of the GVRD. The analyses of this snapshot surveys indicate that Aboriginal homeless people tend to avoid shelters and that they are likely under-reported in the numbers of homeless reported above. In the 2005 survey, there were proportionately more women among the Aboriginal homeless (35%) than among the non-Aboriginal homeless (22%). Similarly, in 2005 there are proportionately more street homeless among the Aboriginal homeless compared to the non-Aboriginal homeless. For 2005, Aboriginal homeless reported somewhat

higher rates of addiction and mental illness than the non-Aboriginal homeless population, but were less likely to report having a mental illness (Goldberg et al. 2005).

Although it is difficult to compare data for each snapshots due to differences in methodology and sampling, there appears to be an increase in the proportion of Aboriginal homeless between 2002 and 2005.

The GVRD Homelessness Project (Eberle Planning and Research et al. 2002) has also found that there has been an increase in the number of Aboriginal households at risk of homelessness in the region, in the period between Census years 1991 to 1996. This study found that 15% of all Aboriginal people in the GVRD are at risk of homelessness.

Rating: Poor



The magnitude of Aboriginal homelessness needs to be closely monitored, as it is a dire issue in the GVRD, as in many Canadian municipalities. Culturally-based initiatives that promote Aboriginal self-sufficiency and respect for the homeless population are strongly recommended by Aboriginal housing activists, and must be implemented in order to avert further deterioration in Aboriginal homelessness rates. Aboriginal people are significantly overrepresented among the region's homeless, and the proportion seems to be increasing. Furthermore, as Goldberg et al. (2005, p.36) note, "the over representation of Aboriginal people among the homeless is not reflected in the existing distribution of Aboriginal run homeless services and emergency accommodations." Such services need to be increased, and capacity given to Aboriginal organizations to address these gaps in delivery.

8. Conclusions

As Rodolfo Stavenhagen, Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous People, states succinctly, “economic, social and human indicators of well-being, quality of life and development are consistently lower among Aboriginal people than other Canadians” (Commission on Human Rights 2004, p.2). The data and statistics outlined for each indicator in this report echo the above statement.

By using a suite of comprehensive categories and indicators, this report was able to provide a snapshot of the overall health of Aboriginal People (society), the Aboriginal Nation (economy), and Aboriginal Land (environmental) in the Greater Vancouver region. By documenting available information, conditions, and concerns, this report puts forth a set of recommendations regarding future data gathering, research, and policy development by which we as a society can progress towards a more sustainable and equitable future.

8.1. Healthy People

The majority of cultural and social indicators revealed poor conditions among Aboriginal people living in the Greater Vancouver Regional District (GVRD), revealing large disparities between the Aboriginal and non-Aboriginal populations in the region (see Tables 44 and 45). While some indicators showed improvement when compared to data from previous years or when compared to total Aboriginal population in BC, many indicators revealed weak, deteriorating, or poor conditions.

Analyzed indicators documented fairly poor conditions for Aboriginal culture and family, indicating there is much room for improvement to progress towards a Healthy People. When compared to the

Table 44. Summary of cultural indicators and their ratings	
Indicator	Rating
Percentage speaking traditional languages	Deteriorating
Percentage participating in traditional activities	Weak
Percentage of Aboriginal children in care	Weak
Percentage of Aboriginal lone parents	Weak
Childcare access	Fair

proportion of adults, few Aboriginal children could speak or understand their traditional language well, indicating a generational loss in language. Many Aboriginal groups have recognized that language is an integral part of their traditional culture, and have begun developing ways to preserve and promote their language among all generations of their people. Hence, there is a positive note in that there are proportionately more children than adults who can speak or understand some of their traditional language, but this has yet to transfer to a generational increase in fluency or comprehensive understanding. Proportionately fewer Aboriginal people participated in the measured traditional activities (hunting, gathering of wild plants, and fishing) than compared to the Aboriginal population of BC, as may be expected in a large urban setting as Vancouver – especially so when compared to many of the small, rural Aboriginal communities that exist in the province, where access to such traditional activities is much more immediate. However, it is likely that many Aboriginal people in the GVRD participate in other “traditional” activities, such as dancing, carving, and healing circles, that are not documented by current statistics. This indicates that more work needs to be done regarding the definition and measurement of “traditional activities”.

Poor conditions among family wellbeing indicators point to a need in improved child and family services in the GVRD. Aboriginal children are significantly overrepresented in the proportion of children in care (CIC) in the GVRD, accounting for nearly one-third of all CIC even though they make up only less than one-thirtieth of all children in the region. Similarly, there are more Aboriginal lone parent than non-Aboriginal families in the region, indicating that there may be proportionately more assistance needed among these families to help them avoid other socioeconomic risks, such as homelessness. Among Aboriginal people at risk of homelessness in the GVRD, 40% lived in female-headed lone parent households (Woodward et al. 2002). In light of these concerns it is positive to note that the Aboriginal community has a more substantial childcare support system than compared to the Aboriginal population of BC, although more information is needed to evaluate the level of childcare equality in the region.

Analysis of social indicators revealed significant concerns regarding the socioeconomic status of the Aboriginal community and the health of individual Aboriginal people (see Table 45). Infant mortality rates – a key indicator of the overall social conditions of a society – for Status Indians were often double those rates for Other residents in the region, and were occasionally larger than the provincial rate for Status

Table 45. Summary of social indicators and their ratings	
Indicator	Rating
Aboriginal infant mortality rate	Weak
Aboriginal life expectancy	Poor
Rate of diabetes among Aboriginal people	Poor
Rate of cancer among Aboriginal people	Deteriorating
Rate of HIV/AIDS among Aboriginal people	Poor
High school graduation rates	Improving
Graduation from post-secondary	Fair
Students in special needs/alternative programs	Deteriorating
Incarceration rates	Weak
Rates of violent crime	Poor

Indians. Similarly, life expectancy was consistently lower for Status Indians when compared to Other residents, often being 9-13 years less. Although these statistics are only for the Status Indian population, they likely reflect similar trends in other groups in the Aboriginal community. Both statistics are used as health indicators by the World Health Organization, and highlight a need to improve the overall socioeconomic conditions of urban Aboriginal people in the region.

Indicators also raised concern regarding the individual health of Aboriginal people. Rates for both cancer and diabetes were higher among Aboriginal than non-Aboriginal people. Although both diseases were virtually undocumented among Aboriginal people less than 100 years ago, diabetes rates are now double the rate for non-Aboriginal people, while cancer rates appear to be on the rise for Aboriginal people. Diabetes is of special concern among Aboriginal women and children; roughly two-thirds of all First Nations people diagnosed with diabetes in Canada are women, and rates of diabetes among Aboriginal children are growing rapidly. HIV/AIDS disproportionately affects Aboriginal people, and rates have exhibited a dramatic increase in HIV/AIDS among Aboriginal people, although the number of reported cases among Aboriginal people has decreased in recent years. Like diabetes, HIV/AIDS affects

proportionately more Aboriginal women and youth, and as such these two segments of the population are important concerns for Aboriginal HIV/AIDS services.

Education is seen as key for future success in all aspects of life, and in this respect, education is a shining light for Aboriginal people. A recent labour force survey revealed that the employment rate of Aboriginal people who have at least a high school diploma was nearly equal to that of their non-Aboriginal peers. High school graduation rates among Aboriginal children have increased steadily, although there is still much room for improvement, with a large disparity between Aboriginal and non-Aboriginal rates, and an actual decline in graduation rates in some large districts in the GVRD. Aboriginal enrolment in local universities has been steady for the past few years. Increasing graduation rates will work to build capacity among urban Aboriginal people in the region, and provide them with better opportunities for employment, which can consequently improve the overall socioeconomic position of Aboriginal people in GVRD. However, there was concern regarding the increase in the proportion of Aboriginal students identified with “severe behaviour” in light of provincial Ministry of Education’s goal to actually reduce these rates.

In terms of crime and safety, available data raises major concerns for the local Aboriginal community. Aboriginal people are significantly overrepresented in federal correction facilities, and this rate shows no sign of slowing down. The number of Aboriginal federal offenders in the Pacific Region has increased over the past five years while the average age of offenders has decreased. Aboriginal people are also disproportionately affected by violent crime and commit violent crime. Proportionately more Aboriginal people are in correctional facilities for Schedule 1 offences and are victims of homicide.

While much of the data highlights areas of immediate concern, some data highlight hope for the future, especially among younger generations of Aboriginal people. There were positive cultural developments, with an increase in the portion of youth would could speak or understand some of their traditional language. It is hoped that this will translate into an increase in the proportion of fluent adults in the future. Graduation rates from secondary school for Aboriginal youth has increased for most regions of the GVRD, and the number of Aboriginal people graduating from post-secondary has stayed relatively constant over recent years. It is hoped that such rates will translate into increased employment and capacity building, and consequently, and overall future improvement in urban Aboriginal society.

8.2. Healthy Nation

While economic indicators highlighted economic inequality among the Aboriginal and non-Aboriginal communities in the GVRD, there has been marked gains and improvement in many facets of the local economy for Aboriginal people (see Table 46). While important and often high profile indicators such as employment and the percentage of people living below the poverty line show causes for concern, other indicators show improvement and hope for Aboriginal youth. Employment

Indicator	Rating
Employment Rates	Weak
Percentage with management positions	Improving
Percentage living below the poverty line	Deteriorating
Average household incomes and STIRs	Improving
Social assistance rates	Fair
Percentage self-employed	Improving
Unemployment rates and income among Youth	Fair

rates for Aboriginal people in the region were lower than rates for the non-Aboriginal population but were higher than overall provincial employment rates for Aboriginal people. Similarly, the unemployment rate for Aboriginal people was more than double the rate for non-Aboriginal people but was much lower than compared to the provincial unemployment rate for Aboriginal people. As stated earlier, education is a strong factor in employment rates for Aboriginal people. The percentage of Aboriginal people involved in management-level positions has increased in the region, and there has been a small growth in the proportion of Aboriginal people occupying positions associated with the middle class. Similarly, self-employment has been growing among the local Aboriginal population, even though it still lags behind the

non-Aboriginal population. Aboriginal youth were also actively employed in the local economy, at levels almost on par with their non-Aboriginal peers.

Despite these employment statistics, Aboriginal families are still twice as likely to be living below the poverty line as non-Aboriginal families. Housing affordability is also an important issue among Aboriginal households, although it appears that housing affordability is slowly on the increase. The proportion of income derived from government transfer payments for Aboriginal people has been decreasing, but it is unclear whether this is as a result of government reductions in the provision of social assistance or an actual reduction in the need of social assistance by Aboriginal people.

8.3. Healthy Land

While present conditions in the exterior environment were fairly stable, future conditions showed a cause for concern (see Table 47). There is a significant amount of green space and protected areas in the GVRD and regional plans have been developed regarding their promotion, conservation, and management. Approximately 70% of the GVRD lay within the regions “Green Zone” which includes protected and agricultural lands. Protected areas make up approximately 42% of the Green Zone, but only a small portion is dedicated to the conservation and protection of biodiversity. It is vital, however, that the utmost care is taken to maintain the quantity and quality of the GVRD’s Green Zone and associated protected areas as the region continues to expand and its population increase, especially in light of past reductions in the region’s Agricultural Land Reserve.

While Aboriginal involvement in regional salmon fisheries appears to be improving in the short term, significant and pressing conservation concerns will likely severely curtail future harvests.

Present air quality in the region is good, with all monitored pollutants falling below acceptable levels. However, Vancouver still generates a significant portion of air pollutants, but these costs

are borne by other regions into which the GVRD’s air pollution flows, such as the Fraser Valley. Local emissions of air pollutants are on the rise, which will ultimately impact local air quality as well as the health of its inhabitants and ecosystems. The predicted rise of gases linked to global warming are of significant concern because of the disturbing implications associated with climate change, both locally and globally.

Water quality in the region appeared to be fair, but the decrease in the number of streams monitored and the lack of up-to-date data weaken overall results. Similarly, a lack of accurate and present data obscures the ability to detect trends in the number of streams in the GVRD recording salmon escapement.

Conditions regarding the interior environment indicated that more attention is needed to improve conditions in the Aboriginal home. A concerning portion of both On- and Off-Reserve housing in the region required major repairs. Furthermore, compared to other large cities across Canada, Vancouver has one of the highest rates of Aboriginal households requiring major repairs. Overcrowding was more of an issue among Aboriginal than non-Aboriginal households, but the rate of Aboriginal households in core housing need has decreased since 2001. There is a growing concern regarding the ratio of social housing units for Aboriginal households in the region. Few Aboriginal-specific housing units have been

Indicator	Rating
Portion of green space	Fair
Portion of protected areas	Fair
Aboriginal salmon harvest	Deteriorating
Air quality	Fair
Air emissions	Deteriorating
Water quality	Weak
Salmon escapement	Unknown
Aboriginal households requiring major repairs	Weak
Number of persons per room	Fair
Number of low income housing units	Deteriorating
Number of Aboriginal homeless people	Poor

built in recent years despite the growing urban Aboriginal population. Aboriginal people are significantly overrepresented in the number of homeless people in the region, making up 30% of the region's homeless even though Aboriginal people account for less than 3% of the region's population.

8.4. Data gaps

The results gathered and developed for the Aboriginal Indicators System has revealed significant gaps in available data regarding the various Aboriginal groups in the GVRD, especially for Metis, Inuit, and Non-Status Aboriginal people. For many of the health-related indicators, such as infant mortality rate and life expectancy, only vital statistics (i.e. birth- and death-related statistics) for the Status Indian population are available. While Status Indians do make up nearly half of all Aboriginal people in the GVRD and act as an example for all Aboriginal people in the region, such data still excludes over half of all Aboriginal people in BC and provides no information on Metis or Inuit populations in the region. While cancer and diabetes are growing concerns among Aboriginal groups across Canada, data on rates for such diseases are sparse. Some data for these diseases are available from Statistics Canada's Aboriginal Peoples Survey, but this data is self-reported and gives blanket statistics for all Aboriginal people. More comprehensive data regarding mortality resulting from such diseases is available, but suffers from the same problems as all provincial vital statistics data. In some cases, data is aggregated to include all Aboriginal people and is not divided into Metis, Inuit and First Nations. Data for many of the social indicators is aggregated for all Aboriginal people, including data on traditional languages and activities, lone parents and graduation rates.

For certain indicators, data was grouped in manners other than by metropolitan areas or regional districts, making it difficult to gain insight into the Aboriginal population in the GVRD. All vital statistics data is aggregated according to health service delivery areas which follow different boundaries than those of the GVRD. Data regarding incarceration is gathered on a regional level which includes all of BC and the Yukon. No data were available regarding the origins of each offender, which is critical for comparing incarceration rates among the urban and rural Aboriginal populations.

In order to discern trends, data needs to be consistently gathered over time. For many of the indicators, data was only available for the last census year (2001). While this is sufficient for allowing regional comparisons, it prevents the highlighting of trends over time.

In addition, there was often a general lack of data available on issues that were pertinent for Aboriginal people. There was no comprehensive information regarding diabetes rates or cancer rates among Aboriginal people, even though these are major concerns among the Aboriginal population. There was a lack of available data regarding post-secondary graduation rates for certain universities, even though increased Aboriginal enrollment is a priority for many of the local colleges and universities. There was a lack of comprehensive information regarding the income levels for Aboriginal households, even though this is critical for determining poverty-related statistics. Homelessness, a huge concern among the Aboriginal community, suffered from a severe lack of data, with only periodic 24-hour counts supplying any sort of available statistics.

These statistics not only revealed current concerns among the urban Aboriginal population, but also highlighted a number of recommendations regarding future data gathering, research, and policy development.

8.5. Recommendations regarding future data gathering

While documenting the present condition of urban Aboriginal people in the Greater Vancouver region, the report also highlighted where data gathering could be improved. With regards to cultural indicators and measurements, there needs to be a re-examination of what is considered "traditional". In it's

analysis, Statistics Canada limits traditional activities to hunting, fishing, gathering, and trapping. This definition should be further expanded to include other traditional Aboriginal activities, based on discussions with the Aboriginal community.

For many of the social indicators, data was gathered only for the Status Indian population in BC, rather than all Aboriginal people in BC. Because of the importance of birth- and death-related statistics to a significant portion of the social indicators, vital statistics data should be gathered for all Aboriginal people. Currently, data is only gathered on Status Indians because they are the only group of Aboriginal people in BC with an identifier on their records which delineates them as a Status Indian. A similar system should be developed for all Aboriginal groups, or a self-reported ethnicity system could be developed which would gather vital data.

Data regarding rates of diabetes, cancer, and HIV/AIDS among Aboriginal people should be gathered more comprehensively and effectively. Because of the seriousness of both cancer and diabetes, systems should be developed to gather information on such rates among Aboriginal people, potentially through a coordinated effort among clinics and hospitals. Currently, information is only gathered through self-reported statistics in the Aboriginal People's Survey, or via age-standardized mortality rates. Because of the severity of these diseases, an increased effort should be made to gather information on rates, not deaths. The BC Centre for Disease Control and the BC Cancer Agency could be involved in such programs. Because of the huge concern over the spread of HIV/AIDS in the Aboriginal community, data on ethnicity and the geographic location of each person tested should be consistently gathered with each test conducted.

There is a current lack of available data regarding the geographic origin of Aboriginal offenders. Such data should be gathered to clarify the relationship between incarceration rates in an urban versus rural context.

With regards to all social statistics, data for Aboriginal populations should be disaggregated to highlight conditions and trends for First Nations, Metis, and Inuit. This includes data for traditional languages and activities, the portion of children in care and lone parents in the GVRD, and graduation rates for the GVRD.

While sufficient data existed for the majority of economic and environmental indicators, some indicators could be improved by more accurate data gathering. To provide more accurate information regarding poverty among Aboriginal people, data regarding Aboriginal household income should be gathered. The GVRD needs to provide municipal-level data regarding the Green Zone to better understand its local distribution and the subsequent implications for populations and biodiversity. While there is a significant amount of data already gathered for water quality in the region, it would be advisable to have more recent data made available, and to develop a monitoring regime whereby a core series of water bodies are regularly monitored for a common series of pollutants, in addition to occasionally monitoring other water bodies and other pollutants. Similarly, salmon escapement information for water bodies in the GVRD needs to be updated. Without more accurate and up-to-date data for a core set of variables, it is difficult to discern trends over time. While homelessness is a major concern for all communities in the region, including the Aboriginal community, there is a general lack of consistently-gathered data. Statistics on homelessness should be gathered annually, in conjunction with further research to determine the characteristics of Aboriginal homelessness.

Evaluation of the social, economic, and environmental indicators not only highlighted present conditions and lapses in data, but also highlighted potential areas of research and policy development to help improve the overall quality of life for Aboriginal people in the GVRD.

8.6. Recommendations for future research

In light of the present conditions highlighted by all indicators and the present gaps in knowledge, several key areas of research were highlighted for each of the 4 directions: north, south, east, and west. Future research projects should utilize both qualitative and quantitative methodologies, and should actively engage the local Aboriginal community in all stages of the research project. Future research should also take into account the end of residential schools when analyzing comparisons over time. The present generation is the first not to attend residential schools, although many of the effects are still carried by this generation. It is difficult to fairly compare those Aboriginal generations who experienced residential schooling with either later Aboriginal generations or non-Aboriginal generations, in light of the severe impacts on the entire Aboriginal way of life.

Also that the comparison should be over time with this generation being the first not to attend residential schools and show the successes and improvements, with comparisons to other indigenous populations that were colonized ie American Indian. This would show progress over time, as it's an unequal comparison at all times between the aboriginal and non-aboriginal population

With regards to the eastern door, culture and family, further research is needed to define which activities constitute "traditional". This research can be done in discussion with local Aboriginal groups. Also, international comparisons could be conducted to examine international patterns among the world's Indigenous people with regard to the transmission of traditional cultural practices. The revitalization of Aboriginal culture is an important issue in the Aboriginal community; therefore, further research is needed to examine this revitalization, since statistics indicate that there is an increase in urban Aboriginal youth involvement in culture. The availability and use of traditional language programs should be documented and monitored to help increase understanding regarding the generational transmission of traditional languages in an urban context. Further research is needed to examine the situation of Aboriginal lone parents in the GVRD, and the affect such a situation has on family and community. Furthermore, research should provide strategies which can assist improving and increasing culturally-relevant services for Aboriginal lone parents. Aboriginal children in care are significantly overrepresented in the region, and research into the reasons why this is so should be conducted.

There are many opportunities for research in the area of health, the southern direction. Preliminary analysis of infant mortality rates highlighted a potential relationship between income and infant mortality rates. A more thorough study examining infant mortality rates and income inequality among the Aboriginal community in the GVRD should be undertaken to further explore this relationship. Comparisons could be made to other minority populations, such as African Americans, as well as a comparison at a global level. Further research should be undertaken to examine diabetes rates among the urban Aboriginal population and compare this to rates for rural Aboriginal populations to determine similarities and differences. Rates of cancer appear to have also increased significantly among the Aboriginal population, and more research is needed to better quantify this relationship, the origins of this increase, and highlight any potential implications. There may be differences in rates between urban and rural populations due to different quality of life factors, such as diet and housing. HIV/AIDS rates are on the rise in the region, and further research is needed to document this increase and the trends among users in order to help provide effective solutions. Future research regarding HIV/AIDS would be to conduct international comparisons between Aboriginal populations in Canada and other Indigenous populations regarding changes in HIV/AIDS infection and transmission.

Other social aspects could also benefit from increased research. More information could be gathered regarding Aboriginal enrolment in post-secondary institutions, and the various barriers Aboriginal people face in applying to and completing post-secondary education. Further research is needed to address the inequality of justice among Aboriginal people. Data needs to be gathered on the portion of Aboriginal offenders from urban areas, and the relationship of incarceration and socioeconomic status in an urban context. As mentioned in the report, the key to lowering Aboriginal offender rates is to improve the socioeconomic condition of Aboriginal people.

While often not as immediate as social research, further research in areas of the economy and environment are required to address certain pressing issues. Research should be conducted which examines the increasing involvement of Aboriginal people in the local urban economy. Such a study should develop longitudinal trends to assess change, and take a comprehensive look at the level of meaningful Aboriginal involvement, and the relationship between increasing education rates, employment, and income. Such a study should highlight the economic conditions of youth, as they show the most improvement out of any group. Further research should examine the issue of poverty among Aboriginal people in the working area. Such a study should examine not only the unemployed, but also the working poor, and should encompass shelter cost-to-income ratio, low income cutoffs, as well as a geographical distribution of poverty to examine geographical relationships in inequality. Such a study could also tie in to the regional distribution of green space in the GVRD, and the change in its distribution over time.

Further research regarding the northern direction – the environment – would be beneficial to all people in the region. Research on the future impact of light-duty vehicle and marine vessel emissions would be valuable in developing management plans to curb such emissions. Further research is needed to better quantify the extent of homelessness in the GVRD. One-time snapshots are valuable but only paint a brief picture. A more comprehensive study is needed to examine the extent of homelessness among Aboriginal people, the cultural and socioeconomic reasons behind it, and the trends in the level of homelessness. Only by thoroughly examining the issue can a proper management plan be created to address and provide effective solutions to homelessness among Aboriginal people.

8.7. Recommendations for future policy development

In conjunction with further research, developing policy to address the social, economic, and environmental conditions of Aboriginal people in the GVRD will assist in resolving many of the issues affecting Aboriginal people and also continue to improve positive developments. First and foremost, many of the issues afflicting Aboriginal people in the GVRD and across Canada, from decreased life expectancy to incarceration rates and unemployment rates, are a result of cultural loss and poor socioeconomic conditions. Indeed, Aboriginal people must be congratulated on their continued survival in the face of tremendous historical and cultural injustices. Therefore, general policy development should focus on the improvement of primary social and economic conditions – promoting the revitalization of culture, improving the quantity and quality of housing, increasing access to employment services, addressing health concerns, and continuing to improve education. In addition, policies which encourage urban Aboriginal self-governance and the continued devolution of services will improve the effectiveness of any attempt at addressing the social, economic, and environmental concerns of Aboriginal people.

In addition to general recommendations, there are a number of policy recommendations specific to this report. Many of these policies are directed at youth, since it is in Youth where the hope and future of Aboriginal people in the region lie.

- First and foremost, policy should be set in place to develop methods to identify all Aboriginal people in BC, not just Status Indians. This will improve available information and help monitor the conditions of all Aboriginal people in the province.
- More attention is needed regarding Aboriginal health concerns. Policy should be developed to improve the gathering of data on diabetes and cancer among Aboriginal people. Policies should actively promote education and prevention of both diseases, as well as HIV/AIDS. As HIV/AIDS is becoming a huge concern among intravenous drug users, policies should be developed which help to avoid such situations, such as promoting safe injection sites and needle exchanges.
- Programs, such as language classes, which promote traditional languages and activities should be actively encouraged.
- Measures which keep at-risk children in the care of extended family should be enhanced in order to reduce the number of children in care in the region.

- Because of links between education and quality of life, further policies need to be developed which encourage and assist Aboriginal youth in attaining secondary and post-secondary education, such as increasing funding, developing Aboriginal curriculum, and promoting a culturally-friendly environment in schools and relevant Aboriginal education services.
- The use of alternative justice models which are culturally appropriate need to be promoted to make the justice system more responsive.
- Present economic policies which help fund Aboriginal businesses, encourage entrepreneurship, and youth involvement in the economy should be continued.
- Because of the importance of research and the series of important gaps that exist regarding research of issues important to Aboriginal people, policy should be developed which actively promotes the involvement of Aboriginal people in research. Aboriginal people should be actively involved in defining what research needs to be collected, the ethics, policies, and procedures involved in gathering data, and the analysis and interpretation of results. Such policies should also promote ownership of information and the requirement to consult Aboriginal people on the very policy and research that will affect them.

Environmental policies need to be developed in order to maintain and improve the foundation upon which all society and economy rests. Strict protection of green space in the GVRD needs to be developed, and policies which encourage the development of new green spaces are needed. Future emission levels from light-duty vehicles and marine vessels need to be curbed; in that respect, policies which promote the reduction of emissions and the dependency on combustion engines should be encouraged. Policies which promote the conservation of salmon in the Fraser and diversify harvest so as to encourage more conservation-friendly harvesting practices are needed to help avoid the imminent collapse of Pacific salmon stocks. Reflecting the UN report on the condition of Canada's Aboriginal peoples, adequate housing needs to become a priority objective. Policies which increase the availability of affordable, quality housing and improve housing conditions both on and off reserve are needed to improve the interior environment of Aboriginal people. Such policies should also address and promote solutions to Aboriginal homelessness.

Overall, there are many pressing and immediate concerns which impact the region's urban Aboriginal population. The transmission of culture to future generations, Aboriginal life expectancy, the rate of diabetes and HIV/AIDS, incarceration rates, unemployment levels, Aboriginal salmon harvest, and rates of homelessness are all examples of some of the important issues impacting Aboriginal people and must be carefully monitored over the future. However, despite all these issues, there is a silver lining amongst these dark clouds. Educational attainment is on the rise, there is an increase in children learning their traditional language, the employment of Aboriginal people with at least a high school diploma is virtually equivalent to their non-Aboriginal peers, and employment and income among Aboriginal youth is virtually equivalent to non-Aboriginal youth. By documenting both the concerns and strengths, we as a society can work towards a more sustainable future for Aboriginal people in the region.

It is only by knowing the present can we improve the future. Documenting the present social, economic, and environmental conditions of Aboriginal people in the Vancouver region provides a base of knowledge with which we can move forward to address concerns important to the community. Future research and policy need to build upon the present gains made in culture, education, the economy, and aspects of the environment. Increased attention is needed to address concerns regarding Aboriginal health, justice, housing, clean land and resources, and future air emissions. Such issues should not be addressed in isolation, as Aboriginal tradition and contemporary scientific study teach us that all realms are linked, and holistic approaches which encompass various aspects will provide the most relevant, successful and long-lasting solutions for the Aboriginal community. As a participant stated in CNPR Community Forum, "if you focus on the big thing, you might just miss the underlying small stuff that's just as important" (CNPR 2005, p.4).

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Appendix 1: Information regarding Health Service Delivery Areas (HSDA) and the local Status Indian population

Relationship of the Status Indian population to the Aboriginal Identity Population in each HSDA					
	Fraser South	Fraser North	Richmond	Vancouver	North Shore/Coast Garibaldi
2001 BC Status Indian population	4,015	3,960	495	6,955	8,185
2001 Aboriginal Identity population	11,660	9,830	1,165	11,100	10,530
Status Indian population as a proportion of the Aboriginal Identity population	0.34	0.40	0.42	0.63	0.78

Communities included in each health RSDA	
HSDA	Communities included
Fraser North	New Westminster, Burnaby, Maple Ridge, Coquitlam
Fraser South	Langley, Delta, Surrey, South Surrey/White Rock
Richmond	Richmond
	City Centre of Vancouver, Downtown Eastside, North East, West Side, Midtown, South Vancouver
North Shore/Coast Garibaldi	North Vancouver, West Vancouver, Powell River, Squamish, Whistler, Pemberton, Gibsons, Sechelt, Pender Harbour, Bowen Island, Lions Bay, Bella Bella, Bella Coola



Appendix 2: Community Forum Handout Aboriginal Indicators Report

In all societies, and at all levels, it is important to measure and monitor the economic, social, and environmental conditions of their inhabitants in order to determine their contemporary condition. Highlighting the present health of a society's inhabitants assists in providing direction for future policy and management in order to maintain and improve their quality of life. Because it is extremely difficult to measure the entire systems of our society, economy, and environment, we measure *indicators*, single aspects or characteristics that act as indexes representative of the larger social, economic, or environmental system and responsive to change in proportion to that in the larger system. The CNPR has developed a draft series of indicators need that are culturally and community relevant, and responsive to local, urban Aboriginal communities. The medicine wheel, a holistic expression of the Aboriginal worldview, was used as a framework to identify those categories important to Aboriginal peoples.

Wheel	Category	Indicator
Society	Culture and Family	% of Aboriginal people in GVRD speaking traditional languages
		% of Aboriginal people in GVRD participating in traditional activities
		% of Aboriginal children in care in the GVRD
		% Aboriginal lone parents in the GVRD
		Childcare access for Aboriginal families in the GVRD
	Education	% of Aboriginal people graduating from high school in the GVRD
		# of Aboriginal people graduating from post-secondary programs in the GVRD
		# of Aboriginal people in alternative education programs
		% of Aboriginal students in special needs/alternative programs
		Literacy rate among Aboriginal people in the GVRD
	Health	Aboriginal Infant mortality rate in the GVRD
		Aboriginal life expectancy in the GVRD
		HIV and AIDS rates among Aboriginal people in the GVRD
		Diabetes rate among Aboriginal people in the GVRD
		Cancer rate among Aboriginal people in the GVRD
Crime and Safety	Aboriginal Incarceration rates in the GVRD	
	Rates of violent crime committed by Aboriginal people in the GVRD	
Environment	Resources & Land	Total hectares of greenspace in the GVRD
		Total hectares of protected land in the GVRD
		Aboriginal salmon harvest in the lower Fraser River
	Air	Air quality for certain pollutants in the GVRD
		Level of emissions of certain pollutants in the GVRD
	Rivers & Oceans	# of water bodies in the GVRD recording salmon escapement
		Sockeye escapement in Widgeon slough
		Water quality for regions in the GVRD
	Homes	% of Aboriginal households in the GVRD in housing units requiring major repairs
		Rates of Overcrowding among Aboriginal people in the GVRD
		# of Aboriginal low-income housing units in the GVRD
		Number of Aboriginal homeless people in the GVRD
Economy	Employment	Employment rates for the Aboriginal population in the GVRD
		% of jobs held by Aboriginal workers that are full-time
		% of jobs held by Aboriginal workers that are management-level positions
	Entrepreneurship	% of Aboriginal workforce that is self-employed
	Income	Income levels for Aboriginal people in the GVRD
		% of Aboriginal people in the GVRD living below the poverty line
		Average household incomes and shelter cost-to-income ratios of Aboriginal households in the GVRD
		Social assistance rates for Aboriginal people in the GVRD
	Youth	Employment rates for Aboriginal youth in the GVRD

COMMUNITY EVALUATION FORM

What do you like about the indicators report? What do you not like?

Please put a check (√) beside the indicator that you think is a good measurement tool. Put an x (X) beside the indicator you do not think is a good measurement tool.

√ or X	ECONOMY	√ or X	ENVIRONMENT	√ or X	SOCIETY
	Employment rates for the Ab. Pop.		Total hectares of greenspace		% of Ab. people speaking traditional languages
	% of jobs held by Ab. workers that are full-time		Total hectares of protected land		% of Ab. people in GVRD participating in traditional activities
	% of jobs held by Ab. workers that are management-level		Ab. salmon harvest		% of Aboriginal children in care
	% of Ab. workforce that is self-employed		Air quality for certain pollutants		% of Ab. Lone parents
	Income levels for Ab. people		Emissions of certain pollutants		Childcare access for Ab. families
	% of Ab. people living below the poverty line		# of water bodies recording salmon escapement		% of Ab. people graduating from high school
	Avg household incomes and shelter cost-to-income ratios		Sockeye escapement in Widgeon slough		# of Ab. people graduating from post-secondary programs
	Social assistance rates		Water quality		# of Ab. people in alternative ed. programs
	Employment rates for Ab. Youth		% of Ab. people in housing units requiring major repairs		# of Ab. teachers and support-workers
			Rates of Overcrowding		Literacy rate among Ab. people
			# of Aboriginal-specific low-income housing		Ab. Infant mortality rate
			# of Ab. homelessness		Ab. life expectancy
					HIV and AIDS rates among Ab. people
					Diabetes rate among Ab. people
					Cancer rate among Ab. people
					Ab. Incarceration rates
					Rates of violent crime committed by Ab. people

What indicators, if any would you like to see added to this report?

What categories, if any, would you like to see added to this report?

Do you have any further questions or comments?

Response from the Community Forum

On March 29, 2005, the Aboriginal community gathered at the Maritime Labour Centre to help the CNPR develop priorities for its research and policy program and to brainstorm around ideas for the Centre's policy and research conference in the fall of 2005. At that forum, a short update was provided to participants regarding the Indicators Report. The purpose and goals of the report were explained, and participants were given a complete list of the indicators and were asked to provide feedback. Community feedback and involvement in developing the indicators is essential to the relevancy of the report. The following section summarizes the main points from participants' feedback.

General comments

Most participants commented that they liked the effort that went into developing the report, and its comprehensiveness. Others appreciated the traditional medicine wheel model and its sustainable development framework. Participants commented that indicators need a frame of reference, and should be compared temporally, or to other regions and populations. One participant commented that data for these Aboriginal indicators should be compared to data for non-Aboriginal people.

Comments on indicators

While participants approved of the majority of indicators, and liked the wide focus of the indicators, some commented on additional categories and indicators that they thought would also be relevant. One participant suggested that suicide rates should also be included as an indicator. Another commented that data on substance abuse (i.e. drugs and alcohol) and its treatment should be documented. Aboriginal people accessing Aboriginal resources was also suggested by a participant. Another participant highlighted that there needs to be more youth-specific indicators in the categories and 3 main theme areas. Political or governance categories were also suggested as additions by participants at the Forum