

8.0 SOCIO-ECONOMIC AND COMMUNITY WELLNESS

8.1 INTRODUCTION

A “Human Health and Community Wellness” Value Component (VC) was identified in the 2002 and 2005 updated version of the Preliminary State of Knowledge of Valued Components for the NWT Cumulative Impact Monitoring Program (CIMP) Audit. This VC was the least developed of all the VCs, with no definition, no specific indicators and a lack of description as to the scope of the VC. Given the importance of this VC, the audit team separated out the VC into two distinct disciplines, specifically: (1) Human Health and (2) Socio-Economic and Community Wellness. A description and presentation of the former is presented Chapter 7.

Through both research³⁴ and consultation undertaken during the Audit, the long-term social and economic changes occurring in the NWT are of major concern to the people, particularly Aboriginal people in smaller communities.

While some socio-economic monitoring programs have been implemented as part of existing socio-economic agreements, the NWT CIMP document provides no definition of community well-being and no direction in terms of specific valued components or indicators to assess socio-economics and community well-being. Therefore, a set of VCs and indicators was proposed in the Audit Plan to guide the analysis contained herein. In general, the Socio-Economic and Community Wellness section focuses more on the assessment of what would be considered typical socio-economic measures. VCs were identified with corresponding indicators: economy and employment; population and government capacity; and, community well-being. The VCs and indicators are described in Table 8.1-1.³⁵

A particular challenge associated with the Audit and in this area of socio-economics is the question of geographical scale. The aggregation of socio-economic indicator statistics at the NWT level masks the significance of trends at the community level and within the Aboriginal population, where the process of social change is the greatest and where the statistics reveal the highest incidence of social and economic problems. Therefore, the report presents data at the Territorial, region and community level in order to provide greater insight into the unique socio-economic context of the NWT.

³⁴ See for example, National Roundtable on the Economy and Environment. Aboriginal Communities and Non-Renewable Resource Development. Towards Sustainable Aboriginal Communities – A Vision for 2010-2025.

³⁵ Based on the work conducted in the Audit a revised set of VCs together with a corresponding set of indicators and a rationale for them is provided at the conclusion of this section.

**TABLE 8.1-1
VALUED COMPONENTS AND INDICATORS CONSIDERED IN THE REPORT**

Valued Component	Indicators	Rationale
Economy and Employment	<ul style="list-style-type: none"> • Changes in economic activity • Changes in economic sector composition. • Shift from traditional economy to modern economy • Labour force change • Seasonal versus full time employment • Local versus external employment • Sources of local labour • Migration and in-migration • Inter community migration • Changes in regional wages and salaries • Changes in income distribution • Changes in training programs • Opportunities for local businesses • Creation of local businesses 	<ul style="list-style-type: none"> • It is essential to understand the NWT economy in the last two decades and the changes that have happened to the present time. These changes, particularly since the late 1990's have been profound in the workforce and have had significant effects on the communities and the populations in the last few years. The planning, exploration and development of the diamond mines have lead the way in creating the greatest change, however new mines (not only diamonds), the potential pipeline development and transmission line development are also contributors. These developments will have significant effects on all aspects of the economy and in turn the populace and community well being make these essential indicators to include in this "baseline" data. Sources include census data, monitoring reports undertaken in relation to the diamond mines and other NWT qualitative and quantitative data
Population and Government Capacity	<ul style="list-style-type: none"> • Population change by community • Changes to public and private sector housing • Housing affordability • Local and territorial government infrastructure capacity 	<ul style="list-style-type: none"> • It is critical to understand the population change over time. Again, the development of the diamond mines has had a great effect on the population and the local capacity in the communities. Internal migration between the small communities has also caused substantial change. Some of this migration has gone from the smaller communities into Yellowknife, which has caused great changes for both the communities and the people themselves. Both housing and municipal services are critical to these communities and families as many have gone from publicly supported housing into privately supplied housing.
Community Well-being	<ul style="list-style-type: none"> • Existing social patterns - divorce, crime, safety • Current social movements / patterns • Characteristics of the existing and incoming residents • Capabilities of existing social organizations • Attitudes towards development • Major issues facing the population • Impact on women's lifestyles 	<ul style="list-style-type: none"> • In terms of community well-being, all of the previous indicators are critical to the concept of community well being. These indicators demonstrate the effects of all the economic and environmental changes that are faced by the communities in the NWT.

8.2 SELECTION OF SOCIO-ECONOMIC AND COMMUNITY WELLNESS INDICATORS

8.2.1 Overview

Generally, this report incorporates and reports on the indicators used by the Government of the Northwest Territories (GNWT). These include a set of 20 social indicators as well as selected other indicators also tracked by the GNWT.

8.2.2 GNWT Social Indicators

The 20 social indicators were developed by a GNWT interdepartmental working group in response to a 2002 Social Agenda Working Group recommendation regarding the need to identify a set of social indicators that could be used to describe and monitor social conditions in NWT communities. The 20 social indicators were based on the general areas of population health, education, crime and safety, housing, families and children, income and employment and Aboriginal culture. Filters were applied to possible indicators in order to select key indicators. Table 8.2-1 provides an overview of the filters that were used.

**TABLE 8.2-1
FILTERS USED TO SELECT SOCIAL INDICATORS**

Filter	Description
Availability	Is it currently available or do the data need to be collected?
Frequency	How often is the indicator currently collected?
Time Series	Is there historical information to show change over time?
Geographic detail	Is it available at a territorial level or at a community level?
Responsiveness	Will the indicator change over time?
Variability	Is there extreme variation in the indicator from period to period that makes trend identification difficult?
Outcome Indicator	Outcome indicators are preferred over output, input or other indicators?
Relevance	Is the indicator relevant to social conditions?
Understandability	Is there a reasonable expectation of most being able to understand the indicator?
Reliability	Is the data source reliable, ongoing and free from bias
Comparability	Are there comparable data for other jurisdictions?

Source: NWT Social Indicators Consultation Report (Undated).

After identifying 20 indicators, the working group undertook a consultation process with non-governmental organizations and other levels of government. Following this process, the NWT Bureau of Statistics developed community reports highlighting data for each of the 20 indicators. Where available, the data are presented for 33 communities, the NWT as a whole, NWT smaller

communities and Canada. Data sources include various GNWT departments and Statistics Canada. The 20 social indicators and the general area that they address are identified in Table 8.2-2.

**TABLE 8.2-2
 SOCIAL INDICATORS**

Area of Focus	Indicator
Population Health	• Incidence of Heavy Alcohol Use
	• Death Rates From Accidents, Suicides and Homicides
	• Sexually Transmitted Infection Rate (three year average)
Education	• Percentage of Population 15 Years and Older with at Least High School
	• High School Graduation Rate
Crime and Safety	• Violent Crime Rate by Detachment
	• Rate of Juvenile Crime
	• Shelter Admissions
Housing	• Percentage of Households in Core Need
	• Percentage of Households with 6 or More Persons
Families and Children	• Percentage of Lone Parent Families
	• Children Living in Low Income
	• Child Protection Investigations
Income and Employment	• Population Dependency Ratios <ul style="list-style-type: none"> ◦ Less than 15 Years of Age ◦ 60 Years of Age and Over
	• Population Mobility
	• Average Employment Income
	• Income Disparity <ul style="list-style-type: none"> ◦ Percentage of Families with Income Less Than \$30,000 ◦ Percentage of Families with Income Greater Than \$75,000
	• Employment Rate
	• Percentage of Aboriginal People 15 Years and Over Able to Speak an Aboriginal Language
	• Use of Harvested Meat and Fish
Aboriginal Culture	• Percentage of Aboriginal People 15 Years and Over Able to Speak an Aboriginal Language
	• Use of Harvested Meat and Fish

Source: NWT Bureau of Statistics <http://www.stats.gov.nt.ca/Social/home.html>.

The GNWT set of 20 social indicators was selected as the basis of this report for the following reasons:

- The GNWT will be maintaining and publishing data for these indicators, on an annual basis.

- The indicators were the product of a GNWT interdepartmental committee mandated to develop indicators that could be used to track social conditions. Selection of indicators was based on the filters outlined in Table 8.2-1.
- The indicators facilitate review and comparison of data across time and geography. For most of the indicators, data are available by NWT community, NWT district, NWT smaller communities, the entire NWT, and for Canada.

8.2.3 Population and Economic Indicators

In addition to the set of social indicators, specific GNWT population and economic indicators have been selected. These indicators were selected because there are good historical and current data as well as comparable data for Canada and/or other provincial or territorial jurisdictions. In some cases there are not community data but these indicators provide high level information about the NWT as a whole. The indicators selected are shown in Table 8.2-3.

**TABLE 8.2-3
DEMOGRAPHIC AND ECONOMIC INDICATORS**

Area of Focus	Indicator
Population	• Yearly population estimates
	• Components of population change
	• NWT population growth by age
Economic Indicators	• Gross domestic product
	• Consumer price index

8.3 DATA SOURCES AND PRESENTATION

The main source of data was the NWT Bureau of Statistics. The Bureau collected data for each of the 20 social indicators as well as the population and economic indicators. The Bureau's data for these indicators reflects Statistics Canada data, as well as the results from various surveys conducted by GNWT departments.

In many cases data are presented for the NWT as a whole, NWT regions, NWT smaller communities and by community. The NWT regions and NWT smaller communities are defined below. The definitions of the indicators are taken from the NWT Bureau of Statistics, NWT Social Indicators Consultation Report (undated) and from the NWT Bureau of Statistics website.

8.3.1 NWT Regions

When data are presented by region, the data include the following communities (see Table 8.3-1) unless otherwise specified.

**TABLE 8.3-1
 NWT REGIONS AND ASSOCIATED COMMUNITIES**

Region	Communities	
Beaufort-Delta	<ul style="list-style-type: none"> • Aklavik • Fort McPherson • Holman • Inuvik 	<ul style="list-style-type: none"> • Paulatuk • Sachs Harbour • Tsiigehtchic • Tuktoyaktuk
Sahtu	<ul style="list-style-type: none"> • Colville Lake • Fort Good Hope • Tulita 	<ul style="list-style-type: none"> • Déline • Normal Wells
Deh Cho	<ul style="list-style-type: none"> • Fort Liard • Fort Simpson • Jean Marie River • Trout Lake 	<ul style="list-style-type: none"> • Fort Providence • Hay River Reserve • Nahanni Butte • Wrigley
South Slave	<ul style="list-style-type: none"> • Enterprise • Fort Smith • Kakisa 	<ul style="list-style-type: none"> • Fort Resolution • Hay River • Lutsel K'e
North Slave	<ul style="list-style-type: none"> • Dettah • Wekweti • Wha Ti 	<ul style="list-style-type: none"> • Rae Lakes • Rae-Edzo
Yellowknife	<ul style="list-style-type: none"> • Yellowknife 	

8.3.2 NWT Smaller Communities

Whenever data are presented for the NWT smaller communities, the data include the following:

- | | | |
|------------------|---------------------|-------------------|
| • Aklavik | • Tulita | • Fort Resolution |
| • Holman | • Fort Liard | • Kakisa |
| • Paulatuk | • Hay River Reserve | • Lutsel K'e |
| • Sachs Harbour | • Jean Marie River | • Dettah |
| • Tsiigehtchic | • Nahanni Butte | • Rae Lakes |
| • Colville Lake | • Trout Lake | • Wekweti |
| • Déline | • Wrigley | • Wha Ti |
| • Fort Good Hope | • Enterprise | |

8.4 RESULTS – DATA FOR EACH INDICATOR

The following section presents and overviews the data for each indicator. This provides a scan of the NWT as a whole, and in many cases provides comparisons between:

- NWT and Canada
- NWT smaller communities and the NWT as a whole
- NWT communities

This section includes reports for both the 20 social indicators and the population/economic indicators.

8.4.1 Population

This indicator is based on Statistics Canada information. Comparable data are available for provinces and territories across Canada. The data include an adjustment for over and under coverage (i.e., under coverage is the number of people that were missed on the census counts). In the NWT under coverage is approximately 7-10% (Personal Communication, Angela Cocco).

Table 8.4-1 presents the population estimate for the NWT. Data are presented for the 1991 through 2004 period only since Statistics Canada did not produce population estimates for the NWT (separate from Nunavut) earlier than 1991.

**TABLE 8.4-1
NWT YEARLY POPULATION ESTIMATES**

Year	Persons
1991	38,746
1992	39,431
1993	39,829
1994	40,580
1995	41,427
1996	41,748
1997	41,635
1998	40,816
1999	40,654
2000	40,499
2001	40,822
2002	41,489
2003	42,206
2004	42,810

Source: Statistics Canada (based on data provided by NWT Bureau of Statistics - Personal Communication, Angelo Cocco)

The population of the NWT began to decline in 1997, a trend that continued until 2001. The 2004 population represented an increase of 1.4% compared to 2003.

According to the 2001 Census (see Table 8.4-2), slightly over half of the population is of Aboriginal identity.

**TABLE 8.4-2
 ABORIGINAL IDENTITY**

NWT Total Population	37,105
Total Aboriginal Identity	18,730
Total Non-Aboriginal Identity	18,370

8.4.1.1 Components of Population Change

This indicator is based on the change in total population numbers according to births, deaths and net migration. These statistics are summarized on Table 8.4-3 for the 1992 through 2003 period.

**TABLE 8.4-3
 COMPARISONS OF BIRTHS, DEATHS AND NET MIGRATIONS**

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Births	852	834	824	874	815	723	681	659	673	613	608	610
Deaths	144	143	143	131	152	138	146	162	157	163	171	175
Net Migration	-240	29	145	-370	-566	-793	-1022	-410	-415	38	99	256

Source: Statistics Canada (as recorded in the NWT Bureau of Statistics, 2004 Socio-Economic Scan, Statistical Supplement).

Positive migration occurred in 2001, 2002 and 2003, following several years of negative migration. Since the 2003 birth rate is lower than it was 10 years ago and the death rate is higher than 10 years ago, migration to the NWT is a key factor in population growth.

In the late 1990's there were a number of mine closures or layoffs that may have contributed to the population decline in the NWT. In 1997 Colomac Mine closed while Giant Mine and Miramar Con Mine laid off 40 and 120 workers respectively. As well the GNWT workforce declined in anticipation of creation of Nunavut Territory. By mid-1998 the Ekati mine was in operation with the Con Mine operations resuming in 1999 and the Lupin and Giant Mine operations beginning in 2000. As well, between 1997 and 2000 there were licenses issued for oil and gas explorations (Sahtu, Fort Liard and Beaufort Delta). Diavik mine construction commenced in December 2000 and the mine started production in February 2003 (GNWT, Communities and Diamonds 2003 Annual Report, August 2004).

8.4.1.2 Five Year Population Mobility

Five year population mobility is a measure of the number of people 5 years and older who did not live in the same community 5 years earlier. Of the total number (total migrants) there two sub-sets: internal migrants and external migrants. Internal migrants are those people who moved

from somewhere in Canada and external migrants are from outside of Canada. Internal migrants can be further subdivided into: (i) intra-territorial migrants – those people who moved to a different community from within the NWT; and, (ii) inter-provincial migrants – people moved into the NWT from elsewhere in Canada. The statistics for NWT five year population mobility are presented in Table 8.4-4 for 2001. Data for Canada are not available.

**TABLE 8.4-4
FIVE YEAR POPULATION MOBILITY**

Area	Population Five Years & Older	Total Migrants	Internal Migrants	Intra-Territorial Migrants	Inter-Provincial Migrants	External Migrants
Entire NWT	33,970	8,475	7,950	2,210	5,740	520
NWT Smaller Communities	7,075	945	910	470	440	20
Beaufort Delta	5,620	1,310	1,260	530	735	50
Sahtu	2,120	520	510	195	320	10
North Slave	2,290	230	220	115	105	10
Deh Cho	2,715	450	450	155	280	10
South Slave	6,020	1,375	1,310	515	805	50
Yellowknife	15,205	4,590	4,200	700	3,495	390

Source: Census (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004).

Of the total migrants who relocated from somewhere in Canada (internal migrants) the vast majority moved to a larger centre or region with larger centres (54% to Yellowknife, 16% to the South Slave, 15% to the Beaufort Delta, and the remaining 14% divided among the Sahtu, Deh Cho, and North Slave). The larger centres in the South Slave and Beaufort Delta that experienced higher in-migration for 2001 are Hay River, Fort Smith, and Inuvik.

Comparing intra-territorial and inter-provincial migrants for the NWT as a whole, there were 2.6 times more people who moved from outside of the NWT than within. The difference is particularly noted for Yellowknife where, of the people who moved there between 1996 and 2001, 83% came from elsewhere in Canada (inter-provincial migrants). In NWT smaller communities as a group, the intra-territorial rate was only slightly greater than the inter-provincial rate.

The diamond industry is likely a factor in Yellowknife's high in-migration rate. In the fall of 1996, construction of the BHP Billiton Ekati Diamond Mine began while construction of the Diavik diamond mine began in December of 2000. Construction of De Beer's Snap Lake project commenced in 2005 (GNWT, Communities and Diamonds 2002 Annual Report, July 2003). Each of these companies has an office in Yellowknife. As well, a number of companies and services have developed to service the diamond industry. For example, in 2002 there were three diamond-cutting factories in Yellowknife.

As large-scale industrial projects continue to be proposed for the NWT in-migration rates will likely rise, and movement from smaller centres to larger ones may increase. Such trends could lead to negative impacts on demographics in the NWT in so far as the Aboriginal – non-Aboriginal balance is concerned. Additionally, increased intra-territorial movement into larger centres could be detrimental to the sustainability of smaller communities needs. Further research and analysis in these areas should be conducted.

8.4.1.3 Population Share by Community Type

This indicator helps assess the degree of urbanization in NWT, based on population comparisons between a) Yellowknife b) Inuvik, Hay River and Fort Smith and c) smaller communities. Population share for each community type is presented as a percentage of total NWT population in Table 8.4-5.

**TABLE 8.4-5
PERCENTAGE OF NWT POPULATION – BY COMMUNITY TYPE**

	1976	1981	1986	1991	1996	2001	2003
Yellowknife	26.6	31.4	34.7	41.7	43.5	44.3	44.6
Inuvik, Hay River, Fort Smith	30.1	27.5	26.1	24.4	23.6	23.0	22.8
Smaller communities	41.3	41.0	39.2	33.9	32.9	32.7	32.6

*Source: Statistics Canada, 2003 NWT Bureau of Statistics Community Population Estimates
(as recorded in the NWT Bureau of Statistics, 2004 Socio-Economic Scan, Statistical Supplement)*

Between 1976 and 2003 the population of Yellowknife increased from 26.6% to 44.6% of the total population of the NWT. In the same period, the other community types reported a declining percentage of the total population of the NWT.

As mentioned above, Yellowknife has a low unemployment rate, a high in-migration rate and a corresponding increase in the city’s population. This likely reflects the economic opportunities in the city, many of which relate to the diamond industry. The urbanization trend in the NWT may also reflect the global social trend of urbanization.

8.4.2 Population Health

Statistics on incidence of heavy alcohol use, death from accidents, suicides and homicides and rates of sexually transmitted infections are reported in Chapter 9 and thus are not discussed in this chapter.

8.4.3 Education

8.4.3.1 Population 15 Years and Older with at Least High School

This indicator is measured as the percentage of population 15 years of age and over that have a high school diploma or more as their highest level of education. Since 2001, this information has been collected from Statistic Canada's labour force survey. Prior to 2001, the data were from the national census and the NWT Bureau of Statistics community labour force surveys. Comparable data are available for Canada (1991, 1996, 2002), provincial and territorial jurisdictions, and NWT communities. Data for every third year over the 1989 through 2004 period are provided on Table 8.4-6.

**TABLE 8.4-6
PERCENTAGE OF POPULATION 15 YEARS AND OLDER WITH
AT LEAST HIGH SCHOOL**

Area	1989	1991	1994	1996	1999	2001	2004
Canada		61.8		65.2		68.7	
NWT	59.8	59.9	63.2	63.5	66.1	64.8	67.5
NWT smaller communities	28.2	34.0	32.5	40.0	36.6	38.9	36.8
Beaufort-Delta	50.9	50.9	52.3	56.3	54.5	54.9	55.6
Sahtu	45.3	48.3	50.4	57.1	54.3	55.7	52.1
Deh Cho	37.4	40.7	39.7	47.3	45.3	45.0	46.6
South Slave	57.9	58.8	59.2	61.5	67.3	64.5	67.7
North Slave	20.3	26.6	35.0	29.5	31.0	30.3	35.3
Yellowknife	78.2	73.9	79.0	75.3	80.6	77.7	82.1

Source: 1989, 1994 and 1999 - NWT Labour Force Survey; 2004 - NWT Community Survey; 1991, 1996 and 2001 - Census (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004).

The percentage (of population 15 years and older with at least high school) for the NWT is quite similar to that for Canada but is almost double the rate of NWT smaller communities. Since 1989, the rate has increased in all regions of the NWT with the highest increases being recorded in the North Slave, South Slave and Deh Cho regions. In 2004, rates of 70% or higher were recorded in Fort Smith, Hay River, Inuit, Norman Wells and Yellowknife while rates of 35 or less were recorded in Colville Lake, Déline, Fort Liard, Holman, Kakisa, Nahanni Butte, Rae Lakes, Trout Lake, Wekweti and Wha Ti.

8.4.3.2 High School Graduation Rate

This indicator measures high school graduates as a percentage of persons 18 years of age. The data are collected from NWT Education, Culture and Employment and from current population estimates are summarized on Table 8.4-7. Data are not presented for communities as students in one community may attend school in another community. Statistics Canada collects comparable data for Canada, although Canadian data are not available for 2001-02 to 2003-04.

**TABLE 8.4-7
 HIGH SCHOOL GRADUATION RATE (EXPRESSED AS PERCENT)**

Area	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Canada	77.4	76.6	75.9	75.2	76.1	76.6	75.9	na	na	na
NWT	37.5	33.6	37.0	38.8	42.2	38.8	44.6	37.1	43.6	45.3

Source: NWT data – NWT Education, Culture & Employment; Canadian data – Statistics Canada (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004).
 na – not available.

The NWT high school graduation rate was less than half the rate recorded for Canada in 1994-95 through 1996-97 but has been increasing over the years to a rate of 45.3% in 2003-04.

8.4.4 Crime and Safety

8.4.4.1 Violent Crime Rate

This indicator is measured as the number of violent crimes per 1000 persons. The data are available from the Canadian Centre for Justice Statistics and Statistics Canada (see Table 8.4-8). Violent crimes include homicides, attempted murders, assaults (sexual and other), other sexual offences, abductions, and robberies.

**TABLE 8.4-8
 VIOLENT CRIME RATE BY DETACHMENT (INCIDENCES PER 1000 PEOPLE)**

Area	1996	1997	1998	1999	2000	2001	2002	2003
Canada	10.0	9.9	9.8	9.6	9.8	9.9	9.7	9.6
NWT	45.8	53.8	50.9	50.2	49.0	49.0	57.3	67.9
Beaufort-Delta	67.4	80.7	78.5	76.2	70.7	68.5	93.2	102.5
Sahtu	51.7	74.9	70.3	74.6	53.5	52.7	55.7	80.3
Deh Cho	71.7	90.7	101.4	83.1	94.5	75.5	95.2	117.2
South Slave	53.3	55.1	49.3	45.2	45.3	54.6	63.3	75.7
North Slave	47.9	63.2	58.2	50.5	51.6	56.8	76.9	57.9
Yellowknife	29.1	32.2	27.7	32.7	32.6	32.8	31.7	43.9

*Number of reported violent crimes per 1,000 population.

Source: Statistics Canada (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004)

Between 1996 and 2003, the NWT violent crime rate increased by over 20 points while the Canadian rate remained stable. The crime rate in the Beaufort Delta and Deh Cho regions is over 100, more than ten times the Canadian rate. Within each of these two regions, the data increased by 40 points between 1996 and 2003. The communities of Fort Good Hope, Fort Liard, Fort McPherson, Fort Providence, Fort Resolution, Fort Simpson, Paulatuk and Tuktoyaktuk all recorded rates of over 100 in 2003. Yellowknife recorded the lowest community violent crime rate at 43.9 in 2003, increasing from 29.1 in 1996. It is important to note that incidents in a particular detachment may include incidents from surrounding communities.

8.4.4.2 Rate of Juvenile Crime

This indicator is defined as the number of youth charged with a crime per 1000 persons between 12 and 17 years of age. These data are available from the Canadian Center for Justice Statistics at Statistics Canada. Data are available for NWT communities, Canada, and the provinces and territories. Tables 8.4-9 and 8.4-10 provide a summary of the data for males and females respectively. To compensate for data volatility, each year's data represent a three-year average of data (e.g., 2003 data are an average of 2001, 2002 and 2003 figures).

**TABLE 8.4-9
RATE OF JUVENILE CRIME (MALES, THREE YEAR AVERAGE)**

Community	1998	1999	2000	2001	2002	2003
Canada	76.0	71.5	69.7	68.8	68.3	64.3
NWT	183.1	189.8	181.9	198.3	197.3	211.9
Beaufort-Delta	263.5	317.0	347.3	371.1	348.2	328.1
Sahtu	533.5	498.7	478.6	527.7	463.8	473.0
Deh Cho	236.7	296.2	270.8	277.3	229.7	270.9
South Slave	180.8	138.1	142.7	183.1	221.7	261.1
North Slave	225.1	192.6	45.0	52.9	83.0	195.3
Yellowknife	86.7	98.3	101.4	101.4	101.1	94.8

*Number of male youths (between 12 and 17 years of age) charged with a crime per 1,000 male youth, three year average
Source: Statistics Canada (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004)

TABLE 8.4-10
RATE OF JUVENILE CRIME (FEMALES, THREE YEAR AVERAGE)

Area	1998	1999	2000	2001	2002	2003
Canada	22.7	21.7	21.4	21.5	22.0	20.6
NWT	70.8	68.6	67.6	73.0	79.7	90.7
Beaufort-Delta	137.9	128.8	121.9	144.5	146.2	161.4
Sahtu	82.4	95.6	83.9	127.3	158.6	180.9
Deh Cho	69.4	81.9	86.6	49.3	60.4	86.3
South Slave	102.3	86.1	82.1	89.7	114.2	122.2
North Slave	36.4	30.3	15.5	0.0	4.2	13.8
Yellowknife	31.7	32.5	38.6	40.6	39.0	46.9

*Number of female youths (between 12 and 17 years of age) charged with a crime per 1,000 female youth, three year average
 Source: Statistics Canada (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004).

In 2003, the NWT male juvenile crime rate was more than three times the Canadian rate, while the female rate was more than four times comparable data for Canada. Between 1998 and 2003 the juvenile male crime rate in Canada decreased by almost 12 points while the NWT rate increased by 28 points. During the same time period the Canadian female rate decreased by two points while the NWT rate increased by 20 points. In 2003, the Beaufort-Delta and Sahtu regions experienced the highest rates for both juvenile male and female crimes. In the same year, the lowest juvenile male rates were recorded in the Yellowknife region while the lowest female rates were recorded in the North Slave region. In 2003, juvenile male crime rates of over 300 were noted in Fort Good Hope, Fort McPherson, Fort Providence, Fort Simpson, Inuvik, Norman Wells, Tuktoyaktuk, and Tulita. Only Fort Good Hope recorded a female rate of over 300 but the highest female rates occurred in the nearly all the same communities as noted for males.

8.4.4.3 Shelter Admissions

Shelter admissions include the number of women and children admitted to shelters in the NWT. The data are collected by the NWT Department of Health and Social Services and a summary of data is provided in Table 8.4-11. Similar data are not available at the community level, for Canada or other provinces and territories.

TABLE 8.4-11
ADMISSIONS OF WOMEN AND CHILDREN TO NWT SHELTERS

Area	Women				Children			
	1999-00	2000-01	2001-02	2002-03	1999-00	2000-01	2001-02	2002-03
NWT	296	257	295	342	334	364	321	350

*Number of Women and Children admitted to shelters.

Source: NWT Health & Social Services (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004).

The number of women and children being admitted to shelters in the NWT between 1999-00 and 2002-03 increased by 15.5% while the rate for children increased by 5%.

8.4.5 Housing

8.4.5.1 Percentage of Households in Core Need

This indicator is measured as the percentage of households in core housing need, where need is defined as a household that has a housing problem of suitability, adequacy or affordability and does not have the income necessary to correct the problem. The data are collected through the NWT Housing Needs Survey and the NWT Community Survey. Community data are available and are summarized on Table 8.4-12 on a regional basis. No comparable data are available for Canada or the provinces and other territories.

TABLE 8.4-12
PERCENTAGE OF HOUSEHOLDS IN CORE HOUSING NEED

Area	1996	2000	2004
NWT	19.7	20.3	16.3
NWT smaller communities	48.2	45.0	35.3
Beaufort-Delta	23.7	22.1	22.2
Sahtu	38.1	35.0	28.0
Deh Cho	50.1	35.1	24.9
South Slave	21.2	20.2	14.3
North Slave	61.4	52.6	34.9
Yellowknife	4.7	11.1	9.1

Source: 1996 and 2000 - NWT Housing Needs Survey; 2004 – NWT Community Survey (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004).

Between 1996 and 2004 there was a 17% decline in the percentage of households that were in core housing need. In 2004, the highest housing need was recorded in the North Slave region although the percentage in this region declined significantly since 1996. With the exception of

Yellowknife, all regions have a rate that is higher than the NWT rate and smaller communities have a higher percentage across all time periods. In 2004, the highest rate was recorded in Colville Lake where 75.8% of households were in core need, although this represented a 15-point decline from 1996. Other communities with percentages of 40 or over in 2004 included Déline, Lutsel K'e, Nahanni Butte and Wrigley. The lowest rates in 2004 were recorded in Norman Wells (8.5%), Yellowknife (9.1%), and Hay River (9.3%).

8.4.5.2 Percentage of Households with Six or More Persons

The data for this indicator are collected through the NWT Housing Needs Survey and the NWT Community Survey and are presented on Table 8.4-13. Crowding is considered to be an issue in NWT households with more than six people.

**TABLE 8.4-13
PERCENTAGE OF HOUSEHOLDS WITH SIX OR MORE PERSONS**

Area	1981	1986	1991	1996	2001	2004
Canada	5.5	3.9	3.2	3.3	3.1	na
NWT	13.9	11.5	9.8	8.6	7.2	7.0
Smaller NWT Communities	33.7	30.4	23.0	16.1	10.1	12.7
Beaufort-Delta	20.3	16.1	12.3	12.0	9.8	9.3
Sahtu	22.9	25.2	18.4	14.7	12.2	10.2
Deh Cho	28.3	21.9	14.4	9.3	8.3	8.2
South Slave	11.7	9.0	7.1	7.2	5.1	4.9
North Slave	48.6	46.8	39.8	26.7	24.8	22.9
Yellowknife	5.7	4.9	5.4	5.1	4.2	4.0

Source: 1981, 1986, 1991, 1996 and 2001 – Census; 2004 – NWT Community Survey (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004). na = not available.

The percentage of NWT households with six or more persons was more than twice the percentage of Canadian households; however, the gap between Canada and the NWT decreased between 1981 and 2001. NWT smaller communities had a higher percentage of households with six or more people than was recorded for the NWT as a whole. The highest percentage was in the region of North Slave with 22.95% in 2004. The highest percentage was recorded in Wekweti (27.85%) while other communities with percentages of 20 or higher included Colville Lake, Paulatuk, Rae Lakes, Rae-Edzo, and Wha Ti (2004). Lowest rates were reported in Nahanni Butte (2.8%), Fort Resolution (2.9%) and Yellowknife (4%).

8.4.6 Families and Children

8.4.6.1 Lone Parent Families

The percentage of all families that are lone parent families is gathered from the national census and is available for NWT communities, Canada, the provinces and territories. A summary of the data collected for Canada and the NWT is provided in Table 8.4-14.

TABLE 8.4-14
PERCENTAGE OF LONE PARENT FAMILIES

Area	1986	1991	1996	2001
Canada	12.7	13.0	14.5	15.7
NWT	16.3	15.5	16.3	21.0
NWT smaller communities	17.7	18.7	21.4	28.3
Beaufort-Delta	19.9	19.8	22.2	28.9
Sahtu	17.3	19.4	19.1	27.8
Deh Cho	18.9	17.7	16.8	19.5
South Slave	22.9	17.4	17.0	22.7
North Slave	17.6	18.6	17.0	29.8
Yellowknife	12.6	12.2	13.6	15.8

Source: Census (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004)

In 2001, the percentage of lone parent families was five percentage points higher in the NWT than in Canada, while the NWT smaller communities rate was seven percentage points higher than NWT. The Beaufort-Delta, Sahtu and North Slave regions had the highest rates while Yellowknife had the lowest. Rates for Canada, NWT and NWT smaller communities all increased between 1986 and 2001. The 2001 percentages were highest in Colville Lake and Trout Lake (50%) and the communities of Aklavik, Fort McPherson, Lutsel K'e, Tsiigehtchic and Wha Ti had rates of 35% or higher. The lowest 2001 rates were recorded in Fort Liard (14.3%) and Yellowknife (15.8%).

8.4.6.2 Children Living in Low Income

This indicator measures the percentage of children living in families with income below the after-tax low income measure. This is a measure of relative income, that is 50% of the adjusted media family income, re-calculated annually at a national level and adjusted for different family sizes. Data for Canada and the NWT are summarized in Table 8.4-15.

TABLE 8.4-15
CHILDREN LIVING IN LOW INCOME

Area	1997	1998	1999	2000	2001	2002
Canada	22.8	21.7	21.6	22.3	21.4	22.6
NWT	24.5	23.3	23.9	24.2	20.3	23.0
NWT smaller communities	32.4	29.2	30.5	30.6	26.0	31.2
Beaufort-Delta	32.2	29.8	30.1	31.7	27.4	28.9
Sahtu	23.7	21.3	14.9	13.4	21.2	22.0
Deh Cho	31.3	23.9	26.3	25.0	28.4	23.1
South Slave	24.9	26.6	25.8	23.4	22.8	26.6
North Slave	31.3	30.1	27.3	25.5	25.2	30.7
Yellowknife	16.5	15.0	17.1	16.8	12.2	14.6

Source: Statistics Canada (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004).

From 1997 to 2002, the percentage of children living in low income families was slightly higher in the NWT than in Canada. In the same time period, the NWT smaller communities rate was six to eight percentage points higher than the NWT rate. The highest regional rate was in North Slave. In 2002, the highest community rate was in Paulatuk (42.9%) with the communities of Aklavik, Fort McPherson, Fort Providence and Tuktoyaktuk having rates of 35% or higher. The lowest rates in 2001 were in Norman Wells (10%) and Yellowknife (14.6%).

8.4.6.3 Child Protection Investigations

This indicator is based on the number of reported child investigations as recorded by the NWT Department of Health and Social Services. Data are available annually for the NWT and a summary of this information for the three year period between 2000 and 2003 is presented on Table 8.4-16. There are no community data or comparable data for other parts of Canada.

TABLE 8.4-16
NUMBER OF CHILD PROTECTION INVESTIGATIONS

Area	2000-01	2001-02	2002-03
NWT	2646	2385	2649

Source: NWT Health & Social Services (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004)

Over the three year periods for which data are presented, the numbers for 2000/01 were very similar to 2002/03 but 2001-02 data approximately 10% lower.

8.4.6.4 Population Dependency Ratios

This indicator is the ratio of the combined child population (aged 0 to 14) and/or the combined population (aged 60 and over) to the working age population (aged 15 to 59). This ratio is presented as the number of dependents for every 100 people in the working age population.

Those who are 60 and over or under 15 are more likely to be dependent on those of working age. As well they may have additional need for health care services.

The data are available annually, for NWT communities and other parts of Canada. Tables 8.4-17 and 8.4-18 summarize the data for i) those less than 15 years of age and ii) those 60 or older respectively.

**TABLE 8.4-17
 POPULATION DEPENDENCY RATIO (LESS THAN 15 YEARS OF AGE)**

AREA	1991	1996	1997	1998	1999	2000	2001	2002	2003	2004
CANADA	32.5	31.8	31.3	30.9	30.4	29.9	29.3	28.8	28.3	27.8
NWT	44.0	42.8	42.1	41.6	40.9	40.3	39.5	38.6	37.5	36.6
BEAUFORT DELTA	-									
SAHTU	51.2	52.5	51.8	49.7	47.8	46.1	44.7	42.9	42.6	41.0
DEH CHO	48.6	43.0	43.4	44.0	44.0	43.8	41.7	40.0	39.1	38.5
SOUTH SLAVE	43.8	43.4	44.1	42.3	40.9	40.2	38.6	37.7	36.3	34.9
NORTH SLAVE	67.0	61.6	60.6	60.6	57.5	55.8	54.9	52.3	51.8	52.1
YELLOWKNIFE	36.9	35.5	34.7	34.5	34.6	34.5	34.3	34.1	33.2	32.5

*Number of people less than 15 years old for every 100 people between the ages of 15 and 59

Source: Canadian rates – Statistics Canada; NWT and community rates: NWT Bureau of Statistics (except 1991 – Statistics Canada) (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004)

TABLE 8.4-18
POPULATION DEPENDENCY RATIO (60 YEARS OF AGE OR OLDER)

Area	1991	1996	1997	1998	1999	2000	2001	2002	2003	2004
Canada	24.7	25.4	25.5	25.6	25.8	25.9	26.1	26.4	26.8	27.1
NWT	7.6	8.2	8.5	8.7	9.0	9.2	9.2	9.6	9.9	10.3
Beaufort -Delta	8.6	10.1	10.7	10.9	11.1	11.1	11.3	11.7	12.4	12.3
Sahtu	11.2	8.8	9.3	10.3	11.0	12.0	12.0	12.8	13.1	12.7
Deh Cho	13.2	13.6	13.9	13.7	14.2	13.7	12.0	12.6	13.4	13.5
South Slave	10.6	13.0	13.8	13.8	13.4	13.7	14.0	14.4	14.6	14.9
North Slave	17.6	14.9	14.2	14.7	15.3	15.2	15.5	15.6	15.3	16.2
Yellowknife	3.6	4.0	4.2	4.4	4.6	5.0	5.2	5.5	5.7	6.3

*Number of people 60 years and older for every 100 people between the ages of 15 and 59

Source: Canadian rates – Statistics Canada; NWT and community rates: NWT Bureau of Statistics (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004)

The dependency ratio for children 15 years and younger declined between 1991 and 2004 across Canada, the NWT, the NWT smaller communities and all NWT regions. The largest decline was noted in the North Slave region. Conversely, the dependency ratio for those aged 60 years and older increased in the same time period, for Canada, the NWT and NWT communities. The dependency ratio (age 60 and over, 1991-2004) remained fairly stable in the Deh Cho region, decreased in the North Slave region and increased in all others.

In terms of communities, the highest dependency ratio for children was recorded in Colville Lake (67.6 in 2004), with Detah, Tae Lakes, Rae-Edzo, Trout Lake and Tuktoyaktuk reporting ratios of 50 or over. In 2004, the lowest ratios were Fort Smith (31.9), Yellowknife (32.5) and Wekweti (33.0). The highest dependency ratio for adults 60 years and older (2004) was recorded in Tsiigehtchic (31.4) with Aklavik, Colville Lake, Fort McPherson, Fort Resolution, and Wrigley reporting ratios of 20 or over. Lowest ratios were noted in Yellowknife (6.3), Norman Wells (7.0) and Paulatuk (7.5).

8.4.7 Income and Employment

8.4.7.1 Average Employment Income

Average employment income is obtained annually by Statistics Canada, based on taxfiler information. Data for the NWT and Canada are summarized on Table 8.4-19.

TABLE 8.4-19
AVERAGE EMPLOYMENT INCOME

Area	1995	1996	1997	1998	1999	2000	2001	2002
Canada	26,507	26,992	27,969	28,943	29,892	31,426	32,322	32,946
NWT	34,045	33,748	33,364	33,476	35,450	36,187	38,497	41,428
Beaufort-Delta	28,907	27,761	27,099	27,885	29,626	30,326	33,347	34,689
Sahtu	27,626	29,751	28,653	29,764	31,816	32,222	33,885	35,364
Deh Cho	24,450	23,570	23,855	24,317	27,054	26,434	28,035	29,174
South Slave	29,711	28,673	28,978	29,789	32,438	33,309	35,220	37,368
North Slave	17,774	17,399	18,565	18,507	21,032	21,489	24,774	26,703
Yellowknife	40,751	40,118	40,237	40,073	41,870	42,689	45,147	49,172

Source: Statistics Canada (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004)

Between 1995 and 2002, the average employment income in the NWT as a whole was consistently higher than the Canadian rate by between \$4500 and \$8400, depending on the year. The rates for Canada, the NWT and all regions have increased over the period for which data are presented but the highest increases were noted in the North Slave and Yellowknife regions while the lowest increases were recorded in the Beaufort-Delta and Deh Cho regions.

In 2002, the highest average employment income was recorded in Norman Wells (\$55,134) with Yellowknife, Hay River and Inuvik recording averages of \$50,000 or more. The lowest average employment incomes was in Wrigley (\$21,538) with incomes of under \$23,000 being reported in Déline, Fort Providence, Paulatuk, Tsiigehtchic and Wha Ti. In 2002, the NWT smaller communities had an average employment income 41% lower than the rate for the NWT and 27% lower than Canada.

8.4.7.2 Income Disparity

This indicator tracks the percentage of families having less than \$30,000 annual income and the percentage of families with more than \$75,000 income per year. The data are obtained annually by Statistics Canada, based on taxfiler information. Data for the NWT and Canada are presented on Table 8.4-20 for families making less than \$30,000 annually and on Table 8.4-21 for families making more than \$75,000 annually.

TABLE 8.4-20
PERCENTAGE OF FAMILIES WITH INCOME LESS THAN \$30,000

Area	1994	1995	1996	1997	1998	1999	2000	2001	2002
Canada	32.5	31.7	31.4	30.5	29.0	28.1	26.8	24.3	23.6
NWT	29.1	29.0	29.0	28.5	27.1	26.3	26.2	20.9	19.4
NWT smaller communities	51.1	51.1	51.1	50.7	46.6	42.6	45.8	39.6	40.8
Beaufort-Delta	47.8	48.8	37.9	43.8	39.3	46.1	45.4	38.9	36.8
Sahtu	37.5	46.4	39.3	43.9	42.8	45.3	37.2	31.1	27.7
Deh Cho	47.6	41.5	38.0	40.4	41.1	31.0	36.9	31.3	27.7
South Slave	44.2	43.5	46.1	43.6	47.5	43.0	37.0	31.5	27.5
North Slave	56.9	58.3	57.4	41.9	51.7	45.7	40.9	42.8	36.6
Yellowknife	16.0	16.3	17.5	16.7	16.0	17.4	16.7	12.8	11.4

Source: Statistics Canada (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004)

TABLE 8.4-21
PERCENTAGE OF FAMILIES WITH INCOME GREATER THAN \$75,000

Area	1994	1995	1996	1997	1998	1999	2000	2001	2002
Canada	22.7	20.7	21.6	23.1	24.8	26.2	28.9	31.2	33.0
NWT	40.6	38.3	38.0	38.7	38.9	40.6	41.6	47.4	50.4
Beaufort -Delta	27.0	24.7	25.5	23.4	26.1	26.5	28.6	35.4	38.4
Sahtu	25.4	27.1	27.1	23.6	25.5	29.1	33.3	33.9	31.6
Deh Cho	24.3	21.1	17.1	20.3	19.7	22.9	23.9	25.7	30.7
South Slave	32.0	28.8	29.9	29.2	30.9	34.4	35.3	42.8	45.9
North Slave	9.6	7.5	7.3	9.3	8.6	13.3	13.1	23.8	25.0
Yellowknife	57.3	54.0	52.7	53.9	54.2	54.6	55.6	61.0	64.9

Source: Statistics Canada (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004).

The percentage of NWT families with an annual income of less than \$30,000 is lower for the NWT as a whole than for Canada but higher for the NWT communities than both the Canadian and the NWT rate. The rate for the Yellowknife region has been the lowest of all regions since 1994. In 2002, the Yellowknife region rate was half the Canadian rate and almost a quarter of the NWT smaller communities rate. Three regions, the Beaufort-Delta, Sahtu and North Slave, had rates higher than the Canadian rate in 2002. In terms of communities, the lowest rate was recorded in Yellowknife (11.4%) with only four other communities recording less than the NWT rate of 19.4% in 2002, those being Fort Simpson, Fort Smith, Hay River, and Inuvik. The highest rate of incomes less than \$30,000 was found in Tsiigehtchic (60%) while rates of 40% or over were found in Holman, Lutsel K'e, Paulatuk, Rae Lakes and Wrigley.

The percentage of NWT families with an annual income greater than \$75,000 is higher for the NWT as a whole than for Canada but lower for the NWT smaller communities than both the Canadian and NWT rate. The rate for the Yellowknife region has been the highest of all regions since 1994. In 2002, the Yellowknife region rate was almost double the Canadian rate and almost 30 percentage points higher than the NWT smaller communities rate. Three regions, the Beaufort-Delta, South Slave and Yellowknife, had rates higher than the Canadian rate in 2002. In terms of communities, the highest rate was recorded in Yellowknife (64.9%) with the only other communities recording more than the NWT rate (50.4%) in 2002 being Hay River and Norman Wells. The lowest rate of incomes more than \$75,000 was found in Fort Resolution (14.3%) while rates of 20% or less were reported in Fort Good Hope, Tulita and What Ti.

8.4.7.3 Employment Rate

This indicator is measured as the percentage of person 15 years and over that are employed at a job or business. The information is collected by Statistics Canada, the NWT Labour Force Survey and the NWT Community Survey. Data for Canada and the NWT are presented on Table 8.4-22.

**TABLE 8.4-22
PERCENTAGE OF PERSONS 15 YEARS AND OVER AND EMPLOYED AT A JOB OR
BUSINESS**

Area	1986	1989	1991	1994	1996	1999	2001	2004
Canada	59.6	62.1	59.7	58.4	58.5	60.6	61.2	62.4
NWT	66.2	65.0	69.3	65.7	68.2	67.5	69.7	67.8
NWT smaller communities	45.1	37.4	48.2	41.1	50.2	47.1	49.9	47.7
Beaufort-Delta	58.8	56.7	59.0	54.3	59.0	60.1	60.4	59.6
Sahtu	53.8	55.1	54.4	53.4	62.2	62.3	61.4	62.1
Deh Cho	47.9	44.9	54.0	46.3	54.3	52.4	58.1	53.4
South Slave	65.5	60.3	68.3	62.9	66.0	66.2	67.5	64.2
North Slave	31.3	26.6	38.1	30.7	37.4	33.0	45.0	37.3
Yellowknife	83.0	83.3	82.9	81.5	80.0	79.5	80.8	79.7

Source: Statistics Canada (except NWT and community data for 1989, 1994 and 1999 - NWT Labour Force Survey; 2004 - NWT Community Survey) (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004)

In 2004, the NWT employment rate was just over five percentage points higher than Canada's rate, while the NWT smaller communities rate was 20 percentage points lower than the NWT rate. Employment rates have been slowly increasing since 1986 for all areas indicated in the

above table except for South Slave and Yellowknife, where slight drops were noted between 1986 and 2004. The North Slave region had the lowest employment rate of 37.3%, almost 40 points lower than the NWT rate in 2004.

The community of Norman Wells had the highest employment rate (86.4%) followed closely by Yellowknife (79.7%), Inuvik (74.9%), Hay River (69.6%), Enterprise (67.2%) and Fort Simpson (65.2%). Between 1986 and 2004, four communities registered increases of more than 20 points, those being Colville Lake, Lutsel K'e, Tsiigehtchic and Wekweti. Lowest employment rates in 2004 were reported in Wrigley (33.6%), Fort McPherson (34.3%) and Rae-Edzo (34.9%).

8.4.8 NWT Economy

8.4.8.1 Gross Domestic Product (GDP)

Table 8.4-23 presents real GDP at market prices in millions of chained (1997) dollars. Real GDP reflects changes in the quantities of goods and services produced not price changes.

**TABLE 8.4-23
GROSS DOMESTIC PRODUCT AT MARKET PRICES,
1999-2003 IN MILLIONS OF CHAINED (1997) DOLLARS**

	Canada	NWT
1999	969,740	2,267
2000	1,020,786	2,338
2000 Annual Change (from previous year)	5.3%	3.1%
2001	1,040,388	2,881
2001 Annual Change	1.9%	23.2%
2002	1,074,516	2,997
2002 Annual Change	3.3%	4.0%
2003	1,092,891	3,515
2003 Annual Change	1.7%	10.6%

Source: Statistics Canada (as reported in NWT Bureau of Statistics, Statistics Quarterly Volume 26 No.4 December 2004)

In 2003, the NWT economic growth on a constant dollar basis was 10.6% compared to 1.7% for Canada. The NWT GDP growth in 2003 was largely attributed to mining, oil and gas activity, which experienced a 75.7% increase in GDP. This increase and the 25.0% decrease in GDP for construction can be attributed in large part to the start of operations at Diavik and the completion of construction.

Note: Separate GDP estimates for Nunavut and the Northwest Territories became available from Statistics Canada commencing in 1999.

8.4.8.2 Consumer Price Index

The consumer price index is a measure of the average change in consumer prices over time. Table 8.4-24 compares 'all items data' between Yellowknife and Canada.

**TABLE 8.4-24
 CONSUMER PRICE INDEX – YELLOWKNIFE AND CANADA
 (ALL ITEMS AND PERCENTAGE CHANGE)**

	Yellowknife		Canada	
	All Items	% Change from previous year	All Items	% Change from previous year
2004	119.1	0.6	124.6	1.8
2003	118.4	1.8	122.3	2.8
2002	116.3	2.9	119.0	2.2
2001	113.0	1.6	116.4	2.5

Source: Statistics Canada (as reported on the NWT Bureau of Statistics Website
<http://www.stats.gov.nt.ca/indicators.otp#cpi>)

The consumer price index for the NWT increased by 0.6% between 2003 and 2004 while Canada's index changed by 1.8% in the same period.

8.4.9 Aboriginal Culture

8.4.9.1 Aboriginal People 15 Years and Over Able to Speak an Aboriginal Language

This indicator measures the percentage of Aboriginal people 15 years of age and over who are able to conduct a conversation in an Aboriginal language. The data are collected through the community labour force survey and community survey, conducted by the NWT Bureau of Statistics.

**TABLE 8.4-25
 PERCENTAGE OF ABORIGINAL PEOPLE 15 YEARS AND OVER ABLE TO SPEAK
 AN ABORIGINAL LANGUAGE**

Area	1989	1994	1999	2004
NWT	55.6	50.1	45.1	44.0
NWT smaller communities	73.9	67.2	62.8	61.9
Beaufort-Delta	34.4	28.8	27.5	24.8
Sahtu	85.6	68.3	64.0	58.4
Deh Cho	78.4	70.3	65.0	61.7
South Slave	38.9	37.8	32.3	34.0
North Slave	95.9	95.6	96.4	93.7
Yellowknife	36.6	33.5	21.9	25.3

Source: 1989, 1994 and 1999 - NWT Labour Force Survey; 2004 - NWT Community Survey
 (as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004)

In 2004, the percentage of Aboriginal people able to speak an Aboriginal language was 18 points higher in NWT small communities than in the NWT as a whole. This difference has remained fairly stable since 1989. In terms of regions, the North Slave has a very high percentage (93.7%) of Aboriginal people who can speak an Aboriginal language while the Beaufort-Delta and Yellowknife regions have the lowest (24.8% and 25.3% respectively). The percentage appears to be declining across time in all areas reported in the above table, but the most dramatic decline appears to be in Sahtu where between 1989 and 2004, there was a drop of 27 percentage points. In terms of communities, the highest 2004 rates were in Rae Lakes (98.5%), Wha Ti (96.9%), Wekweti (96.1%), Trout Lake (95.3%) and Déline (95.8%) and Rae-Edzo (93.1%). The lowest rates were in Paulatuk (7.4%), Inuvik (17.6%), and Aklavik (19.3%).

8.4.9.2 Use of Harvested Meat and Fish

This indicator measures the percentage of households that reported most or all of their meat or fish to be harvested in the NWT. The data are collected from the NWT Labour Force Survey and the NWT Community Survey and are summarized on Table 8.4-26 for 1994, 1999 and 2004.

**TABLE 8.4-26
USE OF HARVESTED MEAT AND FISH**

Area	1994	1999	2004
NWT	15.5	21.3	17.5
NWT smaller communities	36.4	48.7	45.5
Beaufort-Delta	32.8	36.5	32.6
Sahtu	25.3	43.4	32.1
Deh Cho	22.0	27.1	33.0
South Slave	15.8	18.5	15.7
North Slave	15.8	57.6	41.2
Yellowknife	5.9	8.3	5.1

*Source: 1994 and 1999 - NWT Labour Force Survey; 2004 - NWT Community Survey
(as reported in NWT Bureau of Statistics, Social Indicator Regional Level Data, 2004).*

The percentage of households using harvested meat or fish increased between 1994 and 2004 in both the NWT as a whole and in the NWT smaller communities. The region of North Slave showed the greatest increase, rising by 25 percentage points between 1994 and 2004 to 41.2% with a 1999 rate of over 40 points higher than the 1994 rate before declining to the 2004 rate. Turning to communities, the highest 2004 rate of 84.4% was in Colville Lake followed by Kakisa at 76.9% and Trout Lake at 71%. In the same year, the lowest rates were in Yellowknife (5.1%), Enterprise (7.4%) and Hay River (8.6%). Between 1994 and 2004, rate increases of 20 points or more were recorded in Fort Resolution, Hay River Reserve, Kakisa, Nahanni Butte, Rae-Edzo and Wrigley.

8.5 SUMMARY OF THE TRENDS

The population of the NWT has been increasing since 2001, following several years of minor population decline or little growth. This increase is attributed to migration since birth rates decreased and death rates increased between 1992 and 2003. Yellowknife is a key destination for migrants, a trend that is reflected in the increased urbanization rates in the NWT.

The economy of the NWT appears to be strong. The NWT GDP is increasing at a higher rate than that of Canada. The average employment income, the percentage of families with income greater than \$75,000 and the percentage of persons 15 years and over who are employed are all greater for the NWT than for Canada.

The measures indicating Aboriginal culture reveal that between 1989 and 2004 there was a significant decline in the percentage of Aboriginal people 15 years and older able to speak an Aboriginal language (almost seven percentage points). However, between 1994 and 2004, there was a slight increase in the use of harvested meat and fish in the NWT.

A number of indicators reveal a higher incidence of social problems in the NWT than in Canada. These include the following:

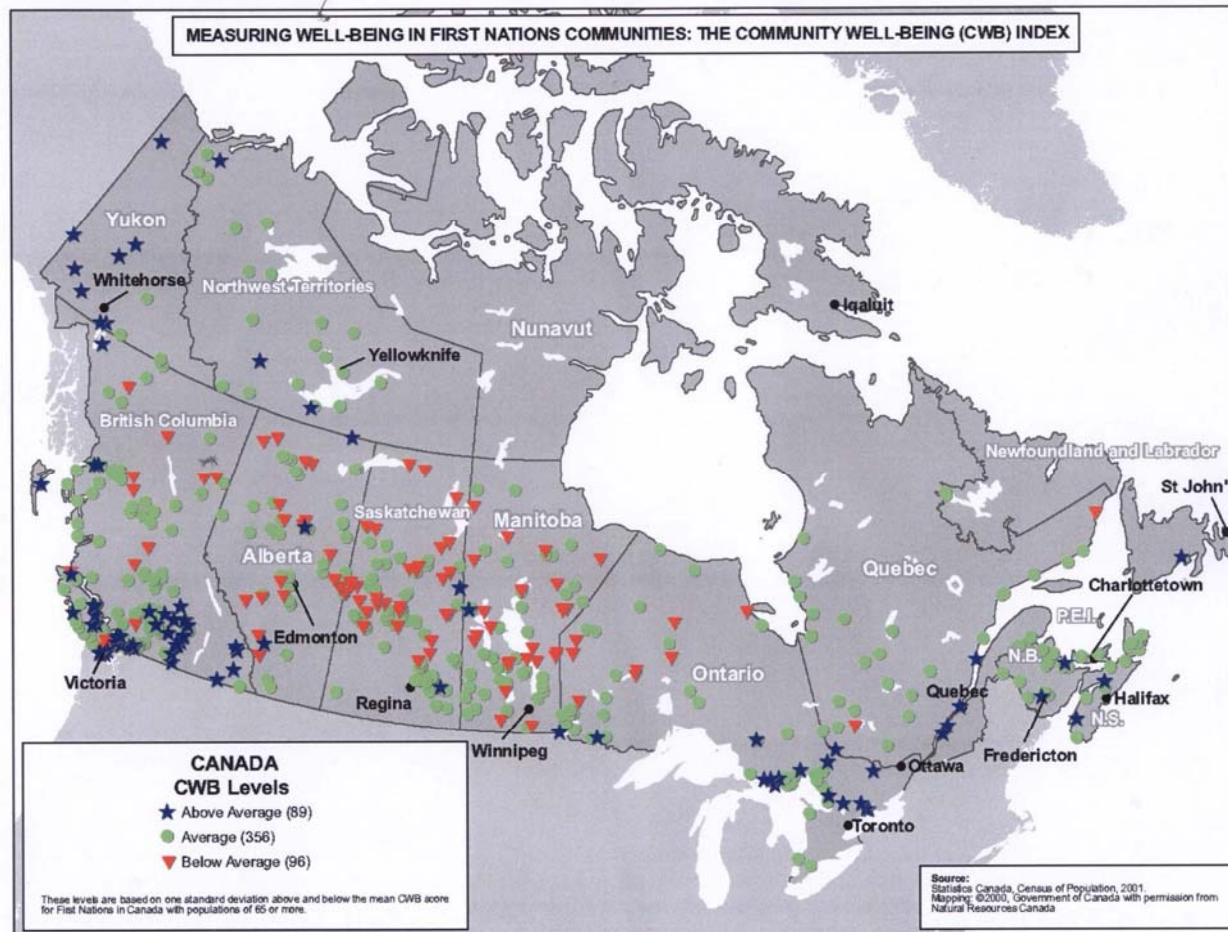
- The NWT violent crime rate is dramatically higher than Canada's. For instance in 2003, the NWT rate was 600% higher than the rate for Canada as a whole.
- In 2003, the NWT three year average rate for juvenile male crime was almost 230% higher than Canada's rate while the NWT three year average rate for juvenile females was 340% higher.
- In 2001, the percentage of households with six or more persons was 3.1 for Canada, 7.2 for the NWT and 10.1 for NWT smaller communities.
- The 2001 percentage of lone parent families was 15.7% for Canada and 21.0% for the NWT.
- Between 1997 and 2002, the percentage of children living in low income in the NWT was quite close to the Canadian rate. However, the NWT smaller communities rates were consistently five to ten percentage points higher than Canada.
- Income disparity in the NWT is also much higher than in Canada – almost 17 points higher in 2002.

In conclusion, the measures indicate that although the NWT population and economy are growing, the social well-being measures indicate higher than national rates of social problems. Most of these problems appear even more pronounced in the NWT smaller communities and are more associated with the Aboriginal population.

Disparities in socio-economic conditions between the Aboriginal and non-Aboriginal populations of Canada are not new and are well documented. These disparities include significant differences in educational attainment, employment, income, housing, levels of social assistance, rates of incarceration and substance abuse, etc. (Armstrong, 1999, Kendall, 2001). The causal factors of socio-economic underdevelopment are numerous, complex and debated. Factors cited by various parties include unemployment, location, culture, loss of land and resources, cultural genocide, job market discrimination and lack of self-determination (Kendall, 2001). Furthermore, there is likely significant regional variation in the level and pattern of underdevelopment and the factors behind it in Canada.

While no comparative analysis was conducted with the Aboriginal population in other parts of country, research work on socio-economic well-being in First Nations communities across Canada does offer some insight. A Community Well Being Index which combines several key indicators of socio-economic well-being into a single score has been developed by INAC (O'Sullivan and McHardy, 2004). The index consists of four equally weighted components including education, labour force, income and housing. As shown in Figure 8.5-1, all of the NWT First Nations communities scored average or above average in comparison to First Nations communities across Canada. While this index should only be considered as one possible measure of community well-being it does provide some sense of comparative analysis.

FIGURE 8.5-1
COMMUNITY WELL-BEING INDEX LEVELS FOR FIRST NATIONS COMMUNITIES
ACROSS CANADA (2001)



8.6 VALUED COMPONENTS AND FUTURE DIRECTION FOR CIMP

The MVRMA is clearly intended to address potential impacts to both the bio-physical and human environments, as indicated in the following definition provided in Section 111:

“impact on the environment” means any effect on land, water, air or any other component of the environment, as well as on wildlife harvesting, and includes any effect on the social and cultural environment or on heritage resources.

The CIMP Working Group has incorporated this definition into the Five-Year Work Plan and, as such, will consider the unique social and cultural realities of the NWT. This approach is consistent with messages heard throughout the Audit process; specifically the need for greater emphasis on the evaluation and, in particular, the mitigation of adverse social and cultural impacts experienced by Aboriginal communities.

The attention and resources allocated by the CIMP to the collection of social and cultural information must be commensurate with the level of concern Aboriginal communities have with respect to how they are being impacted. By doing so, the CIMP should assist other components of the environmental management regime to better incorporate the “human component” into their decision-making.

At the heart of the matter respecting ‘community well-being’ is that CIMP has not yet identified a definition of community well-being.³⁶ While a draft set of valued components and indicators was developed for the purposes of the Audit, the indicators selected may not be agreed to by residents of the NWT or the major stakeholders in CIMP.

Community wellness is a term that has been created in order to assess the overall health of a community. However, what is and what is not a healthy community can vary depending on the values espoused and the objectives of an individual community. For example, for a community that wishes to produce a more traditional lifestyle, lower incomes and a high rate of unemployment or underemployment (as traditionally measured) may not necessarily be viewed as negative indicators. For other communities, low incomes and a high rate of unemployment may send off alarm bells of what needs to be fixed. Different cultures generate different moralities and values, undoubtedly containing many overlapping features but often specifying different virtues and conceptions of good. The different values espoused by communities are neither right nor wrong but rather simply exist as is. Therefore the most important element of

³⁶ In order to understand community wellness it is important to define what is a “community” for the purposes of analysis. The most comprehensive source of social and economic data is the Census. The Census is organized in a geographical hierarchy that allows analysis down to a low level of geography (e.g., dissemination areas, communities, etc.). It is suggest that future analysis of community wellness occur at three different levels – the NWT, First Nations territories and individual communities.

trying to determine community wellness is for communities to decide what values are important to them and to then benchmark/monitor actual socio-economic performance against these values. A broad range of VCs and indicators can be selected in order to capture the range of conceptions of community wellness within the diverse cultures of the NWT.

The current CIMP document for the Valued Component Human Health and Community Wellness identified the following Gaps and Recommendations. As an Audit team we have prepared a response to each of these.

Gaps	NWT Audit Team Response
Is the purpose of the NWT CIMP simply to monitor change or are there specifically identified goals that we are trying to achieve?	The purpose of CIMP with respect to Community Wellness should be to monitor change with respect to a series of clear goals in mind.
Need to understand the scope and parameters of the data to be collected.	There is already a significant number of social measures available and studies completed. Development of clear goals for gaps in the existing work will provide direction for this gap.
Need to re-structure the approach so that human health and community wellness indicators are separated. This will permit the relevant parties to more effectively identify key indicators.	Concur
Recommendations	
Separate Human Health and Community Wellness. Establish two distinct sub-committees to focus on separate substantive areas for monitoring within the NWT CIMP.	Concur
Implement a workplan that works towards identification of key indicators (at least conceptually) within each area: Human Health and Community Wellness.	Concur
Once each sub-committee identifies their key indicators, have a joint meeting to identify overlaps, if any, to ensure efficiency and effectiveness of subsequent data gathering.	Concur

The above set of gaps and recommendations needs to be completed as soon as possible.

Outlined in Table 8.6-1 is a list of valued components and indicators, which can be used as the basis for more direction in the CIMP program. The VCs and indicators of social and economic well-being (e.g., income, education, crime) are based on professional opinion and consultation undertaken during the Audit. None of the VCs are weighted in terms of their overall importance to community wellness, but it is suggested that concerns about social problems and the preservation of Aboriginal culture should receive the foremost attention.

**TABLE 8.6-1
 VALUED COMPONENTS, INDICATORS, RATIONALE AND
 STATUS OF KNOWLEDGE/GAPS/CHALLENGES**

Potential Valued Components	Potential Indicators of Valued Components	Rationale	State of Knowledge/Gaps/Challenges
Economy, Employment and Income	GNP and Gross Regional/Local Income Changes in economic sector composition. Percent of income derived from traditional economic activities (e.g., trapping or fishing). Traditional versus modern economy. Population dependency ratios. Average income Income by source (employment, transfer payment, other) Labour force change Unemployment Rate Seasonal versus full time employment Local versus external employment Income Disparity Changes and Opportunities for local businesses. Community Well-Being Index for First Nations	Most of these economic indicators are standard measures that are either directly available or derivable from the census. Economic measures such as income and employment rate and income disparity demonstrate the community's ability to be self-reliant and have the financial resources to pursue individual and community level objectives. Community well-being index which combines several potential VCs should be a useful comparative tool with Aboriginal communities across the country.	State of Knowledge: The government of the NWT analyzes a significant amount of data on the economy, and employment at income various geographical levels. The Strategic Research and Analysis Directorate of INAC has developed a community well-being index and has assessed all First Nation communities across Canada. Gaps: A full understanding of the shift from traditional economy to modern economy is not well known. Assessing local business changes may require individual surveys. Challenges: Traditional activities supported communities prior to the wage economy, but many of these activities lack an economic

Potential Valued Components	Potential Indicators of Valued Components	Rationale	State of Knowledge/Gaps/Challenges
			valuation (e.g., hunting for food) and therefore standard economic measures to not provide a full picture of the importance of traditional activities. Census data in small communities may be limited due to response rates and release of data by Statistics Canada.
Population	Population change Population Mobility – Intra-Territorial and Inter-Provincial	Population and population change are critical socio-economic indicators for a variety of reasons. Population mobility helps to identify the significance of the “transient” population.	State of Knowledge: Population and population mobility data is readily available. Gaps: Census data provides the data but does not identify the reasons for population change and migration. This requires expert analysis and community input. Challenges: Population data earlier than 1991 is not separate from Nunavut making historical analysis more difficult. Census data in small communities may be limited due to response rates and release of data by Statistics Canada.

Potential Valued Components	Potential Indicators of Valued Components	Rationale	State of Knowledge/Gaps/Challenges
Families and Children	Shelter admissions Number of lone parent Families Income of females Children Living in Lone Income Child protection investigations. Changes in women's lifestyles.	Shelter admissions and child protection investigations are an important indicator of family breakdown and impacts on women and children. Number of lone parent families are an important indicator of family breakdowns and need for social support. Income of females may provide an indication of independence.	State of Knowledge: Most of these indicators of family and children are tracked at various levels of geography in the Census and by the GNWT. Gaps: Changes in women's lifestyles because of increased levels of development requires more investigation. Census data is of some but limited use in this area. Challenges: Census data in small communities may be limited due to response rates and release of data by Statistics Canada.
Aboriginal Culture	Percent of Aboriginal People Able to Speak an Aboriginal Language. Percent of Aboriginal People who Speak an Aboriginal Language at Home. Use of harvested meat and fish. Percent of diet provided by country foods. Percent of the population that hunts, fishes and traps for sustenance. Percent of the population that	Ability and use of Aboriginal languages are powerful indicators of culture being perpetuated. Use and composition of diet is an important indicator in change to lifestyles. Changes in cultural practices may also provide an indication of culture preservation.	State of Knowledge: Census provides excellent data on use of Aboriginal languages. GNWT provides some data on use of harvested meat and fish. Gaps: Changes in cultural practices are not addressed. Challenges: Need to define and develop

Potential Valued Components	Potential Indicators of Valued Components	Rationale	State of Knowledge/Gaps/Challenges
	hunts, fishes and traps for sport/leisure. Changes in cultural practices. Religious practice by denomination (e.g., aboriginal spirituality as per census).		methodology as to changes in Aboriginal cultural practices. Census data in small communities may be limited due to response rates and release of data by Statistics Canada.
Housing	Percentage of Households in Core need Percentage of Households with 6 or more persons. Housing affordability	Households in core need is fairly indicative of the need for suitable, adequate and affordable housing. Housing affordability is an important indicator of housing cost relative to income.	State of Knowledge: Housing statistics are readily available. Gaps: None Challenges: Census data in small communities may be limited due to response rates and release of data by Statistics Canada.
Crime and Safety	Violent Crime Rate by Detachment Rate of Junvenile Crime Shelter Admissions.	These are all important measures of crime and safety in communities.	State of Knowledge: Data is generally available. Gaps: None Challenges: Census data in small communities may be limited due to response rates and release of data by Statistics Canada. Interpretation as to factors behind

Potential Valued Components	Potential Indicators of Valued Components	Rationale	State of Knowledge/Gaps/Challenges
			high rates of crime in particular communities in NWT needs to be assessed.
Education	<p>Percentage of population with at least high school.</p> <p>Percentage of population with some post-secondary training or education.</p> <p>Availability and change in training programs</p>	Educational attainment is an important indicator of the ability to function in society and the economy.	<p>State of Knowledge: Education is well researched in the census.</p> <p>Gaps: Availability of training programs in communities is not specifically tracked but data should be available.</p> <p>Challenges: Census data in small communities may be limited due to response rates and release of data by Statistics Canada.</p>
Community	<p>Crime Rates</p> <p>Capabilities of existing social organizations</p> <p>Population Dependency Ratios</p> <p>Income Disparity</p> <p>Attitudes towards development.</p> <p>Community infrastructure and services (e.g., local health clinic, sanitation)</p> <p>Public involvement in decisions affecting community, land and resource base.</p>	<p>Crime rates are important indicators of social deviance and social problems.</p> <p>Population dependency ratios are a good indicator of the sustainability of the good community in terms of working population to non-working population.</p> <p>Income disparity is an important indicator of differential incomes at the community level.</p>	<p>State of Knowledge: Crime rate, population dependency and income disparity are tracked by the census.</p> <p>Gaps: Attitudinal work is non-existent except in specific projects.</p> <p>Challenges: Census data in small communities may be limited due to response</p>

Potential Valued Components	Potential Indicators of Valued Components	Rationale	State of Knowledge/Gaps/Challenges
		<p>Presence of community infrastructure is an indicator of community investment and the prevalence of basic services. Degree of public involvement provides an indication of how the public feels it can impact decisions.</p>	<p>rates and release of data by Statistics Canada. Attitudinal and degree of public involvement require qualitative analysis.</p>

It is our conclusion that the Gaps and Recommendations section of the Human Health and Community Wellness section of the CIMP document focuses primarily on process and provides little direction on the major social questions facing the NWT. Throughout the Audit the team heard major concerns about the impacts of development on the way of life of the NWT's Aboriginal peoples. In many places, the loss of traditional way of life and the social impacts of development outweighed the concerns on the natural environment. The high incidence of social problems in the NWT, particularly in smaller communities and associated with the Aboriginal population are a testament to the challenges being faced by the Aboriginal community.

The NWT is experiencing significant development pressure on lands and resources that is largely borne on the Aboriginal population that lives closest to the land and relies on these natural resources. It should therefore not be surprising that Aboriginal peoples may be sceptical about the benefits and impacts of development and/or outright opposed to it.

Given this context there is an urgent need to better understand how Aboriginal communities are changing. More specifically, does further development of the NWT lead to an increased social erosion of Aboriginal values and culture and a higher incidence of social problems? And if so can some impacts be mitigated and how?

The Government of Canada has indicated that there are broad national interests in resource development in the NWT. At the same time Aboriginal communities will use the regulatory process to slow down and/or stop resource development because of real or perceived impacts on their communities, way-of-life and peoples. If there is a desire for resource development to occur and do this in a way that allows for Aboriginal communities to develop in the way they desire, it is critical to better understand how development impacts and changes them.

While the socio-economic data presented in the Environmental Trends report does provide a clear indication of social problems and a window into change in Aboriginal culture and lifestyle there is a need to better understand the problems at a community level. Specifically, it is critical to more clearly elaborate on the socio-economic changes occurring and the causation factors behind those changes.

More specifically it would be useful for CIMP to establish long-term monitoring programs to evaluate social changes in Aboriginal communities in the NWT and benchmark/evaluate these against development pressures. Useful indicators would include measures of:

- Use of Aboriginal languages;
- Changes in Aboriginal cultural practices;
- Changes in quantity and quality of trapping, fishing, hunting and gathering activities;

- Changes to traditional and non-traditional economy;
- Changes in family, clan and community structure; and,
- Changes in social problems (list out key social indicators).

These studies should occur in each of the First Nations territories of the NWT in order to provide insight into unique cultural differences and practices.

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