Appendix B Extended Analysis

## **Table of Contents**

## COMMUNITY, FAMILY & INDIVIDUAL WELL-BEING Individual Well-being

1.	Individual Well-being
	Potential Years of Life Lost2
	Injuries4
	Suicides
	Communicable Diseases
2.	Family & Community Well-being
	Teen Births
	Children Receiving Services
	Family Violence
3.	Crime
	Total Police-Reported Crimes
	Violent Crimes24
	Property Crimes
	Federal Statute Crimes
	Other Crimes - Traffic Offences
	Other Criminal Code Offences
4.	Housing
	Ownership
	<i>Crowding</i>
	Core Need
	Vacancies
	CULTURAL WELL-BEING & TRADITIONAL ECONOMY
5.	Cultural Well-Being & Traditional Economy
	Home-Language Use to Mother Tongue42
	Workforce-Aged Group Engaged in Traditional Activities44
	NON-TRADITIONAL ECONOMY
6.	Income & Employment
	Average Income
	Proportion of High-Income Earners52
	Income Assistance Cases
	Employment Rate
	Unemployment Rate
	Participation Rate60
7.	Education
	High School Completion62
	Less Than Grade 964
8.	Business
	NET EFFECT ON GOVERNMENT
9.	Net Effect on Government
	SUSTAINABLE DEVELOPMENT
10.	Secondary Industry70

# COMMUNITY, FAMILY & INDIVIDUAL WELL-BEING

## **Individual Well-being**

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 1.

#### 1.1 Potential Years of Life Lost

Potential Years of Life Lost (PYLL) indicates early death. Often this can be avoided. PYLL is a useful measure of health, well-being, and lifestyle choice. The Glossary at the back of this Report tells you more about this indicator. Because of large changes in rates from one year to the next, we report PYLL as a three-year average rate per 1,000 people.

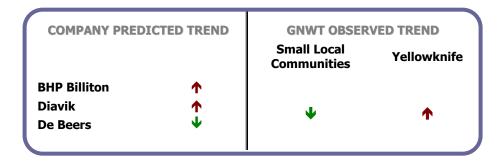
#### 1.1.1 **Observations**

The PYLL rate has gone up a little in Yellowknife. It has dropped in Small Local Communities.

POTENTIAL YEARS OF LIFE LOST (PYLL), RATE PER 1,000, THREE YEAR AVERAGE Yellowknife Remaining NWT Communities → Small Local Communities 120 100 80 Rate 60 40 20 1991/93 1993/95 1995/97 1997/99 1999/01 2001/03 2003/05 Year

Figure 1: Potential Years of Life Lost

Source: Statistics Canada Vital Statistics and NWT Bureau of Statistics.



## 1.1.2 Analysis

It is possible that the PYLL rate in Small Local Communities has gone down because of a better standard of living or better health services. It could also be due to better access to health services.

## 1.2 Injuries

Injuries tell us if more reckless behaviour or violence is taking place. These may follow rapid changes in society. Injuries include major trauma (broken bones, severe burns, accidental or intentional death), minor wounds (cuts, scrapes and bruises), and poisonings. Numbers show diagnosed injuries, not the number of people. <sup>1</sup> One person can have many injury diagnoses in a year.

The Report shows age-standardized injuries. This lets us compare communities that have different age groups or ages that change over time. For example, one community may have more young people than another. Young people tend to have more injuries than older people. If we do not adjust rates for age, we might get the wrong idea about how many injuries happen.<sup>2</sup>

#### 1.2.1 Observations

Doctors are seeing fewer injuries throughout the NWT. We see this trend most clearly in Yellowknife. Outside Yellowknife, nurses diagnose most injuries.

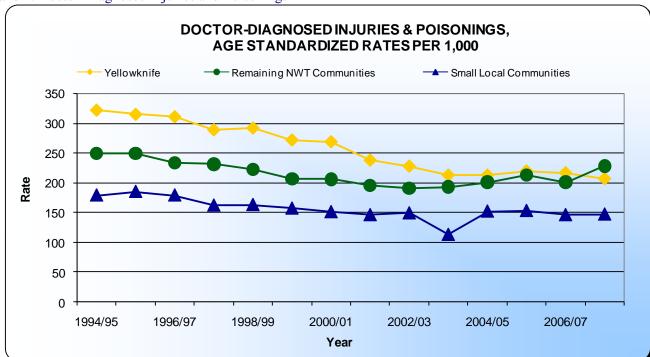


Figure 2: Doctor-Diagnosed Injuries and Poisonings

Source: NWT Department of Health and Social Services Medicare and NWT Bureau of Statistics.

<sup>1</sup> For more information on data limitations surrounding doctor-diagnosed injuries, see Data Tables attached.

4

<sup>&</sup>lt;sup>2</sup> For more information on age-standardization, see NWT Department of Health and Social Services, *Report to the Residents of the Northwest Territories on Comparable Health and Health System Indicators*, 2004, p. 3.

The way nurses record injuries changed in 2000. Data from before 2000 cannot be compared to more recent data.

Injuries have been dropping in Small Local Communities since fiscal year 2002/03. However, the data does not show us if this is lower than it was when the mines began in 1996.

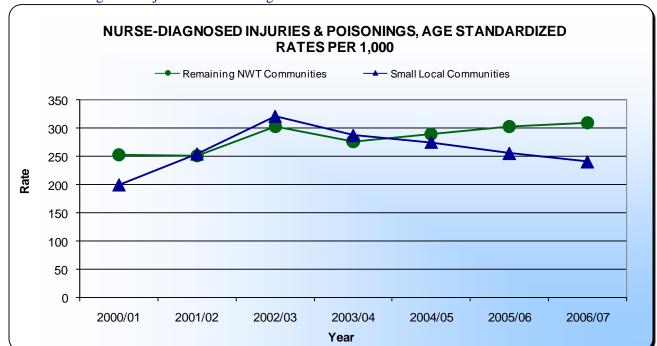
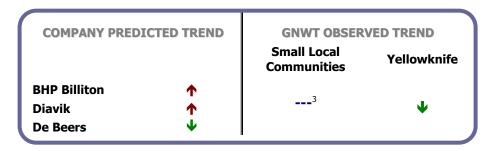


Figure 3: Nurse-Diagnosed Injuries and Poisonings

Source: NWT Department of Health and Social Services Health Suite and NWT Bureau of Statistics.



## 1.2.2 Analysis

The downward long-term trend in Yellowknife may be due to the success of injury prevention efforts.

<sup>3</sup> No conclusion is made about the trend, as we cannot compare nurse-diagnosed injuries before and after the mines began.

#### 1.3 Suicides

We report suicides because there is a link between these and social issues. We often see suicide with mental health problems such as depression. We also see suicide with social issues such as separation from a spouse, substance abuse and dependencies.

This data only takes into account deaths that are recorded as suicide. Because the number of suicides varies so much from year to year, three-year averages can be useful. They smooth out the year-to-year variations seen with small numbers. However, readers should view these with caution. There may be only two or three suicides in a given three-year period. This makes it hard to judge trends.

#### 1.3.1 Observations

The number and rate of suicides in the NWT have gone up.<sup>4</sup> There may have been an increase in Yellowknife. There may have been an overall decrease in rates in Small Local Communities. However, in both Yellowknife and the Small Local Communities, it is difficult to be sure if there is a trend because the number of suicides and population sizes are low. By contrast, it is easier to say that Canadian rates have gone down slowly, because of the larger number of suicides and the larger population size.

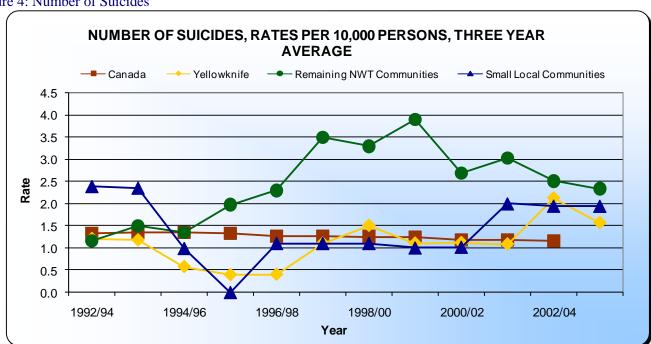


Figure 4: Number of Suicides

Source: Statistics Canada Vital Statistics.

<sup>&</sup>lt;sup>4</sup> See Tables 5 and 5.1 in Appendix C: Data Tables.



## 1.3.2 Analysis

The small number of suicides makes it hard to define trends. As a result, it is hard to tell whether diamond mining has had a positive or negative impact.

\_

<sup>&</sup>lt;sup>5</sup> Due to the small number of suicides and the small population size, it is hard to be sure if there is a real trend.

#### 1.4 Communicable Diseases

#### SEXUALLY TRANSMITTED INFECTIONS

Sexually transmitted infections (STIs) can affect the health and well-being of people living in the North. An STI can also make it hard to have children. Risky actions can increase the chance of getting an STI. This report only includes data on Chlamydia and Gonorrhoea. This is because they are the most reported STIs.<sup>6</sup>

However, beginning in the middle of 2008 there was an outbreak of Syphilis in the NWT. This STI was once thought to be nearly extinct. Three cases were discovered in May 2008, but, by the end of 2008, a total of 53 cases had been confirmed. Before this outbreak, there were only four cases in the past ten years. <sup>7</sup>

#### 1.4.1 Observations

STI rates have gone up in the NWT. This is especially true for youth aged 15-24. Rates are climbing in both Yellowknife and the Small Local Communities, also mostly among youth. Rates in Canada have remained fairly stable.

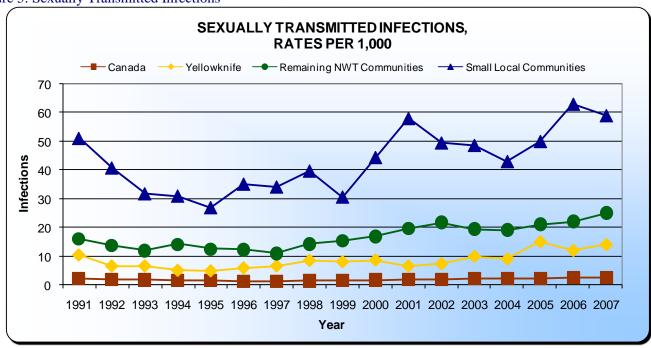


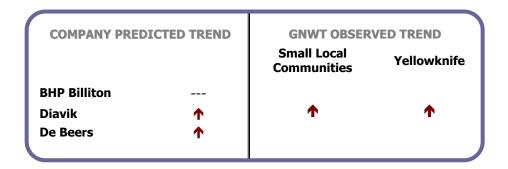
Figure 5: Sexually Transmitted Infections

Source: NWT Health and Social Services Communicable Disease Registry; NWT Bureau of Statistics; Sexually Transmitted Diseases in Canada: 1996 Surveillance Report; and Public Health Agency of Canada.

8

<sup>&</sup>lt;sup>6</sup> There are many other types of STIs, including Genital Herpes, HIV/AIDS, Human Papillomavirus (HPV), Lymphogranuloma Venereum (LGV) and Syphilis.

<sup>&</sup>lt;sup>7</sup> Case numbers include congenital, infectious and non-infectious Syphilis. Syphilis case numbers are from the NWT Department of Health and Social Services, NWT Communicable Disease Registry found in the following departmental publications: *Syphilis Update – To Week Ending January 30*, 2009 [2000-2008], *Epi North* Winter 1999/2000, p. 19 [1999] and *Epi North*, Spring 1999, p. 18 [1998].



## 1.4.2 Analysis

It is unclear whether the recent outbreak of Syphilis is related to diamond mine activity. However, there has been outbreak of Syphilis in Alberta over the last few years that began in Calgary and Edmonton and then spread into North Alberta. 

8 It is likely that the NWT's own outbreak of Syphilis had its beginnings in Alberta.

The trend of increasing rates of STIs may be related to a shift in public attitudes toward STI prevention, now that HIV/AIDS is no longer regarded as a death sentence. Due to advances in the medical treatment of HIV/AIDS, this STI has come to be viewed as a condition one can live with.

Reduced supervision by parents, as a result of work schedules for mine jobs, may have led to an increase in STIs. Alcohol and drug abuse, as a result of higher incomes from mine jobs, may have also played a role in the increase of STIs.

#### **TUBERCULOSIS**

Some groups are more at risk to get tuberculosis (TB), such as immigrants, Aboriginal people, and people infected with HIV. There are few TB cases in the NWT.

Since a TB outbreak can distort numbers from one year to the next, as was the case in the mid-1990s, this Report does not show TB data. Readers can see case numbers in the tables attached to this report.

<sup>&</sup>lt;sup>8</sup> Alberta Blood-borne Pathogens and Sexually Transmitted Infections Surveillance Working Group, *Alberta Blood-borne Pathogens and Sexually Transmitted Infections Surveillance Report 2008* (Edmonton, AB: Alberta Health and Wellness, 2008) ch 10 and 11. CBC Northbeat, *CBC News Transcript – Syphilis Outbreak in the NWT*, September 12, 2008, 6:00 p.m.

## 2 Family & Community Well-being

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 2.

#### 2.1 Teen Births

The teen birth rate is included because employment-induced in-migration and transients can add to unwanted pregnancies. <sup>9</sup> Teen births may also point to mothers who are under stress due to unplanned pregnancies. Some teen mothers may not be mature enough for the demands of raising a child. Stress and lack of maturity may affect the well-being of both the child and parents in a bad way. In addition, teen parents are more likely to be single parents than older parents are.

#### 2.1.1 Observations

The teen birth rate has dropped across the NWT. It has dropped the most in Small Local Communities. Rates have also been falling in Canada.

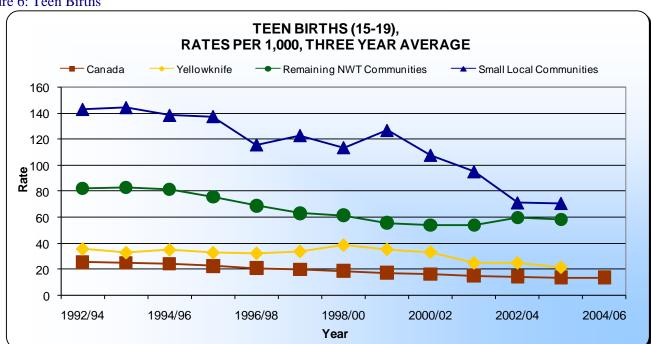
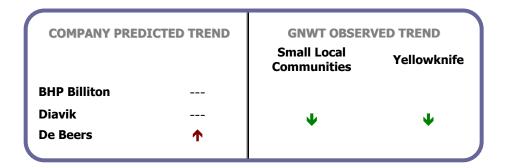


Figure 6: Teen Births

Source: Statistics Canada Vital Statistics.

\_

<sup>&</sup>lt;sup>9</sup> Diavik SEER, Vol. 7.4.1.



#### 2.1.2 Analysis

The decrease in the teen birth rate may be due to a number of factors. More planned parenting, delayed childbirth, or more use of birth control could all lead to a drop in the rate. Another reason could be that more teens are pursuing education. As more teens are able to join the work force upon finishing their schooling, there could be growth in the number of young women working.

A continued drop in the number of teen births will reduce stress on services for teen mothers.

## 2.2 Single-parent Families

A parent with no spouse or common-law partner living with him or her to help raise their children faces many challenges. These families tend to have lower social and economic status than two-parent families. Stress can be higher in children coming from single-parent families than in those from two-parent families. Single parents often have a more negative view of their own health status.<sup>10</sup>

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 2.1.

#### 2.2.1 Observations

The percent of single-parent families has gone up across Canada and the NWT. In the NWT, the biggest rise in single-parent families was in Small Local Communities. This increase occurred after 1996. In Small Local Communities, the percent of single-parent families went up by about 12 percent, as of 2006. In contrast, in Canada the percent went up by about 1.5 percent. The Yellowknife trend is similar to the Canadian trend.

Families that have one parent are more often low-income households. The percent of children in single-parent families who are in low income families has decreased in Canada and the NWT. The rate has not changed much in the Small Local Communities.

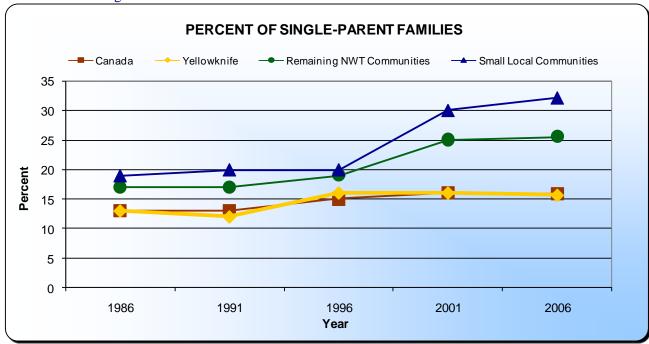
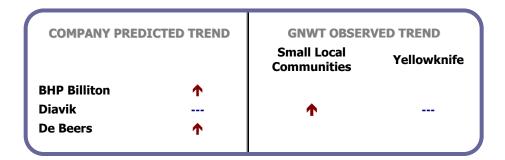


Figure 7: Percent of Single Parent Families

Source: Statistics Canada Census.

 $<sup>^{\</sup>rm 10}$  NWT Health Status Report, GNWT 1999, page 59.



## 2.2.2 Analysis

More single-parent families in Small Local Communities points to additional factors at work. These could include rotation schedules or one partner living out of the house in the hope of finding work. Changes in Yellowknife rates seem to reflect general changes in Canadian society.

Having more single-parent families could affect the NWT economy and its ability to grow. This could happen if, for example, parents do not have access to daycare and are unable to work. Single-parent families may also need more services and support.

## 2.3 Children Receiving Services

The first six years of life affect how a child will develop into an adult. Children who do not grow up in safe environments are at a disadvantage. Children with problems resulting from parent abuse or neglect are also disadvantaged. The number of children removed from their parents or guardians, or receiving services in their own homes, may be one measure of children at risk.

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 2.2.

#### 2.3.1 Observations

Since 2000/01, rates of children receiving services have gone up in the Small Local Communities and the Remaining NWT communities. In Yellowknife, there has not been any clear change in the rate.

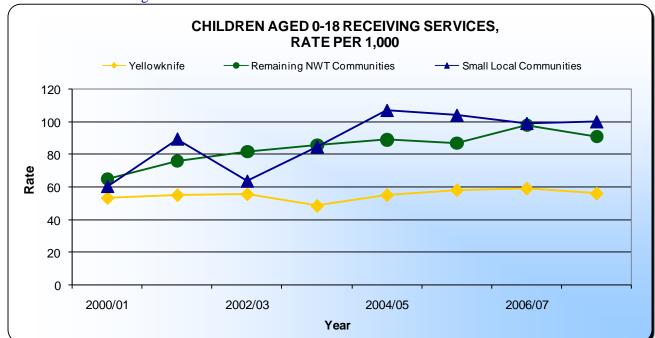
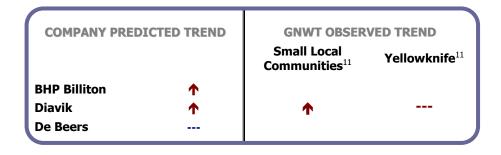


Figure 8: Children Receiving Services

Source: NWT Health and Social Services Child and Family Information System and NWT Bureau of Statistics.



<sup>&</sup>lt;sup>11</sup> Observed trend begins in 2000/01.

#### 2.3.2 Analysis

In 1998, the *Child and Family Services Act* created a new option for children at risk. Now a child welfare worker can work with the child and the family in the home, to develop a 'plan of care' agreement. An equivalent category to 'a plan of care agreement' did not exist under the previous *Act*. Since the new *Act* came into force, parents have been more inclined to seek services for their children, or family, now that they do not have to automatically give up parental rights. This has resulted in an increase in the number of children receiving services from the 1990s into the 2000s. The vast majority of this increase has been from children who are living at home. And, of these children receiving services in their homes, most service arrangements originated through voluntary agreements as opposed to court orders. Introducing the plan of care option made the number of children receiving services go up. The *Act* came into force in October, 1998.

Because of these legislative changes, trend analysis from before the diamond mines were constructed to today cannot be done.

Changes in staff can also affect the number of children receiving help. Public and staff awareness can affect reporting, as well.

\_

<sup>&</sup>lt;sup>12</sup> See Table 9.1 in Appendix C: Data Tables.

## 2.4 Family Violence

While it is clear that family violence is a serious problem in the NWT, getting a complete picture of the actual rates of family violence in Canada or the NWT is difficult. For example, there is no *Criminal Code* offence of family violence or even spousal assault. As a result, counting incidents is difficult. There are also many barriers facing victims, making it difficult for them to safely leave a violent home. Many victims are hesitant to report family violence out of fear and/or loyalty to their family members. Many of those facing such barriers reside in remote communities.

In counting incidents of family violence, the RCMP only records *Criminal Code* offences associated with family violence – such as assault, sexual assault, harassment and stalking – as cases of spousal assault if the victim and offender are known to be spouses. This report examines family violence through data on spousal assault and shelter admissions for women and children. This choice was made because these were the indicators agreed to in the SEAs.

In addition to these indicators, national research tells us that people, particularly women, are abused many times before they report it to the police. Research also reveals that while both men and women experience and commit family violence, women experience more frequent and severe family violence, and aboriginal women are among the most vulnerable to family violence.

Anecdotally, NWT RCMP and shelter workers tell us that women who access shelters are different than women who report violence to the police, and both of these victim groups are different than applicants applying for emergency protection under the *Protection Against Family Violence Act*. With these differences it is difficult to use a single indicator to count family violence.

Most victims of family violence do not seek safety in family violence shelter. Those that do flee to shelters have been victimized many times prior to fleeing. Most NWT communities do not have shelters. This report shows admissions data at the territorial level. The number of women and children using shelters represents a very small number of victims.

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 2.3.

#### 2.4.1 Observations

It is difficult to draw any conclusions about family violence based solely on spousal assault rates.<sup>13</sup> The rates reported in Table 10, in Appendix C: Data Tables, are only a very limited piece of a very complicated picture.

While reported shelter use has fallen, family violence in the NWT is still very high.

<sup>&</sup>lt;sup>13</sup> See Table10 and 10.1 in Appendix C: Data Tables.

Another indicator to consider is the number of Emergency Protection Orders assessed since the *Protection Against Family Violence Act* came into force in April 2005. Since 2005, over 300 Orders have been granted. The majority of applicants are Aboriginal women with children who have suffered from family violence for many years. This *Act* was meant to make it easier for victims to seek protection from abuse and harm. Service providers have indicated that many of the victims accessing protection under this legislation are a group of victims that have not come forward to RCMP or other frontline providers seeking help.

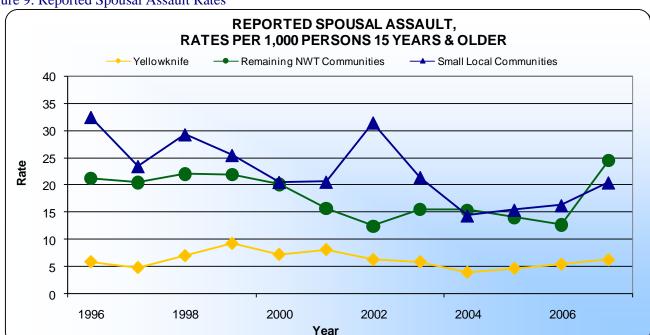


Figure 9: Reported Spousal Assault Rates

Source: RCMP UCR Statistics System.

Spousal Assault



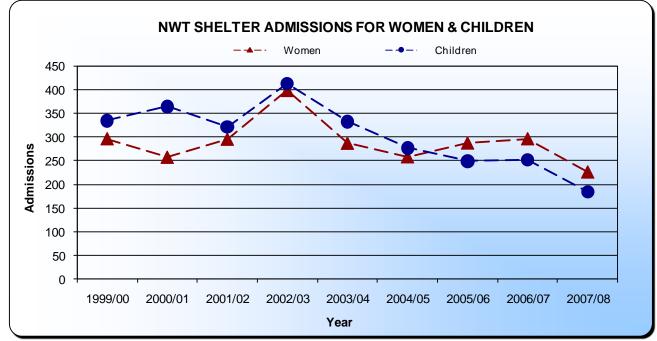


Figure 10: Admission of Women and Children to NWT Shelters

Source: NWT Health and Social Services Family Violence Shelter Reports.

#### 2.4.2 Analysis

Although there appears to be a decrease in reported spousal assault in Small Local Communities, it is difficult to confirm this with the level of current information available. As well, any increase or decrease in reporting for this indicator can mean very different things. For example, on the one hand, an increase in reporting may be a result of better social awareness and support for victims. On the other hand, a decline in reporting may reflect an increase in barriers to victims in coming forward to report to police.

A study by Statistics Canada shows that high unemployment, social isolation, alcohol consumption, younger couples and common-law unions may be risk factors for family violence. Many of these factors are more common in the North.<sup>14</sup>

Diamond mine activity can bring both opportunities as well as risks. In times of economic uncertainty and job losses, spousal assault may increase due to stress and insecurity. Employment opportunities that bring increased income may bring with them more alcohol and time away from family.

Improved employment options for women can also provide them with more choices. This may make them less vulnerable to family violence. However, successful employment of a victim of family violence may enrage her partner and endanger her well-being even further.

-

<sup>&</sup>lt;sup>14</sup> Family Violence in Canada: A Statistical Profile, 2008, Statistics Canada, pg. 12.

This page is left blank.

## 3 Crime

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 3.

There are currently no RCMP detachments in Detah, N'dilo, Gamètì and Wekweètì. Detah, N'dilo and Wekweètì are regularly patrolled out of Yellowknife. Gamètì is regularly patrolled out of Behchokò. As a result, there is no separate data for these communities without detachments, but data for these communities is included in the data for the communities they are policed out of. <sup>15</sup>

## **3.1 Total Police-reported Crimes**

The crime rate in the NWT is made up of a number of *Criminal Code* offences, including violent, property and Other *Criminal Code* offences. Traffic offences are reported by police but are not included in the crime rate. When there is an incident involving more than one crime, only the most serious crime is reported. <sup>16</sup>

#### 3.1.1 Observations

The crime rate in Yellowknife has gone up. This is mostly due to increases in Other *Criminal Code* offences. The rate in Small Local Communities has not reached levels seen before the mines, but has come close. In contrast, crime rates in Canada have been decreasing slowly.

Changes to the youth justice system occurred in 2003, as a result of the introduction of the new *Youth Criminal Justice Act*. As a result, fewer youth have been charged and sentenced to custody. More youth who are in conflict with the law are being dealt with in their communities rather than through the formal justice system.

\_

<sup>&</sup>lt;sup>15</sup> In 2012, Gamètì will get a RCMP detachment.

<sup>&</sup>lt;sup>16</sup> This data gives a general look at the number of Criminal Code crimes in the NWT. It does not show changes in the seriousness of crimes being committed.

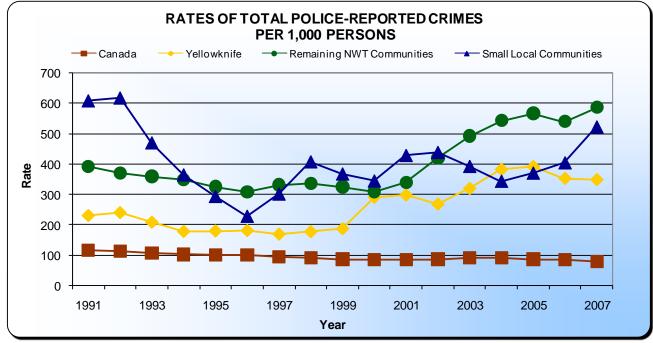


Figure 11: Number of Total Police-Reported Crimes

Source: RCMP UCR Statistics System.



#### 3.1.2 Analysis

A change in RCMP reporting between 1999 and 2000 has meant that offences that used to be recorded as territorial offences – mostly *Liquor Act* offences – began to be reported as Other *Criminal Code* offences. These offences mostly include mischief and disturbing the peace. A similar change in RCMP reporting took place between 2000 and 2002 in all other NWT communities. When the change in reporting took place there was an immediate rise in the crime rate in those communities and in the NWT. However, even after the initial impact of the change in reporting, the crime rate continues to be primarily driven by increases in Other *Criminal Code* offences.

In addition to reporting practices, changes in RCMP activities and resources can also influence crime rate data. There are also many other factors that may make the NWT crime rate higher than rates in southern Canada. These include a young population, <sup>17</sup> lower education levels, drug and alcohol abuse and trauma from residential schools.

As with the territory as a whole, the large increase in crime in Yellowknife is being driven mainly by increases in Other *Criminal Code* offences. Increases in offences such as mischief and disturbing the peace are typically linked to abuse of alcohol. This increase may be linked to resource development and higher income.

The RCMP also believes that drug dealers and other organized crime groups have become more active in the NWT. This may be because people have more money from resource development. <sup>18</sup> Increased crime impacts police services and other parts of the justice system.

<sup>&</sup>lt;sup>17</sup> The territory has a higher proportion of people aged 14-34 than is present in Canada as a whole. Crime is committed most frequently by members of this age group.

<sup>&</sup>lt;sup>18</sup> RCMP report that in recent years, the key transportation hubs in the NWT, Yellowknife and Hay River, have seen the influence of organized crime groups, as well as the violence that is associated with their criminal activities.

This page is left blank.

#### 3.2 Violent Crimes

Violent crimes include:

- Homicide;
- Attempted murder;
- Assault;
- · Sexual assault;
- · Other assaults:
- Other sexual offences;
- Abduction; and
- · Robbery.

#### 3.2.1 Observations

The Canadian violent crime rate did not change much between 1991 and 2007. The rate of violent crime in Yellowknife is currently higher than it was in 1996, but the trend is not clear. The rate in Remaining NWT Communities has increased above 1996 levels. Although Small Local Communities saw high rates before the mines, they have been seeing high rates again recently. Overall, it is difficult to tell if there is a difference in pre-1996 versus post 1996-rates in the Small Local Communities. This is because the rate has not exceeded its previous range. However, in 2007, the rate came very close to exceeding a previous high, last seen in 1991.

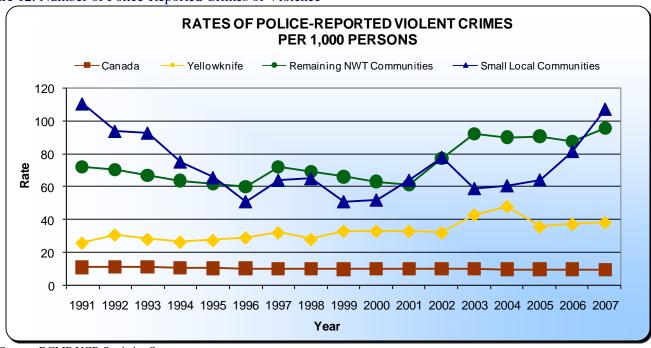


Figure 12: Number of Police-Reported Crimes of Violence

Source: RCMP UCR Statistics System.



#### 4.2.2 Analysis

Violent crime in the NWT is often linked to alcohol and drug use. Alcohol plays a large role in the NWT's violent crime. Heavy consumption of alcohol often leads to serious crimes such as assaults, sexual offences and even murders.

Diamond mine employment can provide higher incomes to people. Higher incomes may contribute to increased drug and alcohol abuse. Increased drug and alcohol abuse may lead to more violent crime. However, low incomes and a lack of employment opportunities may also lead to family breakdown and violence.

Increased violent crime could result in the need for different and possibly more resources for policing and corrections. In the NWT, the majority of male offenders in jail have been convicted of violent crimes. Violent crime can also lead to a need for more shelters, social workers and health and community well-being services. Injuries from violent crime may lower people's ability to work.

<sup>&</sup>lt;sup>19</sup> Violent crime has not exceeded levels seen before the mines. But it has come very close. Further evidence may be needed to see whether high violent crime rates may be linked to mine employment.

## **3.3 Property Crimes**

Property crimes that are most often reported are:

- Non-violent theft;
- · Breaking and entering;
- · Fraud; and
- Possession of stolen goods.

#### 3.3.1 Observations

Property crime rates have been dropping in Canada and across the NWT. Rates for NWT communities have gone up and down more than the Canadian rate has. This may be the result of smaller population sizes in NWT communities. The larger population at the Canadian level flattens out the trend seen for Canada.

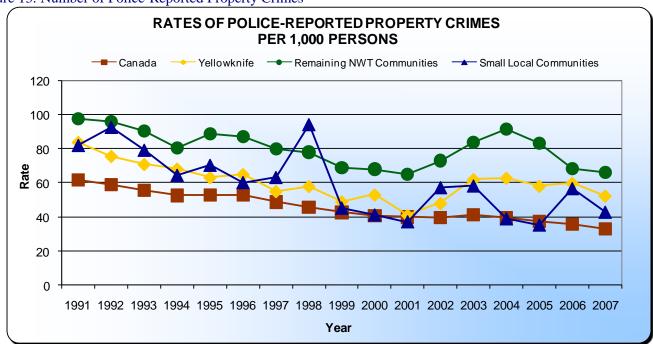


Figure 13: Number of Police-Reported Property Crimes

Source: RCMP UCR Statistics System.



## 3.3.2 Analysis

Property crime is the one area where rates in the NWT are similar to those of Canada generally. Property crime rates in Yellowknife, Small Local Communities and Remaining NWT Communities appear to be going down. This trend began before the mines were developed. This trend has since continued, with some fluctuation.

#### 3.4 Federal Statute Crimes

Federal statute crimes include drug-related offences under the *Controlled Drugs and Substances Act*. Any rise will most likely be due to more drug activity.

#### 3.4.1 Observations

Rates have not changed much in Canada. NWT rates are typically up over pre-1996 levels. Rates have been going up much faster in the NWT than in Canada. In the NWT, rates have fluctuated most in Remaining NWT Communities and Small Local Communities.

RATES OF POLICE-REPORTED FEDERAL STATUTE CRIMES
PER 1,000 PERSONS

Canada Yellowknife Remaining NWT Communities Small Local Communities

25
20
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007
Year

Figure 14: Number of Police-Reported Federal Statute Crimes

Source: RCMP UCR Statistics System.



## 3.4.2 Analysis

Higher reported federal statute crime may be due to more pro-active police enforcement. There could also be more drug activity because of higher incomes due to mine-related jobs. The RCMP has noted that as cash becomes more available, so does the money spent on drugs. When community incomes increase, so can the presence of drug dealers, drugs and organized crime.

The RCMP confirms that the main drugs in use in the NWT are marijuana and cocaine. This includes crack cocaine.

The GNWT has met with communities. At these meetings, concerns were shared about rising drug use, mainly by youth.

#### 3.5 Other Crimes -Traffic Offences

Traffic crime covers impaired driving, failure to stay at the scene of an accident, and dangerous driving.

#### 3.5.1 Observations

The trend for traffic crime in the NWT is unclear. Rates appear to have gone down overall, but may be picking up recently. However, rates have not reached levels seen before the mines. Overall rates are lower even though vehicle traffic, resource activity, population and alcohol use all rose.

RATES OF POLICE-REPORTED TRAFFIC CRIMES
PER 1,000 PERSONS

Canada Yellowknife Remaining NWT Communities Small Local Communities

60

40

30

20

10

1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 **Year** 

Figure 15: Number of Police-Reported Traffic Crimes

Source: RCMP UCR Statistics System.

<sup>&</sup>lt;sup>20</sup> Overall, traffic crime is down in these communities. But it may be starting to increase. As a result, it is difficult to tell what the trends are.

## 3.5.2 Analysis

Data does not show any major influence on traffic crime from the mining industry. The data does not show the number of accidents or how severe they are.

## 3.6 Other Criminal Code Offences

Other Criminal Code offences include:

- · Mischief;
- Probation or bail violations;
- Prostitution;
- · Illegal gambling; and
- Arson.

#### 3.6.1 Observations

Since 1991, rates of Other *Criminal Code* crimes have nearly tripled in Yellowknife and the Remaining NWT Communities. As was mentioned in the analysis in section 3.1, Total Police-reported Crimes, the increase in the crime rate in the NWT is mostly due to increases in Other *Criminal Code* offences. In Small Local Communities, the rate has started to climb recently, but has stayed within its range from before the mines. Rates across the NWT are much higher than in Canada.

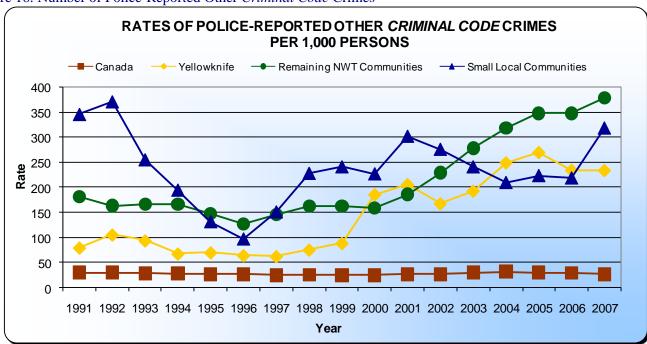
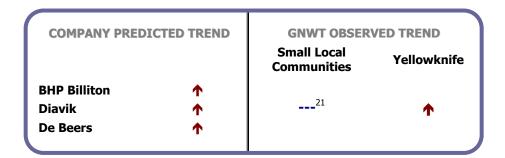


Figure 16: Number of Police-Reported Other Criminal Code Crimes

Source: RCMP UCR Statistics System.



#### 3.6.2 Analysis

There was a marked increase in Other *Criminal Code* offences between 1999 and 2000 in Yellowknife. Much of this increase was due to a change in RCMP reporting at that time. A similar change in reporting happened between 2000 and 2002 in the rest of the NWT. Some crimes that used to be territorial offences (*Liquor Act* offences) are now recorded as Other *Criminal Code* crimes (such as mischief or disturbing the peace). Increases in Other *Criminal Code* offences explains much but not all of the rise in the total crime rate.

Most of the real increase in Other *Criminal Code* crimes is related to alcohol. The Yellowknife trend may be caused by more income or by in-migration. These may be linked to diamond and other resource activity. Other social issues may have also increased the rate of Other *Criminal Code* offences.

<sup>&</sup>lt;sup>21</sup> Rates have not exceeded levels seen before the mines. But they have come very close. Further evidence may be needed to see whether high rates may be linked to mine employment.

## 4 Housing

There are a few types of housing issues that are most often linked with resource development. These include: the number of people who own a home; the number of people who need to share a house; and people's ability to maintain their home. Changes in the number of rental units also can affect the quality of housing.

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 4.

## 4.1 Ownership

#### 4.1.1 Observations

The rate of homeownership in Small Local Communities has not changed much. Rates in Yellowknife and Remaining NWT Communities have climbed. Rates have been climbing less sharply since 1996.

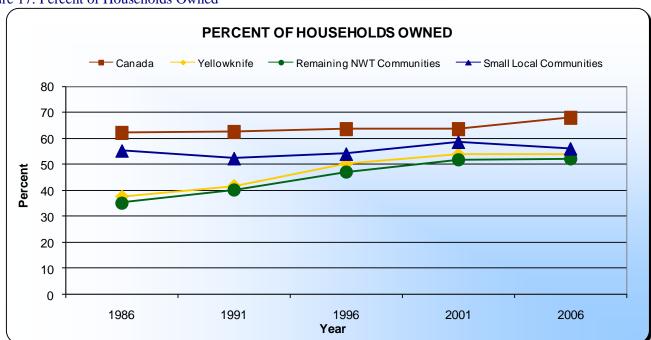


Figure 17: Percent of Households Owned

Source: NWT Housing Needs Survey, NWT Community Survey and Statistics Canada Census.



## 4.1.2 Analysis

The slowing growth of ownership in Yellowknife could be linked to a rise in housing prices. This would be an expected result of in-migration from development.

In Small Local Communities, there is no change in ownership. Therefore, the positive impact predicted has been muted.

Higher incomes do not seem to have led to more ownership. Many families may have already turned to GNWT homeownership programs. This may mean that their spending priorities have been focused on other areas.

Owning a home should lead to improved security. This is most important when people reach retirement.

## 4.2 Crowding

#### 4.2.1 Observations

Rates are dropping in the NWT. This is especially true in Small Local Communities, although rates are still highest in those communities. Rates are lowest in Canada and Yellowknife.

PERCENT OF HOUSEHOLDS WITH **6 OR MORE PERSONS** Yellowknife — Remaining NWT Communities — Small Local Communities 60 50 40 Percent 30 20 10 0 1981 1986 1991 1996 2001 2006 Year

Figure 18: Percent of Households with 6 or More Persons

Source: NWT Housing Needs Survey, NWT Community Survey and Statistics Canada Census.



## 4.2.2 Analysis

Family and household structures are changing a lot across the NWT and the rest of Canada. In the last 10 years, the number of households has grown faster than population in all regions of Canada. People have been expecting and demanding more 'living space' at home. They are forming more households, with fewer members. Values, expectations, availability, and income shape both the demand and supply of housing.

The diamond projects have not had the positive impact on housing that was expected. In Yellowknife and Small Local Communities, crowding was expected to drop further. The lack of suitable housing may have made the drop smaller than expected. In- and intra-migration may have added pressure to the limited supply of housing. Price rises, especially in Yellowknife, may also be a factor.

A drop in crowding should mean improved standards of living. It could also mean changes to family and social structure, and social interaction.

#### 4.3 Core Need

A household is in core need if it has any housing problems (suitability, adequacy, or cost). A household is also in core need if the total household income is below the community Core Need Income Threshold. Housing is 'affordable' when a household pays no more than 30 percent of its gross income for shelter. The NWT Housing Corporation uses the Threshold to show the income a household must have to own and operate a home or rent in the private market without government help.

When incomes rise, the number of households in core need decreases. On the other hand, when housing prices go up, the number of households in core need also increases.

#### 4.3.1 Observations

The percent of households in core need went down in all communities except Yellowknife. There has been more of a drop in core need in Small Local Communities than in Remaining NWT Communities. Core need is still much lower in Yellowknife than in Small Local Communities and Remaining NWT Communities. It has dropped in Small Local Communities by about 25 percent. But, it is still very high, at just under 40 percent.

In the NWT, the percent of owned homes in core need has dropped.<sup>22</sup>

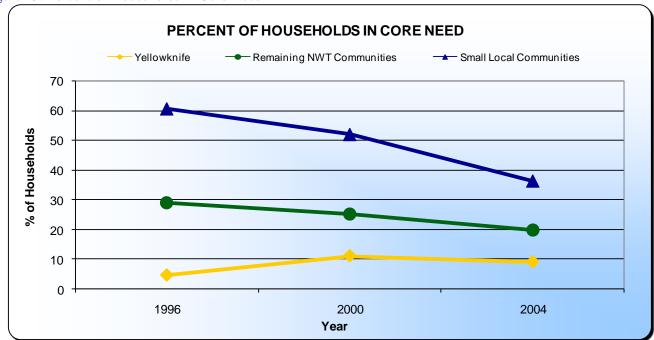
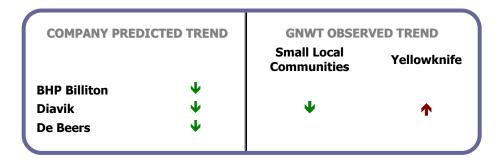


Figure 19: Percent of Households in Core Need

\_

Source: NWT Housing Needs Survey and NWT Community Survey.

<sup>&</sup>lt;sup>22</sup> See Table 20 in Appendix C: Data Tables.



## 4.3.2 Analysis

Many factors can explain the drop in core need in Small Local Communities:

- Improvements in housing stock, mostly because of Northwest Territories Housing Corporation programs; and
- An increase in household income resulting from the mining industry. This adds to residents' ability to care for their own shelter costs.

The main reason core need went up in Yellowknife was because inflation has increased housing costs.

The main housing problem in Yellowknife is cost. In the rest of the NWT, suitability or adequacy is the largest problem.

A drop in core need means more households are able to make it on their own (without the aid of income assistance programs). This should bring improved standards of living. A rise in core needs could mean more people having a lower standard of living and could result in continued or greater need for social services.

### 4.4 Vacancies

#### 4.4.1 Observations

The Yellowknife vacancy rate has dropped in the last two years. Yellowknife's vacancy rate is lower than the Canadian average. <sup>23</sup> The Yellowknife apartment vacancy rate was:

- 0.3 percent in 2002;
- 1.7 percent in 2003;
- 3.0 percent in 2004;
- 3.3 percent in 2005;
- 3.3 percent in 2006;
- 1.2 percent in 2007; and
- 0.9 percent in 2008.<sup>24</sup>

## 4.4.2 Analysis

2008 is the second consecutive year of decline in Yellowknife's vacancy rate. Its low vacancy rate could be a result of:

- High costs of materials;
- Labour shortages related to development; and
- Housing prices going up because people are moving here for the diamond projects.

Canadian vacancy rates have gone up because new rental units have been built. This does not happen as often in the NWT because of the high cost of building. The high cost may be due to a lack of skilled people and materials. It can be harder to find affordable housing when new units are not being built. It is very hard to find larger affordable housing (three or more bedrooms). There were not many apartments built in 2007. So, the vacancy rate is likely to stay low in the near future.

The lack of places to stay in Yellowknife may lead to more crowding there and in other communities. Low vacancy rates can lead to lower migration into and within the NWT. This may limit the NWT economy.

\_

<sup>&</sup>lt;sup>23</sup> CMHC 2008 Rental Market Report.

<sup>&</sup>lt;sup>24</sup> Ibid.

# CULTURAL WELL-BEING & TRADITIONAL ECONOMY

# **Cultural Well-being & Traditional Economy**

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 5.

# 5.1 Home-language use to Mother Tongue

Language is a way to transmit culture from one generation to another. It allows members of a culture to communicate and make sense of their shared experiences.<sup>25</sup>

#### 5.1.1 **Observations**

The percent of people who speak an Aboriginal language is falling in the NWT. This trend is particularly true of people age 15-24. Within the NWT, rates remain the highest in the Small Local Communities. However, rates have fallen sharply in those communities.

In 2006, 20 percent of people in the NWT had a first language other than English or French. The majority of these people had an Aboriginal language as their mother tongue.<sup>26</sup>

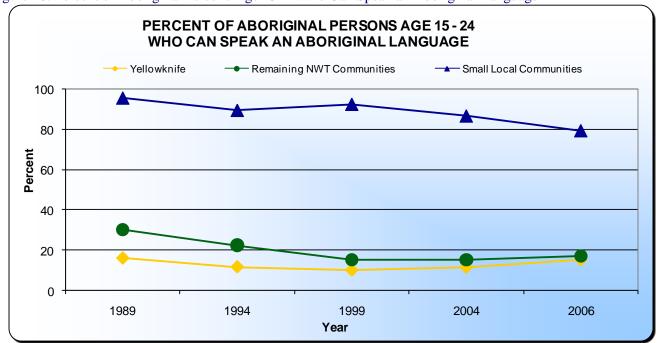


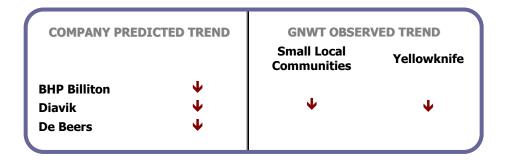
Figure 20: Percent of Aboriginal Persons Age 15-24Who Can Speak an Aboriginal Language<sup>27</sup>

Source: NWT Labour Force Survey and NWT Community Survey.

<sup>&</sup>lt;sup>25</sup> Royal Commission on Aboriginal Peoples, Volume 3, 'Gathering Strength.'

<sup>&</sup>lt;sup>26</sup> 2006 Statistics Canada Census.

<sup>&</sup>lt;sup>27</sup> Due to the different timing of the surveys from which the data shown above was gathered, the data points are not shown at evenly spaced intervals. Between the 1989 Labour Force Survey and the 1991 Census, there are two years between the data points. But between the 1991 Census and the next Labour Force Survey, 1994, there are only two years between the data points. However, this pattern of intervals remains consistent for all the data points shown above.



## 5.1.2 Analysis

The increase in Aboriginal language use in Yellowknife since 1999 may be a result of more people moving there from other NWT communities.

Loss of language has an impact on keeping and passing on Aboriginal culture, heritage and traditions. Language is a key way to transfer such knowledge.

## 5.2 Workforce-aged Group Engaged in Traditional Activities

Traditional activities include cultural activities such as:

- · Hunting;
- · Trapping;
- Fishing;
- Harvesting;
- Sewing; and
- Eating country food.

These activities let people use traditional skills and knowledge. This provides cultural and social benefits.

#### 5.2.1 Observations

In Yellowknife, the percent of people trapping is low and has not changed. In 2003, no Métis from the Yellowknife area engaged in trapping. Many people outside Yellowknife do some form of trapping. Trapping is mostly important in Small Local Communities. Trapping has gone up in those communities lately.

In Yellowknife, between 1998 and 2003, the number of people over the age of 15 who hunted or fished, went down. However, Small Local Communities saw a slight increase during that time.

In 2003, almost 29 percent of Métis from the Yellowknife area hunted and fished. However, this rate is about 8 percent lower than the NWT average and around 15 percent lower than the rates for Remaining NWT Communities and Small Local Communities.<sup>28</sup>

Trends in the percent of households where half or more of the meat or fish eaten is harvested fall within the normal range of change.

\_

<sup>&</sup>lt;sup>28</sup> See Table 23 in Appendix C: Data Tables.

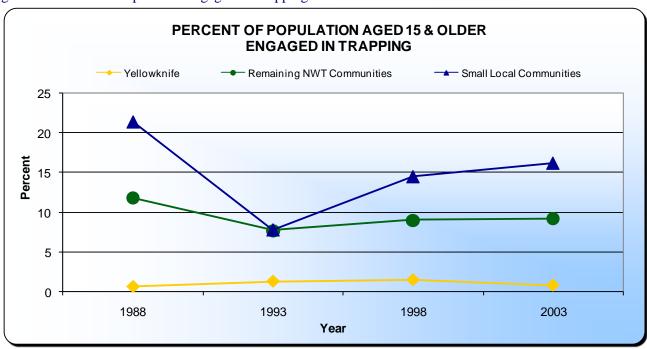


Figure 21: Percent of Population Engaged in Trapping

Source: NWT Labour Force Survey and NWT Community Survey.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton Diavik De Beers	<b>↓</b> <b>↓</b> 	<b>↑</b>	

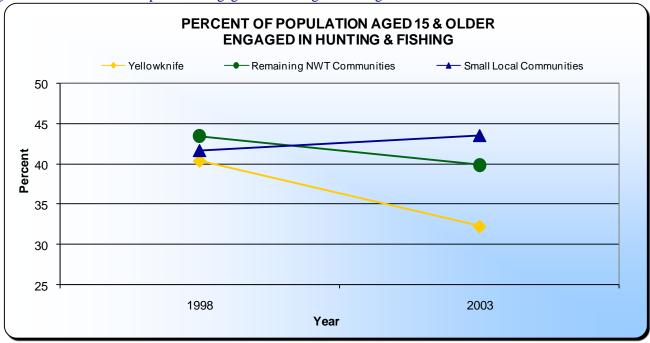


Figure 22: Percent of the Population Engaged in Hunting or Fishing

Source: NWT Labour Force Survey and NWT Community Survey.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton Diavik De Beers	<b>↓</b> ↑	<b>^</b>	<b>V</b>

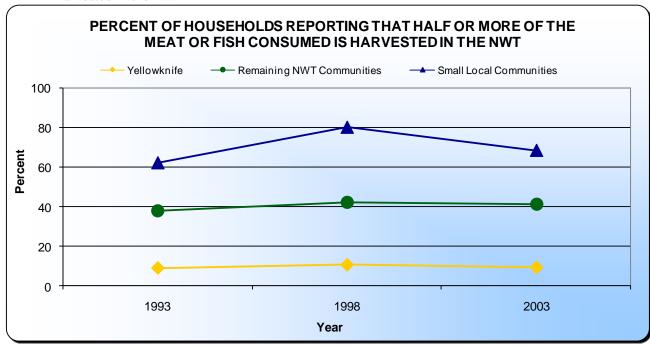


Figure 23: Percent of Households Where Half or More of the Meat or Fish Consumed is Harvested in the NWT

Source: NWT Labour Force Survey and NWT Community Survey.

## 5.2.2 Analysis

Trapping has been going up in Small Local Communities for some time. It has continued to go up since the mines started. This could be linked to the mines through higher incomes and rotational work schedules.

More trapping in Small Local Communities could strengthen the passing down of traditional knowledge. Passing down this knowledge can strengthen cultural well-being. It can help communities to be more vital.

More hunting and fishing in Small Local Communities could be due to more income and the rotational work schedule. There is a constant rise in hunting and fishing in Small Local Communities. This could strengthen cultural well-being and community vitality.

There seems to be no link between trends in the country foods eaten and the diamond mines.

This page is left blank.

# **NON-TRADITIONAL ECONOMY**

## **Income & Employment**

## **6.1 Average Income**

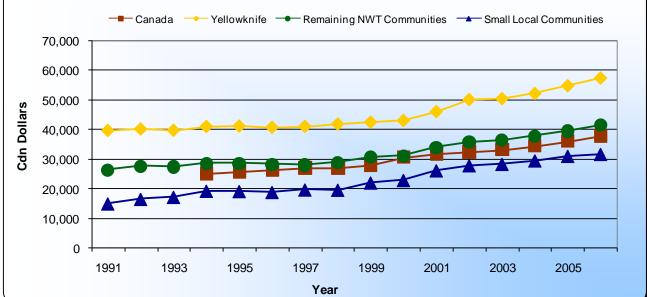
The data here comes from income tax returns. The more people are paid, the higher average income is. Total employment income goes up as wages rise and as more people are working.

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 6.1.

#### 6.1.1 **Observations**

Average income in the NWT has been going up for some time. Since 1997, it has gone up sharply. Since then, income has grown faster in the NWT than in Canada. The largest increases have been seen in Yellowknife and the Small Local Communities. In Yellowknife, average income jumped again in 2002. However, average income is still lower in Small Local Communities.

Figure 24: Average Income **AVERAGE INCOME** Yellowknife Remaining NWT Communities Small Local Communities 70,000 60,000



Source: Statistics Canada.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	<b>^</b>		
Diavik	<b>^</b>	<b>^</b>	<b>^</b>
De Beers	<b>^</b>		

## 6.1.2 Analysis

The steady rise in average income may be a result of diamond mine development and government restructuring during the mid-1990s.

An increase in average income has led to a decrease in the number of income assistance cases. It has also led to a higher standard of living.

## **6.2 Proportion of High-income Earners (Wage Disparity)**

A growing gap between high- and low-income earners can lead to imbalances in society. Close monitoring helps efforts to correct imbalances in the NWT.

Wage disparity is measured by calculating the proportion of high- and middle-income earners. If these two groups are growing, we can see that there are fewer low-income earners. This means that the gap between high- and low-income earners is shrinking.<sup>29</sup>

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 6.2.

#### 6.2.1 Observations

The proportion of high- and middle-income earners has gone up in Canada and across the NWT. The percent of low-income earners has declined proportionally. Small Local Communities have seen the most improvement in wage disparity.

This trend in the NWT seems to have picked up around 1998 and 1999. It slowed for a bit, between 2002 and 2004, and recently started picking up again.

The proportion of high- and middle-income earners is lower in Small Local Communities than in Canada, Yellowknife and Remaining NWT Communities. But, the gap between the proportion of high- and middle-income earners in Small Local Communities and other NWT communities has grown a lot smaller.

<sup>&</sup>lt;sup>29</sup> A UN report, *Indicators of Sustainable Development: Guidelines and Methodologies*, Third Edition (New York: United Nations, 2007): 48, states that a similar indicator, the 'ratio of share in national income of highest to lowest quintile,' is meant to show if income distribution within a country or region is unequal. Large income inequality can hold back human development and long-term economic growth.

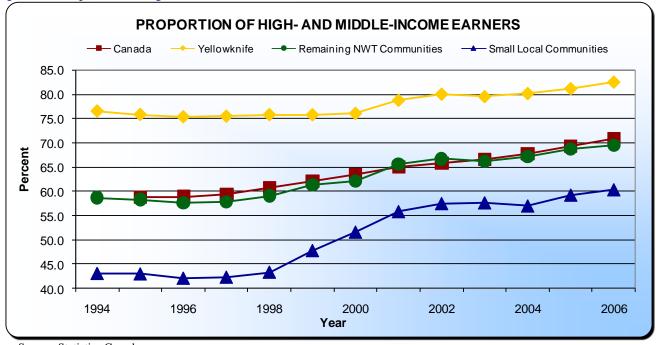


Figure 25: Proportion of High- and Middle-Income Earners

Source: Statistics Canada.





## 6.2.2 Analysis

There were concerns during environmental assessments that diamond mine development would lead to more inequality in income levels. This does not seem to have happened. There are now more people in the upper- and middle-income range in all NWT communities. The shrinking gap between Small Local Communities and other NWT communities, including Yellowknife, may be a positive result of diamond mine development.

## **6.3 Income Assistance Cases**

Case data comes from the average number of households receiving assistance each month.

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 6.3.

#### 6.3.1 Observations

The income assistance case rate has gone down in Yellowknife. It has dropped in Small Local Communities by more than 50 percent. This drop has been greater in these communities than in the rest of the NWT.

AVERAGE MONTHLY INCOME ASSISTANCE CASES, RATES PER 1,000 Yellowknife Remaining NWT Communities → Small Local Communities 140 120 100 80 60 40 20 0 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 Year

Figure 26: Average Monthly Income Assistance

Source: NWT Education, Culture and Employment and NWT Bureau of Statistics.



## 6.3.2 Analysis

Due to program changes in 2007, it is difficult to compare recent data with data from before 2007. Recent changes in the data may reflect policy changes more than real changes. The drop in income assistance cases between 1996 and 1997 was a result of policy changes. The decrease in NWT income assistance cases since 1997 may be a result of better employment opportunities related to the mining industry. Other factors may include seasonal employment, changes in the cost of living, the number of household dependants and money management practices. In-migration of people without jobs to Yellowknife may have stopped the rate there from dropping more.

## **6.4 Employment Rate**

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 6.4.

#### 6.4.1 Observations

The employment rate in Yellowknife has dropped. The employment rate for the Métis from the Yellowknife area has gone up. It is higher than the NWT rate, but lower than the Yellowknife rate. It is much higher than the rate in Small Local Communities.<sup>30</sup> The employment rate in Small Local Communities has been increasing.

The percent of working-aged people who work for more than 6 months each year has gone up across the NWT. However, it has gone up the most in the Small Local Communities. The employment rate in Small Local Communities is still much lower than the Canadian and NWT rates.

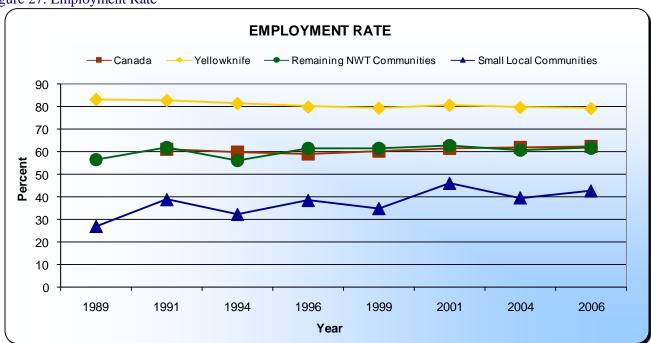


Figure 27: Employment Rate<sup>31</sup>

Source: Statistics Canada Census, NWT Labour Force Survey and NWT Community Survey.

Comparisons between the Labour Force Survey completed by the NWT Bureau of Statistics and the Census completed by Statistics Canada should be done with caution. Census indicators are often higher due to seasonal employment activities.

\_

<sup>&</sup>lt;sup>30</sup> See Table 28 in Appendix C: Data Tables.

<sup>&</sup>lt;sup>31</sup> Due to the different timing of the surveys from which the data shown above was gathered, the data points are not shown at evenly spaced intervals. However, the interval pattern is consistent: 2 years; 3 years; 2 years; 3 years; 2 years; 3 years; etc. For explanation, see note 27 above.



## 6.4.2 Analysis

A major factor in the increase in the employment rate in the Small Local Communities is the diamond mines.

The Department of Education, Culture and Employment has been working with other departments and industry to develop apprenticeship and mine-related training programs for NWT residents. Greater access to culturally-fitting education and training may make it easier for NWT residents to find employment and remain in their communities.

Overall, employment rates across the NWT have shown some improvement over the last 15 years. There are still strong regional differences in employment activity. The employment rate in Yellowknife is over 20 percent higher than in other regions of the NWT.

## **6.5 Unemployment Rate**

The unemployment rate shows the percent of persons (aged 15 and over) looking for work but who are unable to find work.

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 6.5.

#### 6.5.1 **Observations**

The Canadian unemployment rate has continued to drop. The Yellowknife unemployment rate has not. The rate for Métis from the Yellowknife area has gone up. It is lower than the NWT rate, and higher than the Yellowknife rate. It is much higher than the rate in Small Local Communities.<sup>32</sup> The rate is highest in Small Local Communities. However, it seems to be dropping faster there than elsewhere.

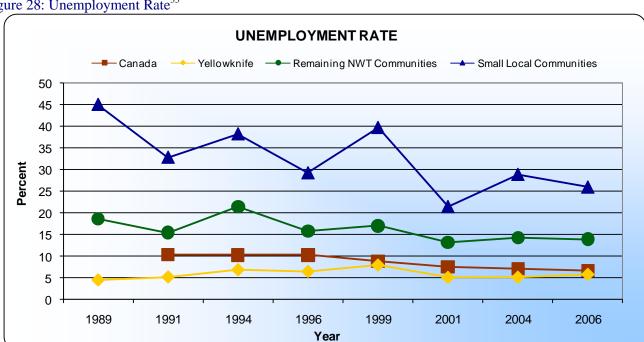


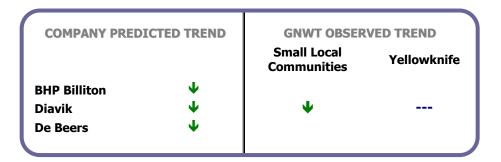
Figure 28: Unemployment Rate<sup>33</sup>

Source: Statistics Canada Census, NWT Labour Force Survey and NWT Community Survey.

Comparisons between the Labour Force Survey completed by the NWT Bureau of Statistics and the Census completed by Statistics Canada should be done with caution. Census indicators are often higher due to seasonal employment activities.

<sup>&</sup>lt;sup>32</sup> See Table 29 of Appendix C: Data Tables.

<sup>&</sup>lt;sup>33</sup> Due to the different timing of the surveys from which the data shown above was gathered, the data points are not shown at evenly spaced intervals. However, the interval pattern is consistent: 2 years; 3 years; 2 years; 3 years; 2 years; 3 years; etc. For explanation, see note 27 above.



## 6.5.2 Analysis

People who choose not to look for work cause the unemployment rate to drop. The unemployment rate may also be affected by people moving in and out of communities. Since the participation rate has remained consistent, a drop in the unemployment rate means that more people are becoming employed.

## **6.6 Participation Rate**

The participation rate is the percent of persons (aged 15 and older) who are working or looking for work.

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 6.6.

#### 6.6.1 Observations

There is no clear trend in the participation rate across the NWT. There has been some improvement in Small Local Communities. The participation rate has fallen in Yellowknife. The rate for Métis from the Yellowknife area is lower than the Yellowknife rate, and higher than the NWT. It is much higher than the rate in the Small Local Communities.<sup>34</sup>

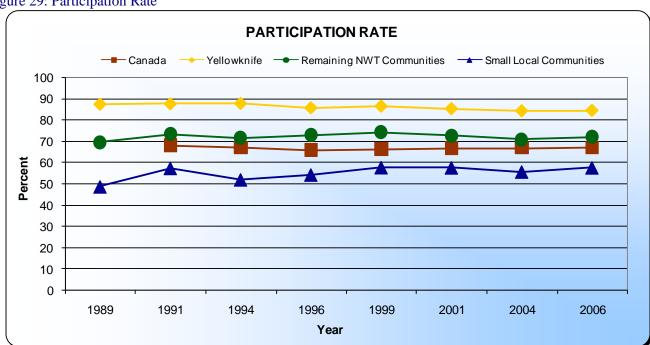


Figure 29: Participation Rate<sup>35</sup>

Source: Statistics Canada Census, NWT Labour Force Survey and NWT Community Survey.

Comparisons between the Labour Force Survey completed by the NWT Bureau of Statistics and the Census completed by Statistics Canada should be done with caution. Census indicators are often higher due to seasonal employment activities.

<sup>&</sup>lt;sup>34</sup> See Table 30 in Appendix C: Data Tables.

<sup>&</sup>lt;sup>35</sup> Due to the different timing of the surveys from which the data shown above was gathered, the data points are not shown at evenly spaced intervals. However, the interval pattern is consistent: 2 years; 3 years; 2 years; 3 years; 2 years; 3 years; etc. For explanation, see note 27 above.



## 6.6.2 Analysis

We were expecting to see a rise in the participation rate. This is because the working age population has gone up. Several things can affect the participation rate:

- Changes in the working age population;
- Frustration with the wage economy;
- · Obstacles to participation such as limited access to higher education, daycare, and remoteness; and
- · Out-migration.

## 7 Education

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 7.

## 7.1 High School Completion

'High School Completion' shows people who have at least finished high school. It includes people who have completed high school or grade 12 diplomas. It also includes General Education Diplomas (GED) given to mature students. 'Greater than high school' means that people who have a trade certificate, college diploma, or university degree.

#### 7.1.1 Observations

The percent of people with high school or greater in Yellowknife and Small Local Communities has increased steadily. The percent of Métis from the Yellowknife area with high school or greater is lower than in Yellowknife, and higher than the NWT rate. It is much higher than in the Small Local Communities.<sup>36</sup>

Education levels have gone up for people aged 20 to 29. In 2006, 67 percent of NWT residents aged 15 years and older had a certificate, diploma or degree.<sup>37</sup> However, educational attainment varies by community type. In Small Local Communities, the percent of people with a certificate or diploma has dropped.

<sup>&</sup>lt;sup>36</sup> See Table 31 in Appendix C: Data Tables.

<sup>&</sup>lt;sup>37</sup> See Table 31.1 in Appendix C: Data Tables.

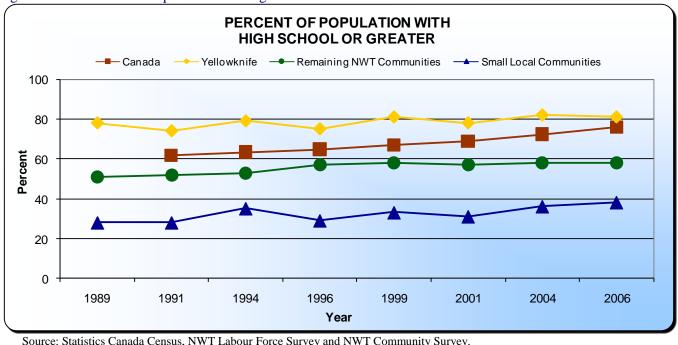


Figure 30: Percent of the Population with High School or Greater<sup>38</sup>

Source: Statistics Canada Census, NWT Labour Force Survey and NWT Community Survey.



#### 7.1.2 **Analysis**

Grade extensions were offered in the smaller communities starting in the late 1990s. This led to a rise in the number of graduates. Support from community groups has helped people to value the benefits of education. Mines have provided incentives for northerners to stay in school by offering educational support, such as scholarships and jobs. Stronger training partnerships between government and industry have helped contribute to higher education levels in the NWT. The drop in the percent of people with a certificate or diploma in the Small Local Communities could be due to people moving out of the communities.

In addition to varying by community type, educational attainment also varies by ethnicity. The rate of aboriginal persons with no certificate, diploma or degree (54.8 percent) is much higher than the rate of non-aboriginal persons (14.1 percent).<sup>39</sup>

<sup>&</sup>lt;sup>38</sup> Due to the different timing of the surveys from which the data shown above was gathered, the data points are not shown at evenly spaced intervals. However, the interval pattern is consistent: 2 years; 3 years; 2 years; 3 years; 3 years; etc. For explanation, see note 27 above.

## 7.2 Less than Grade 9

This includes people aged 15 and older with less than grade 9. It also includes youth who are now finishing Grade 9.

#### 7.2.1 Observations

Across the NWT, communities saw a large drop in the percent of people with less than Grade 9 education from 1989 to 1994. This trend has continued since 1994, but at a slower pace.

Those aged 20 to 29 are driving this drop. Small Local Communities saw a decrease in people with less than grade 9 of almost 30 percent from 1989 to 1994. Since 1994, these communities saw a further 19 percent drop. This is a bit higher than the 15 percent drop since 1994 in the Remaining NWT Communities.

The percent of Métis from the Yellowknife area with less than Grade 9 is higher than in Yellowknife, but lower than in the NWT as a whole. It is much lower than in the Small Local Communities.<sup>40</sup>

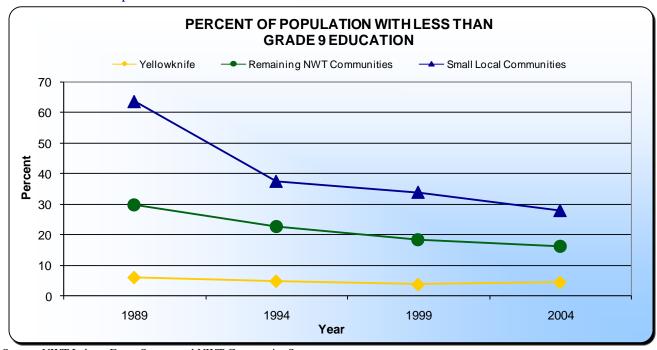


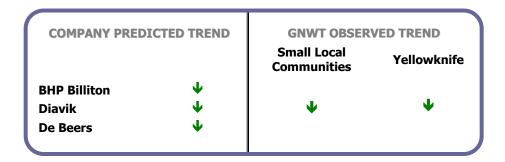
Figure 31: Percent of Population with Less than Grade 9 Education

Source: NWT Labour Force Survey and NWT Community Survey.

64

<sup>&</sup>lt;sup>39</sup> 2006 Statistics Canada Census.

<sup>&</sup>lt;sup>40</sup> See Table 32 of Appendix C: Data Tables.



## 7.2.2 Analysis

The drop in the percent of people in Small Local Communities with less than grade 9 before 1994 is partly due to grade extensions.

There is a direct link between education and employment. More youth are making informed choices. They see that education and skill development lead to better career options. Generally, the higher the education level the more employable one can be and the higher one's income can be. More education could also lead to a drop in income assistance cases.

## 8 Business

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said can be found in Appendix A, Section 8.

#### 8.1.1 Observations

The number of listed businesses in Yellowknife has gone down. In Small Local Communities, there has not been much change in the number of such businesses. Remaining NWT Communities have seen an increase in the number of registered businesses

Not including mining, oil and gas and government, major spending has occurred in two sectors. These sectors are housing, and transportation and warehousing. Investments in buildings and equipment have increased in both sectors.

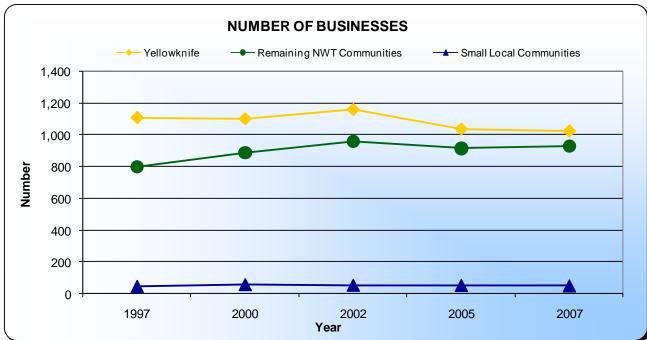


Figure 32: Number of Businesses

Source: ITI database of telephone directory listings.

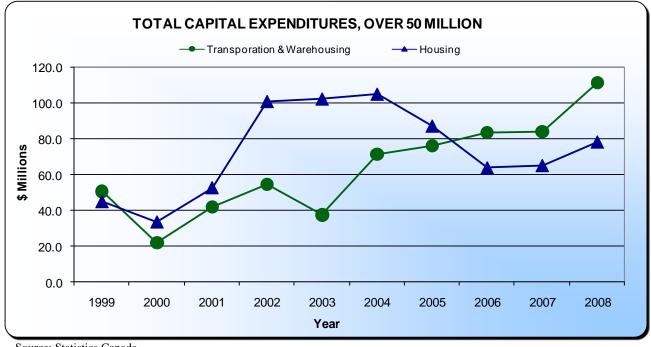


Figure 33: Private & Public Investment, Total Capital Expenditures

Source: Statistics Canada.





#### 8.1.2 **Analysis**

Yellowknife's economy saw the closure of two mines in the city, and the Territory splitting up. Diamond mining has been a factor in the well-being and growth of the Yellowknife economy since. The recent decrease in the number of Yellowknife businesses is likely the result of a number of factors. These include the closure of diamond polishing plants, increasing costs and added competition. Small Local Communities have seen some business growth – most likely due to incomes from the diamond mines. Oil and gas activities may explain the faster rise in Remaining NWT Communities.

The growth being seen in Small Local Communities may mean more balanced economic growth will be seen in this region.

The increase in capital spending indicates the NWT is expanding its economy.

## 9 Net Effect on Government

BHP, Diavik and De Beers predicted certain trends in their EARs. What they said about government costs can be found in Appendix A, Section 9.

#### 9.1.1 Observations

Many things can lead to higher government costs. These include changes in:

- Social trends, such as a change in the crime rate;
- The number of people living in the NWT;
- · Use, such as increased industrial road use; and
- Inflation.

GNWT spending on programs and services has gone up around 6 percent each year. Much of the increase has been to cover the rising costs of maintaining current program and service levels. Program expectations are also under pressure. Mineral resource development can create demands related to the:

- Use and resulting wear and tear on existing infrastructure;
- Need for new infrastructure;
- Need to mitigate the social stresses created by development and income growth;
- · Need to monitor and mitigate environmental effects; and
- Need to invest in areas such as training and business development so that northern residents can benefit from the opportunities available to them.

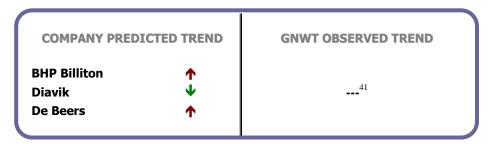
The GNWT also makes strategic investments. It makes these so that the NWT can see the most benefit from development with the least negative impact. Examples are action plans relating to training, STIs, or secondary industry. Other examples are changes to laws, such as the *Protection Against Family Violence Act*, which was created in 2005.

Resource development does create revenue for the GNWT. Diamond mines pay property, fuel, and corporate income tax. They also collect payroll and personal income tax from their employees. Tax revenues from the mines plus payroll tax and personal income tax paid by employees are estimated to be about \$40 million in 2006. This estimate does not include indirect employment or taxes paid by contractors and their employees. Retail businesses that spring up in response to spending by mine employees are an example of indirect employment. Tax revenues the GNWT receives from the mines, their contractors and their employees is offset under the Territorial Formula Financing (TFF) arrangements. For 2006, net revenues to the GNWT from the diamond mines are estimated to be about \$18 million.

The amount of revenue the GNWT receives is also affected by changes in the number of people living in the NWT. Each new person living in the NWT adds \$25,000 to the TFF Grant in 2009/10. However, this does not take into account the additional costs for government services for the new residents, which can vary greatly. The 2004 Community Survey tells us that about 245 diamond mine workers living in the NWT came from other places. Some of these people would have moved to the NWT with a spouse and perhaps a child.

Although residents benefit from employment and income growth, the GNWT faces growing costs. Unless it has the fiscal resources to deal with these costs, the net impact of development on government may be negative. Resource revenue sharing arrangements with the federal government would help to make the net impact positive.

#### **Net Government Costs**



## 9.1.2 Analysis

The territorial government is seeing growing costs linked to development. It has limited ability to pay for these costs with revenue. If it faces a net fiscal cost it will become less able to adapt to the demands of development.

<sup>&</sup>lt;sup>41</sup> The direction of the trend cannot be stated with certainty. The GNWT does not have the information systems in place to conclude on this trend with certainty.

## 10 Sustainable Development

## 10.1 Secondary Industry

For diamond mines, an example of secondary industry is the cutting and polishing of rough diamonds. Secondary industry can also mean more chances in northern jewellery design, manufacturing, retailing and diamond tourism.

Not all of the diamond mine companies talked about secondary industry in their EARs. To find more information about what they said, please see Appendix A, Section 10.

#### 10.1.1 Observations

Access to rough diamonds created a chance for cutting and polishing businesses to start up in the NWT. In 2008, the NWT had four diamond processing plants:

- Arslanian Cutting Works NWT Ltd.;
- Polar Bear Diamond Factory;
- · Laurelton Diamonds; and
- · Crossworks Manufacturing Ltd.

Together, these employ about 115 people in their NWT factories. Cutters, polishers, bruters and sawyers make up most of the workforce. Arslanian Cutting Works NWT Ltd., Polar Bear Diamond Factory and Crossworks Manufacturing Ltd. participate in the GNWT Polished Diamond Certification Program.

The De Beers Snap Lake Mine opened in October 2007. This added to the total amount of rough diamonds made available for manufacturing in the NWT. This created new interest from companies wanting to establish cutting and polishing operations in the NWT. Following a Request for Proposals process, this resulted in Crossworks Manufacturing Ltd. opening a factory in Yellowknife in October, 2008. A number of businesses have inquired and may start up operations in the NWT in the future.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton			
Diavik			<b>^</b>
De Beers			

# 10.1.2 Analysis

Growth of this industry is due to:

- · Local access to rough diamonds;
- GNWT certification programs; and
- Persistence and marketing by the GNWT and the private sector.

Continued growth in this sector will help the NWT to grow a diverse economy and to sustain development.

